SUBJECTIVE WELLBEING, RELIGIOSITY, AND VOTING
INTENTION: THE CASE OF MALAYSIA

KOAY YING YIN

DOCTOR OF PHILOSOPHY

FACULTY OF BUSINESS AND FINANCE
UNIVERSITI TUNKU ABDUL RAHMAN
NOVEMBER 2021

SUBJECTIVE WELLBEING, RELIGIOSITY, AND VOTING INTENTION: THE CASE OF MALAYSIA

By

KOAY YING YIN

A Thesis submitted to the Department of Economics,
Faculty of Business and Finance,
Universiti Tunku Abdul Rahman,
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy
November 2021

ABSTRACT

SUBJECTIVE WELLBEING, RELIGIOSTY, AND VOTING INTENTION: THE CASE OF MALAYSIA

KOAY YING YIN

The decrease in happiness, rise in commit suicide rate, and the lack of official wellbeing indicators in Malaysia have inspired the first study objective – discovering the determinants of Malaysian subjective wellbeing (SWB) based on the cross-sectional data from the sixth wave World Values Survey (WVS) with a sample size of 1209 respondents. Using the ordered probit and probit modelling approaches, this study finds that Malaysians cares about safety and self-esteem needs in their pursuit of SWB. Hence, the government and policy makers may have the policies that can enhance Malaysian financial satisfaction (for safety needs) and respect to human rights (for self-esteem needs) in stimulating greater SWB. Additionally, religions are deemed as an aid mechanism in overcoming the challenges in life. With the multi-religious culture in Malaysia, this study also shows that religiosity helps to improve the happiness of B40 (the lowest income groups in the country and their welfares are always prioritized by the government due to their tight financial circumstances). Furthermore, the moderating role of religiosity in enhancing the SWB of being self-actualizing is also found in this study. Hence, parents may cultivate religious values among their children since young at

ii

home. The government may consider to nurture a religious society through education. The 12th General Election in Malaysia has a turnout rate which has not seen since 1964. This was also the year when digital media started penetrating political communication. Hence, the last objective of this study is to examine the impact of digital media and life satisfaction on Malaysians' voting intention. Using the sixth wave WVS of 1198 respondents, the Hierarchical Linear Regression Modelling results show that life satisfaction and voting intention go in an opposite direction without digital media. Individuals who are not satisfied with life have greater intention to vote vis-à-vis those with greater life satisfaction. Hence, election outcome is more likely to reflect a proportional preference among voters with different life satisfactions. By democratizing access to information with the presence of digital media, voting intention is levelled irrespective of the degree of life satisfaction. Therefore, voters are encouraged to excess more information through digital media before an election. Gaining a better understanding of national affairs instead of overly focusing on personal life satisfaction helps to make a right voting decision if vote or not to vote.

ACKNOWLEDGEMENTS

and even granted me 'the leave of absence' unofficially for my studies. Furthermore, Prof Eng is always there to lend her sympathetic ears to my troubles and stress, as a caregiver. Both of them are also willing to lend a hand whenever I needed a favor. Words cannot truly express my utmost gratitude to them. Their teachings, sharing, advices, and guidance will be etched in my heart and mind, and I am forever grateful to them.

One's success does not emerge without scarifications. Many I had left behind without realizing the importance of them during my pursuance of PhD. Patience, supports, and prayers always remained and remembered especially from my Dad, Mom, Sister, and Brother who are the pillars of my life. Not forgetting, I would like to thank myself for completing this thesis. PhD is not just a degree, the progress of pursuing has loaded me an abundance of wisdom, patience, and self-discipline to be a better person.

APPROVAL SHEET

This thesis entitled **"SUBJECTIVE WELLBEING, RELIGIOSTY, AND VOTING INTENTION: THE CASE OF MALAYSIA"** was prepared by KOAY YING YIN and submitted as partial fulfillment of the requirements for the Doctor of Philosophy in Economics at Universiti Tunku Abdul Rahman.

Approved by:

_____

(Prof. Dr. Eng Yoke Kee)
Professor/Supervisor
Department of Economics
Faculty of Business and Finance
Universiti Tunku Abdul Rahman

Date :...18/11/2021........

_____

(Associate Prof. Dr. Wong Chin Yoong)
Associate Professor/Co-supervisor
Department of Economics
Faculty of Business and Finance
Universiti Tunku Abdul Rahman

Date :...18/11/2021........

FACULTY OF BUSINESS AND FINANCE

UNIVERSITI TUNKU ABDUL RAHMAN

Date: ___18/11/2021_____

SUBMISSION OF THESIS

It is hereby certified that <u>KOAY YING YIN (ID No: 11ABD02577)</u> has completed this thesis entitled "<u>SUBJECTIVE WELLBEING, RELIGIOSITY, VOTING INTENTION: THE CASE OF MALAYSIA</u>" under the supervision of Prof. Dr. Eng Yoke Kee (Supervisor) from the Department of Economics, Faculty of Business and Finance, and Associate Prof. Dr. Wong Chin Yoong (Co-Supervisor) from the Department of Economics, Faculty of Business and Finance.

I understand that University will upload softcopy of my final year thesis in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

_____

(KOAY YING YIN)

DECLARATION

I <u>Koay Ying Yin</u> hereby declare that the dissertation is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UTAR or other institutions.

_____

(Koay Ying Yin)

Date: 18 November 2021

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AC1	Questionnaire of Helping and Caring for Others Wellbeing
AC2	Questionnaire of Looking After the Environment
AC3	Questionnaire of Following the Customs Handed Down by One's Religion and Family
ACTUALIZATION	Categorical Components of Self-Actualization
ACTUALIZATION X *PRAYTIME*	Interaction Term between Self-Actualization Needs and the Praying Time
ACTUALIZATION X *RELIGIOSITY*	Interaction Effect between Self-Actualization Needs and Religiosity
ACTUALIZATION X *GOD*	Interaction Term between Self-Actualization Needs and the Importance of God in Life
ASEAN	Association of Southeast Asian Nations
B40	Income Group of Bottom 40% in Malaysia
B40 X *GOD*	Interaction Term between Being B40 Income Group and the Importance of God in Life
B40 X *PRAYTIME*	Interaction Term between Being B40 Income Group and the Praying Time
B40 X *RELIGIOSITY*	Interaction Effect between Being B40 Income Group and Religiosity
BASIC	Categorical Components of Basic Needs
BE1	Questionnaire for "As Part of Local Community"
BE2	Questionnaire for "As Part of the Malaysia Nation"
BELONG	Categorical Components of Belongingness
BLI	Better Life Index
BN	Dummy variable to Vote for BN Coalition

BN	Barisan National
BN1	Questionnaire for Enough Food
BN2	Questionnaire for Safe Home
BN3	Questionnaire for Enough Medical Treatment
BN4	Questionnaire for Enough Cash
BR1M	Bantuan Rakyat 1 Malaysia
CatPCA	Categorical Principal Component Analysis
CHILD	Dummy Variable of Having Children
DAP	Democratic Action Party
DEMOCRATIC	Regressor of the Perceived Democracy in the Country
DM	Regressor of Using Digital Media as News Resource
EPU	Economic Unit Planning
ESTEEM	Categorical Components of Self-Esteem Needs
FINANCE	Regressor of Household Financial Conditions
FINANCIAL SATISFACTION	Regressor of Financial Satisfaction
FREEDOM	Regressor of Having Freedom of Choice and Control in Life
GDP	Gross Domestic Product
GE	General election
GE-12	The 12th General Election
GE-13	The 13th General Election
GNH	Gross National Happiness

GOD	Regressor of the Importance of God in Life
HA	Dependent Variable of Happiness
HEALTH SATISFACTION	Regressor of Self-Rated Health Satisfaction
HINDU	Dummy Variable of Hindu
HLM	Hierarchical Linear Modelling
INCOME	Regressor of Relative Income Decile
INTEREST	Regressor of Political Interest
KID	Regressor of Number of Kids
LIFE	Regressor of Life Satisfaction with 10-scales
LIFE.DM	Interaction Term between Life Satisfaction and the Use of Digital Media as News Resource
LS	Dependent Variable of Life Satisfaction
M40	Income Group of Middle 40% in Malaysia
MALAY	Dummy Variable for Malay
MALAYSIAN	Regressor of "Being Part of the Malaysia Nation"
MARRIED	Dummy Variable of Being Married
MQLI	Malaysian Quality of Life Index
MUSLIM	Dummy Variable of Muslim
MWI	Malaysian Wellbeing Index
NEIGHBORHOOD	Regressor of Safety in the Neighborhood
OECD	Organization for Economic Co-operation and Development
PAIDJOB	Regressor of Having a Paid Job

PARTY	Regressor of the Confidence towards Political Party
PAS	Pan-Malaysian Islamic Party
PCA	Principal component analysis
PH	Pakatan Harapan
PR	Pakatan Rakyat
PRAYTIME	Regreesor of How Frequent the Respondent Prays
PROUD	Regressor of Making Parents Proud
RELIGIOSITY	Variable of Being Religious
RESPECT	Rregressor of Respect to Human Rights
SAFETY	Categorical Components for Safety Needs
SWB	Subjective Wellbeing
T20	Income Group of Top 20% in Malaysia
T20 X *GOD*	Interaction Term between Being T20 Income Group and the Importance of God in Life
T20 X *PRAYTIME*	Interaction Term between Being T20 Income Group and the Praying Time
T20 X *RELIGIOSITY*	Interaction Effect between Being T20 Income Group and Religiosity
VAF	Variance Accounted For
VOTING	Dependent Variable of Voted Before
WP	Wilayah Persekutuan
WVS	World Values Survey
WVSA	World Values Survey Association

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

It is no doubt that everyone dreams for a happy life. People are working hard on different aspects of life such as work, health and family to pursuit their greatest happiness. However, happiness is a multidimensional phenomenon, it is not just about material good but also non-intangible goods such as social belongingness, respect, self-esteem, spiritual needs, and so on. This broad perspective happiness meant differently for each individual.

Some people find that happiness can easily be earned but some do not agree with such simplicity. For instance, the increase of RM100 in monthly salary can make the poor happy but not the rich. Although everyone defines happiness differently, it is believed that everyone is able to judge or measure their own happiness. As such, this perception gives birth to the study of subjective wellbeing (SWB).

<u>What is SWB?</u>

SWB is an individual's self-rated measure of wellbeing. From the most cited SWB paper – "*Subjective wellbeing*", by Diener (1984), individual can judge their wellbeing based on emotional reactions and cognitive evaluation. The emotional-judged wellbeing is well-known as happiness while cognitive-evaluated wellbeing is called as life satisfaction.

Hence, some scholars deem that "happiness" and "life satisfaction" are two different aspects of SWB and they should not be used interchangeably (Dhandra, 2019; Karabati, Ensari, & Fiorentino, 2019). However, some scholars use the terms – "SWB", "happiness" and "life satisfaction" interchangeably in their studies (Bernini & Tampieri, 2019; Okulicz-Kozaryn, 2010; Easterlin, 2003).

<u>Going Beyond GDP: World's Experiences</u>

We are living in the world of metrics now. We need data (or indicators) to plan, organize, improve, and make success to our business. This is same going to the governments and policy makers, adequate indicators matter for policy and policy matters for people's wellbeing (Seaford, 2013; Hicks, Tinkler, & Allin, 2013; Exton & Shinwell, 2018). However, the big challenge is that we have insufficient wellbeing indicators.

If the policy makers focus too much on the wrong indicators, the governments may make insufficient policy choices to fulfill the needs of their countries or people. This has opened the door for SWB research to bloom in the recent years, especially in the areas about the determinants of SWB, how SWB indicators are being constructed, and its roles in the policy making (Hicks at al., 2013; Dolan &White 2007, Voukelatou et al., 2021; Stiglitz, Fitoussi, & Durand, 2018).

In 2008, the French government has initialled a commission (it's generally known as the Stiglitz-Sen-Fitoussi Commission), which chaired by Professor Joseph E. Stiglitz from the Columbia University. The aim of this commission is to work on better indicators to measure the economic performance and social progress (Stiglitz, Sen & Fitoussi, 2009). Undoubtedly, gross domestic product (GDP) is a classic measure of the total goods and services produced in a country over a period of time.

GDP is always used to indicate how well the country (or her people) doing, albeit it fails to do so. For example, GDP does not adequately reflect the extent of environmental pollutions and social problems created by economic activities towards human wellbeing. Hence, the Stiglitz-Sen-Fitoussi Commission has raised up the idea of 'beyond GDP' in measuring socio-economic wellbeing throughout the world (Stiglitz et al., 2009).

After a decade of research, the Stiglitz-Sen-Fitoussi Commission have pointed out how over-reliance on GDP as the measure of economic performance misinformed policy makers who overlooked the arrival of 2008 crisis. Hence, one of the recommendations that made by the commission is "Regular, frequent and standardized collection of both evaluative and experiential measures of SWB should be pursued, based on large representative samples with a view to shedding light on their drivers and on the directions of causality" (Stiglitz et al., 2018).

In fact, it is not only the French government has realised the importance of having wellbeing indicators to a country but many other international organizations and governments also put efforts in constructing comprehensive wellbeing indices. Bhutan was the first country which delivered the idea of Gross National Happiness (GNH) in 1972 by her Fourth King, His Majesty Jigme Singye Wangchuck. This was inspired by the Bhutan's 1729 legal code – "if the government cannot create happiness for its people, there is no purpose for the government to exist" (Ura, Alkire, Zangmo & Wangdi, 2012, p.6).

Then, the first GNH index was launched in 2008. This index measures the wellbeing of Bhutanese by taking into the account of the Bhutanese's needs on the aspects of spiritual, material, physical, and social wellbeing (Ura et al., 2012). Many other countries such as Canada, Australia, United States, and the United Kingdom have also started to collect their people SWB data as their official national

statistics (Diener, Oishi, & Lucas, 2015). In 2010, the Prime Minister of United

Kingdom (UK) proclaimed that UK would assess SWB in policy making.

The Organisation for Economic Co-operation and Development (OECD) has launched Better Life Index (BLI) to allow people to compare their wellbeing across countries on the selected 11 areas of material living conditions and life's quality (OECD, 2019). In 2012, the United Nations released the first World Happiness Report which it is edited by Helliwell, Layard, and Sachs (2012). Table 1.1 displays some of the existing official wellbeing indices created by the international organizations and governments.

Table 1.1 The Official Wellbeing Indices and Its Measured Domains

Source	Wellbeing Index	Measured Domains
Helliwell et al., 2012, 2019, 2020	World Happiness Index	GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity, and the perception of corruption
Organisation for Economic Co-operation and Development (OECD), 2011	Better Life Index	Housing, income, jobs, community, education, environment, civic engagement, health, life satisfaction, safety, and the work balance.
New Economics Foundation (NEF), 2016	Happy Planet Index	Life expectancy, experienced wellbeing, inequality of outcomes, and the ecological footprint
GNH Centre Bhutan, 2008	Gross National Happiness Index (Bhutan)	Psychological wellbeing, health, time use, education, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards

Table 1.1 The Official Wellbeing Indices and Its Measured Domains
(continued)

Source	Wellbeing Index	Measured domains
the UK Office for National Statistics (ONS), 2011	Personal wellbeing (PWB)	i. Life Satisfaction: Overall, how satisfied are you with your life nowadays? ii. Worthwhile: Overall, to what extent do you feel that the things you do in your life are worthwhile? iii. Happiness Overall, how happy did you feel yesterday? iv. Anxiety On a scale where 0 is "not at all anxious" and 10 is "completely anxious", overall, how anxious did you feel yesterday?
The Australian Unity Wellbeing Research Team, 2017	Australian Unity Wellbeing Index (AUWI)	"It measures wellbeing using two indexes, Personal Wellbeing Index (PWI) and National Wellbeing Index (NWI). The PWI is the average level of satisfaction across seven aspects of personal life – standard of living, health, achieving in life, personal relationships, safety, community connectedness, and future security. The NWI is the average satisfaction score across six aspects of national life – the economy, the environment, social conditions, governance, business, and national security" (The Australian Unity Wellbeing Research Team, 2017, p.5).
Gallup Inc, 2009	Gallup-Healthways Wellbeing Index (US)	Physical health, emotional health, healthy behaviors, work environment, basic access and overall life-evaluation.
Research Associates of Canadian Index of Wellbeing, 2015	Canadian Index of Wellbeing (CIW)	Community vitality, democratic engagement, education, environment, healthy populations, leisure and culture, living standards, and the time use.
The National Economic and Development Board (Thailand), 2007	Green and Happy Index (GHI)	Health, warm and loving family, empowerment of community, economic strength and equity, surroundings and ecological system, and the democratic society with good governance

Observing those available official wellbeing indices in Table 1.1, there is still no standardized wellbeing measurement that can fit every country. This is because people from different countries have their own needs in the pursuit of SWB according to their country's political, economic, technological, and cultural

environments. Furthermore, the wellbeing index is a multidimensional phenomenon, it is not just about the material wellbeing, but social connections, psychological wellness, religious and spiritual development should be counted.

Since the first World Happiness Report in 2012 until date, the main editor, John Helliwell and his co-editors measure SWB through cognitive evaluation of life satisfaction cross the nations based on four types of factors which including economic, social, psychological, and ethical (it is also known as virtue). Among these four factors, the virtuous dimension is the one that most often overlooked (Sachs, 2013). Although social, psychological, and virtuous determinants are statistically proven as important inputs to stimulate SWB worldwide, the current public discourse and public policies still tend to pay the lion's share of advertency on economics.

In general, the citizens are informed, and mostly believe, that wellbeing can be greatly earned through more economic growth or other economic incentives. However, men never did live by bread alone. This had greatly evidenced by the Easterlin Paradox (Easterlin, 1974) that higher income does not come along with greater SWB over the time. In fact, over focusing on pursuing bread would not only cause obesity but also a thirst of other human needs, such as social connections, psychological balance, and virtue (Sachs, 2013).

Virtue, by meaning, is the moral excellence of a person. Morally excellent people have virtuous characters such as honest, respectful, courageous, forgiving, and kind (Morales-Vives, De Raad, & Vigil-Colet, 2014). The idea of living virtually to pursue happiness is far from something new. According to Aristotle (384-322BC), a Greek philosopher, deemed that true happiness is found by leading a virtuous life and doing what is worth and right to do (McMahon, 2004). In psychology literature, it is famously known as eudaimonic wellbeing.

The concept of eudaimonic wellbeing also matches with the concept of Maslow's self-actualization needs (Maslow, 1971) where the self-actualizing individual to actualize their potentials development on morality, creativity, spontaneity, acceptance, experience purpose, meaning and intrinsic motivation. With the high demand of economic growth and the rise of modern living, virtue ethics behavior starts to be overshadowed in the society (Sachs, 2013).

We have learned so much pain about losing virtue ethics behavior, for example, the Chief Executive Officer of Goldman Sachs declared that his bank has helped to cause global economic crisis in 2008 through a brazen financial malfeasance (Ramirez, 2009). Many people were losing their jobs and countries were facing the economic slowdowns and challenges during the 2008 crisis. Since SWB is not just about money or economics, "a renewed focus on the role of ethics, and in particular of virtuous behavior, in happiness could lead us to new and

effective strategies of raising individual, national, and global wellbeing" (Sachs, 2013, p.82).

It is the time for governments and policy makers to restore virtue ethics in the quest for happiness through public policies. However, what is virtue ethics restoring mechanism? Professor Hans Küng and his colleagues from the Global Ethic Foundation have convincingly claimed that all major religions share some basic ethical principles, and hence religions can be the basis for a shared ethical framework in a diverse and pluralistic society (Sachs, 2013). Besides, the Authentic Happiness theorists also support that religion is one of the approaches to pursue authentic happiness (Heady et al., 2010). Hence, Helliwell, Layard and Sachs (2012) suggested in their World Happiness Report that religion is one of the new policy priorities throughout the world.

From the abovementioned issues of measuring SWB beyond GDP and revealing the determinants of SWB, it involves many experts from different backgrounds such as happiness economists, positive psychologists, social scientists, and, religion and spirituality scholars because SWB is a multidimensional measure. More importantly, people have to contribute their feedback about how their life are going on. Hence, the collecting of national statistic about people wellbeing, analyzing those data by the experts and bringing them into the wellbeing policy making can be very technical.

However, all these direct the democratic governments into the right pathway of how a democratic systems function. The government can understand the need of people better and provide honest and high-efficiency services to the country and people. In turn, people will appreciate the government's efforts and contributions by voting them again the elections. If the government focus too much on the economic development and neglect people needs and wellbeing, a lack of trust in the government will occur.

The lack of trust in the government not just happened the United States but also in some other industrialized countries in the recent years. This reflects that although GDP indicated a good sign of economy recovering and blooming, the residents felt differently (Stiglitz et al., 2018). As a result, people lost their confidence and trust on the government. To give an example, it was less than 20% of Americans believed that what the federal government did in most of the time in 2017 was the right thing, compared with nearly 80% in 1964 (Pew Research Center, 2017).

When the aims of government unmatched with the needs of residents, one of the most critical ways that individuals can influence governmental decision-making is through voting (Stiglitz et al., 2018). This has been so vividly demonstrated in a number of recent elections, for instance, the Republican Party took over the presidential position from the Democratic Party in the 2016 United States presidential election.

Of course, the unmatched aims between the government and residents is not the single factor for the voting decision, the digitization matters as well. The digital media has made people easily to obtain the information throughout the world. This has improved people awareness on what has happened in the country and worldwide, including the government's administration.

Moreover, digital media has become the famous channel for electoral campaigns and promoting both political parties and candidates in the electoral arena throughout the world (Kasim & Sani, 2016; Willnat, Wong, Tamam, & Aw, 2013; Woon, 2018; Spierings & Jacobs, 2014; Gueorguieva, 2008). For example, the online presidential campaign by Barack Obama in 2008 has been the historical remarks on the electoral impact of digital media (Swigger, 2012). However, there is still a lack of study to reveal to what extend SWB will stimulate the democratic behaviour of voting with the presence of the digital media as information resources.

Going Beyond GDP: Malaysia's Experiences

In the recent years, Malaysia has been experiencing massive changes in economy, politics, religions, and the information and communication technology. Even though the average annual GDP growth over the period from 2009 to 2018 indicated a positive growth of 4.74% (World Bank, 2020), the public did not really enjoy the fruits from such economic growth. Malaysians complaint about the high

inflation of living costs while many businesses faced sluggish demand (Jayakumar, 2019).

Additionally, the implementation of 6% Goods and Services Tax (GST) from 1 April 2015 until 1 June 2018 had put a burden on consumer's expenditures. On the other hand, the national government debt has accumulated to 190.50 USD billion in December 2019 (CEIC, 2020). This was due to the corruption-ridden regime by the 6th Prime Minister of Malaysia (Jayakumar, 2019).

The Malaysian economy seems getting more challenging and tough. According to the Department of Statistics Malaysia (2020), the country hit the annual GDP growth with only 4.3% in 2019 which was the lowest rate of growth in the last 10 years. The government has been aware of the impact of economic slowdown on Malaysian wellbeing especially those who are from the lower income group, which officially classified as Bottom 40% income group (B40). Hence, this group is always on the priority list to obtain the government's financial aids.

For examples, the government had allocated a total of RM 331 million to eradicate hard core poverty in the 2008 Budget Malaysia (Badawi, 2007). In 2012, the formal Prime Minster, Minster Datuk Seri Najib Tun Razak had declared the launch of "Bantuan Rakyat 1 Malaysia (BR1M)" program as part of Government effort in public funding to ease burden of B40 in Malaysia (https://www.br1m.info). The BR1M program has been renamed as "Bantuan Sara Hidup" (Life's Aid) in

2019. The total allocation of BR1M since its first launch in 2012 until 2019 is shown in Table 1.2. The declined of BR1M in 2019 was due to the change of the government.

Table 1.2: Total Allocation for BR1M from 2012 to 2019

Year	Total allocation
2012	RM 2.16 billion [1]
2013	RM 3 billion [1]
2014	RM 3.6 billion [2]
2015	RM 4.9 billion [3]
2016	RM 5.9 billion [3]
2017	RM 6.8 billion [3]
2018	RM 6.8 billion [3]
2019	RM 5 billion [4]

Source: https://www.nbc.com.my/blog/budget-2013-br1m-v2-0-rm250-for-households-and-singles/[1], https://www.thestar.com.my/news/nation/2013/10/25/budget-2014-highlights-pm-speech[2], https://loanstreet.com.my/learning-centre/is-br1m-good-or-bad[3], https://ringgitplus.com/en/blog/Budget-2019/Budget-2019-BR1M-Renamed-As-Bantuan-Sara-Hidup-Offers-Cash-Assistance-For-B40-Households.html[4]

The changes in Malaysian politics was even more dramatic and ridiculous. Malaysia has witnessed a historic earthquake in her political landscape on 9th May 2018. The opposition coalition, named Alliance of Hope (Pakatan Harapan, PH) has ended the hegemony by Barisan Nasional (BN) coalition which BN had been ruling the country for six decades since independent (Moniruzzaman & Farzana, 2018). This unexpected political change was attributed to the votes of people in Malaysia. Table 1.3 displays the past records of the General Elections (GE) in Malaysia included the election results, number of registered voters, and the number of turnout voters.

Table 1.3: The Past Records of General Elections in Malaysia

GE	Year	Government*			Opposition			Total seats	Registered	Turnout
		Seats	% seats	% vote	Seats	% seats	% vote			
--	1955**	51	98.1	79.6	1	1.9	20.4	52	1280855	1,027,211
1	1959**	74	71.2	51.7	30	28.9	48.3	104	2177650	1,564,575
2	1964**	89	85.6	58.5	15	14.4	41.5	104	2681895	2,146,608
3	1969	95	66.0	49.3	49	34.0	50.7	144	3450000	2,532,042
4	1974	135	87.7	60.7	19	12.3	39.3	154	4178914	2,220,186
5	1978	130	84.4	57.2	24	15.6	42.8	154	5059689	3,596,732
6	1982	132	85.7	60.5	22	14.3	39.5	154	6081628	4,296,312
7	1986	148	83.6	55.8	29	16.4	41.5	177	6791446	4,752,004
8	1990	127	70.6	53.4	53	29.5	46.6	180	8000000	5,751,725
9	1995	162	84.4	65.2	30	15.6	34.8	192	9012370	6,152,809
10	1999	148	76.7	56.5	45	23.3	43.5	193	9564071	6,631,094
11	2004	198	90.4	63.9	21	9.6	36.1	219	9756097	6,916,138
12	2008	140	63.1	50.3	82	36.9	46.8	222	10922139	8,161,039
13	2013	133	59.9	46.5	89	40.1	53.5	222	13268002	11,257,147
14	2018	121	54.5	47.9	101	45.5	52.1	222	14,940,624	12,299,514

Note:
*   "Government" means Alliance Party in 1964; Alliance and Sarawak United People's Party for 1969; Barisan Nasional 1974 to 2013; and Pakatan Harapan since 2018
**   Sabah and Sarawak did not participate in respective elections.
Source: Arah Aliran Malaysia: Penilaian Pilihan Raya

Figure 1.1 shows clearly that the number of registered voters shot up dramatically in the 12th General Election (GE-12) in 2008 and it achieved the highest turnout rate in the 2013 General Election (GE-13) with about 84.84%. What made Malaysians vote desperately? Many recent studies illustrated that such political change was due to the poor politic regime by BN coalition from 2008 to 2018 which breeding serious corruption, wastage of governmental spending, power misuse, severe inflation, high living costs which unmatched with the income level and the racial issues (Noh, 2014; Welsh, 2013; Moten, 2011; Brown, 2008; Wong, 2005).

Figure 1.1: The Number of Registered and Turnout Voters in the Past General Elections
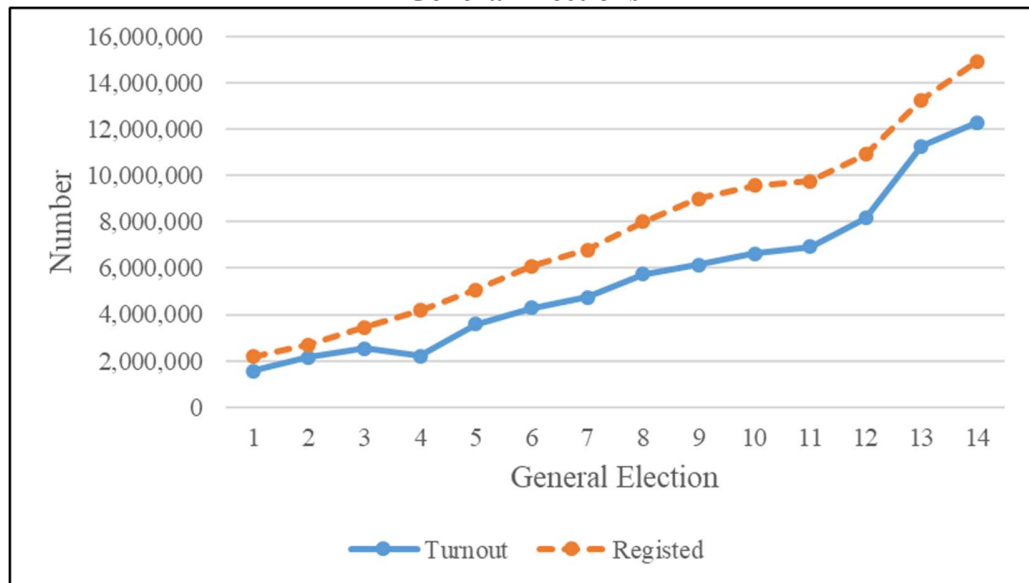
Source: Arah Aliran Malaysia: Penilaian Pilihan Raya

However, the elected government though the 14th GE did not last for 2 years, the old ruling party is back in power again. Such political tsunami started from the unexpected resignation of Tun Dr. Mahathir Mohammad, the 7th Prime Minister of Malaysia on 25 February 2020 (Wilson, 2020). After a week of unprecedented political turmoil, the King of Malaysia has appointed Mr. Muhyiddin Yassin as the new Prime Minister. Mr Muhyiddin took over the government by defecting with more than 30 Members of Parliament, and creating a coalition with his old party (UMNO). This have been a shattering blow to those who deemed the 14th GE as a watershed, a new journey for the country (Head, 2020).

When it comes to the culture of Malaysian society, Malaysia is well-known as a multiracial, multicultural and multi-religious country. As shown in Figure 1.2, Malaysia consists of about 61.30% Muslims (official religion), 19.80% Buddhist,

15

9.2% Christians, 6.3% Hindus, 1.3% Confucianism, Taoism and other traditional Chinese religions, 0.4% other religions and 1% unspecified (Department of Statistics Malaysia, 2010).

The issue about religion is quite sensitive in the country due to her multi religious society. The criticizing or insulting actions towards the religion of others can easily destroy the harmony of multiracial society in Malaysia. Hence, the government restriction on religions is quite high. According to the Global Restriction on Religion Studies in 2016 by the Pew Research Center, the Social Hostilities Index Score is 6.2 out of 10 while the Government Restrictions on Religion Index Score is 8.2 out of 10.

Figure 1.2   Percentage Distribution of Malaysians by Religion in 2010, Malaysia
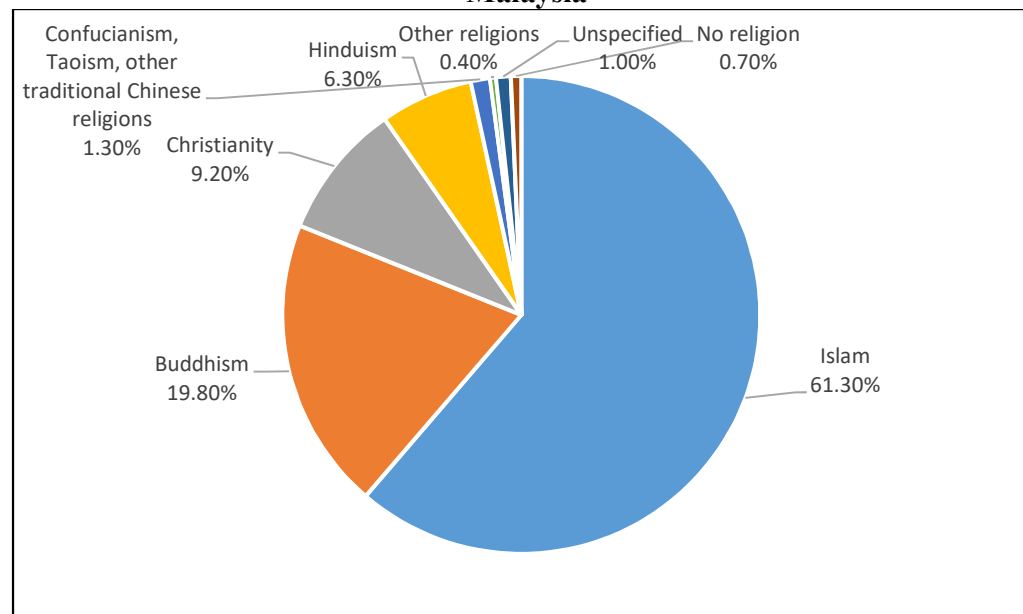
Source: The Population and Housing Census in 2010, Department of Statistics, Malaysia

There are quite a number of religious issues and changes are bothering the government and people. For instance, the position of Islam and freedom of religion. In August 2017, a picture of a gang of Malays that promoting atheism from the Atheist Republic Consulate of Kuala Lumpur's annual gathering was released on the social media (Ghazali, 2017). The deputy minister of handling Muslim's affairs at that time claimed that atheism is unconstitutional for Malays in Malaysia as it is prohibited to spread other religious beliefs and doctrines among Muslims. Hence, this group of Malays should be charged if their act of involving in the atheism was proven (Eleftheriou-Smith, 2017).

Furthermore, the use of religion in politics is even more evident after the loss of ruling power of the BN coalition in the 14th GE. The main political party in the BN coalition, UMNO, has joined the Islamist Party (PAS) to change in the characteristic of Malaysia's opposition from a plural platform to an ethno-religious one (Chew, 2019). Additionally, the religious expression in the media, the use of "Allah" by Christians, and the publication of the Bible in the Malay language are also the religious issues in the recent years (Sani & Shah, 2020). Despite those religious issues in the country, many local studies have found that religiosity brings SWB to Malasyians (Rahim, 2013; Ading, Seok, Hashmi, & Maakip, 2012; Abdel-Khalek & Tekke, 2019).

Malaysia is also experiencing a dramatic digital transformation. According to the Department of Statistics, about 18.50% of the Malaysian economy (RM267.7

billion) in 2018 was digital economy (Sharon, 2019). The 2020 Budget reflects the good efforts of the government to boost up the local technology industry by firming digital content, embracing digitization, improving e-commerce, and adopting 5G technology (Ismail, 2019). On the other hand, the society is also moving towards the digitalization era. Figure 1.3 shows a steady increase in the number of Internet users in Malaysia over the period from 2009 to 2018.

Figure 1.3: The Number of Internet Users from 2009 to 2018 in Malaysia
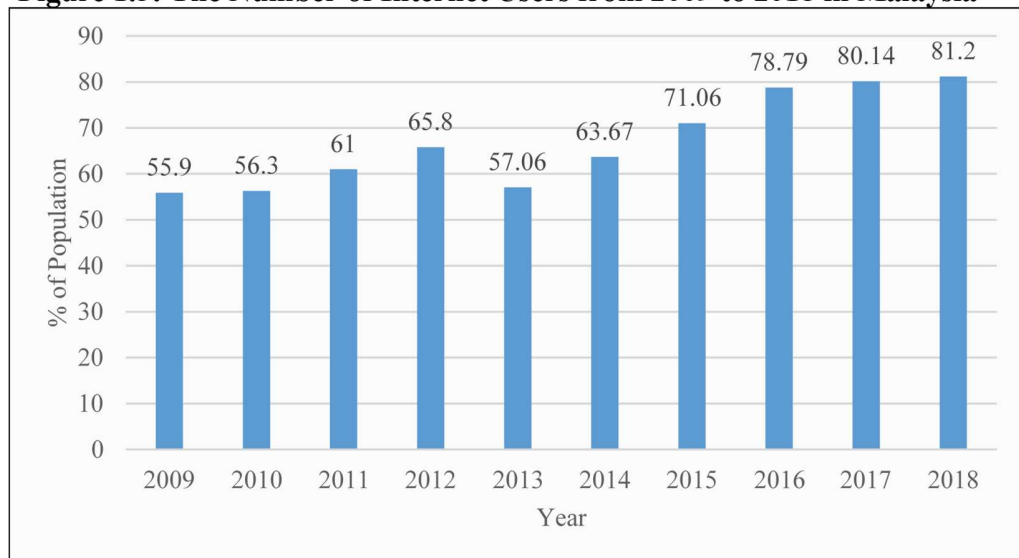
Source: The World Bank

According to the Internet User Survey which conducted by the Malaysian Communications and Multimedia Commission (2018), there were more that 80% of the total Internet users in Malaysia use Internet for communicating through text, visiting social networking platforms, and getting information as shown in Figure 1.4. With the uses of Internet, Malaysians can have better relationships with family and friends due to the easy contact through social media and the communication

platforms such as Google Meet and Zoom. Furthermore, Internet allows varieties of entertainment such as online games and online videos or televisions. Also, online shopping allows Malaysians to shop easy and fast.

Figure 1.4: Online Activities in Malaysia, 2018
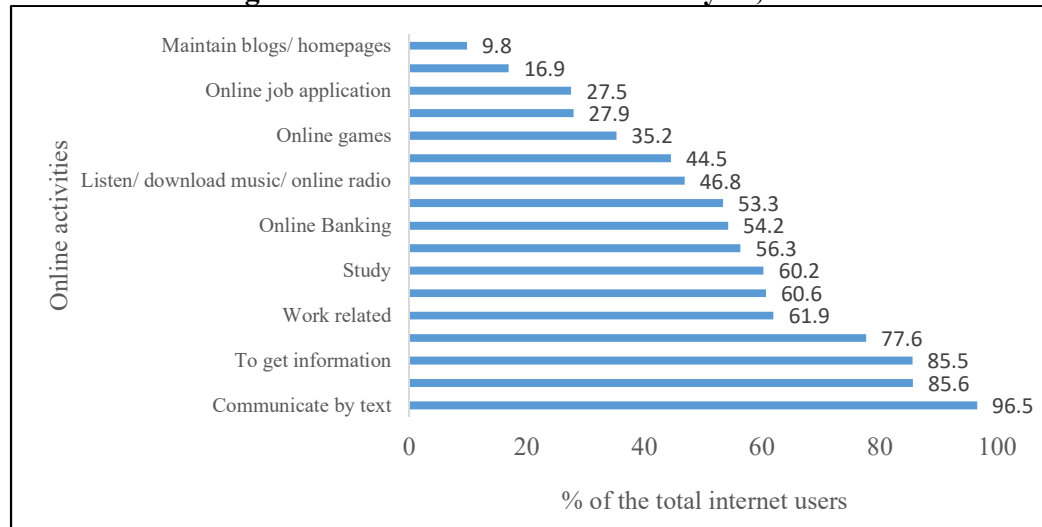
Source: The Malaysian Communications and Multimedia Commission, 2018

In 2008, soon after the 12th GE in Malaysia, Prime Minister Abdullah Ahmad Badawi admitted that the ruling government has underestimated the power of Internet in spreading the political information that biased to the opposition and cause a significant vote swing (Gomez, 2014). Since then, the political parties fully adopted the digital media as the information transmission channel in promoting their election campaigns in the following general elections in 2013 and 2018. Nevertheless, digital media is just a tool to deliver information yet the information from the Internet can be manipulated and misled the voters (Lim, 2016). Hence, the users must be caution when receiving the online information, they could be the fake news and distract the voting intention.

With all the economic, political, religious, and technology changes over the years, how were Malaysian life doing? According to the most recent World Happiness Report 2020, the world ranking of Malaysian happiness is 82th out of 153 countries with an average score of 5.384 out of 10-cantril ladder. Among the nine Association of Southeast Asian Nations (ASEAN) countries, Malaysia's happiness was ranked as the forth ranking as shown in Table 1.4. However, Malaysian happiness has dropped the most among the ASEAN countries from 2008-2012 to 2017-2019 with a drop of 0.310 out of 10 points.

Table 1.4 Happiness among the Selected ASEAN Countries

Countries	Cantril ladder (0-10)	World's ranking	Changes in Happiness from 2008-2012 to 2017-2019
Singapore	6.377	31	-0.140
Philippines	6.006	52	1.104
Thailand	5.999	54	-0.095
Malaysia	**5.339**	**82**	**-0.310**
Vietnam	5.353	83	-0.130
Indonesia	5.286	84	-0.004
Loas	4.889	104	0.014
Cambodia	4.848	106	0.693
Myanmar	4.308	133	-0.131

Source: World Happiness Report 2020

Like other countries, the government was also aware of the limitation of GDP as a wellbeing indicator. Hence, the government has introduced Malaysian Quality of Life Index (MQLI) to measure Malaysian happiness in 2000 but it was not tracked on yearly basis. Only 2002 MQLI, 2004 MQLI, 2011 MQLI are found and MQLI was renamed as Malaysia Wellbeing Index (MWI) in 2014. Table 1.5 shows the 14 aspects of live that covered by the MWI.

Table 1.5 MWI by Malaysia Economic Planning Unit

Dimension	Components	Indicators
Economic Wellbeing	Transport	Road Development Index (RDI)
		Private motorcars & motorcycles (per '000 population)
		Road length per capita(km)
		Rail ridership (million)
	Communication	Fixed and mobile telephone line subscriptions (per '000 population)
		Internet subscribers (per '000 population) Number of hotspot locations
		Number of domain name (per '000 population)
	Education	Equality
		Pre-school participation rate
		Primary school participation rate
		Secondary school participation rate
		Tertiary participation rate
		Quality
		Literacy rate
		% of graduate teachers in primary schools
		% of graduate teachers in secondary Schools
		National Average Grade (UPSR)
		National Average Grade (SPM)
		Number of Lecturers with PhD
		Primary education survival rate
		Secondary education survival rate
	Working Life	Trade disputes
		Man-days lost due to industrial action ('000)
		Industrial accidents
		Average working hours
Social Wellbeing	Housing	% of low-cost housing units to bottom 40%
		% of households with treated water
		% of households with electricity
		% of households with garbage collection services
		Crowdedness (no. of persons per room)
	Leisure	No. of households with paid TV subscription ('000)
		Domestic hotel guests (per '000 population)
		Recreational parks visitors (per '000 population)
		Cinema goers (per '000 population)
	Governance	% of corruption cases prosecuted
		No. of e-payment transactions (million)
		% of cases solved by Biro Pengaduan Awam
		% of e-Filing users
	Public Safety	Crime rate (per '000 population)
		Road accidents (per '000 vehicles)

Table 1.5 Malaysia Wellbeing Indicators by Malaysia Economic Planning Unit (Continued)

Dimension	Components	Indicators
	Social Participation	% of registered voters (per population aged 21 years and above)
		No. of registered non-profit organisations (per '000 population)
		No. of registered residents' associations
		Membership in RELA and Rakan Cop (per '000 population)
	Culture	Membership in public libraries (per '000 population)
		No. of Istana Budaya visitors (per '000 population)
		No. of museum visitors (per '000 population)
		No. of Kompleks Kraf visitors (per '000 population)
	Health	Level of Health
		Level of Health Life expectancy at birth
		Non-communicable disease cases (per '000 population)
		Infant mortality rate (per 1,000 live births)
		Maternal mortality rate (per 100,000 live births)
		Healthcare Services
		No. of beds in hospitals (per '000 population)
		Doctor to population ratio
		Hospital waiting time for out-patients (minute)
	Environment	Air quality (% of station with API<50)
		Water quality (% of clean river monitored)
		% of forested land
		Quantity of scheduled waste generated (tonnes/year)/population
		Maximum mean temperature (°C)
	Family	Institution
		Divorce rate (% of population aged 18 and above)
		Domestic violence cases (per '000 population)
		Juvenile crimes (% of population aged 10 -18)

Source: Economic Unit Planning Malaysia, 2013

The MWI is constructed based on the objective wellbeing indicators at aggregate level from each of these aspects of life. The objective wellbeing indicators are computed based on the existing data sources which measuring the availability of social, environmental and economic resources. However, these indicators do not take into the account of people's experiences of those objective facts (Veehoven, 2000; Noll, 2013). For example, the income in the MWI is measured based on the real per capita income (in Ringgit Malaysia) as shown in

Table 1.5. Nevertheless, this income measurement does not consider the individual's income comparison with others like their spouses, siblings or colleagues.

Some scholars have argued that social policy needs subjective indicators (Veehoven, 2000; Noll 2013; Senik, 2014). The individual assessment can provide more useful information based on the experience of citizens in the economic and social progress, albeit it is subjective (Diener et al., 2015; Senik, 2014). On the other hand, SWB is multi-dimensions. It is not just about the economic wellbeing but psychological wellbeing such as self-esteem, autonomy, mastery and self - actualization matters too (Chirkov, Ryan, Kim, & Kaplan, 2003; Ryan, 2009; Patrick, Knee, Canevello, & Lonsbary, 2007; Manganelli, Thibault-Landry, Forest, & Carpentier, 2018; Markussen, Fibæk, Tarp, & Tuan, 2018).

In light of this argument, two limitations may be found in MWI indicators. First, the subjective wellbeing measurement from individual level on those aspect of life is missing. Second, the psychological and ethical dimensions of wellbeing such as self-esteem, self-growth, and virtue ethics are not taken into account of such index. In order to have a comprehensive measurement for Malaysian's wellbeing, Economic Planning Unit Malaysia (EPU) may need to figure out what are the economic and non-economic factors at individual level in contributing Malaysians' SWB.

23

1.2   Problem Statement

Not only the happiness of Malaysian dropped over the years, the commit suicide rate in Malaysia is on the rise, which has increased by 60% since 1960s based on a study done by the Malaysian Psychiatric Association (the Star Online, 2018). Most of the recent reported suicide cases in Malaysia are youth suicide and they are mainly due to the mental illness and depression (Dudley, 2018). Intuitively speaking, if people are blissful and satisfied with their living, they would not end their lives intentionally. Then, what makes Malaysian to be happy and satisfied? Is material living conditions or psychological wellbeing?

Although the government has initialed the efforts in tracking Malaysian wellbeing by the indicator of MWBI, it may not be sufficient to measure Malaysian's wellbeing because it is mainly constructed by the objective data instead of subjective indicators from individual assessment. To certain extent, subjective indicators are better than the objective indicators in measuring social wellbeing, they are subjected to individual's judgment based on their life experiences (Senik, 2014). Furthermore, the coverage of this index is only limited to economic and social aspects of wellbeing yet the psychological and ethical dimensions of SWB have been excluded from this indicator. Hence, the first objective of this study is to reveal the economic and psychological determinants of Malaysian SWB.

As mentioned in the previous section that the government attempts to help the B40 by providing financial aids. However, the aids in money form seems not an ideal long-term strategic to improve the poor's wellbeing. In view of the massive national debt and slowdown economic growth in Malaysia, the long-term financial aids for B40 may worsen the national expenditures. Furthermore, the long-run financial allowance may demotivate B40 groups to work hard or to be active in the labour market as they have 'free' income without any contributions. Like what had happened in the United States, the unemployment insurance benefits have prolonged the unemployed status on voluntarily basis after 2008 economic crisis (Ghayad & Dickens, 2012).

The financial aids are not the ideal way to reduce the poverty, the poor should equip some virtue ethics and wisdom to fight for their better living. The better path is to work hard, study, train, and self-discipline to escape from poverty. This universal philosophy is found in both secular and religious traditions (Sachs, 2013). For instance, work is deemed as a universal calling in the Catholic social teaching (Annett, 2016). In the Encyclical letter of Pope Francis (2015), "Work is a necessity, part of the meaning of life on this earth, a path to growth, human development and personal fulfillment" (p.94).

In fact, most religions regardless which denominations are sharing good virtue ethics to motivate the believers to live a good life. As such, the Malaysian government and policy makers may consider to enhance B40 group's wellbeing

through religiosity related policies on top of financial aids. However, the religiosity related policy making is new and challenging especially in the multi-religions country like Malaysia. Therefore, a lot of research is required. For the first move, it is crucial to reveal if religiosity helps to improve lower income group's wellbeing.

Not only the lower income group but all walks of life are motivated to seek a deeper sense of contentment which is beyond material wellbeing. Maslow (1943) claimed that self-actualization needs is the highest needs and also the difficult ones to be fulfilled. Nevertheless, the fulfilment of self-actualization can help to improve SWB (Church et al., 2013; Vasudha & Prasad, 2017; Kashdan et al., 2018). Since most of the religions share good virtue ethics among the followers, this may help to form good moral values of the followers. Hence, the second objective of this study is to further examine if self-actualization needs bring greater SWB with the presence of religiosity.

Moving forward, there are quite a number of studies have claimed that democracy helps to breed life satisfaction (Helliwell & Putnam, 2004; Inglehart & Klingemann, 2000; Pacek & Radcliff, 2008; Frey & Stutzer, 2018). For instance, voting can make people feel satisfied due to the right granted by the country to individuals for involving in politics. However, the studies on the reversed relationship if life satisfaction encourages people to vote are still limited especially in the context of Malaysia. Reviewing back the turnout voting statistics in Figure

1.1, there was a dramatic increase in the voter turnout since the 12th General Election in 2008. Was this due to the dissatisfaction of life?

Additionally, the widely use of digital media such as Internet, emails and smartphones help to increase the wide spread and transparency of news or political information. Therefore, digital media has been globally adopted as information delivery tools in the electoral platform. In general, people will interpret and compare the news that happened in the country to other countries after receiving the news through digital media. Such interpretation and comparison may trigger receivers' feelings such as anger, dissatisfaction, and etc. In view of this, the third objective of this study is to examine the impact of life satisfaction on voting intention with the condition on the use of digital media as information resources.

1.3   Research Objectives

The decrease in happiness, rise in commit suicide rate, and the lack of official wellbeing indicators in Malaysia hint that something goes wrong with Malaysian SWB. In order to improve Malaysian SWB, it is essential to find what influences Malaysian happiness and life satisfaction. Furthermore, religions have been widely recognized as one of the important factors in the pursuit of SWB. Since Malaysia is a multireligious country, this characteristic should be able to bring

greater SWB to Malaysians. However, the question is through which channels that religiosity can bring greater SWB is yet to be fully studied.

Additionally, Malaysia practices Parliamentary Democracy which the government is elected through the general election. Based on the voting behaviors in recent years, Malaysia are seemingly not satisfied with their lives under the incumbent government and hope to change a government through their votes. So, it is important to study if life satisfaction is associated with the voting intention. If such association is confirmed, the incumbents or newly elected government may need understand better what makes Malaysians happy and satisfied to their lives to remain themselves in their office.

Hence, this study intends to serve the following three objectives:

i.   **To discover the determinants of Malaysian SWB**

In order to achieve this objective, the study would firstly identify the needs of Malaysians on their pursuit of SWB with the need theory of Maslow. Then, the new indicators of each identified Malaysian needs are constructed based on the Categorical Principle Components Analysis (CatPCA). Next, the study will propose a material-psychological compatible happiness model drawn upon the Maslow's hierarchy of needs. Finally, the determinants of SWB would be confirmed through a series of empirical analysis. The numerical results would help the government and policy makers to understand better the variety needs of

Malaysian in their quest of SWB. Thus, the SWB policies will be properly designed to nurture a happy nation.

ii. To examine the moderating effect of religiosity on the relationship between B40 and self-actualization and Malaysian SWB

With the religious sharing and teaching on the ethical forming, religions can play a role as an aid mechanism to go through the difficulties in life (Afrasibi & Fattahi, 2017; Esqueda, 2014). In Malaysia, B40 group is the lowest-income group in the country. As such, the SWB of B40 group may be lower compared to other higher income groups. Hence, this study attempts to examine if religious faiths and practices can be a moderator, to make B40 happier and satisfied with their lives. At the same time, this study also intends to study if religiosity can help to bring greater SWB of self-actualization. The empirical findings can shed light on the importance of religiosity in the SWB policy making.

iii. To investigate the impact of life satisfaction on Malaysian voting intention with the presence of digital media.

This study also aims to explore the motivation of life satisfaction on voting intention in Malaysia. In the last decade, Malaysians had been desperately involving in the general election. Many scholars claimed that this political behavior was due to the bad administration of BN coalition (Noh, 2014; Welsh, 2013; Moten 2011). However, until date, there is still no study has been done to reveal if life satisfaction is a motivation to vote by taking into account of digital media as the moderator on the relationship between life satisfaction and voting intention.

Moreover, the use of digital media as information resources has improved the transparency of news in Malaysia. Hence, this study attempts to discover the role of digital media in stimulating voting intention. Lastly, this study also provides new insight on the effect of life satisfaction on voting turnout on the condition of using digital media as information resources. The analysis results of this part of study would serve as evidence whether Malaysians would safe guard their life satisfaction through voting. As such, the government may need to prioritize Malaysian SWB in order to remain themselves in the office in the next general election.

1.4   Overview of the Study

This study consists of five chapters. It starts with the introductory chapter that mainly highlights on the current issues that related to the SWB and the inspirations and objectives of this study. Chapter 2 reviews and summarizes the past contributions on the inputs of SWB, the aid mechanism of religiosity on happiness and life satisfaction, and the role of life satisfaction and digital media on triggering voting intention. The following Chapter 3 is about the theoretical and empirical frameworks, including the descriptions on different used model specification and data source. Chapter 4 reports on the empirical findings for each specific objective. Chapter 5 concludes the overall findings of this study and suggests for the policy implication and future studies.

1.5   Significance of the Study

The SWB studies are important in revealing on what and how a happy person or country can be as well as the effects of SWB on human behaviors. All these can benefit a variety of parties, including individuals, scholars, government and the policy makers. The first objective of this study can contribute by identifying both materials and psychological needs that bothering Malaysians in the pursuit of their SWB. The obtained statistical evidence could serve as a happy guideline to individuals on their journey of happiness through a balance fulfilment between materials and psychological needs.

Specifically speaking, the needs are safety at the neighborhood, financial satisfaction, belongingness needs, making parents proud, freedom in making choices, respect to the human rights, health satisfaction, income, the importance of God in life, and the perceived democracy. Furthermore, the empirical findings can be a reference to the government and policy makers in making good public policies to suit Malaysian needs and nurture a happy country. For literature, the first objective of this study can fill up the research gaps by presenting the new indicators of Malaysian needs based on the CatPCA.

Furthermore, this study also introduces a material-psychological compatible SWB model drawn upon Maslow's hierarchy of need to sharpen the analytical understanding and provide new perspective on the material and psychological

needs in measuring Malaysian SWB. Furthermore, the findings also show that happiness and life satisfaction are two different measurement of SWB, they may not appropriate to be used interchangeably in the future studies.

The second objective of this study is an expansion of the existing literature on the relationship between religions and SWB in the context of Malaysia. So far, the past studies have just focus on the direct impact of being religious on SWB yet the indirect impacts of religiosity have not been fully explored. As such, the second objective of this study is to further investigate the indirect impact of religiosity on Malaysian SWB through B40 and self-actualization needs on SWB. The novelty findings indicated that religious faiths help to remove the unhappiness of B40. This may be due to the religious belief that God may help them to form good moral and ethics to go through their hardship in their financial circumstance.

Therefore, B40 group may consider to seek for the religious guidance and moral support to help themselves to pass through the financial challenges. For the government and policy makers, the findings of this study can be the hints to them that they may consider to form religions policies to help the B40, not just focusing on the financial aids as the current practice. Furthermore, the second objective of study also provide a novel sight on the religiosity in amplifying the happiness and life satisfaction on the self-actualization pathway. As such, individuals, government, and the policy makers may put in efforts to form a religious society.

The last objective of this study contributes to the current literature on the linkage between SWB and political behaviors by revealing a new insight on the driven force of life satisfaction on the voting intention with the condition on the use of digital media as information sources. The study for this perspective in Malaysia context has yet discovered. This study offers the statistical evidence that life satisfaction is negative related to intention to vote. However, digital media helps to reduce the emotional voting from different levels of life satisfaction.

The results can be the highlights to the ruling government about the importance of prioritizing Malaysian life satisfaction in the policy and decision making. In order to sustain the voter's royalty and remain the ruling government in the office in the next general election, life satisfaction of Malaysians have to be guaranteed. Otherwise, the history will be replayed again where Malaysians were so desperate to vote for a new government since the general election in 2008. Additionally, the government may look into the rule of law on monitoring and controlling the online information through digital media to ensure their truthfulness. Else, some parties may misuse it to trigger Malaysian life dissatisfaction and distract them from voting.

CHAPTER 2

LITERATURE REVIEW

2.1   Introduction

This chapter reviews the past studies from both theoretical and empirical perspectives which are related to the respective objectives in this study. The objectives are (i) to discover the determinants of Malaysian SWB, (ii) to examine the moderating effect of religiosity on the relationship between B40 and self-actualization and Malaysian SWB, and (iii) to investigate the driving force of life satisfaction on Malaysian's voting intention with the presence of digital media as information resources. By doing so, the research gap is hoped to be discovered and this study would attempt to address it in order to expand the existing literature.

2.2   Discovering the Determinants of SWB

First of all, this study explores to the global subjective wellbeing studies through the lens of psychological and economics happiness literature. Then, this study would narrow down the scope to the SWB studies in Malaysia as this study focus only in the context of Malaysia. Then, this study would attempt to identify the research gaps in accounting the SWB in Malaysia.

2.2.1 SWB: From the Psychological and Economic Perspective

Traditionally, most of the SWB psychologists explained human wellbeing through two approaches: (1) hedonic and (2) eudaimonic. The hedonic approach defines wellbeing as maximizing the pleasure (positive affect) and avoiding the pain (negative affect) (Ryan & Deci, 2001; Di Fabio & Palazzeschi, 2015; Kahneman, Diener, & Schwarz, 1999; Deci & Ryan, 2008). Hedonic wellbeing is more about feeling, mood and affect (Deci & Ryan, 2008). Hence, hedonic psychologists agreed that individuals can judge their feelings subjectively about the good or bad life circumstances they experience (Ryan & Deci, 2001).

On the other hand, the classic economists always focus on the quantitative and pecuniary facts such as wealth and income. Hence, whenever it comes to the story of happiness / wellbeing, the term of 'utility' or "welfare" is used. This group of classic economists believe that utility/welfare (happiness) through consumptions and savings can be maximized if the income is high (Ng, 1978; Van Praag & Kapteyn, 1973). In view of this, GDP is used as a common measure of national wellbeing yet it has seriously been criticized as a poor indicator to measure the economic and social progress in a country. Therefore, it has been a rise in the interest shown by economists in subjective in general especially measures of SWB since last decades (Clark, 2018; Dolan et al., 2008).

As such, the studies on the determinants of SWB have been blooming especially in the fields of psychological and economics. Some overlaps of the determinants of SWB are found in both psychological and economics literature. This study has considered some potential influences on SWB that have been identified in both literatures. Similar to Dolan et al. (2008), the reviewed influences of SWB are documented as follow:

Income and Financial Satisfaction

It is a norm that higher income can support better life style and thus happiness is more guaranteed. This practice holds in the cross-sectional empirical results (D'Ambrosio, Jäntti, & Lepinteur, 2020; Lim, Shaw, Liao, & Duan, 2020; Easterlin, 1974; Ferrer-i-Carbonell, 2005; Diener, Suh, Lucas, & Smith, 1999). Furthermore, Easterlin (1995) also argued that income comparison is able to distract the impact of income on happiness.

The person with 'better off' income will be happier than those who are 'lesser off', vice versa. The works by Easterlin (1974; 1995; 2001) have motivated an expanding scope of studies in the happiness-income literature, such as the comparison between the effects of absolute income and relative income on wellbeing (D'Ambrosio et al., 2020; Diener, Sandvik, Seidlitz, & Diener, 1993; McBride, 2001; Chu-liang, 2009; Ferrer-i-Carbonell, 2005; Ball & Chernova, 2008).

However, the time series analysis results have shown that income increases continually over the years but happiness remained unchanged (Easterlin, 1974, 1995, 2001; Clark & Oswald, 1996; Frey & Stutzer, 2000). Such stagnated happiness result was due to the offsetting between positive and negative impact of higher income on wellbeing (Easterlin, 1995). Furthermore, some scholars further explained that people have used to the high-income level and they do not feel happier if the income increases (Rayo & Becker, 2007; Di Tella, Haisken-De New, & MacCulloch, 2010).

In all, the empirical findings implied that income (money) does not improve happiness persistently. If money cannot help to buy happiness, what else can generate happiness? Besides income, financial satisfaction is another economic factor that in favor of SWB measurement. The SWB studies showed that people who are more satisfied with their financial circumstances tend to be happier (Ngamaba, Armitage, Panagioti, & Hodkinson, 2020; Brzozowski & Visano, 2020; Easterlin, 1974; Van Praag & Kapteyn, 1973; Van Praag, 2004).

This implied a direct impact of financial satisfaction on SWB which individuals with higher satisfaction on their financial circumstances are having less stress on their financial burdens such as debt and loan repayment and thus they are happier (Brzozowski & Visano, 2020; Joo & Grable, 2004) Furthermore, better financial circumstances can easily fulfill human basic needs and earn a better financial status in life (Diener & Diener, 2009).

However, the recent studies are more interested to dip deeper about the moderating effect of financial satisfaction in the linkage between income and SWB (Diener & Biswas-Diener, 2002). In general, higher income is accompanied with higher financial satisfaction. This has been proven by a few empirical studies such as the work by Headey and Wooden (2004) and Douthitt, MacDonald, and Mullis (1992). These studies have shown that the correlation between income and life satisfaction is weaker than the one between income and financial satisfaction. This is logic as life satisfaction can be influenced by many factors yet income is one of the important contributors to financial satisfaction (Diener & Biswas-Diener, 2002). Hence, financial satisfaction can influence more direct to life satisfaction compared to income.

Personal Characteristics: Personality and Age

In psychological literature, eudaimonic wellbeing defines wellbeing as living virtually and holly which such definition is inspired by the thought of Aristotle that living good by doing good (Waterman, 1993; Ryan & Deci, 2001). The eudaimonic factors that may correlate with wellbeing include self-awareness of meaning in life (Mascaro & Rosen, 2008; Steger et al., 2008), sense of moral elevation (Tomer, 2011; Ryan, Huta, & Deci, 2008), awareness of one's true potential (Ryan & Deci, 2001), and self-acceptance (Vansteenkiste & Ryan, 2013; Kasser & Ahuvia, 2002). In general, people who know their purpose of life would be positive thinkers and they would try to excel their potentials in life by developing their strengths and helping others which may reward them happiness. This is

38

overlapping with the concept of self-actualization by Maslow's hierarchy of needs (1970).

It is inspired by the eudaimonic approach, the well-known positive psychologist, Richard M. Ryan and his co-developer, Edward L. Deci, have introduced a theory which focusing on personality, human motivation, and optimal functioning, namely Self-Determination Theory (SDT). According to Ryan and Deci (2000), human motivation is driven by both extrinsic and intrinsic motivation. Extrinsic motivation is contributed by the external factors such as evaluation system, respect from others, rewarding system, etc. On the other hand, intrinsic motivation comes from within self like one's interest, value and sense of morality.

In SDT model, human motivation encourages people to achieve three basic psychological needs which are autonomy, competence and relatedness. Autonomy refers to the self-driven where people can do whatever they like or whatever valuable to them; competence is the feelings of superiority in life domain such as in work place; and relatedness means the connections to others (Ryan & Deci, 2000). This theory is now quite popular in SWB studies as the fulfillment of being autonomy, competence and relatedness is the dominant platform of boosting happiness (Chirkov et al., 2003; Ryan, 2009; Patrick et al., 2007; Manganelli et al., 2018; Markussen, et al., 2018).

When the need of autonomy is fulfilled, people would not feel anxiety and stress to response in a particular way in their life. In turn, they will feel vitality when handling any life circumstances (Patall, Cooper, & Robinson, 2008). The need fulfillment for competence helps to welcome higher self-efficacy and confidence of a person in any situation he faces. Furthermore, people with higher competence are more willing to accept any outcomes of their actions regardless it is a success or a failure (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999). Lastly, the relatedness need allows people to gain more connection and support from others which help to secure their interpersonal base (Mikulincer & Shaver, 2007).

Additionally, psychologists also argued that the psychological needs such as autonomy, competence, and belongingness can influence happiness (Milyavskaya et al., 2013; Philippe, Koestner, Beaulieu-Pelletier, & Lecours, 2011). The empirical studies have shown a positive correlation between the fulfillment of psychological needs and happiness (Milyavskaya et al., 2013; Hills & Argyle, 2001; Furnham & Cheng, 2000). Such results are found with the arguments that human is happier if they can do whatever they like freely and they are recognized by others.

There are a bunch of SWB studies have discovered a u-shaped nexus between age and happiness where teenagers and senior citizens are happier than middle-aged individuals (Fukuda, 2013; Blanchflower & Oswald, 2008; Stone, Schwartz, Broderick, & Deaton, 2010; Tang, 2014; Clark, 2007; Hayo & Seifert, 2003; Gerdtham & Johannesson, 2001). The u-shaped linkage are explained as such:

(1) young people are bearing lesser responsibilities and problems in life (Brockmann, 2010), (2) the middle aged group are facing more stressful life at work and family (Fukuda, 2013) and (3) elderly people become wiser in adapting their life circumstances (Ulloa, Møller, & Sousa-Poza, 2013) or they even lower down their expectation in life (Blanchflower & Oswald, 2004).

Oppositely, Easterlin (2006) found an inverted u-shaped linkage between age and happiness based on the United States General Social Survey. Easterlin (2006) justified that the increase of happiness from young age to midlife is due to the growing satisfaction on family and work life even though the decreasing satisfaction on health is encountered. However, later beyond midlife, the impact of dissatisfaction on health and financial circumstances are greater than the diminishing satisfaction at family and work. Thus, an inverted u-shaped life cycle happiness is found. Similar results are obtained by Mroczek and Spiro (2005).

Socially Developed Characteristics: Unemployment, Education, and Health

Happiness economists also deemed that unemployment does matter in SWB (Weimann, Knabe, & Schöb, 2015). Work does not only pay people income but it helps to form one's social recognition and self-esteem and more importantly it stimulates a sense of being needed. Hence, happiness economics research has documented that unemployment reduces SWB significantly throughout the world (Hastings, & Roeser, 2020; Huang, 2018; Sarracino, 2013; Böckerman & Ilmakunnas, 2006; Di Tella, MacCulloch, & Oswald, 2001; Ohtake, 2004;

Winkelmann & Winkelmann; 1995). Nevertheless, the unhappiness of being unemployed may be alleviated through tolerance and family connections (Huang, 2018) and also through religion (Hastings, & Roeser, 2020).

Using the data from European and WVS that covering 28 countries, Stavrova, Schlösser, and Fetchenhauer (2011) found that the adverse impact of unemployment on happiness is weak in societies with higher tolerant attitudes towards jobless. In the Asian countries which Chinese culture related including China, Hong Kong, Malaysia, Singapore and Taiwan, Huang (2018) revealed that family connection helps to alleviate the pain of being unemployed especially for those who find family is very important in their lives. Family support regardless in terms of financial or morale support may help to reduce the unemployment effect on happiness (Lu, Gilmour, Kao, & Huang, 2006; Huang, 2018; Yan & Sorenson, 2006). If unemployment ruins SWB, does it mean employment can guarantee SWB?

Education has been recognized as one of crucial investment in human capital that equip everyone a variety of abilities that offering both tangible and intangible benefits. For example, better educated people is found to live longer and healthier and thus they tend to have happy marriage, high-quality of social networks, and massive job opportunities in labor market (Oreopoulos & Salvanes, 2011). Cuñado and de Gracia (2012) revealed a positive relationship between education and SWB in Spain and this is due to greater self-confidence that gained from acquiring knowledge. Powdthavee, Lekfuangfu, and Wooden (2015) illustrated that

better education helps to tackle higher income, better health and bliss marriage which guarantee greater happiness.

However, it is not always "higher" means "better". We still can find quite a number of happiness economics studies that have shown either an insignificant or strictly negative relationship between higher education and SWB (Nikolaev, 2015; Clark & Oswald, 1996; Powdthavee, 2011). There are a few sensible explanations are given by scholars for such results on the relationship between education and SWB. Firstly, it is argued that individuals with higher education tend to be more ambitious that may diminish life satisfaction as higher goals are hardly to achieve (Clark & Oswald, 1996). Besides that, it is possible that unhappy individuals incline to pursue higher education, this may cause a negative correlation between higher education and SWB (Veenhoven, 2010).

Health is another important input to SWB. Keng and Wu (2014) argued that good health not only promote productivity with reducing the number of sick leaves and lead to higher income and quality of life, but it also increases individual's utility (happiness) directly. Similarly, there are many empirical studies concluded that health is strongly and positively related to SWB (Diener, Oishi, & Tay, 2018; Lamu & Olsen, 2016; Easterlin, 2006; Van Praag, Romanov, & Ferrer-i-Carbonell, 2010; Nussbaum, 2001; Graham, 2008; Binder & Coad, 2013). However, these results are held when only the self-rated health measure are taken in the empirical analysis (Diener et al., 1999; Easterlin, 2006; Okun & George, 1984).

According to Hooker and Siegler (1992), self-assessed health does not only measure self's health conditions but also self's level of emotional adjustment; and the association between self-assessed health and SWB is mediated by self's emotion. Hence, self-assessed health seems to be more important than objective health assessment by physicians in affecting SWB (Diener et al., 1999). Layard (2005) also found the similar results that self-assessed health affects happiness but not the objective results that proven by the doctors. In view of this, Weimann et al. (2015) commented that self-assessed health may comfort patients who are seriously ill to be happier through their positive attitude toward their sickness even though they are told by the doctors about their critical sickness. As such, this study would employ the self-rated health satisfaction for the empirical analysis.

Relationship: Marital Status and Having Children

Does marriage bring SWB? The mixed results are obtained from the previous studies. Gardner and Oswald (2006) have illustrated that married people have longer life expectancy than who are not married. This is due to the married people are having better physical and mental health (Lewis, McBride, Pollak, Puleo, Butterfield, & Emmons, 2006; Braithwaite, Delevi, & Fincham, 2010; Perelli-Harris, Hoherz, Lappegard, & Evans, 2019).

A good marriage will bring a good life companionship and thus the unhealthy habit such as drinking and smoking will be eliminated. The effect of marriage is even more significant for men where the empirical results have shown

that the married men would have 6.3% lower than those unmarried men in the probability of dying in the next 10 years while the married women would have only 3.4% lower in such probability than the unmarried women (Gardner & Oswald, 2006).

However, not all marriage will bring happiness to the married couples (Hetherington, 2003). Some couples are suffering after the marriage due to the stress and commitment of the family (Wilcox & Nock, 2006; Hall & Willoughby, 2019). Some studies even showed that the happiness from the marriage is not sustainable where the newly-wed couples may reach the peak of happiness but the level of happiness will be gradually back to the initial level before the marriage (Clark, Diener, Georgellis, & Lucas, 2008; Lucas, Clark, Georgellis, & Diener, 2003). The most recent study in Taiwan by Tao (2019) provides empirical evidence that happiness level is significantly higher than baseline in the first three years in marriage yet such significance disappears after the fourth year of marriage.

Does having children help to enhance SWB? The answers provided by the past studies are diversified. Some research show that parenthood increases parents' SWB (Clark et al., 2008; Stutzer and Frey, 2006). This may due to the completion of a family for married couples compare to those couples without children. However, some studies indicate a negative impact of having children on happiness (Alesina et al., 2004; Deaton & Stone 2014; Glass, Simon, & Andersson, 2016).

These results may be due to the burdens of raising children such as the expenses on children and the sacrifice of parents' own time especially time for leisure activities (Weiman et al., 2015). Some researchers have shown that the happiness impacts of having children are controlled by different factors such as parent's age, children age, parent's education, financial background, and etc. Deaton and Stone (2014) found that children would bring happy parenthood to those parents who aged between 34 and 46.

Based on the WVS, Margolis and Myrskylä (2011) illustrated that having children is negatively related to the parental wellbeing for those parents who aged under 30 while no impact is found on parents who aged between 30 and 39. The positive impact is found only for those parents who aged more than 40. Besides parent's age, children age also affects the parent's happiness. Clark, O'Neal, Conley, and Mancini (2018) revealed that parents are at the peak of life satisfaction at the birth of child but the satisfaction decreases when the kids are 2 years old. After that, the happiness on having children will increase again. Furthermore, parents who are highly educated (Myrskylä & Margolis, 2014) and with strong financial circumstances (Margolis & Myrskylä, 2011; Blanchflower & Clark, 2019) are happier to have children compared to others.

Social and Political Environment – Perceived Democracy

Political economy also attempts to integrate the important of democracy on happiness since 2000 (Kinari, Ohtake, Kimball, Morimoto, & Tsutsui, 2019). For

example, Frey and Stutzer (2000) and Frey (2008) have conducted longitude studies on the impacts of political institution (democratic) on SWB in Switzerland. The authors argue that democracy allows people to take part in the political process such as voting hence the procedural utility (happiness) is stimulated. However, Kinari et al. (2019) found that the results of election would affect voters' happiness but the happiness is not sustainable in which it just took one- or two-days during Japan's 2009 election. The impact of democracy on SWB will be further discussed in the latter part of this chapter as it is related to the third objective.

2.2.2   SWB Studies in Malaysia

Most of the SWB studies in Malaysia are with particular targeted samples, for examples, they are based on age, ethnic, or even gender groups. Due to the aging population in Malaysia, the wellbeing for elderly people should not be ignored. Yahaya, Abdullah, Momtaz, and Hamid (2010) examined the wellbeing in later life through the perceived quality of life of elderly Malaysians who are living alone. Similar to the research by Momtaz, Ibrahim, Hamid, and Yahaya (2011), Yahaya et al. (2010) found that elderly working women who are living alone in their studied sample are less likely to have lower quality of life. Additionally, Yahaya et al. (2010) also revealed that higher self-rated health and education welcome higher quality life of elderly Malaysians who staying alone. It is not surprised that healthier and well-educated senior citizens are more willing to be independent and can handle their life with better quality.

Based on a sample of 1415 older Malays from Peninsular Malaysia, Momtaz et al. (2011) studies the psychological wellbeing from the sociodemographic perspective. The psychological wellbeing in their studies is equivalent to SWB, positive affect and happiness as employed by Stegar, Kashdan and Oishi (2008). Momtaz et al. (2011) found that age, gender, marital status and house income are important wellbeing predictors of elderly Malays in Peninsular Malaysia while education, employment and place of residency (either urban or rural) are found no impact. The results of negative age impact on wellbeing might due to the stressful living such as loosing spouse, bad health and the social isolation (Bennett, 2005).

Momtaz et al. (2011) found that elder Malay women experience lower wellbeing than elder Malay men with a few reasoning: (1) female may have longer life expectancy that may accompany with illness; (2) the chances of being widow for female is higher than male; (3) elderly women are generally having lower socioeconomic resources for supporting better life; and (4) elderly women are more negative. Furthermore, the married elderly people are happier as they have partners to be their life supporters while higher family income can support their better living styles that make them happier.

Shah et al. (2021) found that it was about 79.20% of a sample of 1204 respondents who aged between 60 and 85 years in Selangor were happy. Their sociodemographic characteristics showed that being a man, age of 60 to 74 years,

48

and living in urban areas tends to be happy. Additionally, a logistics regression model illustrated that (i) the elderly who stayed in urban (ii) middle – class group (M40), (iii) receiving emotional support and (iv) handgrip strength were significantly related with happiness. Therefore, Shah et al. (2021) suggested that the activities or programs that aim to strengthen the emotional support and active social engagement in the elderly population should be structured and established.

A similar study on elderly population's wellbeing in Selangor was conducted by Madhumita, Meram, and Pranab (2021). They conducted a survey on 303 older persons who aged 60 years and above and mainly from the urban areas. The results indicated that being physically independent, men, Chinese, having no chronic illness and living with spouse had better psychological wellbeing. They also confirmed that those who are married and are physically independent had greater wellbeing while retirement has no impact on the elderly's wellbeing compared to those who are still working.

Kooshair et al (2012) and Kooshair et al (2014) have studied the life satisfaction of Peninsular Malaysians aged 60 and above. The formal demonstrated that living arrangements are significant and positively related to life satisfaction in both direct and indirect ways. Living with children is the commonest way of living arrangements for the elderly pupils in Malaysia. Kooshair et al (2012) found that such living arrangement makes elderly more satisfied with their lives compare to those who living alone. Kooshair et al (2014) revealed that life satisfaction is

greater in men than women. Such difference was explained by living arrangements, widowhood, financial resources and education.

Park and Joshanloo (2021) used the survey data from the Gallup World Poll which covering the age range of 15 to 20 years (adolescents) to 95 years and above. They found that (1) the respondents who live in large cities, those attain tertiary education and above, and those who earn higher incomes are with higher levels of life satisfaction; (2) life satisfaction decreases with age, especially those who are 50 years old and above; and (3) females are more satisfied with their lives than male. Overall, they concluded that household income, satisfaction on living standards, and education are the three most important factors of life satisfaction for both females and males.

Boo, Yen, and Lim (2016) examined both happiness and life satisfaction in Malaysia with a same set of factors based on a sample of 1289 respondents from the 6th waves of WVS. They found that income has a strong and positive association with both happiness and life satisfaction. Besides, their results also showed that health status, employment and financial satisfaction are significantly and positively related to both happiness and life satisfaction. As such, they concluded that happiness and life satisfaction can be used interchangeably in the SWB studies in Malaysia since they are affected by the same factors.

Recently, Boo et al. (2020) further studied the impact of income on SWB based on a sample of 249 working adult students from Universiti Sains Malaysia (USM). Again, they measured SWB by both happiness and life satisfaction while income was measure from different perspectives: absolute household income, relative income and expected income. They found that absolute income has greater impacts on SWB regardless it is measured by happiness or life satisfaction. Furthermore, larger gap between the actual and expected income is accompanied with greater unhappiness and dissatisfaction of life. Additionally, better health status improves one's SWB. In terms of ethnicity, Malays are more satisfied with their lives compared to other ethnic groups.

In the traditional Chinese culture, Chinese parents are more likely to raise sons rather than daughters thus the parents' sex discrimination is formed. Siah (2015) found that such discrimination may reduce both happiness and self-esteem among daughters in Malaysia. On the other hand, Yap et al (2021) conducted a survey on a sample of 480 secondary school students to examine the association between self-esteem and happiness among adolescents in Malaysia. They confirmed that both self-esteem and motivation are positively correlated to happiness. Furthermore, the mediating role of motivation on the relationship between self-esteem and happiness is identified where individuals with higher self-esteem have higher motivation to achieve goals which may bring greater happiness.

Cheah and Tang (2011, 2013) focused their wellbeing studies in Penang, the state with second highest commit suicide rate in Malaysia. The empirical results obtained by Cheah and Tang (2011) showed that money (income) and education do not help to improve happiness in Penang but the race, marital status and health do. As the majority ethnic group, Malays are found to be happier than others ethnic groups and this may due to the more privilege given to Malays. Furthermore, married Penang residents are happier which it may due to the supportive of life partnership. Lastly, Cheah and Tang (2011) suggested the government may provide more health awareness program in view of the important of health of happiness.

Cheah and Tang (2013) further investigated the SWB in Penang. Again, their empirical results indicated that only race, marital status and education are the important inputs of Penang residents' SWB. It was found that Malaysian Chinese in Penang are less likely to be happy compared to other races. The authors explained that Malaysian Chinese are facing more challenges in economic advancement as they are the biggest group of taxpayers. Furthermore, Malaysian Chinese are generally having hectic working life to fight for a better living due to the unequal ethnic privileges in the nation. Besides, married Penang residents are happier than those who are single, divorced or widowed as they have better support from spouse on social, mental and economic conditions.

Some researchers attempted to shed light on the happiness impact of five personality traits including extraversion, agreeableness, conscientiousness,

openness and neuroticism. Based on a sample of 317 academicians from a research university, Aziz, Mustaffa, Samah, and Yusof (2014) showed that among the five personality traits, all are significantly and positively correlated with academicians' happiness except neuroticism with opposite sign. Hence, the authors concluded that the basic personality structure is strongly related to the happiness of academicians and the happiness level only trapped at the middle level. As such, the higher institutions are suggested to nurture a happy working place for academicians to enhance their happiness.

In sum, we can observe that the SWB studies in Malaysia are quite scatted in the sense that (i) only targeted group is studies where mostly are Malays-oriented or particular age group instead of the sample that consists of variety races and age groups across Malaysia; and (ii) the focus of studies is either social economic based or psychological based instead a comprehensive studies that revealing the SWB through economic and psychological perspective. To bridge the research gaps, the first objective of this study is to identify Malaysian needs in their pursuit of SWB through a joint perspective between economic and psychological wellbeing based on a larger sample that include the respondents from different ages.

2.3 Examining the Moderating Effect of Religiosity on the Relationship between B40 and Self-Actualization and SWB

The World Happiness reports have highlighted that SWB is affected by the ethical factor yet this factor has always been overlooked (Helliwell et al., 2012). Furthermore, the modernization of this new era not only bring the economic blooming and the fast advancement in sciences and technology, but it causes the falling of human virtue ethics (Sachs, 2013). People become self-centred, apathy, and losing the ethical behaviours in the pursuit of material wellbeing. Therefore, Helliwell et al. (2012) proposed that religion is one of the new policy priorities throughout the world to restore the virtue happiness. In view of this, would Malaysian government and policy makers consider this suggestion on having religions – related policy to tackle higher Malaysian SWB?

Malaysia is a multi-religious country which mainly are Muslims then followed by Buddhists, Hindus, Christians and others. From the previous sub section about the SWB studies in Malaysia, we can observe that most of the local studies reveal a strong direct impact of religiosity on SWB (Achour et al., 2015; Noor, 2008; Rahim, 2013; Yahaya et al., 2012). *How about the indirect impact of religiosity on SWB?* Therefore, this study intends to further investigate the indirect impact of religiosity which its moderating effect on the relationship between B40 and self-actualization and SWB. The following sub-sections is about the literature on the relationship among religiosity, income, self-actualization, and SWB.

2.3.1. Religiosity and SWB: from the Perspectives of Faith, External Religiosity, and Religion Denomination

The role of religion in shaping human wellbeing has widely been recognized by individuals, scholars or even some governments such as in Bhutan and Thailand (Steiner, Leinert & Frey, 2010; Myers, 2008). Before the further discussion, we should distinguish the dimensions of religiosity as each dimension may affect wellbeing differently. Scholars have classified religiosity into two types, namely internal (or faith) and external religiosity. The former one refers to the belief in the existence of God and the willingness of accepting God's will (Clark & Lelkes, 2005). For religious people, faith is their spiritual guidance in each aspect of their lives. Following this spiritual guidance, they may gain their inner peace and happiness.

On the other hand, external religiosity includes all observable religion related activities such as prayer (Clark & Lelkes, 2005), church attendance (Greene & Yoon, 2004), and commitment or active membership of religious organization (Brown & Tierney, 2009; Choong, Ong & Moschis, 2013; Kongarchapatara, Moschis & Ong, 2014). Some scholars from this stream of study have argued that adherents may be happy because of their services to God or because of the social connection among adherents that build through the events or activities at religious organization. Therefore, this study investigates the role of religiosity on SWB from both aspects, religious faith and religious practice.

All religions motivate us to be a better person, not only physiologically but psychologically as well. The studies have empirically shown a positive correlation between religious faith and wellbeing (Cohen, 2002; Swinyard, Kau, & Phua, 2001; Tao, 2008). Certain religions believe that this universal is full of evil and good (Snoep, 2008). For example, Christians believe the existence of angels and devils. In Buddhist, the adherents believe in Karma where behaving good attracts good returns while doing bad would get sufferings. Hence, the religious-related beliefs have guided people to do well and right (Puchalski, Dorff, & Hendi, 2004).

When everyone is doing good and right, the harmful and violent phenomenon such as civil war (Toft, 2007), family violence (Nason-Clark, 2004) and community crime (Beyerlein & Hipp, 2005) can be reduced. Furthermore, the belief and trust in God's will motivate individual to be more aware of their meaning of life (Ardelt, 2003; Silberman, 2005). As a result, religion helps individual to manage their family, work and community with greater attitude and behavior. Individual will be stronger to face all the ups and downs in their life. As such, Myers (2008) and Clark and Lelkes (2005) found that religious adherents suffer from lower negative psychological after facing a traumatic life event.

A bunch of studies has proxied external religious by the frequency of church attendance. They have empirically shown that the increase in church attendance would gain higher probability to be happier (Hayo, 2007; Greene & Yoon; 2004; Ferriss, 2002). Additionally, the effect of church attendance has greater impact on

wellbeing compare to the one of internal religious (Steiner et al., 2010). Another popular indicator of external religious, which is the frequency of participation in religious activities, also is found to be positively related to individual wellbeing (Myers, 2000; Soydemir, Bastida, & Gonzalez, 2004; Gruber, 2005; Swinyard et al., 2001).

These results are due to the social networks that are formed among the adherents who attending the same church or religious activities (Tao, 2008). From the social networks, people gain the social support and thus they can handle their depression, stress and frustration better than those with limited social support (Abbey & Andrews, 1985). Indirectly, the religiosity can help to reduce the suicide rate in the nation (Huang, 1996). Besides, Smith (2003) found that the bonding of family is even tighter after participating in the religious services. This is because parents can understand better about their children from their children's friends and teachers within their own religious circle.

Besides internal and external religiosity, another group of scholars also documented that denomination matters in influencing happiness. The evaluation through various value system and organization structures of churches, Ellison (1991) found that Protestants are happier than Catholics with an explanation that Protestants have stronger autonomy in their belief and better social integration compared to Catholics. In the context of South Korea, Kim (2003) revealed that Christians are happier than Buddhists due to their higher earnings and education

achievement, stronger faith in God and activeness in the religious activity compared to Buddhists.

Tao (2008) also found that the likelihood of Christians being happier is greater than Buddhists by a probability of 28% in Taiwan. The strong belief in God of Taiwanese Christians makes them more aware of their meaning of life hence they are more satisfied with their living. In additional, job security, healthiness, family relationship and social networks are the sub factors that derive higher happiness among Christians in Taiwan compare to its counterparts. However, Hayo (2007) and Greene and Yoon (2004) found no impact of denomination on wellbeing in Europe. Due to the sensitive topic of religion in Malaysia, this study would take religion denomination into the empirical analysis yet the results would not be further interpreted and discussed to avoid any unnecessary conflicts of interests.

2.3.2 The Impacts of Religiosity on Malaysian SWB

Momtaz et al. (2010) further disclosed that personal religiosity towards Allah is able to reduce the pain of widowhood experienced by the windowed elederly Muslims in Malaysia. Such conclusion was made based on their studied sample of 1367 widowed and married elderly Muslims. Momtaz et al. (2010) attempted to justify their findings by three explanations: (1) religious Muslims would seek help or spiritual support from God to go through the hard time of losing their spouses (Maltby & Day, 2002); (2) generally, religiosity is strongly and

positively related to hope (Hasson-Ohayon, Braun, Galinsky, & Baider, 2009). Hence, the higher hope would help the widowed elderly Muslim to make better adjustment towards their widowhood; and (3) Muslims believed that Allah will provide strength for them to cope their widowhood (Momtaz et al., 2010).

Based on the same sample of 1415 elderly Malays, Momtaz and his research team (2012) further investigated the moderating role of Islamic religiosity in the linkage between chronic illness and psychological wellness Malays. The moderating role of religiosity was confirmed in their empirical studies. Such results may be due to the belief in Allah about the nature of universe and in life after death (Hedayat-Diba, 1997). Therefore, Muslims are more willing to accept their bad health conditions in the later age. Thus, the belief in Allah (religiosity) would mitigate the depression during the chronic illness.

Besides elderly Muslims, Yahaya et al. (2012) also studied about the Malaysian adolescents' wellbeing from the spiritual wellbeing and mental health perspectives. The spiritual wellbeing has been categorized into two types which are religious wellbeing and existential wellbeing. The formal one is referring to the connection with god while the latter one means the individuals' perception on meaning and purpose in their life (Yahaya et al., 2012). The authors have provided the statistical evidence showing that the effect of existential wellbeing on reducing the mental problems is greater than the religious wellbeing. Thus, Yahaya et al. (2012) suggested that policy makers may look into the policies that encouraging

the vulnerable adolescents and youths to participate in the religion activities regularly and actively.

On the other hand, for Malays families, they are holding very strong principles of life based on their religiosity towards their god, Allah. Hence, Al-Seheel and Noor (2016) revealed that Islamic-based gratitude strategy is able to improve Muslim students' happiness. Such as, they suggested that religion is one of the crucial factors in enhancing Malay students in Malaysia as it makes people to understand better the meaning of life and their purpose of life.

Using a sample of 315 Muslim female academicians in Malaysia with an age range between 30 years to 60 years, Achour, Grine, Nor, and Mohd Yusoff (2015) illustrated that religiosity helps Muslim working ladies to balance the working life and family responsibilities and thus their personal wellbeing is guaranteed. Achour et al. (2015) constructed the religiosity indicators based on prayer, beliefs, and worship. Besides Muslim working female, Achour et al. (2017) in their recent research also claimed that religious commitment is vital in enhancing Muslim students' happiness, especially through the moderating effect of education. Students with higher education might understand better about the religiosity practice thus they would be happier.

Noor (2008) tested the relationships among work experience, age and religiosity in measuring married Malay Muslim women's wellbeing. She found that

religiosity help to soothing the bad working experience on younger Malay Muslim women however such results disappear among the older Malay Muslim women when the different indicator of wellbeing is used. On the other hand, Rahim (2013) examined also revealed that life satisfaction, perceived religiosity and the frequent of praying affect the happiness on postgraduates. Rahim (2013) concluded that the three selected independent variables are strongly and positively related to the SWB especially the perceived religiosity.

Recently, Aw and Sabri (2020) conducted a survey on a sample of 503 single mothers throughout Malaysia. They argued that single mothers who usually act as the pillar of the family are facing more psychological distress and financial hardship compared to women in common dual-parent households. Using Partial Least Square Structural Equation modelling, they found that religiosity is significantly and positively related to single mothers' SWB. Hence, they concluded that religiosity provides social and mental support to single mothers. So, single mothers can cope with their life circumstances with a more positive thinking. Consequently, they tend to be happier and more satisfied with their lives.

Sabri et al (2021) also found that a positive association between religiosity and life satisfaction on a total of 527 women who are single, divorced, separated or widowed, with children in the home and also those on public assistance. Based on the 6th wave WVS data with 1300 respondents, Kamarudin, Yen and See (2020) measure religiosity based on two variables which are believe in God and the

importance of God in life. They found that important of God contributes to the likelihood of being happier and more satisfied with lives. However, the variable of believe in God helps to improve Malaysian life satisfaction but not their happiness.

To understand better the impacts of religiosity on SWB, Ariffin et al. (2021) interviewed 14 respondents regarding the element of religion as an indicator for well-being in life. All the respondents agreed that religion is an important part in life and has great impact on individual's social well-being. They believed that every religion provides basic references and guidelines in people's lives which encourages harmonious living in a plural society. In view of the context of multiethnic and multiracial in Malaysia, the respondents wish everyone can respect their respective religious values and ensure that that religious sensitivities of each race are protected.

In sum, most of the religiosity - SWB studies just mainly focused on the direct relationship between religiosity and SWB yet its indirect relationship on SWB has not been fully explored. Hence, this study reviews the past studies regarding the potential moderating effects of religiosity on the relationship between life circumstances and SWB.

2.3.3 Moderating Effects of Religiosity on the Relationship between Life Circumstances and SWB

Recently, there is a group of researchers attempted to explore the potential moderating effects of religiosity in reducing the negative impact of life circumstance on SWB (Hastings, & Roeser, 2020; Diener et al., 2011; Plouffe & Tremblay, 2017; Joshanloo, 2018). Religious people tend to believe that no matter how difficult their life is, it is always God's plan and God's will for them to go through.

Furthermore, they believe God will lead them to pass through all the life challenges (Hackney & Sanders, 2003). Hence, it is argued that religiosity can provide spiritual support to bear the negative life circumstances and gain SWB. For instance, Ryff, Singer, and Palmersheim (2004) revealed that religious or spiritual faith can act as a protector for those who are lower educated to suffer lesser mentally and physically illness compared to those who are highly educated.

Most of the SWB literature have statistically proven that wealth is positively related to SWB. This implies that poor feel the pain as they are not able to afford all the necessities in their life. However, to certain extent, religiosity helps to reduce such pain. Based on the US samples and world samples, Diener et al. (2011) found that religiosity is generally accompanied with higher SWB. The studies demonstrated that the religiosity-SWB linkage was stimulated through social support, being respected, and purpose in life. Nevertheless, how strong the

religiosity impact on SWB is subjected to the societal circumstances. The impact of religiosity on SWB is more profound in the countries and states with more life difficulties such as starving, illness, crime and poor education. In contrast, the religious and non-religious people are undergoing similar levels of SWB in the nations and states with better life circumstances.

In common, higher income stimulates greater psychological adjustment such as adaptable, calmness, optimistic, happiness, stability and so on (Gebauer, Nehrlich, Sedikides, & Neberich, 2013; Diener, Ng, Harter & Arora, 2010). Based on a sample of 187,957 respondents from eleven religious-diversified culture, Gebauer et al. (2013) has empirically demonstrated that religiosity helps to diminish the impacts of low income on psychological adjustment. These results were justified by the religious teachings. On one hand, religions always comfort the poor by de-emphasizing the significance of money. On the other hand, religious teaching delivers the anti-wealth norms where the prosperity should not be the central of SWB (Gebauer & Maio, 2012).

Some researchers have examined the relationship between wealth and SWB at the national level through the income inequality and mixed results are obtained. For instance, Joshanloo and Weijers (2016) found a negative relationship between income inequality and life satisfaction but such negative relationship can be mitigated by religiosity. In the study, Joshanloo and Weijers (2016) indicated the religiosity through two perspectives, religious belief and religious participation.

The religious belief is referring to the importance of God / Religion in life while religious participation takes into the account of how frequent the person prays or attends religious ceremonies. Only the religious belief is the significant buffer in reducing the negative effects of income inequality on life satisfaction in their study.

Churchill, Appau, and Farrell (2019) also provided the empirical evidence to support the moderating role of religiosity on the relationship between income and SWB based on the WVS data involving 54 developing countries. Churchill et al. (2019) found that income affects life satisfaction more than the driving force of religiosity in the developing countries when the analysis is made on the separation basis between income and religiosity towards life satisfaction. When the income factor is combined with the religiosity, greater impact on life satisfaction is found. Hence, Churchill et al. (2019) explained such results by claiming that religion offers psychological wellbeing (Bowler, 2013) that goes beyond economic wellbeing especially people from the developing countries who always feel the insecure or anxious about their life (Norris & Inglehart, 2011).

Not all the empirical studies are supporting the stand point that religiosity helps to reduce the suffering of income on SWB. For example, Joshanloo (2018) examined if religiosity and purpose in life would help to minimize the income effect on life satisfaction. The hierarchical modelling on a sample of 97,739 respondents from 94 countries that obtained from the Gallup World Poll showed that only purpose in life but not religiosity play the role as a moderator in such relationship.

Hence, Joshanloo (2018) concluded that people who aware of their meaning of life tend to deemphasize financial aspiration and focus more on intangible goods such as personal growth. Additionally, the meaning of life helps to strengthen the mental resources to handle the financial challenges (Ryff, 2014).

With a sample of 59 countries from the WVS, Plouffe and Tremblay (2017) found no moderating effect of religiosity in attenuating the income impact on SWB albeit both religiosity and income affect SWB respectively at the individual level. This outcome might be due to the fact that religiosity (through religious faith) and income simply contribute to SWB independently. Furthermore, it might be just the speculation that religious belief helps to comfort the stress or adversity of life yet the reality may not happen as expected (Plouffe & Tremblay, 2017).

Bomhoff and Siah (2019) attempted to duplicate Plouffe and Tremblay's work (2017) as they disagreed with the use of average relative income scale as national income indicator. For that reason, Bomhoff and Siah (2019) employed GDP per capita to proxy country's income. The results displayed that national income significantly affect SWB which it was contradict with the findings by Plouffe and Tremblay (2017). However, like Plouffe and Tremblay's analysis (2017), Bomhoff and Siah (2019) still failed to find the significant role of religiosity as a moderator in the nexus between income and life satisfaction at both individual and national level.

In sum, the buffer effect of religiosity in the linkage between income and SWB has yet reached a consensus among the scholars. Furthermore, the moderating impact of religiosity in the linkage between income and SWB in Malaysia has not been empirically studied yet. To bridge the research gap, this study will further investigate the moderating role of religiosity on SWB through the low-income group.

2.3.4 Potential Moderating Impacts of Religiosity in Leading Self-Actualization towards SWB

Lack of literature is found on the moderating effects of religiosity in leading self-actualization towards SWB. However, this study is able to find the literature to support the relationship between religiosity and self-actualization. The modern humanistic psychologists believe that qualitative and subjective experiences can provide better understanding about the human nature such as individual's potential and personal psychological growth (Kamath & Ashok, 2015). This is in line with the Maslow's motivation of achieving self-actualization through an integrated personality, identity and the fulfilment of full humanness (Maslow, 1971).

On the other hand, humans have always tried to understand the nature, role, and the purpose of self through the lens of religion (Ofodile, 2005). Voland (2009) has pointed out that religion helps to shape human mind in order to think rational and explain all life events. For instance, Stoicism and Buddhism emphasize that not external causes our wellbeing, yet our state of mind (Kesebir, 2018). Hence,

religious people always tend to believe that things happen for a reason especially in God's plan. In a way, religious people are more likely to accept both strengths and weaknesses not only of themselves but others as well. According to Maslow's hierarchical needs, accepting both strengths and weaknesses of self and others is part of self-actualization. In view of this, religion would help to transform humans' way of being, hence they could gain wisdom and SWB (Lenoir, 2015).

According to the German psychiatrist, Kurt Goldstein (1965), humans are always challenged by the surrounding environment and their own life in order to achieve great success. Hence, people have to realize their talents and improve their methods of coping all the challenges or problems, so they can get closer to self-actualization. When it comes to the problems solving, many studies have postulated that religion would help – (1) to form the emotions, values and faith of people, (2) to guide the flows between humans and external factors and (3) to grant the wisdom of handling and coping the adverse events (Koenig, George, & Siegler, 1988; Schroeder & Frana, 2009; Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006; Ray & Wyatt, 2018; Solanki, Kaur, Das, Awasthi, & Jain, 2019).

Empirically, French and Joseph (1999) used the "Francis Scale of Attitude Towards Christianity" as an indicator of religiosity and the "Index of Self – actualization" that proposed by Jones and Crandall in 1986, they found a positive and significant correlations between these two indices. Hackney and Sanders (2003) also revealed a positive linkage between religiosity and self-actualization with a

meta-analysis through three facets of religiosity, namely institutional religion, ideological religion and personal devotion. As such, Hackney and Sanders (2003) concluded that religion may improve people's psychological adjustment and thus they can be self-actualized.

There are some scholars attempted to bind the religiosity and self-actualization from different religion denomination. For example, Afrasibi and Fattahi (2017) deemed that Muslims believe that the only way to be self-actualized is getting closer to their God (Allah) as He is the creator of all things including human being. Hence, in the Islamic view, Allah has issued the rules and laws about 'to be' or 'not to be'. Muslims have a strong thought that as long as they follow all these rules and laws, they will be free from any obstacles or limitations to be self-actualized and be happy. Besides the rules and laws, Muslims need a guide and need to be aware of the nature and path of achieving perfection. Therefore, in the Al-Quran (the Islamic bible), the Prophet is stated as a guide for Muslims to go through the pathway to perfection.

Similarly, Christians also believe that God is the creator of the universe as per stated in the Bible (Esqueda, 2014). Hence, God has his plan to determine how man should be constructed and man's attitudes and behavior be judged according to the biblical belief system. In other words, there is a strong linkage between Christianity and self-actualization. With a sample of 314 psychology undergraduate students from the southeastern United States, Watson, Milliron, Morris, and Hood

Jr. (1995) claimed that the coefficient of the correlation between self-actualization and the religiosity from the intrinsic perspective such as belief in God is 0.18. This implied a significant role of religiosity in actualizing self (Watson et al., 1995).

In Taoism, the founder, Lao Tzu also reckoned that human life is part of the universe. According to his philosophy, we should deal with the universe with his concept of Tao (Ch'en, 1977). The Tao is explained as the creative process that exists in nature, and it is responsible for all creation in life, even for life itself. In another words, the Tao is the natural rule that human should live with the nature harmoniously with the concept of emptiness and tranquility of all things (Chang & Page, 1991). Hence, human should breed a kinship with others where we should always care for others and help others to build a sound interpersonal relationship. In view of this, Taoism will motivate the followers to be self-actualized through kinship as defined by Maslow (Rosen & Crouse, 2000).

Recently, Beitel, Bogus, Hutz, Green, and Cecero (2014) empirically examined the association between mindfulness (from the Buddhism perspective) and self-actualization (based on Rogers (1961) and Maslow (1970) definition of self-actualization). According to the teaching of Buddhism on the Four Noble Truths and the Eightfold Path, Buddha encourages his followers to seek for truth of nature through wisdom (Bodhi, 2011).

The Eightfold Path is strongly related to the mindfulness, for instance, it emphasized that (1) earning mental discipline through effort, focus and mindfulness; (2) human should live ethically especially when it comes to the speech, action, and livelihood, and (3) receiving wisdom through cultivating healthy purposes and by viewing things as they are instead of upon one wishes them to be. With such teaching, Beitel et al. (2014) statistically proven that the mindfulness from the Buddhism perspective is significant in self-actualization.

On the other hand, Whitehead, Bates, Elphinstone, Yang, and Murray (2018) attempted to illustrate the empirical linkage between Buddhism of nonattachment to self and self-actualization. A positive and significant coefficient of 0.54 is found between the nonattachment to self-index and self- actualization (Whitehead et al., 2018). The nonattachment from the Buddhism perspective stresses on the relationship between individual and their experiences.

A person with strong nonattachment to self tends to be able to control their self-related concepts, thoughts and feeling without fixation in any life circumstance (Sahdra, Shaver, & Brown, 2010). Furthermore, Buddhism claims that all things are impermanent including individual's self. Hence, individual should let go the attachment to the self and be free to have personal growth and thus self-actualization is stimulated.

In India, religion has been a psychic sustenance since the ancestral era, helping to survive poverty and pursue freedom (Behere, Das, Yadav, & Behere, 2013). In the old-age tradition, Indian Temples are a common place for unsettled mind or suffering individuals to worship and seek God's guidance and blessings to overall the challenges and difficulties in life. According to the Hinduism, each person has a soul that mirror God.

The followers are advised to live with such belief in order to gain the salvation (Sharma & Mehrotra, 2018). With the advancement in technologies and sciences, the economy in India is getting better and her people gain better material wealth and meet their basic needs. Nevertheless, the social and economic development has created more stressful lives and illness. Thus, the modern Indians stared to seek for psychological needs such as self-esteem and self-actualization.

Sharma and Mehrotra (2018) argued that religion disclose the "spirituality" path way for the Modern Indians, especially those from the middle- and high-income groups who are seeking for guidance to work on self-actualization and personal growth. The definition of spirituality has reached an international consensus as - "Spirituality is a dynamic and intrinsic aspect of humanity through which persons seek ultimate meaning, purpose, and transcendence, and experience relationship to self, family, others, community, society, nature, and the significant or sacred. Spirituality is expressed through beliefs, values, traditions, and practices."

(Puchalski, Vitillo, Hull, & Reller, 2014, p.646). Some studies have shown an important linkage between spirituality and self-actualization (Gold, 2013).

However, the findings by Ivtzan, chan, Gardner and Prashar (2013) are contrasted with the argument by Sharma and Mehtora (2018) that religion moderates the relationship between spirituality and self-actualization. Even though the central goal of religion and spirituality is to find the ultimate truth of the universe, religion is different from the spirituality where it involves meanings and methods in looking for the ultimate truth (Hill, Pargament, Hood, McCullough, Swyers, Larson, & Zinnbauer, 2000). With a total of 205 participants, Ivtzan et al. (2013) revealed that people with higher level of spirituality tend to be self-actualized regardless the level of religiosity. In other words, it is spirituality that help to self- actualize a person but not the religiosity.

Although many scholars as abovementioned have argued that the religiosity does not absence from the process of self-actualization, some empirical study still reveal a contrasting result such as no linkage between religiosity and self-actualization. For instance, Kamath and Ashok (2015) found an insignificant positive Pearson's correlation (0.117) between religiousness and self-actualization. Kamath and Ashok (2015) further explained that the self-discovery and self-growth underlying self-actualization can be achieved through non-religious avenues such as meeting the basic needs, participating in the art or musical activities, encouraging

health suspicion, multiple perspectives and inquiry spirit, developing creativity and metacognition and guidance.

From the literature review above, we can observe that many scholars agree that religiosity or religion helps self-actualization. However, self-actualization is not an easy pathway (Maslow, 1970; Afasibi & Fattahi, 2017). The results from the first study objective in this study show a negative association between self-actualization needs and SWB. Hence, when it comes to the second objective of this study, this study intends to examine the moderating effect of religiosity in the relationship self-actualization needs and SWB in Malaysia.

2.4 Investigating the Impact of Life Satisfaction on Voting Intention with the Presence of Digital Media

Past studies have revealed that democracy promotes SWB as people are allowed to participate in the politic to choose their preferable leaders to govern their countries. How about the opposite way? Would life satisfaction motivate voters to turn out at the ballot box, especially in the digital era where voters can easily receive or retrieve political news and information through Internet, smartphone or email? For the following sub-sections, this study would review the literature about the nexus between life satisfaction and voting intention, the impact of digital media on voting intention, and the secret weapon role of digital media in Malaysian electoral arena.

2.4.1 Life Satisfaction and Voting Intention

There are quite a number of studies have recognized that political factors such as political system (eg. democracy or communism) are one of the crucial inputs to individual subjective wellbeing, either happiness or life satisfaction (Helliwell & Putnam, 2004; Inglehart & Klingemann, 2000; Pacek & Radcliff, 2008; Frey & Stutzer, 2000; Radcliff, 2001; Owen, Videras & Willemsen, 2008). For instance, Frey and Stutzer (2000) illustrated that both direct democracy and federal structure are able to breed individual SWB. Stutzer and Frey (2003) further explored that happiness which is gained from the process of participating in politics and the fairness of procedure is greater than the gains from the political outcomes.

However, the studies that focusing on the driving force of life satisfaction on voting intention are still limited and the findings are still remained inconclusive. Veehoven (1988) was one of the pioneers who studied the happiness impact of political participation. Veehoven (1988) presumed that happiness would excrete democracy due to "happy ignorance" or "contented idleness". In other words, citizens with higher life satisfaction would tend to be political apathy and they are also more likely to withdraw themselves from political participation to remain the existing political system. However, Veehoven (1988) then rejected his statement through a reference research on correlational studies.

From the data reviewing in Milbrath and Goel (1977), it was found that happy persons attended to political moments as well as parliaments. In other words, happier people are more likely to involve in the political events. Thus, Veehoven (1998) reclaimed that happier citizens care more about social and political issues due to the status quo which vote for remaining the incumbents in the office. Thus, happier citizens are more active in the political activities than those who are less happy. Nevertheless, the most recent studies showed a mixed empirical evidence on the driving force of life satisfaction and voting intention.

Zhong and Chen (2002) examined on various subjective factors that might foster peasants' involvement in the Chinese village elections base on a survey sample from twelve counties in the south of Jiangsu in 2000. The empirical results indicated that the peasants who are with (i) low internal efficacy and democratic values, (ii) high life satisfaction and (iii) high political interest in state and local issues are tend to vote in the village elections regardless the anti-corruption sentiment. In the United States context, Flavin and Keane (2012) found that Americans who are more satisfied with their lives are more likely to vote instead of participating in the political protest. Such results are robust even after taking into consideration of mediators – both internal and external political efficacy and social connectedness.

Ward (2015) also illustrated that the vote share of incumbent party is very sensitive to the voters' subjective wellbeing after controlling for macroeconomic

factors such as economic growth, unemployment rate and inflation rate. Flavin and Pacek (2014) also confirmed the conclusion by Veehoven (1998) empirically on the linkage between subjective wellbeing and political participation through the mechanism of social quo. The study was focusing on the Organization for Economic Cooperation and Development (OECD), the post-communist countries of Eastern Europe, and the countries of Latin America. Moreover, Flavin and Pacek (2014) claimed that people with greater life satisfaction are more likely to support conservative oriented political parties and to adopt traditional philosophical and policy opinion.

In the United Kingdom, Liberini, Redoano, and Proto (2017) argued that the impact of life satisfaction outweighed the effects of personal financial circumstances on the voting intention. Their empirical results indicated that happier individuals are 1.6% more likely to vote for the incumbent compared to only 0.18% increase in supporting the incumbent as a result of a 10% increase in family income. Hence, Liberini et al. (2017) suggested that the future studies on voting intention or preference should take into the consideration of SWB as good governance would breed better quality of life in the country.

On the other hand, Lorenzini (2015) attempted to compare the impacts of life satisfaction on political participation through protest and contacting activities between 301 permanent unemployed youth and 317 employed youth from Geneva in 2010. The unexpected results were obtained where the unemployed youth with

higher life satisfaction is more politically active while employed youth with strong life dissatisfaction is more likely to participate in politics. Lorenzini (2015) attempted to explain such results by controlling the socioeconomic status, civic attitudes, social inclusion and psychological wellbeing but the attempts failed. The initial results remained unchanged and robust and thus the efforts of explaining such results was highly recommended for future research.

However, Dolan, Metcalfe, and Powdthavee (2008) claimed that life satisfaction does not directly affect the voting intention in the United Kingdom but it is significant when only it interacts with conservative political affiliation. Conservatives with greater life satisfaction are less likely to turn out in voting. How about in the case of Malaysia? Does life satisfaction directly contribute to the voting intention? Or it should be interacted with other phenomena to trigger the voting intention, such as digital media?

So far, this study only found a research done by Ng, Vaithilingam, and Rangel (2017) on the linkage between life satisfaction and voting preference in Malaysia. Using the sixth wave of WVS, Ng et al. (2017) concluded that Malaysians who are more satisfied with the lives prefers to vote for the formal ruling party – BN coalitions, this happiness effect is even greater than the ethnic voting impact. Ng et al. (2017) illustrated that such results were due to the 'status quo' which was defined as "doing nothing or maintaining one's current or previous decision" (Samuelson and Zeckhauser, 1988, p.7).

However, reviewing back the administration of BN coalition which breeding serious corruption, severe inflation and misuse of power had caused a lot of hassle to Malaysians' lives. To certain extend, life satisfaction may be shaken by such administration. Furthermore, the turn out voting rates in the last-decade general elections in Malaysia have been ballooned in size especially in the 2003 General Election. As such, this study hypothesizes that life satisfaction motivates voting intention. Additionally, the widespread of news or political information through digital media may amplify the life satisfaction impact of voting intention. Therefore, this study will discuss about the role of digital media such as Internet in electoral landscape worldwide as well as in the context of Malaysia.

2.4.2 Digital Media Revolution in Worldwide Electoral Platform

The earlier studies have claimed that individual's political attitudes are partly formed by the interpersonal diffusions and exposure of mass media (Wang, 2007; Kim & Johnson, 2006; Zaller, 1987). The prevalence of mass media coverage may also be a form of subjective norm that affects voting intentions (Singh, Leong, Tan, & Wong, 1995). The context of worldwide Internet use, the online media is gradually substituting the traditional media. For instance, Kim and Johnson (2006) found that online media is more effective than tradition media in delivering political news and information in order to influence Koreans' political attitudes towards the voting intention in the South Korean election in 2004.

Furthermore, the Internet not just helps to widespread both local and international news without geography boundaries, but it also encourages people to involve more in political participation (Jamal, Kizgin, Rana, Laroche, & Dwivedi, 2019). Such participations could be informal such as email feedbacks or complaints to a politician, convey residents' opinions and demands to the Government or respective political parties (Haque, 2002). Those easy approaches to the politicians or political parties will make people to have more interest and confidence to vote for their flavor politicians or parties to govern the country.

Internet has also opened a door way for social media such as Facebook and Twitter to be the new platform for electoral campaign across the world (Lilleker, Koc-Michalska, Negrine, Gibson, Vedel, & Strudel, 2017). For example, the most recent 2016 presidential election in the United State has demonstrated a significant role of social media in the political marketing strategy (Kreiss, Lawrence, & McGregor, 2018). The social media allows candidates or party representatives to post their issue position and campaign for votes on their webpages on those social media. Such postings can be widely be viewed by the voters and hence it can serve the campaign purposes well (Lilleker, 2015).

Based on the study on five German and six Austrian parties' use of Facebook in the 2013 national election campaigns, Magin, Podschuweit, Haßler, & Russmann (2017) hypothesized that Facebook has been a hybrid campaign tool to disseminate information, interact with, and mobilize voters in both countries.

However, their empirical findings showed that Facebook is more favour in delivering information instead of interacting with and mobilizing voters. This might be due to the wide coverage and low communication barriers of Facebook in reaching out the ordinary or potential voters (Caton, Hall, & Weinhardt, 2015).

Boulianne (2019) argued that the impacts of social media on civic and political participation is subjected to the nature of use based on the meta-analysis studies. Firstly, the social media is used for disseminating information or news (Dimitrova, Shehata, Strömbäck, & Nord, 2014; Boulianne, 2015). According to the Pew Research, it is about half of Facebook users obtains news via Facebook (deSilver, 2014). When people obtain more information about political issues or current events, they are more aware of the happenings in their nations and worldwide. Consequently, they are more likely to involve in civic and political life and thus the propensity to vote is higher (Tolbert & McNeal, 2003; Mossberger, Tolbert, & McNeal, 2007; Lin, 2016; Feezell, Conroy & Guerrero, 2016; Munir, 2018; Galais & Cardenal, 2017).

Secondly, social media is a networking platform that building the formal and informal social ties among the friends, families, colleagues and any particular groups that sharing the same interest on political issue (Tang & Lee, 2013). It is very common that social media user will post, share and like the political news or issues on their social media page and their peers may view and share out the information (Wolfsfeld, Yarchi, & Samuel-Azran, 2016; Boulianne, 2019).

By doing so, social media helps to enlarge the social connections and enhance the exposure to mobilizing information (Boulianne, 2015). Larger social connections on social media such as Facebook and Twitters may increase exposure to political information and social media users are more aware their roles as a citizen to be active in the political participation such as signing a petition, joining a boycott, and voting at ballot box (Boulianne, 2015).

In addition, social media may breed the political expression as it offers a free and easy method of sharing and discussing about the political issues (Lu, Heatherly, & Lee, 2016). The interpersonal discussion would size up the digital media effect on political knowledge and involvement (Eveland, 2004). It is found that social media is a better and safe way for citizens to express their anger, disappointment and dissatisfaction about the politics in their nation on social media, especially in those countries without a free and independent press (Boulianne, 2019; Tufekci & Wilson, 2012). Such online political expression would encourage more citizens to coordinate political activities like creating international connections, fund raising and activating people's unity and support to fight for better political system (Howard & Hussain, 2013).

Not all literature is supporting and providing statistical evidence that digital media cultivates voting intention. For instance, Hargittai and Shaw (2013) illustrated that the Internet use and social network site use have no direct linkage with the voting behavioral among college-age youth in Chicago during the 2008

United State presidential election. However, Hargittai and Shaw (2013) found an indirect impact of online political information practice towards voting intention through civic engagement. In other words, the college-age youth who obtain more political information online tend to have higher civil engagement such as attending and organizing the meetings of a club or organization, performing volunteer work and sharing current issues or things with their families and friends. Then, the civil engagement motivates youth to vote in the presidential election.

Baumgartner and Morris (2010) also examined the political uses of social network site on political engagement among young adults aged 18 to 24 years old at the beginning stage of 2008 presidential election in the United State. They also found that the exposure to the political news via social network site does not help to improve the turn out rate of young adults at the ballot box. Nevertheless, Baumgartner and Morris (2010) pointed out that the political uses of social network sites are quite significant in terms of fund raising, mobilizing the supporters, and online election campaigning. Similarly, Bimber (2001) also demonstrated that the political information from the Internet did not contribute to the turn out rate of the US presidential election in 1998 yet it motivated citizens to donate money for the election.

Aldrich, Gibson, Cantijoch, and Konitzer (2016) investigated the impacts of both digital media and traditional approach via phone, mail and in person canvassing on political issues in the United Kingdom and the States. Surprisingly,

the digital media did not improve the turn out rate of voting in both countries as expected. The traditional methods of approaching voters are still remained efficient in enhancing the turn out rate. However, Aldrich et al. (2016) concluded that online messages are crucial in encouraging younger adults to participate in election campaign especially in the context of the States. In the 2015 Danish National Election, Ohme, de Vreese, and Albaek (2018) stated that digital media significantly influence the vote choice certainty of only first-time voters but not the experienced voters.

Xia and Shen (2018) compared the role of traditional news media and online alternative media use in political participation through institutional form (voting) and non-institutional form (protest participation). Their results indicated that only traditional media but not online alternative media help to encourage residents in Hong Kong to vote. Furthermore, Xia and Shen (2018) hypothesized that political information exposure would lead to different cognitive, affective, and political behavioral results.

Thus, the results in Xia and Shen (2018) on the other hand showed that the political information released by the online alternative media helps to amplify the dissatisfaction of residents towards politics in Hong Kong. Hence, the residents are more likely to participate in the protest to show their dissatisfaction on politics. As such, online alternative media is deemed as educational and mobilizing channel to protest participation (Chan, 2017).

2.4.3 The Secret Weapon Role of Digital Media in Malaysia Electoral Arena

The third objective of this study also attempt to shed light on the potential of digital media in voting intention in Malaysia. Look back the 10-year political reformation in Malaysia, the digital media has played a role as 'soft weapon' in the change of government via election. The media freedom was strictly controlled by the Malaysian Government in 1980's and 1990's. Most of the news that might image the Government negatively would be filtered out before the broadcasting or publishing (Anuar, 2005; Kenyon & Marjoribanks, 2007). By doing so, Malaysians were less explosive to the economic and political issues in the nation.

However, this practice has been changed by the digital media such as Internet, smartphones and emails where it is hardly controlled by the Government (Kasim & Sani, 2016). Therefore, the digital media is not only improving the transparency of information and news but also the mobilizing of news in Malaysia (Brown, 2005; Willnat et al., 2013; Sani & Azizuddin, 2014). The popularity and effectiveness of digital media in the general election is due to its characteristics – trendy, cheap and easy to access (Sani & Azizuddin, 2014). Therefore, political parties use it to promote their candidates and voters use it to obtain political issues.

The opposition coalition (formally known as Pakatan Rakyat, PR) was the first party promoted and campaigned their party's leaders and candidates for the GE-12 in 2008 via digital media. The significant vote swung in 2008 from BN

coalition to the opposition coalition has made BN coalition realizing the importance of digital media in influencing the voting results (Ndoma & Tumin, 2011; Rajaratnam, 2009). Therefore, both BN coalition and opposition coalition took the digital media seriously as a new platform to promote their parties during the GE13 in 2013 (Gomez, 2014).

Not only the opposite coalition but also the independent bloggers released and posted a lot of news and information about the bad administration by Najib. Additionally, the opposition coalition also took the digital media as an instrument to trigger the dissatisfaction of people to the untrusted government. For instance, PR coalition has created influential online message via Facebook, Youtube and Twitter such as "Ini Kali Lah!" (This is the time) and "Ubah!" (Change) to motivate Malaysians to vote (Noh, 2014; Sern & Zanuddin, 2014; Adnan & Hamdan, 2013).

On the other side, BN coalition attempted to campaign about the economic development and the political and social security under their administration online. Furthermore, BN coalition also controlled the online news portal such as the Star Online, Bernama Online, Utusan Online, and Berita Harian Online in order to spread the news that were biased toward the parties under BN coalition (Kasim & Sani, 2016). In the light of the involvement by both ruling and opposition coalitions on the digital media, people generally expected that digital media help to trigger political activism (Lim, 2016).

Conversely, the results from a few surveys and empirical studies showed inconclusive results on the impact of digital media on political participation. The survey results by Zentrum Future Studies Malaysia indicated that voters aged between 21 to 30 years old is the group that trust blogs and digital media for reliable information the most compared to other age groups (Sulainman, 2008). However, Merdeka Center for Opinion Research (MCOR) (2008) showed that only 12.90% voters in the sample chosen digital media as the source of election information.

So far, the empirical study by Willnat et al. (2013) is the only study that found in Malaysia context providing regression analysis on the use of digital media on voting likelihood. The team found that the use of political digital media did not help to stimulate voting intention even after taking political efficacy as a mediator. In fact, the studies abroad also showed a mixed result on the linkage between digital use and voting intention. In view of this, this study attempts to expand the literature by revealing if digital media would help to encourage people with higher life satisfaction to vote at the ballot box in Malaysia.

2.5   Summary

Undoubtedly, material living conditions, from financial security and material consumption to health, are essential sources of wellbeing, but mental health and inner peace are also important and they should not be ignored. After

reviewing the international as well as the local SWB literature from both economic and psychology perspectives, this study finds that happiness economists focus more on the domains of life while happiness psychologists emphasize more on the psychological philosophy. In order to fill the research gap, the main objective of this study is to construct a comprehensive SWB model with the theoretical support of Maslow's hierarchy of needs in which it incorporates both materialism and psychological needs in explaining human motivations towards better wellbeing.

Furthermore, most of the local SWB studies are on targeted age group or ethnic group basis. Studies with variety age group and ethnic groups throughout all states in Malaysia are still limited. Hence, this study employs the WVS data that consists of 1300 respondents across 13 states and the federal territories (Malay: Wilayah Persekutuan) throughout Malaysia for the first objective empirical analysis. Furthermore, a variety of components that represent Malaysian perceived needs on physiological, safety, belongingness, self-esteem and self-actualization would be constructed by the categorical principal component approach (CATPCA). Then, the hypothesis that each needs help to enhance Malaysians' SWB are tested by a few qualitative modelling approaches.

From the literature review for the second objective, this study finds that the studies on direct impact of religiosity on SWB in both international and local context are well established. However, the research on the potential moderating effect of religiosity in the nexus between income and SWB has not completely

explored especially in the case of Malaysia. Furthermore, no research is found on the buffer effect of religiosity on the self-actualization pathway towards SWB in the context of Malaysia. Therefore, the second research objective of this study is further investigating the buffer effect of religiosity on SWB through the channel of low-income group and self-actualization.

For the empirical analysis, this study will expand the empirical models in the first objective by including the interaction terms between religiosity and income groups and also the one between religiosity and self-actualization respectively. The significance of both interaction terms would confirm the buffer role of religiosity on SWB. Furthermore, the marginal effects of religiosity, income groups (B40 and T20), self-actualization and those interaction effects would be identified. To provide unbiased results, the religiosity would be proxy by both religious faith (the importance of God in life) and religious practice (how frequent the respondents would pray).

Lastly, most of the existing literature on the relationship between SWB and democracy emphasized more on how the democracy process stimulates SWB. However, the research on how the life satisfaction motivates the democracy process (through voting intention) are still limited especially in the case of Malaysia. Moreover, the digital media has transformed the electoral arena quite significantly in the sense that the international and local political news are more transparent and easier expose. Would this digital media help to amplify the life satisfaction effect

on voting intention in the voting intention? The studies on this matter is yet to be done.

Therefore, the third objective of this study is to reveal the driven force of life satisfaction on Malaysian voting intention in the digital era. It is expected to obtain a significant negative relationship between life satisfaction and voting intention with the argument that dissatisfaction of life would motive people to vote in order to change a new government. Besides, the interaction term between life satisfaction and the use of digital media is expected to be positive and significant to confirm that the digital media help to amplify the dissatisfaction of life and thus voters tend to vote at the ballot box.

CHAPTER 3

THEORETICAL FRAMEWORK AND METHODOLOGY

3.1 Introduction

This chapter discusses about the theoretical framework, model estimation, and source of data for each objectives of this study. A SWB model is drawn upon the Maslow's hierarchy of needs to discover the determinants of Malaysian SWB. Then, the SWB model is expanded by including the interaction terms between religiosity and B40 as well as the one between religiosity and self-actualization based on the authentic happiness theory. Lastly, a voting model is proposed via the rational choice, economic, and altruism voting theories to investigate the impact of life satisfaction on political behavior (voting) in the digital era. Those models are estimated by a variety of modelling approaches, namely ordered probit, probit, and hierarchical linear modelling (HLM). The choices of modelling approach are decided by the nature of data.

3.2 Source of Data

This study employs the sixth wave of World Values Survey (WVS) data for empirical analysis. The WVS is an international study hub for social scientists studying on human values and their effects on social and political life. It is led by a

global team of scholars, with the WVS association and secretariat based in Vienna, Austria. The WVS has involved in on-going nationally representative surveys since 1981. Until today, the WVS have covered up to 120 countries which represent nearly 94.5% percent of world's population with a common set of questionnaires. Hence, it is the biggest non-commercial (with about 400,000 respondents), cross sectional and time series research on human beliefs and values ever achieved (www.worldvaluessurvey.org). Figure 3.1 shows some quick facts of WVS.

Figure 3.1: Quick Facts about the WVS

QUICK FACTS ABOUT THE WORLD VALUES SURVEY		
Largest non-commercial academic social survey program	WVS is organized in waves conducted every 5 years	120 countries representing 94.5% of the world population
150+ national research teams - truly global scope	Time-series data for 39-years (1981-2020)	Over 600 indicators
Over 30 000 publications based on the WVS data	Over 60 000 citations for WVS in Google Scholar	Over 800 000 data downloads per year

Source: www.worldvaluessurvey.org

The main motive of WVS is to reveal the human beliefs, values and motivations from all parts of the world. Hence, the WVS provides subjective data which over 600 indicators on the topics that relate to social, economics and politics to different fields of scholars, government officials, journalists, students, and also international organizations for over 30 000 publications. For instance, the data on

economic development (Tabellini, 2010), democracy (Kim, Baek, & Heo, 2019), religion (Churchill et al., 2019), gender equality (Inglehart & Norris, 2003), and SWB (Huang, 2019; Lim, Shaw, Liao, & Duan, 2020; Brzezinski, 2019). Hence, this study employs WVS data because it offers the data on SWB, religion, and democracy that matches with the research objectives in this study that related to SWB, religiosity, and voting intention in Malaysia.

Most importantly, the WVS data is comparable to other standardized scales and measures of SWB that are commonly used in the happiness studies field. For example, the second chapter of the first Word Happiness Report, the authors, Helliwell et al. (2012) compare the SWB measures from the Gallup World Poll (GWP), the WVS, the European Values Survey (EVS), and the European Social Survey (ESS). The SWB measures that used by GWP in evaluating the quality of lives is an 11-point ladder (sometimes also known as Cantril ladder) scale running from 0 to 10 where 0 means the worst possible life for the respondents and 10 being the best possible. On the other hand, one of the SWB measures in the WVS is life satisfaction on a 1 (not at all satisfied) to 10 scales (very satisfied).

Helliwell et al. (2012) found that the average life satisfaction by countries provided by the WVS are very similar to the average Cantril ladder by countries that provided by the GWP, albeit the used scales are different. Referring to the charts provided by Helliwell et al. (2012), the average life satisfaction in Malaysia

provided by the WVS is about 6.8 while the ones provided by the GWP is about 6.6 (refer to Appendices A and B).

Furthermore, Helliwell et al. (2012) also state that "if the country rankings for life satisfaction by the WVS and EVS are compared with those for the Gallup ladder responses asked of the same respondents, and in the same survey, the correlation is very high (r = 0.94)" (p.14). All these comparisons prove that the WVS data is comparable to other SWB measurements. Therefore, this study decides to use the WVS data for the empirical analysis in this study.

The 6th wave WVS survey in Malaysia was in charged by the Principal Investigator, Professor Edward J. Bomhoff from the School of Business, Monash University, with his colleague, Dr. Grace Lee Hooi Yean. The field work took about three months from 19 March 2012 to 15 June 2012 covering 13 states and the Federal of Kuala Lumpur with the respondents aged from 18 to 80 years old. However, the data was only published in 2014. With the standard of WVS, the sample size for each involved country must be at least 1200 respondents. With the Malaysia population of 28,610,000 people as reported at August 2011 by the Malaysian Department of Statistics, 1300 respondents were being selected.

One of the reasons that this study uses the WVS is the sampling was selected based on the probability proportional to size sampling technique which is nationally presented. All the households in the sample frame were divided into 13 states and

the Federal of Kuala Lumpur. At the same time, in each stratum the second level of stratification was made by type of settlement (urban/rural) based on the urban-rural proportions at the state level.

Subsequently, the samples in each stratum were further stratified by race, gender and age which to reflect the sociodemographic characteristic in Malaysia. For instance, there were 11.8% of Malaysians staying in Johor. So, 11.8% (154 pupils) of the respondents from Johor was selected. Then, 110 respondents were from urban areas while 40 respondents were from rural areas in Johor (see Table 3.1). The allocation of questionnaires was assigned based on the population percentage in each state for both urban and rural areas as shown in Table 3.1.

For each wave, suggestions for questions are solicited by social scientists from all over the world and a final master questionnaire is developed in English. For the survey in Malaysia, the team of Professor Edward translated the master questionnaire into Chinese and Malay languages and hired a marketing firm (the name of the marketing firm was not disclosed) to conduct the survey. The marketing firm has gone through the translated questions with their own language experts (in Chinese and Bahasa Malaysia) before rolling out the 100 pilot tests.

The methods of data collection are face-to-face interviews at the respondent's home or place of residence and phone interviews for remote areas. Respondent's answers were recorded in a paper questionnaire (traditional way) or

by the Computer Assisted Personal Interview (CAPI). By the CAPI, the respondents use an electronic device such as computer, laptop or smartphone to answer the questionnaire. Unlike the phone interviews, the interview takes place in person instead of over the phone. An interviewer is usually present to serve as a host and to guide the respondent answering the questions using an electronic device.

Table 3.1: The Allocation of Respondents (Questionnaire) in Each State of Malaysia

Demographics			Percentage		Total Population ('000)		Questionnaires Allocated		
State	% of Total Malaysian population	Total population ('000)	Urban	Rural	Urban	Rural	Urban	Rural	Total
Johor	11.8	3375.98	71.9	28.1	2,427	949	110	44	154
Kedah	6.9	1974.09	64.6	35.4	1,275	699	58	32	90
Kelantan	5.4	1544.94	42.4	57.6	655	891	30	41	71
Melaka	2.9	829.69	86.5	13.5	718	112	33	5	38
Negeri Sembilan	3.6	1029.96	66.5	33.5	685	345	31	16	47
Pahang	5.3	1516.33	50.5	49.5	766	751	36	34	70
Perak	8.3	2374.63	69.7	30.3	1,655	720	75	33	108
Perlis	0.8	228.88	51.4	48.6	118	111	5	6	11
Penang	5.5	1573.55	90.8	9.2	1,429	145	65	8	73
Selangor	19.3	5521.73	91.4	8.6	5,047	475	229	22	251
Terengganu	3.7	1058.57	59.1	40.9	626	433	28	21	49
Sabah	11.3	3232.93	54.0	46.0	1,746	1,487	78	69	147
Sarawak	8.7	2489.07	53.8	46.2	1,339	1,150	61	53	114
Federal	5.9	1687.99	100	0	1,688	0	77	0	77
Total	100	28,438			20,173	8,265	916	384	1,300

Source: WVS, 2012

3.3 Constructing SWB: Maslow's Hierarchy of Needs

3.3.1 Theoretical framework

SWB is a multi-dimension phenomenon. It is not just the material life conditions but the psychological needs do matter in the pursuit of SWB. Hence, this study proposes a comprehensive SWB model with the theoretical support of Maslow's hierarchy of needs (1943) in which it incorporates both materialism and psychological needs in explaining Malaysian SWB. Although this theory was introduced in 1943 which was more than 70 years ago, it is still applicable in our daily life.

We still need food, air, water, safety, love, self-esteem, and self-actualization for a happy and blessed life no matter how modern the world is today. Furthermore, it is a human nature that we always 'hope for more'. The basic needs itself cannot fully satisfy human desires. Hence, Maslow (1943) argued that human needs are hierarchical (as shown in Figure 3.2); satisfaction will be improved only the primary needs are fulfilled.

Figure 3.2: Theoretical Framework for Maslow's Hierarchy of Needs and SWB
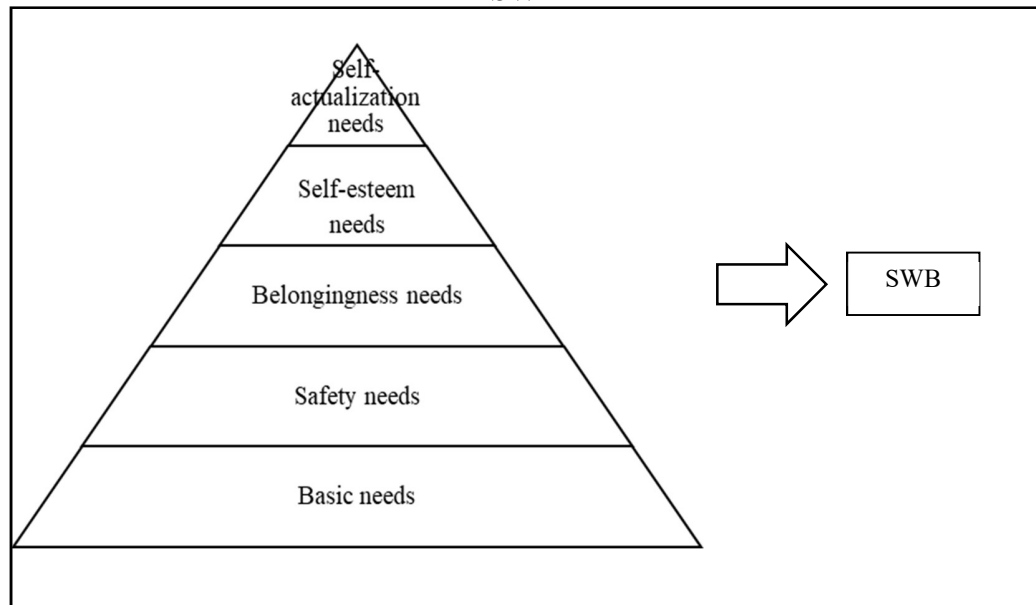
Maslow's hierarchy of needs consists of five needs which are from the bottom level, starts with basic needs - safety needs - belongingness needs - self-esteem needs until the top level, the self-actualization needs (Maslow, 1943). Basic needs (or also known as physiological needs) refer to food, air, water and shelter. We need it to keep ourselves physically fit to live. Safety needs include job securities, safety in the community and country, and safety from murder, assault and chaos. Safety helps to stimulate a sense of relaxation because when we know we are safe means we are far away from dangers or problems. Therefore, people will be happier and be more satisfied with their life.

Hypothesis 1: Basic needs are positively associated with SWB.

Hypothesis 2: Safety needs are positively linked with SWB.

After fulfilling the basic and safety needs, Maslow (1943) argued that the next needs to be fulfilled were belongingness needs. However, some researchers disagreed with such ordering, they claimed that belongingness is one of fundamental human needs (Deci & Ryan, 2000; Baumeister & Leary, 1995; Lavigne, Vallerand, & Crevier-Braud, 2011; Stenseng, Forest, & Curran, 2015). As what has been expressed by the phrase 'no man is an island', human beings do badly if being isolated from others. Hence, human beings need to be part of a community in order to have a flourish life.

Hypothesis 3: Belongingness needs are positively related with SWB.

Self-esteem is a part of self-perceptions which it could be affective or evaluation in the way how someone feel about themselves (Leary & Baumeister, 2000, Miller, Zivnuska, & Kacmar, 2019). Self-esteem can result different life outsomes. For example, low self-esteem brings negativity such as anxiety and depression (Kim & Moore, 2019; Sowislo & Orth, 2013; Hilbert, Goerigk, Padberg, Nadjiri, Übleis, Jobst, & Sarubin, 2019). In contrast, high self-esteem attracts more positivity like happiness and initiative (Baumeister, Tice, & Vohs, 2018). Hence, Brummelman, Thomaes, and Sedikides (2016) claim that people with higher self-esteem are generally more satisfied and be grateful of who they are.

Hypothesis 4: Self-esteem needs are positively associated with SWB.

Self-actualization needs refer to the aspiration for self-fulfillment where human can be a person who they want to be with their inherent potentials. Therefore,

Maslow (1970) interpreted self-actualization as everyone can actualize their potentials in morality, creativity, spontaneity, problem solving, lacking of prejudice and acceptance of facts. In general, self-actualizing people are more likely to have steadier and grounded happiness and life satisfaction as they can perceive reality accurately and also their sense of dignity, wonder and gratitude for their lives. Furthermore, self-actualizing people are more problem-centered instead of self-centered and thus they will be more willing to fight for difficulties. As a result, they would get rid of anxiety and depression (Crandall & Jones, 1991).

Hypothesis 5: Self-actualization needs are positively related to SWB.

In a nutshell, this study intends to study Malaysian SWB with a theoretical framework drawn upon the theory of Maslow's hierarchy of needs. With this framework, this study is able to identify which needs that Malaysian care in their pursuit of SWB. Thus, the empirical results could be the reference for the government and policy makers to design and implement sound policies to match Malaysian needs and bring greater welfare to the people and country.

3.3.2 Empirical Model and Methodology

With the theory of Maslow's hierarchy of needs, a basic SWB model is constructed as such:

$$SWB_i = \beta_0 + \beta_1 MHN_i + \mu_i \tag{1}$$

where *MHN* is a vector of independent variables that represents the Maslow's hierarchical needs – basic, safety, belongingness, self-esteem, and self-actualization needs. *B_1* is a vector of parameters for *MHN* and it is the key coefficient of interest. *i* denotes *i*-th respondent while μ is the disturbance term. However, the basic model, Equation (1), may not be fully reflect the Malaysian SWB at individual level if some other control and demographical variables are neglected. Therefore, this study suggests an augmented SWB model as following:

$$SWB_i = \beta_0 + \beta_1 MHN_i + \beta_2 X_i + \mu_i \tag{2}$$

where *X* is a vector of control and demographical variables, namely health satisfaction, income, the importance of God, the perceived democracy, log age, log age squared, having a paid job, education, Muslim, Hindu, marital status, and the number of kids. *B_2* is a vector of parameters for *X*.

SWB represents the level of respondent's perceived SWB and it is measured based on two different dimensions which are affective and cognitive SWB. The affective SWB is referring of the feeling or mood of happy and it can change easily. Literally, the past studies named this affective SWB as happiness. On the other hand, cognitive SWB is the evaluation on life where the person can judge whether they are satisfied with their life. Therefore, the SWB literature labelled it as life satisfaction. This facet of SWB does not change easily over the short period, hence, it lasts longer than affective SWB. Due to the two different nature of both affective and cognitive SWB, this study takes happiness (*HA*) and life satisfaction (*LS)* as two different proxies for *SWB*.

HA is collected through the question "Taking all things together, would you say you are: not at all happy, not very happy, rather happy or very happy?" with a scale from 1 (not at all happy) to 4 (very happy) in the WVS. This item has widely been adopted in the happiness studies such as the ones done by Churchill & Mention (2020), Lam et al. (2018), Veenhoven (2009). This item is an ordinal measurement with 4-scaled, this study estimates it by the ordered probit modellings. The ordered probit model follows cumulative standardized normal distribution. The probability distributions are denoted by $\Phi(.)$. For this study, the four levels of perceived happiness are set, *HA* (j = 1, 2, 3, and 4). Hence, there will be three cuts (denoted by τ_j) in the proposed ordered probit model.

For a four-level response, *HA*,

$$\text{Level 1: } \tau_0 \leq HA_i^* < \tau_1$$

$$\text{Level 2: } \tau_1 \leq HA_i^* < \tau_2 \qquad (3)$$

$$\text{Level 3: } \tau_2 \leq HA_i^* < \tau_3$$

$$\text{Level 4: } \tau_3 \leq HA_i^* < \tau_4$$

HA_i^* is the unobserved or latent variables that generated based on the observed HA_i. The conditional probability of *HA* underlying the ordered probit model with a given vector of *MHN* and *x* in the Equation (2) is:

$$Prob(HA_i = j) = \Phi(\tau_j - \beta MHN_i - \theta X_i) - \Phi(\tau_{j-1} - \beta MHN_i - \theta X_i) \quad (4)$$

where τ_j is the cut for j, also referred to as the intercept.

For the nonlinear of models like the ordered probit model, the estimated coefficients are not so straightforward to explain. Hence, marginal effects are more appropriate to be analyzed. Marginal effects show the change in probability when the predictor or independent variable increases by one unit. For instance, the marginal effects of *MHN* for the *j*-th response can be obtained as following:

$$\frac{\partial Prob(HA_i = j | MHN_i, X_i)}{\partial MHN_i} = [\phi(\tau_j - \beta MHN_i - \theta X_i) - $$

$$\phi(\tau_{j-1} - \beta MHN_i - \theta X_i)]\beta_1 \quad (5)$$

where $\phi(.)$ is the standardized normal density function. It determines how a change in *MHN* changes the probability for the *j*-th response.

The question used to indicate *LS* is "All things considered, how satisfied are you with your life as a whole these days?" with original scale from 1 (completely dissatisfied) to 10 (completely satisfied). This item from the WVS has frequently been used in the past studies (Rojas, 2020; Blanchflower, 2020; Yu et al., 2019). However, the regression with the original scale does not meet the parallel assumption of ordered probit modelling. As such, it is recoded to a binary response (j=0,1), 1 means the respondent is satisfied with his/her life, 0 otherwise. Since it is a binary response in nature, this study estimates it by logit and probit modellings.

Suppose that there is an unobserved or latent variable, *LS**, ranging from -∞ to + ∞ that generates the observed *LS*. When going through the generation process of *LS*, the large values of *LS** are categorized as *LS*= 1, while those with smaller values of *LS** are classified as *LS* = 0. *LS** is connected to the observed binary response *LS* with the measurement equation as follow:

$$LS = \begin{cases} 1, & LS_i^* > \varsigma_j \\ 0, & LS_i^* \leq \varsigma_j \end{cases} \qquad (6)$$

ς_j if the threshold or cut point. If LS_i^* is more than ς_i then $LS_i = 1$. On the other hand, when LS_i^* is same or less than ς_i, $LS_i = 0$. When the latent LS_i^* is unobserved or the LS_i is binary, the qualitative model cannot be estimated by Ordinary Least Squares

(OLS). Hence, the maximum likelihood estimation is used subjected to the assumptions on the distribution of error terms. The error terms in the probit models follow standardized normal distribution. Therefore, the population probit model of *LS* is:

$$Prob(LS_i = 1) = \Phi\big(\varsigma_j - \beta MHN_i - \theta X_i\big) \tag{7}$$

where Φ is the cumulative standardized normal distribution function.

Similar to ordered probit modelling, the interpretation for the coefficients of probit model is not so straightforward. Again, the marginal effects are computed. For example, the marginal effects of *MHN* can be calculated as following:

$$\frac{\partial Prob(HA_i = j | MHN_i, X_i)}{\partial MH_i} = \big[\phi\big(\varsigma_j - \beta MHN_i - \theta X_i\big)\big]\beta_1 \tag{8}$$

In handling the survey data analysis, the study may face two main challenges: first, the sampled data in this study is large which contains too many items or variables to be analyzed; second, this study may get the multicolinearity problem in the regression analysis that caused by the correlated variables. Furthermore, most of the questionnaires in the data set are in ordinal scales. One of the approaches to handle the survey data that used by the past studies is the categorical principal component analysis (CatPCA). For examples, the studies

carried by Neira, Lacalle-Calderon, Portela, and Perez-Trujillo (2019) and Levin, Inchley, Currie, and Currie (2012).

Therefore, this study uses CatPCA to construct the five needs variables of *MHN*, namely basic (*BASIC*), safety (*SAFETY*), belongingness (*BELONG*), self-esteem (*ESTEEM*), and self-actualization needs (*ACTUALIZATION*). By doing so, this study can avoid the multicolinearity problem and remain the information in the original data set. Then, the obtained components can be analyzed as regressors in a model (Field, 2013). The questions for constructing the needs components are selected based on the past studies as listed in Table 3.2.

The previous empirical results have indicated that the fulfillment of basic needs is positively related to the SWB (Lelkes, 2006; Howell & Howell, 2008; Diener & Lucas, 2000; Guillen-Rayo et al., 2013; Tay & Diener, 2011). The most recent studies by Galiani, Gertler, and Undurraga (2018) supported Maslow's argument that the contribution of basic needs fulfillment is not sustainable which it would not have long last effects on human SWB. It is found that the impact of the fulfillment of basic housing needs on poor slum dwellers' SWB only last for about 28 months. Since this study is just a cross-sectional study, hence, it is assumed that *BASIC* is positively related to *SWB*.

Tables 3.2: Details of the Variables Used in *SWB* Model

Variable	Scale	WVS code	WVS Questions	Used by the Past Studies
Dependent Variables				
HA	1 (Noat at all happy) - 4 (Very happy)	V10	"Taking all things together, would you say you are…" (p.1)	Churchill & Mention (2020), Lam et al. (2018), Veenhoven (2009).
LS	1(satisfied with life), 0 (dissatisfied with life)	V23	"All things considered, how satisfied are you with your life as a whole these days?" (p.2). However, this item has been rescaled to a dummy.	Rojas (2020), Blanchflower (2020), Yu et al. (2019)
Needs Variables				
BASIC			"In the last 12 months, how often have you or your family:	
BN1	1(Often) - 4 (Never)	V188	Gone without enough food to eat	Sulemana et al. (2019), Yusof (2019)
BN2	1(Often) - 4 (Never)	V189	Felt unsafe from crime in your home	Ali & Hassan (2019), Canale et al. (2018)
BN3	1(Often) - 4 (Never)	V190	Gone without medicine or medical treatment that you needed	More et al. (2019), Maridal (2017)
BN4	1(Often) - 4 (Never)	V191	Gone without cash" (p.19).	Yusof (2019), Nanziri (2016)
SAFETY				
NEIGHBORHOOD	1(Not at all safe) - 4 (Very safe)	V170	"Could you tell me how secure do you feel these days in your neighborhood?" (p.17).	More et al. (2019), Norris, & Inglehart (2015)
FINANACAL SATISFACTION	1(Completely dissatisfied) - 10 (completely satisfied)	V59	"How satisfied are you with the financial situation of your household?" (p.5).	Blanchflower (2020), André et al. (2019)

Tables 3.2: Details of the Variables Used in *SWB* Model (Continued)

Variable	Scale	WVS code	WVS Questions	Used by the Past Studies
BELONG				
BE1	1(Strongly disagree) - 4(Strongly agree)	V212	"I see myself as part of my local community" (p.21).	Ruedin (2019), Greenaway et al. (2015)
BE2	1(Strongly disagree) - 4(Strongly agree)	V214	"I see myself as part of the Malaysia nation." (p.21).	Appau et al. (2019), Masoom et al. (2016)
ESTEEM				
PROUD	1(Strongly disagree) - 4(Strongly agree)	V49	"One of my main goals in life has been to make my parents proud." (p.4).	Dalton & Ong (2001), Lomazzi (2018)
FREEDOM	1(no choice at all) - 10 (a great deal of choice)	V55	"How much freedom of choice and control you feel you have over the way your life turns out?" (p.4).	Verme (2009), Steele & Lynch (2013)
RESPECT	1 (A great deal of respect for individual human rights -10 (No respect at all)	V142	"How much respect is there for individual human rights nowadays in this country?" (p.13).	Wang et al. (2018), More et al. (2019)
ACTUALIZATION				
AC1	1 (Not at all like me) - 6 (Very like me)	V74	"It is important to help people living nearby; to care for their needs." (p.8).	Musek (2017), Held et al. (2009)
AC2	1 (Not at all like me) - 6 (Very like me)	V78	"Looking after the environment is important to this person; to care for nature and save life resources." (p.8)	Held et al. (2009) Ulman & Dobay (2020)

Tables 3.2: Details of the Variables Used in *SWB* Model (Continued)

Variable	Scale	WVS code	WVS Questions	Used by the Past Studies
ACTUALIZATION				
AC3	1 (Very like me) - 6 (Not at all like me)	V79	"Tradition is important to this person; to follow the customs handed down by one's religion or family." (p.8)	Held et al. (2009), Dobewall & Strack (2014)
Control variables				
HEALTH SATISFACTION	1(poor) – 4 (Very good)	V11	"All in all, how would you describe your state of health these days?" (p.1)	Ngamaba (2017), Pierewan & Tampubolon (2015)
INCOME	1 (Lowest group) – 10 (Highest group)	V239	"On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country." (p.24)	Ng et al. (2019), Davis & Wu (2019)
GOD	1 (Not at all important) – (Very important)	V152	"How important is God in your life?" (p.15)	Bomhoff & Siah (2019), Churchill et al. (2019)
DEMOCRATIC	1 (Not at all democratic) – 10 (Completely democratic)	V141	"How democratically is this country being governed today?" (p.13).	Sharma (2019), Maridal (2017)
AGE	In year	V242	"How old are you?" (p.24)	Graham & Pozuelo (2017), Wong et al. (2020)
PAIDJOB	1 (Yes, has a paid employment) – 0 (No, does not have a paid employment)	V229	"Are you employed now or not?" (p.22)	
EDUCATION	1 (No formal education) – 9 (University-level, with degree)	V248	"What is the highest educational level that you have attained?" (p.25)	del Mar Salinas-Jiménez et al. (2011), Bomhoff & Siah (2019)

Tables 3.2: Details of the Variables Used in *SWB* Model (Continued)

Variable	Scale	WVS code	WVS Questions	Used by the Past Studies
MUSLIM	1 (Yes), 0 (No)	V144	"Do you belong to a religion?" (p.26)	Devine et al. (2019), Ngamaba & Soni (2018)
HINDU	1 (Yes), 0 (No)	V144	"Do you belong to a religion?" (p.26)	Ngamaba & Soni (2018)
MARRIED	1 (Yes), 0 (No)	V57	Are you married? (p.5)	Mikucka (2016), Grover & Helliwell (2019)
KID	0 (No) – 8 (More than 8 kids)	V58	"Have you had any children?" (p.5)	Vinson & Ericson (2014), Herbst & Ifcher (2016)

Source: WVS, 6th wave questionnaires, Malaysia, available at http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp

The component for *BASIC* are constructed based on the 4 items with a scale from 1 (often) to 4 (never) in the WVS: "In the last 12 months, how often have you or your family: (i) gone without enough food to eat, (ii) felt unsafe from crime in your home, (iii) gone without medicine or medical treatment that you needed, and (iv) gone with cash. All these items have been adopted by the previous studies to measure the basic needs (Sulemana et al., 2019; Yusof, 2019; Ali & Hassan, 2019; More et al., 2019; Maridal, 2017; Nanziri; 2016). This study finds that the Cronbach's alpha is 0.778 which the component is quite reliable to be used.

Moving to the next level of needs, safety needs, it cannot be avoided from the safety in neighbourhood. The earlier study by Campbell, Converse, and Rosder (1976) argued that safe residential environment would offer higher life satisfaction. With the massive growth of Chinese cities, Ma, Dong, Chen, and Zhang (2018) also illustrated that the main neighbourhood characteristics such as the perceived safety, physical and social surroundings, and transportation convenience are sources of life

satisfaction. Besides the safety from neighbourhood, another safety source is from individual financial conditions (Weziak – Bialowolska, 2016). This is because without financial sources such as money, people cannot live with basic needs like food and shelters. We may feel insecure if we have financial constraints to fulfil the basic living. Hence, a positive linkage between *SAFETY* and *SWB* is expected.

For *SAFETY* component, this study uses two items in the WVS. "Could you tell how secure do you feel these days in your neighborhood, from 1 (not at all safe) to 4 (very safe)" is used to measure the safety from the surroundings (More et al., 2019; Norris & Inglehart 2015). On the other hand, "How satisfied are you with the financial situation of your household, from 1 (completely dissatisfied) to 10 (completely satisfied). However, the Cronbach's alpha for the generated *SAFETY* which is pretty low (0.257). Therefore, this study does not use the generated component of *SAFETY* to proxy the safety needs in the model but these two items are analyzed in the model on stand alone basis.

Belongingness needs encompass the sense of closeness and appreciation that people care about in important groups (Baumeister & Leary, 1995). As such, belongingness breeds positive emotion such as happy as it stimulates the satisfaction of being loved and valued by others. Appau, Churchill, and Farrell (2019) illustrates that "the perceived strength of belonging to one's immediate neighborhood and country" is one of the dimensions of social integration that can

boost the SWB in the UK. Therefore, this study presumes that *BELONG* is positively linked with *SWB*.

This study generates the *BELONG* component based on two items: (i) "I see myself as a part of local community" and "I see myself as part of Malaysia nation" with a scale from 1 (strongly disagree) to 4 (strongly agree). These two items have been used to proxy the identity belongingness in the past studies (Ruedin, 2019; Greenaway et al., 2015; Appau et al., 2019; Masoom et al., 2016). The obtained Cronbach's alpha for this *BELONG* component in this study is 0.841 which shows that *BELONG* is very reliable to be used in the analysis.

Self-esteem can be gained through various ways, for example the recognition from the parents (King et al., 2002; Brummelman & Sedikides, 2020; Mohan, 2020), respect to human right (Schimmel, 2009; Grover, 2021; Heo et al., 2019), and freedom to make choices in life (Assor et al., 2021). Besides, self-esteem is one of the predictors of SWB (Suh & Oishi, 2002; Schimmel, 2009; Diener, Diener, & Diener, 2009; Heo et al., 2019). Therefore, this study generates the *ESTEEM* needs based on three items. The first item is about the self-esteem that gained through making parents proud, "One of my main goals in life has been to my parents proud with a scale from 1(strongly disagree) to 4 (strongly agree)" (Dalton & Ong, 2001; Lomazzi, 2018).

The second item in used is "How much freedom of choice and control you feel you have over the way your life turns out?". It is scaled from 1 (no choice at all) to 10 (a great deal of choice). Steele and Lynch (2013) also adopt these WVS items in their studies. The last item is "How much respect is there for individual human rights nowadays in this country?" with a recoded scale from 1 (No respect at all) to 10 (a great deal of respect for individual human rights). This item is also used in the past studies (Wang et al., 2018; More et al., 2019). Based on the three items, this study generates an *ESTEEM* component with a Cronbach's alpha result of 0.305. Since the *ESTEEM* component is not reliable, this study includes the three items in the model on stand alone basis instead using the *ESTEEM* component.

Many recent studies have statistically proven on Maslow's argument that self-actualizing people tend to be happy (Vasudha and Prasad, 2017; Kashdan, Stiksma, Disabato, McKnight, Bekier, Kaji, & Lazarus, 2018; Silvia & Kashdan, 2009). Using a survey on 522 participants who are under recruitment of Amazon's Mechanical Turk, Kaufman (2018) concluded that the self-actualization underlying Maslow's hierarchy of needs (1943) is still well fit in the research on personality and wellbeing in the 21st century.

The modern living still requires human to have the characteristic of self-actualization such as continued freshness of appreciation, self-acceptance, authenticity, equanimity, aware of purpose of life, efficient perception of reality, humanitarianism, peak experiences, good moral intuition and creative spirit to face

the challenges in the modern era. As such, this study assumes that *ACTUALIZATION* is positively related to *SWB*. With all the above-mentioned past studies, it is expected that the parameters of *MHN*, $\beta > 0$.

The *ACTUALIZATION* component in this study is constructed by referring to Held et al (2009) using the WVS data. The used items are: (i) "It is important to help people living nearby; to care for their needs.", (ii) "Looking after the environment to this person; to care for nature and save life resources", and (iii) "Tradition is important to this person; to follow the customs handed down by one's religion or family". All these three items come with an original scale of 1 (very like me) to 6 (not at all like me). In order to avoid any confusing scale measurement of *ACTUALIZATION*, the items (i) and (ii) are rescaled to 1 (not at all like me) to 6 (very like me) while the scale for item (iii) remains as it is in the WVS. Now, the scale measures for these three items move into the same direction, where higher scales mean greater self-actualization is needed.

To have a comprehensive analysis on Malaysian SWB, this study also includes some other control and demographic variables as suggested by the past studies that discussed in the Chapter 2. For the self-rated health satisfaction (*HEALTH SATISFACTION*), this study uses the item in the WVS, "All in all, how would you describe your state of health these days?" with a scale from 1 (poor) to 4 (very good). Such item is used in the studies by Ngamaba (2017) and also the ones by Pierewan and Tampubolon (2015).

On the other hand, the income indicator (*INCOME*) is measured by self-reported deciles in the national distribution of income. Therefore, such income levels are defined in relative terms, are comparable across the states in Malaysia. The respondents are asked "On this card is an income scale on which 1 indicates the lowest income level and 10 the highest income in your country. Which one will you choose?". This item is used in the happiness studies by Ng et al. (2019) and Davis and Wu (2019).

Furthermore, Malaysia is a multi-religious country and majority of the population are Muslims. They are quite religious and they pray for 5 times per day. To mirror the religious culture in Malaysia, this study also includes the variable that indicates the importance of god (*GOD*) in the SWB modelling. The used item is "How important is God in your life?" with a scale from 1 (not at all important) to 10 (very important). Such item is used in the previous studies (Bomhoff & Siah, 2019; Churchill et al., 2019) to reflect the religious faith of the respondents. Also, this study also includes the religion denomination with dummy variables for Muslims (*MUSLIM*) and Hindus (*HINDU*).

For democracy (*DEMOCRATIC*) factor, this study uses the item from the WVS: "How democratically is this country being governed today?" with a ranking from 1 (not at all democratic) to 10 (completely democratic). Such measurement is widely adopted by the previous studies (Sharma, 2019; Maridal, 2017). Consistent with the previous happiness studies, this study also includes the age and age squared

term in the SWB models to reflect the U-shaped relationship between age and SWB (Tao, 2019; Fukuda, 2013; Blanchflower & Oswald, 2008; Stone et al., 2010). However, both age (*LAGE*) and age squared (*LAGE squared*) are expressed in the natural logarithm term to minimize the measure gap between age and SWB indicators.

For employment (*PAIDJOB*), this study uses a binary response question: "Are you employed now or not?" with a coding, 1 denotes yes, has a paid employment; o otherwise. Additionally, this study employs the WVS item: "What is the highest education level that you have attained?" from level 1 (no formal education) to 9 (university level). This study not just includes the marital status (*MARRIED*) (1- if they are married, 0 otherwise) but also the number of kid(s) they have (*KID*) with the coding 0 (no) to 8 (more than 8 kids).

3.4 Examining the Moderating Effect of Religiosity on the Relationship between B40 and Self-Actualization and SWB: Authentic Happiness Theory

The World Happiness Reports (Helliwell et al., 2012; 2013; 2019) have highlighted the importance of virtue ethics in the pursuit of happiness. However, this factor has always been overlooked and human ethics starts to fall in the modern era today (Sachs, 2013). Hence, the World Happiness Report 2012 has suggested the global policy makers to look into the religions polices to restore the virtue ethics

in the pursuit of SWB because most religions are sharing the basic ethics to its followers (Küng & Moltmann, 1986).

In Malaysia, the government always prioritize the welfare of low-income group (B40) by providing the financial aids and subsidiaries. The long-term financial aids and subsidiaries may burden the national account and the B40 group may rely heavily on those financial aids and lose the motivation to work. Perhaps, this low-income group may need to compass good ethics through religiosity to get through their financial hardship. However, the religiosity related policy making is new and challenging especially in the multi-religions country like Malaysia. Therefore, a lot of research is required. For the first move, it is crucial to reveal if religiosity helps to improve lower income group's wellbeing.

On the other hand, self-actualization, according to Maslow (1970), represents growth of an individual toward fulfillment of the highest needs which include being ethical. With the high demand of economic growth and the rise of modern living, virtue ethics behavior starts to be overshadowed in the society (Sachs, 2013). In the recent years, there are a few issues in Malaysia can be perceived as unethical human behaviors such as the cyber bullying, serious corruption, and the import of foreign waste materials from the developed countries. Hence, this study also intends to examine if religiosity helps to moderate the relationship between self-actualization and SWB. Overall, the second objective of

this study is to reveal the moderating effect of religiosity on the relationship between B40 and self-actualization and SWB.

3.4.1 Theoretical Framework

To achieve the second objective of this study, a theoretical framework is drawn upon the authentic happiness theory. Most of the authentic happiness theorists are psychologists and they criticized that many mainstream SWB theories over emphasize on satisfaction and pleasure (Heady et al., 2010). Hence, authentic happiness theory has strong sense of morality, sometimes Christian, overtones yet it is evidently numerically testable and applicable in stimulating long term wellbeing (Lyubomirsky, King, & Diener, 2005; Seligman, Parks, & Steen, 2004; Proyer, Gander, Wellenzohn, & Ruch, 2016).

The authentic happiness theory was introduced by Martin Elias Pete Seligman, an American Psychologist, in 2002 (Proyer et al., 2016). Seligman (2002) claimed that a good life is constituted by three routes, pleasure, meaning, and engagement. The idea of pleasure is same with the hedonic happiness where people show their positive emotions such as excitement, ecstasy, and comfort among others (Scorsolini-Comin, Fontaine, Koller, & Santos, 2013). According to Seligman (2002), a meaningful life includes belonging and serving something that people perceive it is more important than self. Hence, some other authentic happiness theorist further defined meaning as the purposes of life which are pro-

social (altruistic) and are perceived to have intrinsic worth instead of being purely self-centred and materialistic (Heady et al., 2010).

Engagement in the authentic happiness theory refers to a stage of losing self especially in the moment that human participate in an activity in which it is considered pleasurable. Seligman (2002) stated that individual can cultivate engagement in relation to an action and able to recognize what those actions are and what structures can cause the individual has little mindfulness of his/ her true sensations.

Studies have showed that the engagement in pursuing meaningful life helps to breed some character strengths like love, hope, curiosity, and zest and all these eventually promote greater SWB (Peterson & Seligman, 2004; Peterson, Ruch, Beerman, Park, & Seligman, 2007). In view of these three ways of approaching happiness, many authentic happiness theorists have reached a consensus that religious beliefs and behaviours are significant approach to fulfil the long-lasting authentic happiness (Heady et al., 2010; Myers, 2008; Peterson & Seligman, 2004).

Figure 3.3: Theoretical Framework for Direct and Indirect Impacts of Religiosity on SWB Drawn upon the Authentic Happiness Theory
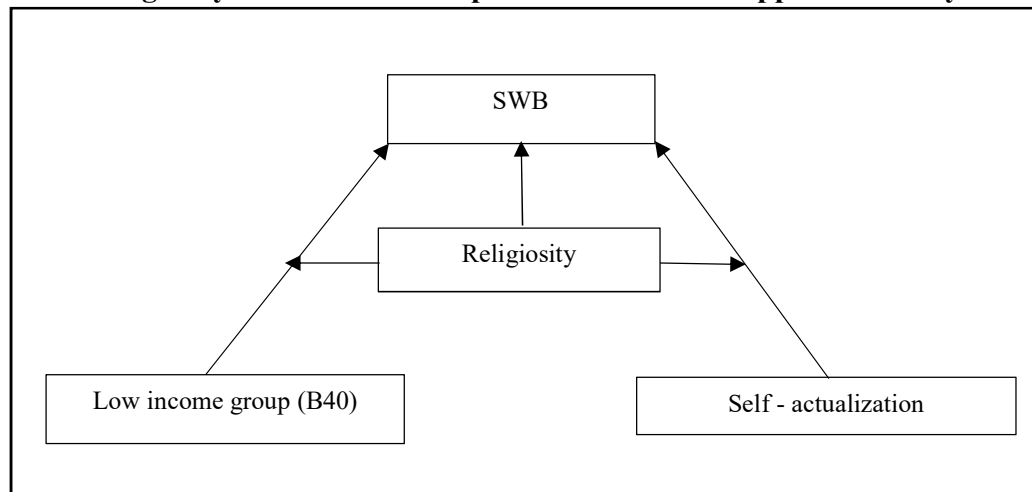
Almost all religions share common virtue ethics such as gratitude (Fredrickson & Joiner, 2002; Emmons, 2007; Wood, Froh, & Geraghty, 2010; McCullough et al., 2003), altruism (Lyubomirsky, Sheldon, & Schkade, 2005), forgiveness, patience, and self-control (Witvliet, Richie, Root Luna, & Van Tongeren, 2019). Therefore, religious persons are happier and more satisfied than their counterparts (Diener et al., 2011; Hackney & Sanders, 2003; Rizvi & Hossain, 2017; Devine, Hinks, and Naveed, 2019). As such, this study argues that there is a direct impact of religiosity on SWB as shown in Figure 3.3.

Hypothesis 6: Religiosity is positively associated with SWB.

Additionally, religiosity has indirect impact on SWB in the sense that when people suffer in the difficulties that hit their boundaries, "religion offers a number of aids: spiritual support, ultimate explanation, a sense of larger, benevolent, forces at work in the universe, and a purpose in life that holds sacred significance"

(Pargament, 2002, p.175). In view of this, there are quite a number of recent studies has further explored the buffering effect of religion on SWB against economic stressors like unemployment and income inequality (Joshanloo & Weijers, 2016; Churchill et al., 2019; Diener et al., 2011; Plouffe & Tremblay, 2017; Joshanloo, 2018).

Hence, this study argues that B40 group is with lower SWB compared to the middle-income group (M40) due to their low income. Nevertheless, religiosity can indirectly cushion the negative impact of being B40 group on SWB in Malaysia.
Hypothesis 7: B40 group is with lower SWB compared to M40 group.
Hypothesis 8: Religiosity helps to moderate the relationship between B40 and SWB.

On the other hand, there is a bunch of religion studies have shown that most religions help people to realise and actualize themselves (Solanki et al., 2019; Kesebir, 2018; Lenoir, 2015; Koenig et al., 1988; Schroeder & Frana, 2009; Cotton et al., 2006; Ray & Wyatt, 2018; French & Joseph, 1999; Hackney & Sanders, 2003; Afrasibi & Fattahi, 2017). The literature about the significant role of religiosity in self-actualization has been discussed in depth in the Chapter 2. With the previous studies, this study assumes that religiosity would guide them to self-actualize and hence they boost up their SWB.
Hypothesis 9: Religiosity helps to moderate the relationship between self-actualization and SWB.

3.4.2 Empirical Model and Methodology

Based on theoretical framework that drawn upon the authentic happiness theory, both direct and indirect impacts of religiosity on SWB can empirically be examined as such:

$$SWB_i = \partial_0 + \partial_1 B40_i + \partial_2 ACTUALIZATION_i + \partial_3 RELIGIOSITY_i$$
$$+ \partial_4 B40 \text{ x } RELIGIOSITY_i + \partial_5 ACTUALIZATION \text{ x } RELIGIOSITY_i$$
$$+ \mu_i \tag{9}$$

However, SWB is not solely affected by the religiosity but it also influenced by other human needs and control variables as per discussed by the first objective in this study. In view of this, Equation (10) is the expansion to Equation (2):

$$SWB_i = \partial_0 + \partial_1 B40_i + \partial_2 ACTUALIZATION_i + \partial_3 RELIGIOSITY_i$$
$$+ \partial_4 B40 \text{ x } RELIGIOSITY_i + \partial_5 ACTUALIZATION \text{ x } RELIGIOSITY_i$$
$$+ \beta_1 MHN_i + \beta_2 X_i + \mu_i \tag{10}$$

SWB represents the level of respondent's perceived SWB. Again, it is measured through happiness (*HA*) and life satisfaction (*LS*). HA still remained as 4-scaled variable (j = 1, 2, 3, and 4). Therefore, this study estimates it again by the ordered probit modelling. The ordered probit model of *HA* with given all the independent variables in the Equation (10) can be expressed as:

$$Prob(HA_i = j) = \Phi\big(\tau_j - \partial_1 B40_i - \partial_2 ACTUALIZATION_i -$$

$$\partial_3 RELIGIOSITY_i - \partial_4 B40 \text{ x } RELIGIOSITY_i -$$

$$\partial_5 ACTUALIZATION \text{ x } RELIGIOSITY_i - \beta_1 MHN_i - \beta_2 X_i\big) -$$

$$\Phi\big(\tau_{j-1} - \partial_1 B40_i - \partial_2 ACTUALIZATION_i -$$

$$\partial_3 RELIGIOSITY_i - \partial_4 B40 \text{ x } RELIGIOSITY_i -$$

$$\partial_5 ACTUALIZATION \text{ x } RELIGIOSITY_i - \beta_1 MHN_i - \beta_2 X_i\big)$$

$$(11)$$

For *LS*, it is estimated by the logit and probit modellings due to its nature of binary responses (j = 0, 1). Therefore, the probit model of *LS* is

$$Prob(LS_i = 1|Z_i) = \Phi\big(\varsigma_j - \partial_1 B40_i - \partial_2 ACTUALIZATION_i -$$

$$\partial_3 RELIGIOSITY_i - \partial_4 B40 \text{ x } RELIGIOSITY_i -$$

$$\partial_5 ACTUALIZATION \text{ x } RELIGIOSITY_i - \beta_1 MHN_i -$$

$$\beta_2 X_i\big) \qquad\qquad (12)$$

where Φ is the cumulative standard normal distribution function.

B40 is a dummy variable, 1 indicates that those fall in the first four lowest income levels which extracted from *INCOME* (scores 1 to 4), 0 otherwise. In general, richer people are relatively happier (Myers & Diener, 2018), although there are diminishing happiness returns to higher income (Donnelly et al., 2018). Therefore, it is hypothesized that *B40* group in Malaysia is unhappier/ dissatisfied

with life compared to *M40* (middle income group) due to their low-income circumstances.

Hence, it is predicted that $\alpha_1 < 0$. Furthermore, *ACTUALIZATION* is a CatPCA component that represents self-actualization as mentioned by the first study objective. The relationship between *SWB* and *ACTUALIZATION* is expected to be a positive correlation ($\alpha_2 > 0$) as the characteristic of self-actualization such as humanitarianism and good moral intuition brings greater life satisfaction and psychological wellbeing (Kaufman, 2018).

For *RELIGIOSITY*, the past studies generally measured it from two perspectives, religious faith and religious practice. Religious faith is commonly indicated by the question "How important is God in your life?" with a 10-scaled measurement where 1 denotes (not at all important) to 10 (very important) (Ng et al., 2019; Bomhoff & Siah, 2019, Churchill et al., 2019). For religious practice, it is proxied by the question "Apart from weddings and funerals, about how often do you pray?" (Yu et al., 2019; Myers, 2000). It is scaled from 1 (never) to 8 (several times per day). Hence, this study also uses these two proxies, the importance of God in life (*GOD*) and how often the prayers do (*PRAYTIME*) to measure *RELIGIOSITY*.

Most of the past studies have reached a consensus that religiosity attracts higher SWB (Diener et al., 2011; Hackney & Sanders, 2003; Rizvi & Hossain, 2017;

Devine et al., 2019). Myers (2008) claimed that almost all cross-sectional studies indicated a significant correlation, generally in the range between 0.008 to 0.15, between SWB and religious faiths and behaviours. Moreover, the recent longitudinal study by Ng et al. (2019) revealed that religiosity is the only common determinant of life satisfaction for both developed and developing countries. Therefore, it is expected to have a positive direct impact of *RELIGIOSITY* on *SWB*, hence, $\alpha_3 > 0$ is presumed.

One of the most cited explanations for the positive correlation between religions and SWB is that when people suffer in the difficulties that hit their boundaries, "religion offers a number of aids: spiritual support, ultimate explanation, a sense of larger, benevolent, forces at work in the universe, and a purpose in life that holds sacred significance" (Pargament, 2002, p.175). In view of this, there are quite a number of recent studies further examined the buffering effect of religion on SWB against economic stressors like unemployment and income inequality (Joshanloo & Weijers, 2016; Churchill et al., 2019; Diener et al., 2011; Plouffe & Tremblay, 2017; Joshanloo, 2018).

All these studies confirmed the cushioning role of religion in reducing the unhappiness or dissatisfaction of facing the poor financial circumstances but none of them are in Malaysia context. To fill up the research gap, this study examines the indirect impact of *RELIGIOSITY* in cushioning the unhappiness / dissatisfaction of *B40* by expecting a significant α_4. On the other hand, the indirect impact of

RELIGIOSITY in enhancing the happiness/ satisfaction of *ACTUALIZATION* can be examined via a significant α_5.

For the remaining regressors, *MHN* and *x*, they are measured with same proxies as used in the first study objective except for *INCOME*, it has been rescaled into two dummy variables which are *B40* and *T20*. *T20* is a dummy variable, 1 indicates that those fall in the first two highest income levels (scores of 9 and 10) which extracted from *INCOME*, 0 otherwise. Like the first study objective analysis, all the marginal effects for each independent variable are computed and reported in Chapter 4.

3.5　　**Investigating the Impact of Life Satisfaction on Voting Intention with the Presence of Digital Media: The Rational Choice, Economic, and Altruism Voting Theories**

The existing studies focus more on the impact of democracy on life satisfaction. However, the reverse studies that the effect of life satisfaction in triggering political behaviour likes voting is still limited, especially in the context of Malaysia that experiencing watershed politics recently. The coalition of National Front (Barisan National, BN), which involving the United Malays National Organization (UMNO), Malayan Chinese Association (MCA), and the Malayan Indian Congress (MIC), was the hegemony in Malaysia since independence until 2018.

However, it was obvious that Malaysians were so desperate to vote for a new government since the 14th general election (GE-14) in 2008 where the turnout rate at the ballot box and the vote swung to the opposition coalition increased dramatically. Many scholars deemed that the changes of such voting pattern were due to the bad administration by the ruling of BN.

Intuitively, good government will prioritise people's wellbeing and thus people will have better living. In turn, people will vote for the government again. Therefore, the rational theory of voting claims that people will vote if only their votes can bring benefits to them. With the rational theory of voting, this study argues that life satisfaction is the benefit gained from the voting and it can trigger the voting intention.

Furthermore, the advancement of digital media such as Internet, emails, and smartphones have made people easily exploring the news in local and global. Therefore, people will be more aware of the happenings and the performance of government in the country. Will this amplify the impact of life satisfaction on voting intention? Therefore, the last objective of this study to discover the potential role of life satisfaction in triggering voting intention with the presence of digital media as news resource.

3.5.1 Theoretical Framework

Based on the current literature, this study proposes a theoretical framework based on a mix of voting theories which are rational choice, economic, and altruism voting theory as shown in Figure 3.4 in explaining the impact of life satisfaction on voting intention with the condition on the use of digital media as news sources.

Figure 3.4: Theoretical Framework for Voting Intention in Malaysia Drawn upon the Rational Choice, Economic, and Altruism Voting Theories
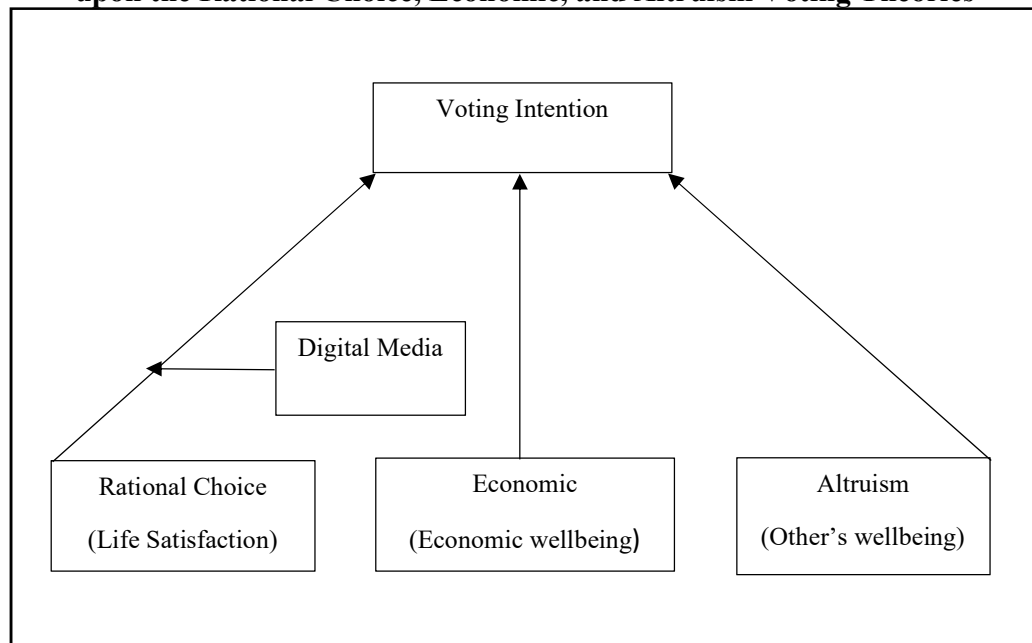
The rational choice of voting theory which developed by Downs (1957) and expanded by Riker and Ordeshook (1968) has long been used in explaining if voters choose to vote or not to vote (Blais, 2000). The main argument of this theory is simple which it claims that voters decide to vote if the benefit of voting is greater

than the cost, and vice versus. Hence, some political scholars interpret that rational voters are selfish in the sense that they only vote for their self-interest (Blais, 2000). Therefore, this study argues that life satisfaction is one of the self-interest that motivates Malaysians to vote.

Veehoven (1988) initially argued that happiness would excrete democracy because citizens with higher life satisfaction would tend to withdraw themselves from political participation to remain the existing political system. However, Veehoven (1988) then rejected his statement through a reference research and reclaimed that happier people care more about the social and political issues in the country. Thus, happier citizens are more active in the political participation compared to their counterparts.

Although many recent studies agree with Veehoven's argument (Ward, 2020; Flavin & Keane, 2012; Flavin et al, 2014), this study argues in an opposite way. Reviewing back at the high voting participation and the poor governance in Malaysia, this study argues that Malaysians with a lower level of life satisfaction tend to vote compared to those with a higher level of life satisfaction.
Hypothesis 10: Life satisfaction is negatively related to voting intention.

Besides, the rational theory of voting also states that voters are under the condition of imperfect information whereby voters are not well-informed about the political issue in the nation including the information about the candidacy

(Jankowski, 2007). The advanced technologies today such as Internet has improved such condition. Not only the studies in Malaysia but worldwide have mostly recognised the contribution of Internet towards voting behaviour in the last decade (Kasim & Sani, 2016; Willnat et al., 2013; Gomez, 2014; Woon, 2018; Spierings & Jacobs 2014; Gueorguieva, 2008).

Hence, this study presumes that digital media help to provide more information and thus it amplifies the effect of life satisfaction on voting intention.

Hypothesis 11: Digital media is positively related to voting intention.

Hypothesis 12: There is a moderating effect of digital media in the relationship between life satisfaction and voting intention.

Besides the rational choice of theory, this study also includes economic voting theory and altruism voting theory to embark a comprehensive framework in explaining the voting intention in Malaysia. In the eye of political economists, economic wellbeing is the main motivation to vote. Hence, the economic voting theory deems that that people vote for the ruling government when the economy is good to remain them in the office. In contrast, voters will swing to vote for the opposition if the economy is bad to change the incumbents (Lago & Blais, 2019). This study uses the personal financial circumstances instead of nation's GDP to test the economic voting in Malaysia.

Hypothesis 13: Personal financial circumstances are positively related to voting intention.

Furthermore, some researchers from economics, psychology and political science have reached a consensus that the act of voting is not only motivated by self-interest but also others wellbeing which is formally known as altruism voting (Edlin et al., 2007; Hudson & Jones, 2002). Hudson and Jones (2002) claimed that the weight that voters place on self-interest compared to public interest (others wellbeing) is different based on how voters judge their individual welfare and the social benefit.

Reviewing back to the turnout rate in the last few general elections in Malaysia, Malaysians were so desperate to vote for a better and bright future for Malaysia. With the altruism voting theory, this study hypothesized that voters not only vote for self- benefits but for their kids' futures as well.

Hypothesis 14: Malaysians who have children tends to vote compare to their counterparts.

3.5.2 Empirical Model and Methodology

The rational choice of voting theory argued that voters decide to vote if the benefit of voting is greater than the cost, and vice versus (Down, 1957; Ordershook, 1968; Blais 2000). Hence, the turnout voting can easily be calculated based on this theory through the expected utility of voter as such:

$$R = (B \text{ x } P) - C + D \tag{13}$$

where R represents the expected utility of voter, B refers to the utility gain if the preferred candidate wins, P is the likelihood of individual's vote getting the preferred outcome, C displays the cost of voting while D denotes the benefit triggered from fulfilling social duty to vote.

Undeniably, people tend to vote if their expected utility (R) is high. Otherwise, they tend to withdraw themselves from voting. As such, this study proposes that:

$$VOTING_i = f(R_i) \qquad (14)$$

where $VOTING$ represents the intention to vote and i denotes the i-th voter. It is reasonable to assume that voters with higher expected utility derived from voting have higher intention of voting, $f'(R_i) > 0$.

As the expected utility takes into account both private and social satisfactions, it becomes natural to proxy R_i with life satisfaction $LIFE_{ij}$. Doing so is also in line with the SWB literature that claims life satisfaction as self-evaluation on how well individual's life is doing (Diener, 1984; Ward, 2020; Ward and King, 2019). Furthermore, life satisfaction is a good proxy to capture both private and social satisfaction. This is because the first objective of this study has proven that life satisfaction is driven by personal wellbeing such as financial satisfaction and

also the social benefit like the democracy in the country which coherent with Equation (14).

Life satisfaction is a perceived judgement that can be shaped by access to information about the election. A voter, for instance, who has low private benefit derived from voting could be motivated to vote if he or she finds strong moral mandate to vote after being exposed to a sea of information via social media. To address the role of social media in motivating voting intention as well as reshaping the interaction between voting intention and expected utility of voting, Equation (14) is expanded by incorporating digital media DM and an interaction term $DM \times LIFE$.

$$VOTING_{ij}^* = \gamma_0 + \gamma_1 LIFE_{ij} + \gamma_2 DM_{ij} + \gamma_3 LIFE \times DM_{ij} + \omega_j + \varepsilon_{ij} \qquad (15)$$

To complete the model, Equation (15) also incorporate a number of controlled variables that take into account demography, political preference, age, education level and ethnicity as follows:

$$VOTING_{ij}^* = \gamma_0 + \gamma_1 LIFE_{ij} + \gamma_2 DM_{ij} + \gamma_3 LIFE \times DM_{ij} + \gamma_4 W_{ij} + \omega_j + \varepsilon_{ij}$$

$$(16)$$

where W is a vector of control variables which are personal financial circumstances (*FINANCE*), having children (*CHILD*), political interest (*INTEREST*), the

confidence toward the political party (*PARTY*), the preferable political party which is BN coalition (*BN*), civil duty as Malaysian (*MALAYSIAN*), age of respondent (*AGE*), age squared of respondent (*AGE squared*), education level (*EDUCATION*), and the race (*MALAY*).

VOTING is a binary response variable and it is obtained through the question "Have you ever vote before in the General Election?", 1 is yes, 0 otherwise. This question is adopted in the studies by Sulemana and Agyapong (2019) and Antonietti et al. (2016). The voting pattern in Malaysia is not only affected by the factors at individual level but the voter's preference varies across the state (Khalid & Awang, 2008). For example, voters in Kelantan and Terengganu prefer to vote for the Pan-Malaysian Islamic Party (PAS) while voters from Penang are more favourite to the Democratic Action Party (DAP). Therefore, the *VOTING* model in Equation (16) should be regressed by taking into the account of state clustering.

In other words, this study intends to examine not only the voter's personal factors that stated in Equation (16) but also the state factor at national level at a hierarchical structure. However, the conventional qualitative models such as probit, logit, and tobit modelling approaches fail to test the hierarchical impacts of regressors on dependent variable. As such, Equation (16) is regressed by the hierarchical linear modelling (HLM) which it allows independent variables to be obtained from level of a hierarchical structure and it is with at least one random

effect above level one (Sullivan, Dukes, & Losina, 1999; Raudenbush & Bryk, 2002, Garson, 2013).

All the independent variables in Equation (16) are considered as the factors influence *VOTING* at individual level (level 1) while the dummy variables for each state in Malaysia are the factors from state level (level 2). With HLM, this study can provide a systematic analysis of how covariates measured at both individuals and states levels influence *VOTING* and how the joint effect among covariates measured at these two different levels affect *VOTING* (Raudenbush & Bryk, 2002). With HLM, it is assumed that there exists a latent continuous variable, *VOTING** underlying *VOTING*. The binary response *VOTING* is observed directly while *VOTING** is not. However, it is technically known that *VOTING** > 0 if *VOTING* = 1 while *VOTING** ≤ 0 if *VOTING* = 0.

ω_j is a random effect that capturing the random variation at the state level (level-two), and ε_{ij} is the random effect at individual level (level-one) in Equation (18). The parameters for the random effects are $E(\omega_j) = E(\varepsilon_{ij}) = 0$, var $(\omega_j) = \delta^2_\omega$, var $(\varepsilon_{ij}) = \delta^2_\varepsilon$, cov $(\omega_j, \varepsilon_{ij}) = 0$, and , cov $(\omega_j \omega_{j'}) = 0$ for j = j'. Conditional on the random effect ω_j at the state level can be derived from Equation (16) if it is assumed that the ε_{ij} in Equation (16) follows a standard logistic distribution. If the ω_j were observed, the conditional density function for the *j*-th state can be written as:

$$f\big((VOTING_j|LIFE_j, DM_j, LIFE \times DM_j, W_j, \omega_j\big)$$

$$= \prod_{i=1}^{n_j} \frac{\exp[VOTING_{ij}(\gamma_1 LIFE_{ij} + \gamma_2 DM_{ij} + \gamma_3 LIFE \times DM_{ij} + \gamma_4 W_{ij} + \omega_j)]}{1 + \exp(\gamma_1 LIFE_{ij} + \gamma_2 DM_{ij} + \gamma_3 LIFE \times DM_{ij} + \gamma_4 W_{ij} + \omega_j)} \qquad (17)$$

The eligible age to vote in Malaysia is 21 years old and above. However, the original data set from the WVS consists of 1300 respondents who aged between 18 to 80 years old. Therefore, the respondents who aged below 21 years old are dropped out from the original dataset, only 1198 respondents are included in the HLM analysis in this study. For robustness checking, this study also estimates Equation (16) by Tobit modelling approach.

The main independent variable, *LIFE*, is used to indicate the level of life satisfaction. This variable is obtained through the question, "All things considered, how satisfied are you with your life as a whole these days?" from scale 1 (completely dissatisfied) to 10 (completely satisfied). This WVS question was adopted in the previous electoral studies in Malaysia by Ng et al. (2017). Even though some past empirical studies have shown that people with higher life satisfaction tend to vote (Flavin & Keane, 2012; Liberini et al., 2017), this study hypothesizes that $\gamma_1 < 0$ to reflect the dissatisfaction of Malaysians towards the ruling of BN coalition and strong desire to vote for a new government.

DM denotes the use of digital media as news resources. The respondents are asked in the WVS that "People learn what is going on in this country and the world from various sources. For each of the following sources (mobile phone, Internet, or

email), please indicate whether you use it to obtain information". *DM* is coded as 1 if the respondent used at least one of the resources (mobile phone, Internet, or email) as news resources, 0 otherwise. Goidel et al. (2017) and Holbert et al. (2017) also used such WVS question in their empirical studies.

Referring to the previous studies, most of the studies indicated that digital media users are more likely to vote (Woon, 2018; Spierings & Jacobs 2014; Gueorguieva, 2008). Therefore, this study assumes that $\gamma_2 > 0$. In order to test the moderating effect of digital media on the linkage between life satisfaction and voting intention, an interaction term between life satisfaction and the use of digital media as news resources, *LIFE* x *DM*, is included in Equation (16). Such moderating effect can be identified by a significant γ_3.

On the other hand, *FINANCE* is included in Equation (16) to proxy the economic voting effect where people tend to vote if the economy is good to reward the incumbent (Lago & Blais, 2019). *FINANCE* is obtained via the question "During the past year, did your family (read out and code one answer): 1 - Spend savings and borrow; 2 - Spend some savings; 3 - Just get by; and 4 – Save money." to reflect individual's financial wellbeing. Since this variable is a categorial variable, this study assigns three dummy variables, namely *FINANCE2*, *FINANCE3*, and *FINANCE4* for code 2, 3, and 4 respectively while code 1 is served as benchmark group.

For altruism voting, it is indicated by *CHILD*, the respondents are asked if they own any children, 1 denotes yes, 0 otherwise. Some past studies found that people do not only vote for their own interest but for other's wellbeing such as their children (Edlin et al., 2007; Hudson & Jones, 2002). Thus, it is expected that people who own children tend to vote at the ballot box. For *INTEREST*, it is measured by "How interested would you say you are in politics?" with a scale from 1 (not at all interested) to 4 (very interested). Immerzeel and Pickup (2015) and Negri (2019) also used such question to measure the political interest in their analysis.

This study also includes the factor of confidence in the political party (*PARTY*) in studying the voting intention in Malaysia. Alkhawaldeh et al (2016) used the WVS question "How confidence you have in the political party?" with a scale from 1 (not at all) to 4 (a great deal) in their study. They found a positive relationship between the confidence in the political party and voting decision. As such, this study hypothesized the similar result. On the other hand, this study also includes the partisan impact through *BN* in Equation (16). This variable is obtained through the question "Would you vote for BN if there is any election tomorrow? 1-yes, 0 otherwise". Ng et al. (2017) also used this question in studying the voting preference in Malaysia.

Some electoral studies showed that civic duty is one of the predictors for voting turnout rate (François & Gergaud; 2019; Feitosa & Galais, 2020). This study tests such relationship through *MALAYSIAN* by the WVS question, "I see myself

138

as part of the Malaysia nation." with a scale from 1 (strongly disagree) to 4 (strongly agree). For demographical factors, this study includes *AGE*, *AGE squared*, *EDUCATION*, and *MALAY* in Equation (16).

For *EDUCATION*, this study uses the WVS question, "What is the highest education level that you have attained?" with a scale from 1 (no formal education) to 9 (university level). Similar to the local study by Ng et al. (2017), this study classifies *EDUCATION* into three groups which are low level education for scale 1 to 3, (*LOWEDU*), medium level of education for scale 4 to 7 (*MEDIUMEDU*), and high level of education for scale 8 and 9 (the benchmark group in the model). Table 3.3 summaries the details of the used variables in Equation (16).

Table 3.3: Details of the Variables Used in *VOTING* Model

Variable	scale	WVS code	WVS Questions	Used by Past studies
VOTING	1 (vote before in the General Election), 0 otherwise.	V227	"When elections take place, do you vote always, usually or never?" (p.21).	Sulemana & Agyapong (2019), Antonietti et al. (2016)
LIFE	1(completely dissatisfied) - 10 (completely satisfied)	V23	"All things considered, how satisfied are you with your life as a whole these days?" (p.2)	Liberini et al. (2017), Ha & Kim (2013), Ng et al. (2017)
DM	1(obtain information from mobile phone/ Internet/ email), 0 otherwise	V221, V222, V223	"People learn what is going on in this country and the world from various sources. For each of the following sources (mobile phone, Internet, or email), please indicate whether you use it to obtain information." (p.21)	Goidel et al. (2017), Holbert et al. (2017)

Table 3.3: Details of the Variables Used in *VOTING* Model (Continued)

Variable	scale	WVS code	WVS Questions	Used by Past studies
FINANCE	1 - Spend savings and borrow 2 - Spend some savings 3 - Just get by 4 - Save money	V237	"During the past year, did your family (read out and code one answer): 1 - Spend savings and borrow; 2 - Spend some savings; 3 - Just get by; and 4 – Save money." (p.23)	Lin et al. (2013), Chong & Gradstein (2015)
CHILD	1 (yes), 0 otherwise	V58	"Have you had any children?"	Ercolano et al. (2014), Ng et al. (2017)
INTEREST	1 (not at all interested) - 4 (very interested)	V84	"How interested would you say you are in politics?" (p.9)	Immerzeel, & Pickup (2015), Negri (2019)
PARTY	1 (not at all) - 4 (a great deal)	V116	"How confidence you have in them?" (p.11)	Alkhawaldeh et al. (2016)
BN	1 (yes, I will vote for BN), 0 otherwise	V228	"Would you vote for BN if there is any election tomorrow?" (p.22)	Ng et al. (2017)
MALAYSIAN	1 (strongly disagree) - 4 (strongly agree)	V214	"I see myself as part of the Malaysia nation." (p.21)	
AGE	In years	V242	Age of respondent	Ng et al. (2017), Negri (2019)
AGE squared	Age x age (In years)		Age squared of respondent	Negri (2019)
EDUCATION	1 (no formal education)- 9 University-level with degree	V248	"What is the highest educational level that you have attained?" (p.25)	Ng et al. (2017)
MALAY	1 (Malay), others 0	V254	What is the race?	Ng et al. (2017)

Source: WVS, 6th wave questionnaires, Malaysia, available at http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp

CHAPTER 4

RESULTS AND DISCUSSION

4.1   Introduction

This chapter reports and discusses the empirical findings for all the objectives in this study which including (1) discovering the determinants of SWB from both material conditions and psychological perspectives underlying the Maslow's hierarchical of needs; (2) examining the moderating impacts of religiosity on the relationship between B40 and self-actualization and SWB based on the authentic happiness theory; and (3) exploring the potential role of life satisfaction in triggering the political behavior (voting) with the catalyst of the use of digital media as information resources via the rational choice, economic and altruism voting theories.

4.2   First Objective: Examining the Determinants of SWB in Malaysia

For empirical analysis, this study employs the sixth wave Malaysian survey data from the WVS. The original sample consists of 1300 respondents. However, some missing information are found for 91 respondents. Therefore, this study eliminates those respondents with the missing information from the sample and it

remains 1209 respondents who aged from 18 to 80 years. This sample can well-reflect the population in Malaysia as according to the Age of Majority Act 1971, the majority group in Malaysian population is with age 18 years and above.

Hence, the sample includes those who aged from 18 to 80 years. Furthermore, 822 of them are married while 816 of them are having kids at home. To mirror a multi-religious country, the empirical model also takes into the consideration of different religion denominations. As such, there are 762 Muslims, 92 Hindus and the rest are from other religions such as Buddhists, Christians, Taos, and others in the studied sample.

Based on the simple descriptive statistics as shown in Table 4.1, this study can tell that Malaysians are generally quite happy where no respondents ranked their happiness as 1 (not happy at all). Therefore, the minimum value of *HA* as shown in Table 4.1 is 2 instead of 1 and the mean value of *HA* is 3.536 out of 4 points. Furthermore, the respondents are quite satisfied with their life, it is about 82% of the respondents indicated that they are satisfied with their life. This study measures *SWB* by *HA* and *LS* because it is believed that *HA* and *LS* are two different perspectives of SWB. Statistically, the simple correlation analysis (Table 4.2) shows that the pairwise correlation between *HA* and *LS* are low which is 0.193 and it is significant at 1% significance level.

Table 4.1: Descriptive Statistics of Variables in *SWB* Model

Variable	Obs	Mean	Standard deviation	Min	Max
HA	1,209	3.536	0.567	2	4
LS	1,209	0.820	0.385	0	1
BN1	1,209	3.859	0.461	1	4
BN2	1,209	3.674	0.666	1	4
BN3	1,209	3.802	0.561	1	4
BN4	1,209	3.758	0.567	1	4
BASIC	1,209	0.002	1.001	-5.89	0.5
NEIGHBORHOOD	1,209	3.162	0.672	1	4
FINANCIAL SATISFACTION	1,209	6.523	2.014	1	10
BE1	1,209	3.448	0.537	1	4
BE2	1,209	3.515	0.561	1	4
BELONG	1,209	0.000	0.996	-1.26	1.06
PROUD	1,209	3.677	0.502	2	4
FREEDOM	1,209	7.527	1.717	1	10
RESPECT	1,209	2.694	0.708	1	4
AC1	1,209	4.567	1.138	1	6
AC2	1,209	4.736	1.090	1	6
AC3	1,209	2.151	1.126	1	6
ACTUALIZATION	1,209	-0.001	1.002	-1.87	1.78
HEALTH SATISFACTION	1,209	3.231	0.719	1	4
INCOME	1,209	6.023	1.827	1	10
GOD	1,209	9.080	1.684	1	10
DEMOCRATIC	1,209	7.177	1.880	1	10
LAGE	1,209	3.625	0.369	2.890	4.382
LAGE squared	1,209	13.28	2.631	8.354	19.202
PAIDJOB	1,209	0.763	0.425	0	1
EDUCATION	1,209	5.065	1.909	1	9
MUSLIM	1,209	0.630	0.483	0	1
HINDU	1,209	0.076	0.265	0	1
MARRIED	1,209	0.680	0.467	0	1
KID	1,209	2.297	2.188	0	8

Data Source: WVS, 6th Wave, Malaysia

Note: Age is expressed in terms of log. This is because without the log transformation, the impact of age on SWB is very small (close to zero as per the OLS regression results for *HA* and *LS* shown in Appendices C and D). To reduce the big discrepancy between age and SWB, this study chose to use log age and log age squared. Furthermore, the minimal values for *BASIC*, *BELONG*, and *ACTUALIZATION* are negative because they are the computed score object for each respondent after taking into the correlations among the use questionnaire and their dimensions (See Meulman & Heiser, 2005).

Table 4.2 Correlation Analysis for *SWB* Model

	HA	LS	BASIC	NEIGHBORHOOD	FINANCIAL SATISFACTION	BELONG	PROUD	FREEDOM	RESPECT	ACTUALIZATION
HA	1									
LS	0.193***	1								
BASIC	0.129***	0.081**	1							
NEIGHBORHOOD	0.234***	0.020	0.182***	1						
FINANCIAL SATISFACTION	0.246***	0.271***	0.120***	0.081**	1					
BELONG	0.178***	0.054	0.024	0.138***	0.062*	1				
PROUD	0.131***	0.046	0.071*	0.050	0.013	0.168***	1			
FREEDOM	0.176***	0.187***	0.081**	0.112***	0.256***	0.139***	0.191***	1		
RESPECT	0.178***	0.104***	-0.019	0.141***	0.132***	0.143***	0.020	0.052	1	
ACTUALIZATION	0.021	-0.002	-0.081***	-0.042	-0.012	-0.184***	-0.050*	0.022	-0.082***	1
HEALTH SATISFACTION	0.358***	0.130***	0.078**	0.084**	0.202***	0.114***	0.0895**	0.162***	0.049	0.003
INCOME	0.226***	0.222***	0.218***	0.109***	0.331***	0.125***	0.056	0.105***	0.121***	-0.007
GOD	0.166***	0.071*	0.034	0.160***	0.013	0.232***	0.205***	0.171***	0.024	0.100***
DEMOCRATIC	0.189***	0.127***	0.087**	0.175***	0.175***	0.158***	0.131***	0.235***	0.216***	0.045
LAGE	-0.010	0.016	0.000	0.060*	0.087***	0.082***	-0.104***	-0.004	0.033	0.077***
LAGE squared	-0.010	0.016	-.0.002	0.063	0.084***	0.082***	-0.104***	-0.007	0.032	0.078***
PAIDJOB	-0.009	0.017	0.065*	-0.071*	0.029	-0.099***	-0.048	0.055	0.010	-0.106***
EDUCATION	-0.001	0.085**	0.052	-0.061*	0.022	-0.012	0.044	0.071*	-0.079**	-0.010
MUSLIM	0.0864**	-0.003	-0.019	0.080**	-0.016	0.079**	0.051	0.074**	-0.019	0.021
HINDU	0.037	-0.011	0.022	0.042	0.0200	0.056	0.035	0.041	0.071*	0.037
MARRIED	0.033	0.038	0.038	0.044	0.131***	0.056	-0.060*	0.014	0.024	0.071*
KID	0.024	0.033	-0.014	0.082**	0.030	0.070*	-0.050	-0.007	-0.010	0.076**

Table 4.2 Correlation Analysis for *SWB* Model (Continued)

	HEALTH SATISFACTION	INCOME	GOD	DEMOCRATIC	LAGE	LAGE squared	PAIDJOB	EDUCATION	MUSLIM	HINDU	MARRIED	KID
HEALTH SATISFACTION	1											
INCOME	0.098***	1										
GOD	0.028	0.083**	1									
DEMOCRATIC	0.081**	0.137***	0.124***	1								
LAGE	-0.228***	0.054	0.054	0.064**	1							
LAGE squared	-0.230***	0.053	0.052	0.067**	0.999***	1						
PAIDJOB	0.024	0.064*	-0.058*	-0.094**	-0.164***	-0.114***	1					
EDUCATION	0.112***	0.101***	-0.010	-0.069*	-0.419***	-0.397***	0.136***	1				
MUSLIM	0.027	-0.042	0.335***	0.136***	-0.012	-0.015	-0.080**	-0.063*	1			
HINDU	0.029	0.036	0.007	-0.005	-0.011	-0.122	-0.016	0.018	-0.375***	1		
MARRIED	-0.071*	0.051	0.078**	0.073*	0.522***	0.568***	0.002	-0.203***	0.077**	-0.037	1	
KID	-0.138***	-0.013	0.157***	0.054	0.627***	0.636***	-0.172***	-0.341***	0.165***	-0.056	0.592***	1

Note: The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$.

The low pairwise correlation between *HA* and *LS* that shown in Table 4.2 partly signifies that *HA* and *LS* are two different measurement of SWB as claimed by some literature (Dhandra, 2019; Karabati et al., 2019) where *HA* refers to the feeling or emotion and it would not sustain all the time. On the other hand, *LS* is referring to the cognitive, judgment or evaluation on *SWB* and it can last longer than *HA*. Hence, the pairwise correlation between *HA* and *LS* provides some statistical evidence that the decision on treating *HA* and *LS* differently as indicators for SWB in this study is appropriate.

This study uses the categorical principle component analysis (CatPCA) to generate the needs components for *BASIC*, *SAFETY*, *BELONG*, *ESTEEM*, and *ACTUALIZATION* to proxy the Maslow's hierarchy of needs. However, based on the CatPCA results, only the computed components for *BASIC*, *BELONG* and *ACTUALIZATION* are highly reliable which the obtained Cronbach's Alpha values are more than 0.70 as shown in Table 4.3. Therefore, all these three reliable components – *BASIC*, *BELONG*, and *ACTUALZATION* are included in the analytical models as the proxy for the respective needs.

However, the reliability of *SAFETY* and *ESTEEM* are quite low which with the Cronbach's Alpha values of 0.257 and 0.305, respectively. These results hint that the selected items as shown in Table 4.3 are not appropriate to be jointly computed as a component to proxy *SAFETY* and *ESTEEM* respectively. Hence, those items are included in the models on standalone basis.

Table 4.3: Model Summary of CatPCA for Needs Variables

Variables	Component loading	Cronbach's Alpha	Total Eigenvalue	% of Variance
		Variance Accounted For		
1. *BASIC*		0.778	2.400	60.010
Items:				
BN1	0.788			
BN2	0.667			
BN3	0.847			
BN4	0.781			
2. *SAFETY*		0.257	1.147	57.361
Items:				
NEIGHBORHOOD	0.757			
FINANCIAL SATISFACTION	0.757			
3. *BELONG*		0.841	7.726	86.315
Items:				
BE1	0.929			
BE2	0.929			
4. *ESTEEM*		0.305	1.255	41.830
Items:				
Proud	0.686			
Freedom	0.796			
Respect	0.388			
5. *ACTUALIZATION*		0.749	1.997	66.582
Items:				
AC1	-0.759			
AC2	-0.868			
AC3	0.817			

Notes:

The component loading shows the correlation between each original item and the extracted component.

The Cronbach's alpha indicates the reliability on the internal consistency of the extracted component. The value between 0.70 and 0.80 is broadly accepted by the empirical works as good level of reliability.

The total Eigenvalue measures the variance in all the items which is accounted for by the extracted component.

The % of variance indicates the total variation of the extracted component that can be explained by all the selected items.

Besides the needs underlying the Maslow's hierarchy of needs, this study also includes other control variables in the modelling analysis which are *HEALTH SATISAFCTION*, *INCOME*, *GOD*, *DEMOCRATIC*, *LAGE*, *LAGE squared PAIDJOB*, *EDUCATION*, *MUSLIM*, *HINDU*, *MARRIED*, and *KID*. Based on the paired-wise correlation (Table 4.2), this study finds that all the correlation values between the selected independent variables are quite low which not more than absolute value 0.80. This indicated that all the variables are not strongly associate with each other. Hence, the selection of independent variables is safe from multicollinearity concern which it is commonly found in the use of survey data.

4.2.1 Maslow's Hierarchy of Needs and Malaysian SWB

This study regresses the *HA* models by the cross-sectional ordered probit due to its ordinal nature. On the other hand, the *LS* models are estimated by the probit modelling as it is a binary response variable. Table 4.4 reports the ordered probit estimates on HA while Table 4.5 displays the probit estimates on LS.

Table 4.4: Ordered Probit Estimates on *HA*

VARIABLES	(1)	(2)	(3)	(4)	**(5)**
Maslow Hierarchical of needs					
BASIC	0.031**	0.017	0.019	0.022	**0.022**
	(0.014)	(0.014)	(0.014)	(0.014)	**(0.014)**
Safety needs:					
NEIGHBORHOOD		0.126***	0.122***	0.114***	**0.114*****
		(0.023)	(0.023)	(0.023)	**(0.023)**
FINANCIAL		0.034***	0.034***	0.032***	**0.032*****
SATISFACTION		(0.009)	(0.008)	(0.008)	**(0.008)**
BELONG			0.038**	0.029*	**0.035****
			(0.015)	(0.016)	**(0.016)**
Esteem needs:					
PROUD				0.060**	**0.062****
				(0.030)	**(0.030)**
FREEDOM				0.007	**0.006**
				(0.009)	**(0.009)**
RESPECT				0.081***	**0.086*****
				(0.022)	**(0.022)**
ACTUALIZATION					**0.040*****
					(0.015)
Control variables					
HEALTH	0.247***	0.231***	0.226***	0.225***	**0.226*****
SATISFACTION	(0.021)	(0.022)	(0.022)	(0.022)	**(0.022)**
INCOME	0.046***	0.034***	0.033***	0.030***	**0.029*****
	(0.008)	(0.009)	(0.009)	(0.009)	**(0.009)**
GOD	0.033***	0.031***	0.027***	0.024***	**0.025*****
	(0.009)	(0.009)	(0.009)	(0.009)	**(0.009)**
DEMOCRATIC	0.032***	0.024***	0.022***	0.015*	**0.016***
	(0.008)	(0.008)	(0.008)	(0.008)	**(0.008)**
LAGE	-0.290	-0.351	-0.433	-0.551	**-0.573**
	(0.860)	(0.869)	(0.872)	(0.876)	**(0.877)**
LAGE squared	0.047	0.052	0.062	0.080	**0.084**
	(0.120)	(0.121)	(0.122)	(0.122)	**(0.122)**
PAIDJOB	0.008	0.020	0.029	0.026	**0.019**
	(0.037)	(0.038)	(0.038)	(0.038)	**(0.038)**
EDUCATION	-0.009	-0.008	-0.008	-0.006	**-0.006**
	(0.008)	(0.008)	(0.008)	(0.008)	**(0.009)**
MUSLIM	0.050	0.047	0.046	0.050	**0.052**
	(0.035)	(0.035)	(0.035)	(0.035)	**(0.035)**
HINDU	0.087	0.083	0.077	0.065	**0.069**
	(0.057)	(0.058)	(0.058)	(0.059)	**(0.059)**
MARRIED	-0.004	-0.018	-0.017	-0.014	**-0.011**
	(0.042)	(0.043)	(0.043)	(0.043)	**(0.043)**
KID	0.005	0.006	0.006	0.007	**0.007**
	(0.010)	(0.010)	(0.010)	(0.010)	**(0.010)**
N	1,209	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.140	0.165	0.168	0.176	**0.181**
Approximate LR test	6.36	8.31	8.20	10.42	**14.58**

Notes:
The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Approximate LR test shows that the parallel assumption is met.

Table 4.5: Probit Estimates on *LS*

VARIABLES	(1)	(2)	(3)	(4)	(5)
Maslow Hierarchical of needs					
BASIC	0.006	0.006	0.006	0.007	**0.007**
	(0.010)	(0.010)	(0.010)	(0.010)	**(0.010)**
Safety needs:					
NEIGHBORHOOD		-0.019	-0.019	-0.026	**-0.026**
		(0.016)	(0.016)	(0.017)	**(0.017)**
FINANCIAL		0.036***	0.036***	0.031***	**0.031*****
SATISFACTION		(0.006)	(0.006)	(0.006)	**(0.006)**
BELONG			-0.000	-0.005	**-0.004**
			(0.011)	(0.011)	**(0.011)**
Esteem needs:					
PROUD				0.006	**0.006**
				(0.021)	**(0.021)**
FREEDOM				0.020***	**0.020*****
				(0.006)	**(0.006)**
RESPECT				0.035***	**0.036****
				(0.016)	**(0.016)**
ACTUALIZATION					**0.003**
					(0.011)
Control variables					
HEALTH	0.052***	0.035**	0.035**	0.030**	**0.030****
SATISFACTION	(0.015)	(0.015)	(0.015)	(0.015)	**(0.015)**
INCOME	0.035***	0.024***	0.024***	0.024***	**0.023*****
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
GOD	0.011	0.013**	0.013**	0.011*	**0.011***
	(0.007)	(0.006)	(0.007)	(0.007)	**(0.007)**
DEMOCRATIC	0.018***	0.015***	0.015***	0.010*	**0.010***
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
LAGE	-0.425	-0.535	-0.534	-0.650	**-0.655**
	(0.641)	(0.625)	(0.626)	(0.624)	**(0.624)**
LAGE squared	0.063	0.077	0.077	0.092	**0.092**
	(0.090)	(0.087)	(0.088)	(0.087)	**(0.088)**
PAIDJOB	0.019	0.013	0.013	0.007	**0.006**
	(0.029)	(0.028)	(0.029)	(0.028)	**(0.028)**
EDUCATION	0.019***	0.018***	0.018***	0.017***	**0.017*****
	(0.008)	(0.006)	(0.006)	(0.006)	**(0.006)**
MUSLIM	-0.039	-0.036	-0.036	-0.039	**-0.039**
	(0.026)	(0.025)	(0.025)	(0.025)	**(0.025)**
HINDU	-0.065	-0.067	-0.067	-0.082	**-0.082**
	(0.052)	(0.052)	(0.052)	(0.054)	**(0.054)**
MARRIED	-0.001	-0.017	-0.017	-0.013	**-0.013**
	(0.032)	(0.030)	(0.030)	(0.030)	**(0.030)**
KID	0.011	0.013*	0.013*	0.014**	**0.014****
	(0.007)	(0.007)	(0.007)	(0.007)	**(0.007)**
N	1,209	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.084	0.123	0.123	0.136	**0.136**

Notes:
The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data.

In order to get the robust results, the specified needs – *BASIC*, *SAFETY*, *BELONG*, *ESTEEM*, and, *ACTUALIZATION* are entering the models one by one from column (1) to (5). The sign and significance of the coefficients are quite consistent throughout the regression from column (1) to (5). Hence, the following empirical analysis focus on column (5) in Tables 4.4 and 4.5. Column (5) is a full model which accommodates all the needs variables and control variables. The results in Table 4.4 show that the fulfilment of basic needs on food, safe accommodation, medical and cash is insignificant in explaining Malaysian SWB regardless *HA* or *LS* is used as proxy.

Such results can be explained from both practical and theoretical perspectives. In practice, Malaysia is a developing country and the people in general do not face the serious problems of starving, homeless or even lack of medical facilities like the poor country. Hence, the obtained empirical results fit the theoretical argument by Maslow (1943) that once the basic needs are met, people will look for higher needs such as safety and belongingness. This can be further justified by the result in column (1) in Table 4.4 where the *BASIC* is significant and positively related to the probability of being very happy without inclusion of other needs variables in the models.

On the other hand, the insignificant impact of *BASIC* on *LS* in Table 4.5 can be justified by the hedonic wellbeing treadmill where good or bad events can influence wellbeing temporarily. However, when people have adapted the

circumstances, the level of SWB will be back to the starting point (Diener, Lucas, & Scollon, 2006). This is also consistent with the diminishing effect of utility theory in Economics where the further increment will increase the utility at decreasing rate then stagnated. Malaysians have fulfilled the *BASIC*, thus, the further fulfillment of *BASIC* is no longer improving life satisfaction. Therefore, Malaysians would seek for the fulfillment of higher needs.

For safety needs, Table 4.4 shows that one level increase in how secure the respondent feels these days in their neighborhood is associated with a 1.14% higher probability of being very happy. Generally, people spend quite a lot of time in the neighborhood. A safe environment in the neighborhood would make a happy living and build up a good relationship among the neighbors (Ma et al., 2018). Based on a case study in in Selama district (in Perak state, Malaysia), Sakip et al. (2016) found that good relationships among the community in the neighborhood provide the sense of safety among residents and it will bring the happiness eventually. Hence, this study provides some empirical evidences to support a positive relationship between safety in neighborhood and happiness in Malaysia.

However, Table 4.5 demonstrates that *NEIGHBORHOOD* is not significantly related to the probability of being satisfied with life. This may be due to Malaysians weight their safety impact on *LS* based on their self-achievement like their satisfaction on their financial achievement as per the results reported in both Tables 4.4 and 4.5. Both results showed that one level increase in financial

satisfaction is related to a 3.1% (3.25%) increase in the probability of being very happy (satisfied with life). These results are consistent with the findings by Boo et al. (2016). Such results could be explained by the economy today in Malaysia where it is still at the stage where high in inflation and slow in economic growth (World Bank, 2019).

It is no doubt that Malaysians are still working hard to earn more to meet better living standard. Higher financial satisfaction reflects that people are freer from financial problems and worries (Prawitz, Garman, Sorhaindo, O'Neill, Kim, & Drentea, 2006, Ward & King, 2019). Furthermore, higher financial satisfaction allows Malaysians to enjoy more secured materials wellbeing such as luxury accommodation, cars, and holidays. Hence, it is not surprised that financial satisfaction stimulates the safety in living and thus it makes Malaysians happier and more satisfied with their living.

Does belongingness matter in Malaysian SWB? Table 4.4 illustrates that the fulfilment of belongingness needs (*BELONG*) through being part of community and country can make Malaysians very happy. This result is consistent with the recent studies by Tan et al. 2020 in Malaysia, Appau et al. (2019), Lavigne et al. (2011), and Stenseng et al. (2015) with the argument that belongingness fulfilment is a combination feeling of closeness, being needed and appreciated in a social group. As a result, all these feelings will bring happy emotions.

In contrast, Table 4.5 displays that *BELONG* is not significantly related to the probability of being satisfied with life. These findings go against the "belongingness hypothesis" which proposed by Baumeister and Leary (1995), claiming that ''human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships" (p. 497). As such, the insignificant results may hint that Malaysians has not met the belongingness needs as part of community and country that can improve their *LS*.

The self-esteem needs (*ESTEEM*) are measured by three items in this study and they provide different results on the linkage between *ESTEEM* and SWB. Firstly, Table 4.4 shows that the item which proxy the gained self-esteem from making parents proud (*PROUD*) is positively and significantly related to *HA*. This may be due to the strong family concepts inherited in the Asian families (Lee & Mock, 1996; Ibrahim, Tan, Hamid, & Ashari, 2018) including Malaysia where children are always educated to respect and do something good and make parents proud as a return to their parents. Nevertheless, *PROUD* can make Malaysians happy but nothing to do with their *LS* as reported in Table 4.5.

Unlike the *PROUD* variable, the *FREEDOM* provides the empirical evidence that freedom in making choice in life can stimulate *LS* (see column 5 in Table 4.5) but not *HA* among Malaysians. Undoubtedly, freedom in making choice allows people to be free to be 'themselves' and live in the way they wish without

154

the control by others (Inglehart et al., 2008). This would make Malaysians satisfied with their life. However, it is not always happy to have freedom in decision making especially when it involves "trade-off". For example, a married man could be satisfied with his life by choosing job posting abroad to achieve greater career advancement but he may not be happy to leave his family in his homeland.

Respecting to human rights (*RESPECT*) is the only item among *ESTEEM* regressors that influence both *HA* and *LS*. Table 4.4 demonstrates that one level increase in the respect to human right is accompanied with an 8.6% increase in the probability of being very happy. On the other hand, Table 4.5 illustrates that when the respect to human right increases by one level, the estimated probability of being satisfied with life increases by 3.6%. When the human rights are highly respected, people would feel happy and satisfied with their lives because human rights grant them freedom to fight for their welfare (Suh & Oishi, 2002; Schimmel, 2009; Heo et al., 2019). For instance, rights to speak allow people to express themselves in terms of their thoughts and opinions.

Table 4.4 shows that the needs of self-actualization (*ACTUALIZATION*) is positively and significantly related to *HA*. This result is quite consistent with the positive and significant correlation between self-actualization and wellbeing components in the study by Church et al (2013) where they compared the need satisfaction and wellbeing in eight countries, including the United States, Australia, Mexico, Venezuela, the Philippines, Malaysia, China, and Japan. Additionally,

analysis by Vasudha and Prasad (2017) and Kashdan et al. (2018) also support a positive relationship between self-actualization and happiness. The explanation is quite straightforward, people who are self-actualizing tend to become who they want to be in life, hence, they are happy.

Self-actualization falls on the top of Maslow's hierarchical of needs. As argued by Maslow (1970), people will only look for this need after fulfilling the needs of self-esteem. This may be the reason why Table 4.5 reports that *ACTUALIZATION* is insignificantly related to the probability of being satisfied with life. In other words, Malaysians may still trap at the middle hierarchies of needs such as safety needs and self-esteems needs to tackle greater life satisfaction as shown by the empirical results in this study. Furthermore, it is not easy to find and shape our "identity" without bothering external factors such as materials fulfilling and how people perceive and think of us.

4.2.2. Other Control Variables and Malaysian SWB

Besides the needs underlying Maslow's hierarchy, both Tables 4.4 and 4.5 also show that Malaysians with higher health satisfaction are more likely to be happy and satisfied with their own life. These results are consistent with the previous results from Diener et al. (2018), Lamu and Olsen (2016) and Easterlin (2010). With a healthy mind and body, people can be more productive at work (Mousteri, Daly, Delaney, Tynelius, & Rasmussen, 2019); efficient in handling all

circumstances either good or bad in the life course (Weimann et al., 2015); and be more gratitude to their life (Valikhani, Ahmadnia, Karimi, & Mills, 2019; Hill, Allemand, & Roberts, 2013; Singh, Khan, & Osmany, 2014). All these grant people a happy and satisfied living.

The perceived relative income that indicated by *INCOME* is significant at 0.01 level of significance across the modelling in Tables 4.4 and 4.5. It is found that a level increase in *INCOME* accompanies a 2.9% increase in the probability of being very happy and a 2.3% rise in the probability of being satisfied with life, respectively. These are similar with the previous studies in Easterlin and Angelescu (2012) and Lim et al. (2020). It is no doubt that income is the main source of living especially for material wellbeing.

Income does not only help to support the necessities of living (FitzRoy, Franz-Vasdeki, & Papyrakis, 2012) but better living with higher social status such as owning branded goods, enjoying luxury holidays, and so on. Furthermore, Malaysia is still a developing country, people are still putting efforts on earnings and thus incomes are the fruits of their hard work. Hence, higher *INCOME* will accompany with higher *HA* and *LS*.

The perceived importance of God in life (*GOD*) is found to be significantly and positively related to both *HA* and *LS*. Majority people would think God is important because they believe that God is their life creator as well as their spiritual

guru. With the guidance of God, the followers are led to be kind, generous, mature and gratitude (Eichhorn, 2012; Diener & Clifton, 2002). For example, one of the philosophies of Buddhism is about "Karma" where people would have a return on their actions. Hence, good deeds contribute to good karma but bad deeds attract to bad karma. In fact, all Gods regardless from which religions are coaching people to do good to gain the inner peace. Consequently, people will be happier and more satisfied with their life.

The regression results in Tables 4.4 and 4.5 also showed that the higher perceived democracy (*DEMOCRATIC*), on average, Malaysians tend to be happy and satisfied with their life. It is not surprised that democracy permits people to have more rights to express themselves as Malaysians in the politics. For example, there were quite a few rallies occurred in Kuala Lumpur since last 10 years such as the Coalition for Clean and Fair Elections or "BERSIH" (meaning clean in Malay) where Malaysians demonstrated to have a fair and clean election (Smeltzer & Paré, 2015). Furthermore, Malaysians were quite active in voting to fight for a new government in the last decade. All these democratic actions strengthen Malaysians' citizenship. Hence, Malaysians would definitely feel happier and satisfied to be part of the country through their political participation.

Among the demographic variables, only education (*EDUCATION*) and having kids (*KID*) significantly contribute to Malaysians *LS*. In other words, higher educated Malaysians and those who are owning kid(s) respectively tend to be

satisfied with their life. The result of positive relationship between education and life satisfaction is consistent with the recent study by Park and Joshanloo (2021) in Malaysia context. This may be due to the opportunities and resources available. Malaysia is a middle-income and developing country. Hence, the labor market is quite competitive where opportunities for better, high-paying jobs and high standards of life may not be available to those with lower education. On the other hand, the positive impact of having kids on life satisfaction may be due to the reciprocal filial piety (Tan et al., 2021).

Most of the SWB literature have found a U-shaped relationship between age and SWB worldwide (Beja, 2018; Blanchflower, 2020; Stone et al., 2020). However, it does not seem the case in Malaysia context. Tables 4.4 and 4.5 show an insignificant U-shaped relationship between age and SWB regardless happiness or life satisfaction is used as the proxy. These results are consistent with some of the latest SWB studies in Malaysia context (Park and Joshanloo, 2021; Boo et al, 2020; Kamarudin et al., 2020). The insignificant relationship between age and SWB in Malaysia may be due to the challenges that faced by every age group, for example, the stress from studies, career, and retirement or aging. Hence, it makes no different for SWB among the age groups.

Table 4.4 and 4.5 also demonstrate that having a paid job is not significantly related to the probability of being very happy or satisfied with life. These results are consistent with the findings by Cheah and Tang (2011) in Malaysia context.

This implies that either having a paid job or not does not correlate with happiness or life satisfaction. One of the possible explanations is having a paid job in Malaysia may be as stressful as not having a paid job (Cheah and Tang, 2011). Another possible explanation could be some of the respondents who have no paid job may have financial or moral support from the family to face the challenges of having no job (Huang, 2018; Yan & Sorenson, 2006).

For religion denomination, neither Muslims nor Hindu are significantly related to the probability of being very happy or satisfied with life. Such results not just found by this study but also the study by Mohd Hashim and Mohd Zaharim (2020). This implies that SWB is not different across religious groups in Malaysia. This may be because majority religions are sharing similar ethical principals in benefiting its followers (Sachs, 2013). Therefore, religions regardless which denominations in general bring would bring wellbeing to their followers.

Similar to the studies by Kamarudin et al (2020) and Boo et al. (2020), Table 4.4 and 4.5 also illustrate that marital status is not significantly associated with the probability of being very happy or satisfied with life. In other words, it makes no difference the SWB between married and unmarried Malaysians. One of the possible explanations is that striking the balance between work and family can be very challenging tasks for working couples nowadays in Malaysia (Boo et al., 2020).

As a robustness checking, this study also regresses *HA* by ordered logit and OLS modelling approaches (see Appendices E and F) and *LS* models are also regressed by logit and OLS modelling approaches (see Appendices G and H) which the results are quantitatively similar to those results in Tables 4.4 and 4.5.

4.2.3. Conclusion

In summary, this study finds a few new insights about the SWB in Malaysia. First of all, this study finds that Malaysians still trap in their safety and self-esteem needs in their pursuit of SWB. The safety through financial and the self-esteem gained from the respect to human right are the two important needs that make Malaysians happy and satisfied with their life. In view of this, the government and policy makers may look into these two aspects to improve Malaysian SWB. Furthermore, this study finds that self-actualization need is positively associated with happiness but not happiness. Hence, the second objective of this study is to test if religiosity helps to bring greater happiness that caused by self-actualization need.

Besides the safety and self-esteem needs, this study also provides the empirical evidence that health satisfaction, income level, the importance of God in life, and the democracy in the country helps to improve Malaysian SWB. In view of this, the government and policy makers may consider to enhance Malaysian SWB through the policies that related to the health satisfaction, income, religion,

161

and the democracy in the country. In Malaysia context, Boo et al. (2020; 2016) found that both happiness and life satisfaction are influenced by similar factors which are income. Therefore, they concluded that the concepts of happiness and life satisfaction can be used interchangeably in Malaysia. However, different conclusion is found in this study.

The pairwise correlation between *HA* and *LS* is 0.193 and it is significant at 1% of significance level. This implies that *HA* and *LS* are not strongly correlated with each other. Furthermore, the regression analysis also indicate that the determinants of *HA* and *LS* are quite different. Table 4.4 (column 5) shows that one rank increase in the safety at the neighborhood, the estimated probability of being very happy increases by 11.4%. Additionally, a point increase in the belongingness need accompanies with a 3.5% increase in the probability of being very happy. Also, a rank increase in making parents proud is associated with a 6.2% rise in the probability of being very happy. However, these three variables do not bring any impact to the probability of being satisfied with life (See Table 4.5, column 5).

On the other hand, Table 4.5 (column 5) displays that a point increase in the freedom accompanies with a rise of 2% in the probability of being satisfied with life. Furthermore, a level increase in education is associated with a 1.7% increase in the probability of being satisfied with life. However, there is no impact of freedom and education on the probability of being very happy as shown in Table 4.4. Hence, this study empirically concludes that SWB is multi-facet phenomenon,

HA and *LS* are two different concepts of SWB. For future studies, *HA* and *LS* are not appropriate to be used interchangeably in measuring Malaysian SWB. Otherwise, the measuring of SWB will be biased.

4.3 Second Objective: Examining the Moderating Impacts of Religiosity on the Relationship between B40 and Self-Actualization and SWB

The second objective of this study is to reveal both direct and indirect impacts of religiosity on Malaysian SWB through the channels of the lowest income group (*B40*) and self-actualization needs (*ACTUALIZATION*). Hence, SWB are still indicated by both *HA* and *LS*. The studied sample (1209 respondents) and the model specifications are still remained the same as in the first objective of this study. However, the religiosity is measured by two different aspects of religiosity which are through religious faith and religious practice.

The religious faith is indicated by the importance of God (*GOD*) while religious practice is measured by how frequent the respondent prays (*PRAYTIME*). The simple pairwise correlation analysis provides a low correlation of 0.2177 at 1% of significance level. This result provides the statistical evidence that *GOD* and *PRAYTIME* are two different aspects of religiosity. Hence, this study treats them as two different indicators of religiosity in the following modelling analysis.

Furthermore, three income groups have been classified into *B40*, *M40*, and *T20* as practiced in Malaysia. *B40* is extracted from the INCOME with the scaled from 1 to 4; *M40* is obtained from the INCOME with the scaled from 5 to 8; and *T20* is attained from the *INCOME* with the scaled from 9 to 10. *M40* is served as benchmark group in the modellings. In order to examine the indirect impact of religiosity in moderating the unhappiness / life dissatisfaction of *B40*, this study expands the *HA* and *LS* modellings as in the first objective of study by including the interaction terms between income groups and religiosity. On the other hand, this study also includes the interaction terms between *ACTUALIZATION* and religiosity to examine if religiosity helps to amplify the happiness or life satisfaction of being self-actualized.

4.3.1 The Moderating Impacts of *RELIGIOSITY* on the Relationship between *B40* and *ACTUALIZATION* and *HA*

Tables 4.6 displays the ordered probit regression results on *HA* taking into consideration of the moderating effects of *RELIGIOSITY* that indicated by *GOD* through *B40* and *ACTUALIZATION*. In order to observe the consistency of independent variables impacts on happiness, column (1) shows the results of the model without interaction terms. Column (2) exhibits the regression results with the interaction terms, *B40* x *GOD* and *T20* x *GOD* while column (3) demonstrates the regression results with interaction term, *ACTUALIZATION* x *GOD*. Lastly, column (4) includes all the interaction terms as above mentioned.

Table 4.6: Ordered Probit Estimates for the Moderating Effects of *GOD* on *HA* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	**(4)**
B40	-0.092**	0.149	-0.076*	**0.309***
	(0.039)	(0.154)	(0.040)	**(0.132)**
T20	0.036	-0.530	0.039	**-0.488**
	(0.087)	(0.237)	(0.083)	**(0.314)**
ACTUALIZATION	0.041***	0.044***	0.231***	**0.303***
	(0.015)	(0.015)	(0.083)	**(0.089)**
GOD	0.027***	0.034***	0.026***	**0.040***
	(0.009)	(0.011)	(0.010)	**(0.011)**
B40 X *GOD*		-0.028		**-0.047**
		(0.019)		**(0.020)**
T20 X *GOD*		0.075		**0.066**
		(0.064)		**(0.065)**
ACTUALIZATION X *GOD*			-0.021**	**-0.028***
			(0.009)	**(0.009)**
BASIC	0.029*	0.028*	0.030**	**0.029**
	(0.014)	(0.014)	(0.014)	**(0.014)**
NEIGHBORHOOD	0.115***	0.113***	0.117***	**0.116***
	(0.023)	(0.023)	(0.023)	**(0.023)**
FINANCIAL SATISFACTION	0.035***	0.035***	0.036***	**0.035***
	(0.008)	(0.008)	(0.008)	**(0.008)**
BELONG	0.038**	0.037**	0.039***	**0.037**
	(0.016)	(0.016)	(0.016)	**(0.016)**
PROUD	0.062**	0.064**	0.070**	**0.076**
	(0.030)	(0.030)	(0.030)	**(0.030)**
FREEDOM	0.006	0.006	0.007	**0.007**
	(0.009)	(0.009)	(0.009)	**(0.009)**
RESPECT	0.088***	0.091***	0.086***	**0.089***
	(0.022)	(0.022)	(0.022)	**(0.022)**
HEALTH SATISFACTION	0.228***	0.227***	0.231***	**0.231***
	(0.022)	(0.022)	(0.022)	**(0.022)**
DEMOCRATIC	0.017**	0.016*	0.018**	**0.016***
	(0.008)	(0.008)	(0.008)	**(0.008)**
EDUCATION	-0.005	-0.005	-0.005	**-0.005**
	(0.008)	(0.009)	(0.009)	**(0.008)**
MARRIED	-0.008	-0.008	-0.005	**-0.004**
	(0.043)	(0.043)	(0.043)	**(0.043)**
KID	0.006	0.007	0.006	**0.007**
	(0.010)	(0.010)	(0.010)	**(0.010)**
N	1,209	1,209	1,209	**1,209**
Pseudo R$_2$	0.179	0.181	0.181	**0.185**
Approximate LR test	17.67	20.41	20.59	**23.55**

Notes:
The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested. For robustness checking, this study also run ordered logit and OLS regression which the results are quantitatively similar to those results in Table 4.6 (see Appendices I and J).

The best modeling results in Table 4.6 are displayed by column (4). Hence, the following analysis is made based on column (4). The modelling without interaction terms in column (1) indicates that *B40* group tends to be unhappier compared to *M40*, ceteris paribus. This result is same with the ones obtained by Shah et al. (2021) and one of the possible explanations is *B40* group may have greater financial stress compared to middle income groups.

Furthermore, the positive impact of *ACTUALIZATION* on *HA* remains the same as the results from the first study objective. On the other hand, *GOD* is significantly and positively related to happiness. A rank increase in *GOD* is associated with a 2.7% increase in the probability of being very happy. Similar results are provided by the past studies that religiosity can directly influence happiness in Malaysia (Kamarudin et al., 2020; Sabri et al., 2021; Achour et al., 2015; Al-Seheel & Noor, 2016; Noor, 2008).

However, the moderating role of religiosity through religious faith (*GOD*) is statistically confirmed in column (4) after including all the interaction terms into the model. The results show that the sign of *B40* group changes from negative to positive which it indicates that the estimated probability of being very happy by B40 is higher than M40 by 30.9%, ceteris paribus. Furthermore, the *GOD* variable remains positive and significant together with the significant interaction term, *B40* x *GOD*. The interaction effect of *B40* x *GOD* can be observed referring to Figure 4.1.

Figure 4.1: The Predicted Probability of Being Happy (*HA* = 2, 3, and 4) with and without Interaction Effects between *B40* and *GOD* by Ordered Probit Modelling

Note: The Predicted Probability is computed based on the results of Column (4) in Table 4.6 holding other independent variable at their average values and dummy variables as zero.

Figure 4.1 illustrates that the predicted probability of achieving lower level of happiness (*HA* = 2 and 3) is lower if the *B40* group perceives God is important in their life than those who are not. However, the predicted probability for *B40* group who perceives God is important to achieve highest level of happiness (*HA* = 4) is higher compared to their counterparts. Overall, the presence of religious faith (*GOD*) helps *B40* to be happier without bothering their low-income circumstances, albeit the predicted probability of being happier make no difference after scoring *GOD* more than 9-scale. A similar graph is obtained based on the ordered logit modelling (see Appendix K).

The above results confirm that *GOD* can makes *B40* group happier. This may be due to the role of religion in providing support structures and enable individuals to cope with stress (Sabri et al., 2021; Lim & Putnam, 2010). Furthermore, most religious teaching focus on how to live one's life with virtues such as integrity, truthfulness, and compassion (Ananthram & Chan, 2016). All these virtues are needed to encourage *B40* group to work harder and fight for their low-income suffering.

However, the interaction effects in Figure 4.1 also indicates that the predicted probability of being happier make no difference between religious *B40* and non-religious *B40* after scoring *GOD* more than 9-scale. Such results imply that believing in God is important and good for wellbeing but not to be extremely religious as suggested by Ellis (1962) that excessive religiosity is not healthy.

On the other hand, religious faith (*GOD*) also plays a booster role in enhancing self-actualizing happiness. The regression results from the first objective of this study have shown a positive correlation between *ACTUALIZATION* and *HA*. Such results remain the same in Table 4.6 from Column (1) to (4). The interaction term, *ACTUALIZATION* x *GOD* is significant in both Column 3 and 4. Based on the results in Column (4), we can compare the predicted probability of being happy between the ones with and without this interaction as displayed in Figure 4.2.

Again, the predicted probability of being less happy (*HA* = 2 and 3) is slightly lower among respondents who are self-actualizing and perceiving God is important compared to those who are self-actualizing but not perceiving God is important. However, when it comes to the predicted probability of being happiest (*HA* = 4), the situation changes where those who are self-actualizing and perceiving God is important are happier than those who are self-actualizing but not perceiving God is important, although the moderating effect is just make a little difference. A similar graph is obtained based on the ordered logit regression (see Appendix L).

Figure 4.2: The Predicted Probability of Being Happy (*HA* = 2, 3, and 4) with and without Interaction Effects between *ACTUALIZATION* and *GOD* by the Ordered Probit Modelling
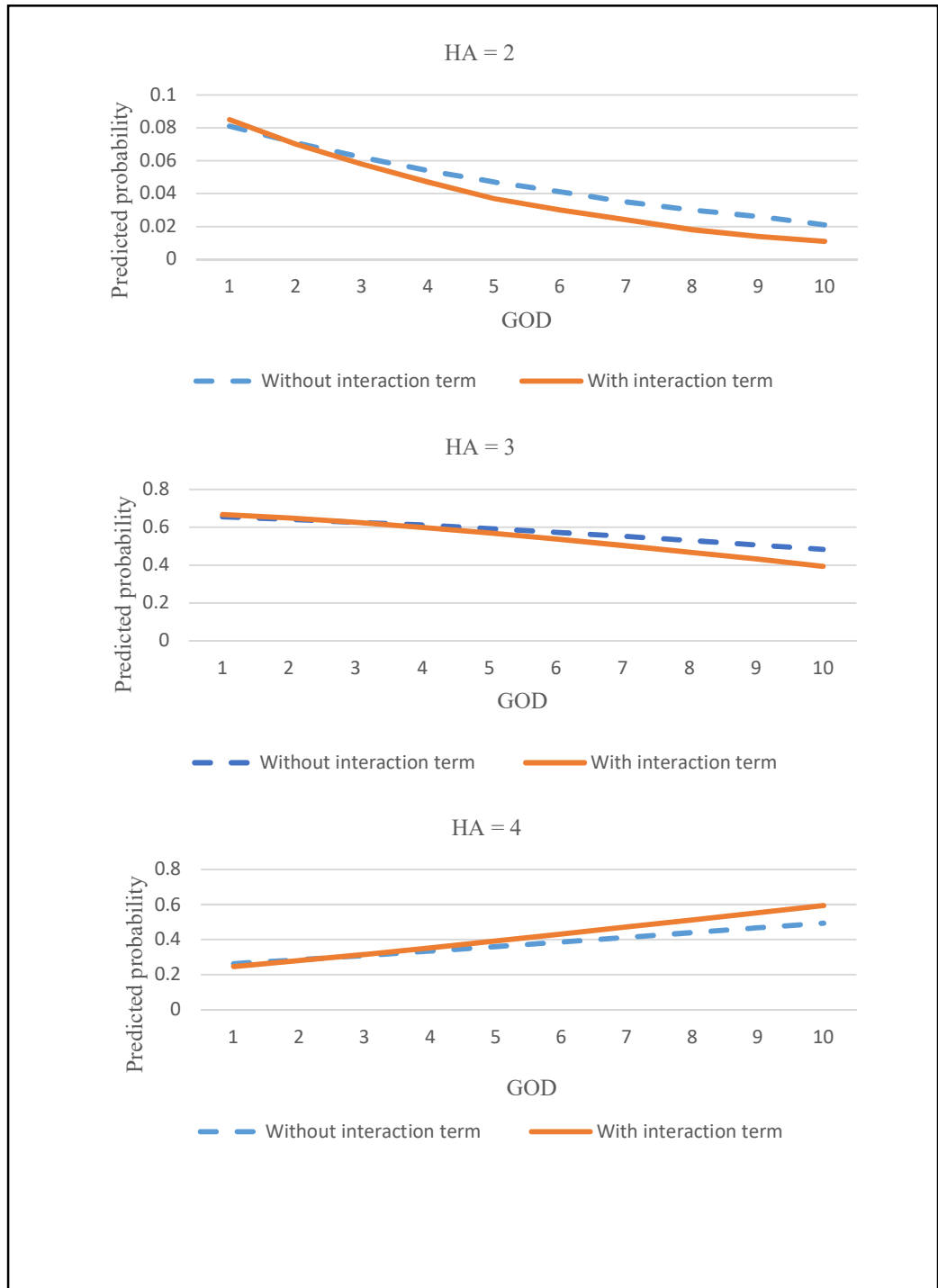
Note: The Predicted Probability is computed based on the results of Column (4) in Table 4.6 holding other independent variable at their average values and dummy variables as zero.

The findings on the interaction effects between *ACTUALIZATION* and *GOD* in Figure 4.2 can be explained by the Maslow's argument (1970) that self-actualization falls on the peak of needs hierarchy. The fulfillment of self-actualization requires the wisdom of able to accept the facts, be lack of prejudice, solve problems, have sense of morality, be creative and be spontaneous. One of the ways to improve self's wisdom is through religions (Kesebir, 2018; Mulla & Krishnan, 2014). Hence, this study illustrates that with the presence of religiosity, self-actualizing people tend to be happier as shown by Figure 4.2.

Table 4.7 illustrates the ordered probit modelling results on happiness when the religiosity is indicated by the frequency of prayers, *PRAYTIME*. Column (4) displays that prayers do not help to improve *B40* group's *HA* and also it does not help to amplify the happiness of self-actualization as all the interaction terms, neither *B40* x *PRAYTIME* nor *ACTUALIZATION* x *PRAYTIME* is significant in the regression from column (2) to (4). However, the rest of coefficients, in terms of significance and signs, remains unchanged as in Table 4.6. To sum up, only religiosity through religious faith but not through prayers, helps to improve *B40* group's happiness and the happiness of being self-actualized.

Table 4.7: Ordered Probit Estimates for the Moderating Effects of
PRAYTIME* on *HA* through *B40* and *ACTUALIZATION

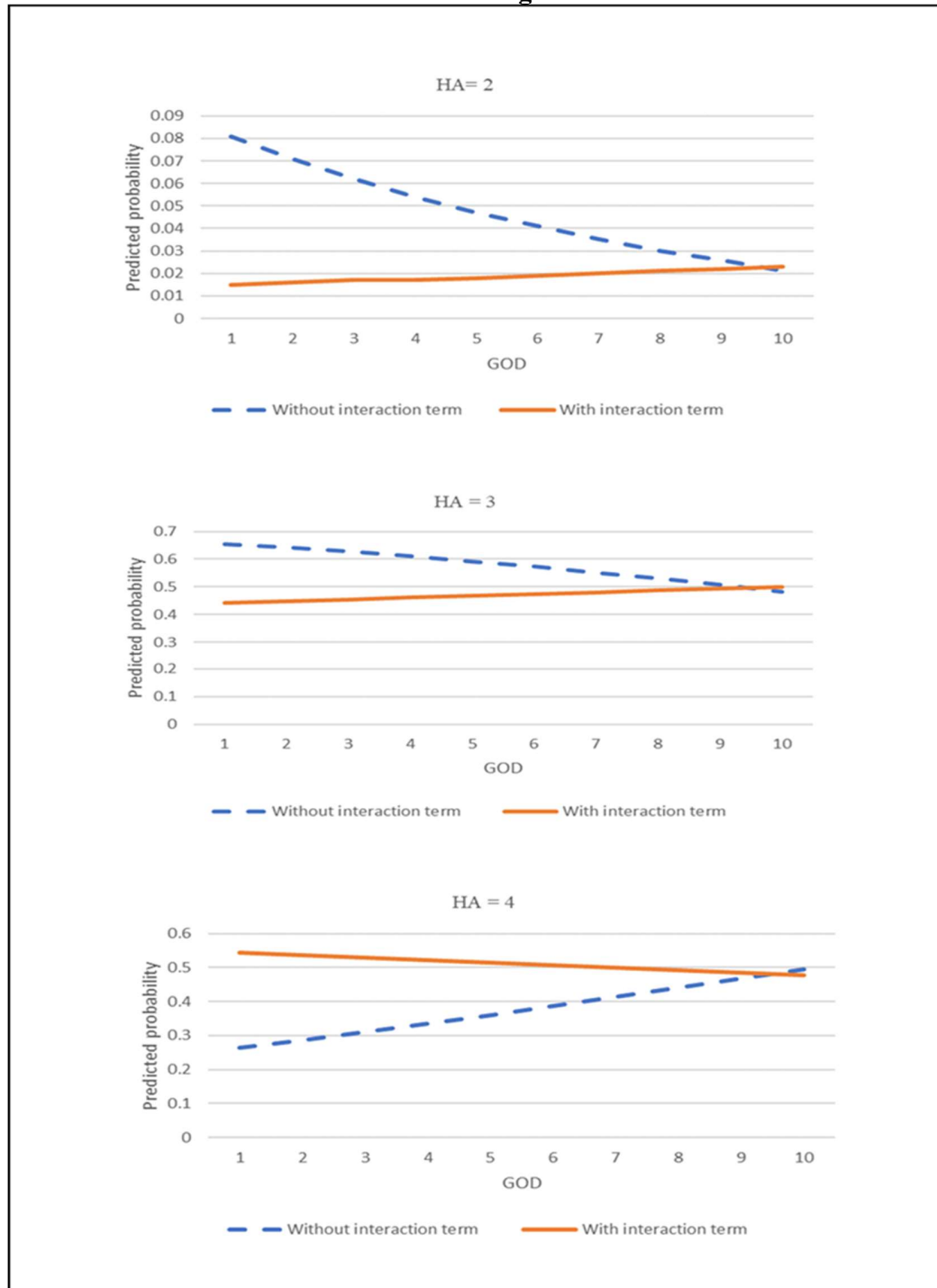| VARIABLES	(1)	(2)	(3)	(4)
B40	-0.102**	-0.040	-0.104***	**-0.063**
	(0.039)	(0.165)	(0.040)	**(0.169)**
T20	0.036	0.218	0.035	**0.218**
	(0.086)	(0.273)	(0.086)	**(0.272)**
ACTUALIZATION	0.038**	0.038**	0.006	**0.008**
	(0.015)	(0.015)	(0.083)	**(0.051)**
PRAYTIME	0.010	0.011	0.010	**0.011**
	(0.008)	(0.009)	(0.008)	**(0.009)**
B40 X *PRAYTIME*		-0.010		**-0.006**
		(0.025)		**(0.025)**
T20 X *PRAYTIME*		-0.034		**-0.034**
		(0.058)		**(0.058)**
ACTUALIZATION X			0.005	**0.005**
PRAYTIME			(0.008)	**(0.008)**
BASIC	0.028*	0.028*	0.028*	**0.027***
	(0.014)	(0.014)	(0.014)	**(0.014)**
NEIGHBORHOOD	0.118***	0.118***	0.118***	**0.118***
	(0.023)	(0.023)	(0.023)	**(0.023)**
FINANCIAL	0.033***	0.033***	0.033***	**0.033***
SATISFACTION	(0.008)	(0.008)	(0.008)	**(0.008)**
BELONG	0.045**	0.045**	0.044***	**0.045***
	(0.015)	(0.016)	(0.015)	**(0.016)**
PROUD	0.075**	0.076**	0.074**	**0.075***
	(0.030)	(0.029)	(0.029)	**(0.029)**
FREEDOM	0.009	0.009	0.009	**0.009**
	(0.009)	(0.009)	(0.009)	**(0.009)**
RESPECT	0.085***	0.084***	0.085***	**0.085***
	(0.022)	(0.022)	(0.022)	**(0.022)**
HEALTH	0.225***	0.225***	0.225***	**0.224***
SATISFACTION	(0.022)	(0.022)	(0.022)	**(0.022)**
DEMOCRATIC	0.017**	0.018**	0.017**	**0.018***
	(0.008)	(0.008)	(0.008)	**(0.008)**
EDUCATION	-0.004	-0.004	-0.004	**-0.004**
	(0.008)	(0.008)	(0.009)	**(0.008)**
MARRIED	-0.011	-0.010	-0.011	**-0.010**
	(0.042)	(0.043)	(0.043)	**(0.043)**
KID	0.008	0.008	0.008	**0.008**
	(0.010)	(0.010)	(0.010)	**(0.010)**
N	1,209	1,209	1,209	**1,209**
Pseudo R$_2$	0.175	0.175	0.175	**0.175**
Approximate LR test	22.82	26.38	25.28	**27.98**

Notes:

The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested. For robustness checking, this study also run ordered logit and OLS regression which the results are quantitatively similar to those results in Table 4.7 (See Appendices M and N).

4.3.2 The Moderating Impact of *RELIGIOSITY* on the Relationship between *B40* and *ACTUALIZATION* and *LS*

Table 4.8 presents probit regression results on *LS* with the intention to test the moderating roles of the importance of God through income groups and self-actualization on life satisfaction. Unlike the impact of *B40* x *GOD* on *HA* in Table 4.6, it is confirmed that *GOD* does not help to improve *B40* group's *LS* as the interaction term between *B40* x *GOD* is not significant throughout the regression in Table 4.8. This implies that religious faith helps to soothe B40's emotional wellbeing but not their evaluation on their life. In view of this, the best modelling results can be referred to column (3) which only included the significant interaction term, *ACTUALIZATION* x *GOD*. Column (3) in Table 4.8 presents that without the interaction terms between *PRAYTIME* and *B40* and *T20*, the probability of being life satisfaction by *B40* group tends to be lower than the ones by M40 by 6.3%.

ACTUALIZATION and *GOD* are significantly and positively related to *LS*. Again, the interaction term, *ACTUALIZATION* x *GOD* is significant. Figure 4.3. displays that the predicted probability for someone who needs self-actualizing and perceives God is important is slightly higher than the counterparts (a similar graph is obtained based on the ordered logit regression, see Appendix Q). This can be rationalized by the arguments from previous studies that religions deliver concepts of right and wrong (Anathram & Chan, 2016; Afrasibi & Fattahi, 2017) and promote ethical behavior (Küng, 1996; Sachs, 2013; Devine et al., 2019) which help to moderate the relationship between *ACTUALIZATION* and *LS*.

Table 4.8: Probit Estimates for the Moderating Effects of *GOD* on *LS* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	(4)
B40	-0.080**	-0.054	**-0.063****	0.086
	(0.032)	(0.136)	**(0.031)**	(0.095)
T20	0.006	-0.789	**0.010**	-0.751
	(0.069)	(0.283)	**(0.067)**	(0.360)
ACTUALIZATION	0.005	0.005	**0.172****	0.200***
	(0.011)	(0.011)	**(0.059)**	(0.063)
GOD	0.012*	0.012	**0.011***	0.016*
	(0.007)	(0.008)	**(0.007)**	(0.008)
B40 X *GOD*		-0.002		-0.017
		(0.013)		(0.014)
T20 X *GOD*		0.066		0.061
		(0.048)		(0.047)
ACTUALIZATION X			**-0.018****	-0.021***
GOD			**(0.006)**	(0.007)
BASIC	0.010	0.010	**0.011**	0.011
	(0.010)	(0.010)	**(0.010)**	(0.010)
NEIGHBORHOOD	-0.025	-0.025	**-0.024**	-0.024
	(0.017)	(0.017)	**(0.017)**	(0.017)
FINANCIAL	0.034***	0.034***	**0.034****	0.034***
SATISFACTION	(0.006)	(0.006)	**(0.006)**	(0.006)
BELONG	-0.001	-0.001	**-0.001**	-0.001
	(0.011)	(0.011)	**(0.011)**	(0.011)
PROUD	0.007	0.008	**0.015**	0.018
	(0.021)	(0.021)	**(0.022)**	(0.022)
FREEDOM	0.019***	0.020***	**0.020****	0.020***
	(0.006)	(0.006)	**(0.006)**	(0.006)
RESPECT	0.038**	0.038**	**0.037****	0.038**
	(0.022)	(0.016)	**(0.016)**	(0.016)
HEALTH	0.033**	0.033**	**0.035****	0.036**
SATISFACTION	(0.015)	(0.015)	**(0.015)**	(0.015)
DEMOCRATIC	0.011*	0.011*	**0.012***	0.011*
	(0.006)	(0.006)	**(0.006)**	(0.006)
EDUCATION	0.018	0.017***	**0.018****	0.018***
	(0.006)	(0.006)	**(0.006)**	(0.006)
MARRIED	-0.010	-0.009	**-0.006**	-0.006
	(0.031)	(0.031)	**(0.031)**	(0.030)
KID	0.014**	0.014**	**0.014****	0.014**
	(0.007)	(0.007)	**(0.007)**	(0.007)
N	1,209	1,209	**1,209**	1,209
Pseudo R_2	0.130	0.132	**0.138**	0.141

Notes:

The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested. For robustness checking, this study also run ordered logit and OLS regression which the results are quantitatively similar to those results in Table 4.8 (See Appendices O and P).

Figure 4.3: The Predicted Probability of Being Satisfied with Life (*LS* = 1 and 0) with and without Interaction Effects between *ACTUALIZATION* and *GOD* by the Probit Modelling
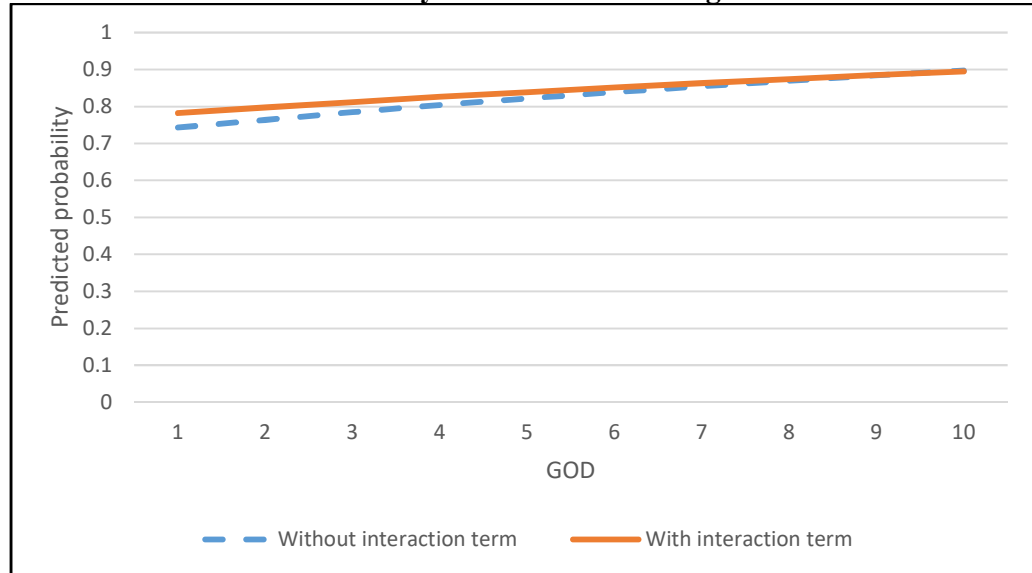
Note: The Predicted Probability is computed based on the modelling results of Column (3) in Table 4.8 holding other independent variable at their average values and dummy variables as zero.

Table 4.9 reports the regression results on *LS* taking into the account of interaction effects between *PRAYTIME* and income groups as well as the interaction impact between *PRAYTIME* and *ACTUALIZATION*. Surprisingly, the best model results in Column (4) displays that the respondent who prays more tend to be less satisfied with their life. This may be due to the unanswered prayers where people pray for their wishes to come true (Riggio, Uhalt, & Matthies, 2014). Intuitively, people will get disappointment and dissatisfaction if their prayers are unanswered. Also, it might be due to the reverse relationship where people with a low life satisfaction are more likely to pray for a good life.

Table 4.9: Probit Estimates for the Moderating Effects of *PRAYTIME* on *LS* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	**(4)**
B40	-0.078**	-0.292*	-0.071**	**-0.205**
	(0.032)	(0.163)	(0.031)	**(0.162)**
T20	0.003	-0.696***	0.007	**-0.700***
	(0.069)	(0.223)	(0.068)	**(0.234)**
ACTUALIZATION	0.005	0.003	0.089**	**0.080**
	(0.011)	(0.011)	(0.038)	**(0.040)**
PRAYTIME	-0.006	-0.012*	-0.008*	**-0.013**
	(0.007)	(0.007)	(0.007)	**(0.007)**
B40 X *PRAYTIME*		0.025		**0.016**
		(0.017)		**(0.017)**
T20 X *PRAYTIME*		0.083**		**0.083**
		(0.036)		**(0.036)**
ACTUALIZATION X *PRAYTIME*			-0.014**	**-0.013**
			(0.006)	**(0.006)**
BASIC	0.010	0.011	0.012	**0.012**
	(0.010)	(0.010)	(0.010)	**(0.010)**
NEIGHBORHOOD	-0.021	-0.021	-0.022	**-0.022**
	(0.017)	(0.017)	(0.017)	**(0.017)**
FINANCIAL SATISFACTION	0.034***	0.034***	0.033***	**0.033***
	(0.006)	(0.006)	(0.006)	**(0.006)**
BELONG	0.002	0.002	0.003	**0.002**
	(0.011)	(0.011)	(0.011)	**(0.011)**
PROUD	0.012	0.010	0.013	**0.011**
	(0.021)	(0.021)	(0.021)	**(0.021)**
FREEDOM	0.020***	0.021***	0.021***	**0.021***
	(0.006)	(0.006)	(0.006)	**(0.006)**
RESPECT	0.038**	0.040**	0.038**	**0.039**
	(0.016)	(0.016)	(0.016)	**(0.016)**
HEALTH SATISFACTION	0.032**	0.035**	0.035**	**0.037**
	(0.015)	(0.015)	(0.015)	**(0.015)**
DEMOCRATIC	0.011*	0.010*	0.011*	**0.010***
	(0.006)	(0.006)	(0.006)	**(0.006)**
EDUCATION	0.018***	0.019***	0.018***	**0.018***
	(0.006)	(0.006)	(0.006)	**(0.006)**
MARRIED	-0.010	-0.012	-0.012	**-0.013**
	(0.031)	(0.030)	(0.030)	**(0.030)**
KID	0.016**	0.016**	0.016**	**0.016**
	(0.007)	(0.007)	(0.007)	**(0.007)**
N	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.128	0.134	0.133	**0.137**

Notes:

The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested. For robustness checking, this study also run ordered logit and OLS regression which the results are quantitatively similar to those results in Table 4.9 (See Appendices R and S).

On the other hand, *B40* as well as the interaction term with *PRAYTIME* are insignificant in explaining the probability of being satisfied with life. If B40 x PRAYTIME is excluded from the model like the results in column (1) and (3), it is found that B40 group is not satisfied with their live compared to M40. Again, this implies that religiosity regardless indicated by *GOD* or *PRAYTIME* cannot help to reduce the life dissatisfaction of *B40*. However, the result in column (4) indicates that the highest income group, T20 tends to be less satisfied with life compared to M40 yet such life dissatisfaction can be reduced by prayers where the interaction term, *T20* x *PRAYTIME* is significant at a 5% significance level.

The total impact of the interaction effect between *T20* and *PRAYTIME* can be observed in Figure 4.4. On average, the probability for those who are from *T20* group and pray frequently is higher than their counterparts provided the scores of *PRAYTIME* is more than 6 out of 8 (the ordered logit regression also showed a similar graph like Figure 4.4, see Appendix T). One possible explanation is the adaptation (Clark, 2018). T20 may adapt to their financial wellbeing, hence, their life satisfaction may go back to the start point. This may cause T20 is less satisfied with their live compared to M40 group. However, with the presence of religiosity through prayers may cultivate their gratitude towards what they have in life and this may cause them to be satisfied with their live.

Figure 4.4: The Predicted Probability of Being Satisfied with Life Satisfaction (*LS* = 1 and 0) with and without Interaction Effects between *T20* and *PRAYTIME* by the Pobit Modelling
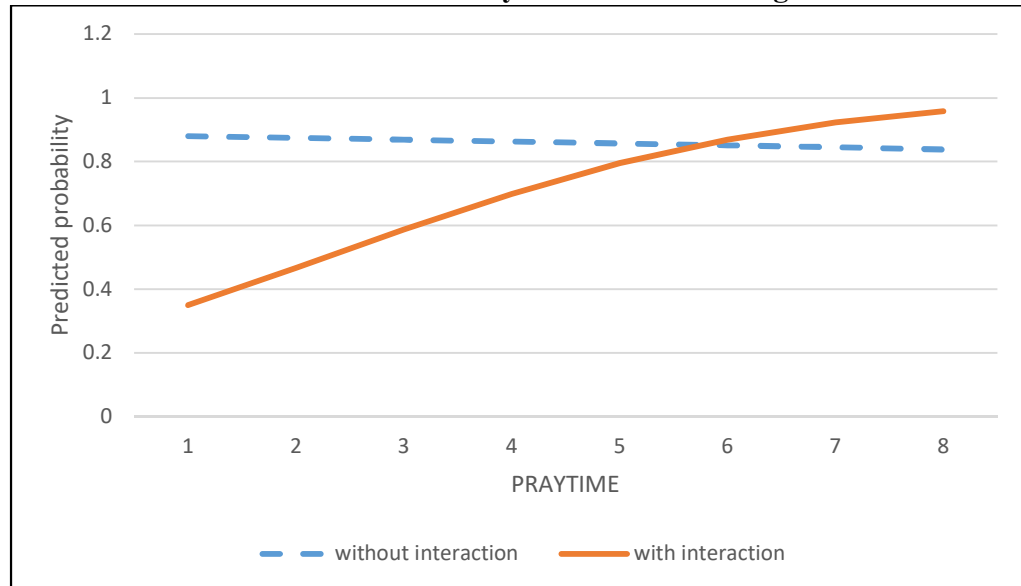
Note: The Predicted Probability is computed based on the results of Column (4) in Table 4.16 holding other independent variable at their average values and dummy variables as zero.

When *PRAYTIME* interacts with *ACTUALIZATION*, again, the moderating role of religiosity on the relationship between self-actualization on life satisfaction is confirmed. Figure 4.5 demonstrates the interaction effects between *ACTUALIZATION* and *PRAYTIME* on life satisfaction based on the modelling results in column (4) of Table 4.9. The probability of being satisfied with life is higher with the present of *ACTUALIZATIO* x *PRAYTIME* compared to the ones without such interaction effects if the scores of *PRAYTIME* falls between 1 and 6 (the ordered logit regression also provide a similar graph life Figure 4.5, see Appendix U).

178

Figure 4.5: The Predicted Probability of Being Satisfied with Life Satisfaction (*LS* = 1 and 0) with and without Interaction Effects between *ACTUALIZATION* and *PRAYTIME* by the Probit Modelling
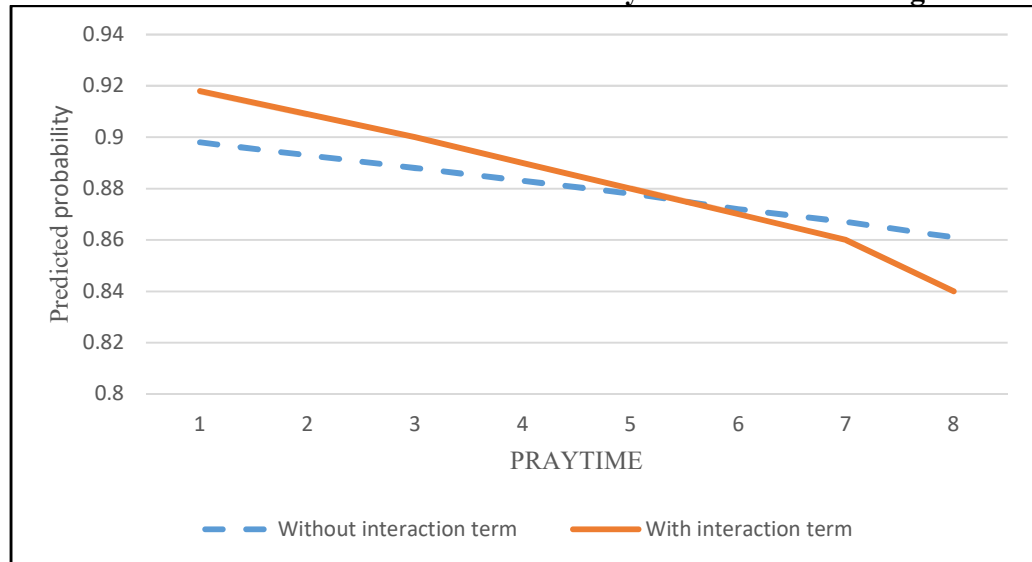
Note: The Predicted Probability is computed based on the modelling results of Column (4) in Table 4.9 holding other independent variable at their average values and dummy variables as zero.

In sum, when it comes to the relationship between *B40* and *LS*, religiosity neither through religious faith nor prayers help to improve B40 group's life satisfaction. Surprisingly, the more prayers *T20* group make, they tend to be more satisfied with their life. On the other hand, both religious faith and prayers help to reduce the life dissatisfaction of being self-actualization. Once again, the empirical results under this sub-section provide some statistical evidences that religiosity can help to moderate the relationship between *ACTUALIZATION* and *LS*. The government and policy makers may consider to bring the religion element in the policy making to tackle greater life satisfaction in Malaysia.

4.3.3 Conclusion

The empirical results provide a few new insights on the impact of religiosity on Malaysian SWB. Firstly, mixed results on the direct impact of religiosity on Malaysian SWB show that religious faith which is indicated by *GOD* directly and significantly affect both facets of SWB, *HA* and *LS*. However, religious practice through prayers (*PRAYTIME*) does not related to *HA*. Surprisingly, *PRAYTIME* is negatively related to *LS* which means the more Malaysians pray, they tend to be not satisfied with their life. In view of this, religious faith is more important than prayers in stimulating Malaysian SWB directly. In view of this, the government may encourage Malaysians to have a dominant religion and adopt their religious faith and values.

Secondly, this study finds that *B40* is unhappier and dissatisfied with life compared to the *M40*. However, *B40* with religious faith tend to be happier than their counterparts without religious faith. This implies that *B40* needs religious faith to cushion the unhappiness of being the lowest income group in Malaysia. As such, the government and policy makers may not just provide the monetary aids to *B40*. They may consider to provide some psychological counselling that integrate religious faith as most religions are able to offer the mental aids and the moral supports to comfort those who are in the sufferings.

As argued by Maslow (1970), self-actualization is not an easy pathway, it requires the wisdom of being acceptance, altruism, creative, and spontaneous. This study finds that both aspects of religiosity, *GOD* and *PRAYTIME*, moderate the linkage between self-actualization and SWB. In other words, self-actualizing people with religiosity tend to have higher SWB compared to those who are not religious. This implies that religions may provide some important guidance or wisdom to self-actualizing people to be happier and satisfied with their life. Hence, the government and policy makers may nurture a religious culture in Malaysia through religions-related policies.

4.4 Third Objective: Revealing the Driven Force of Life Satisfaction on Voting Intention with the Condition of Using Digital Media as Information Resources

This study also employs the sixth wave of WVS data for the third objective. However, the eligible voting age in Malaysia is 21 years old and above. In view of this, this study has filtered out 101 respondents who aged 18 to 20 years old from the original dataset. Hence, the studied sample for the third study objective consists of 1198 respondents who are aged from 21 to 80 years old. To well reflect the real voting in Malaysia, this study integrates the state clustering into the analysis as the voter's voting preference varies across the state (Khalid & Awang, 2008). Therefore, the empirical analysis on *VOTING* is obtained by hierarchical linear modelling (HLM). The details of state clustering are shown in Table 4.10.

Table 4.10: Descriptive Statistics for States for *VOTING* Model

State ID	State	Frequency	Percentage	Cumulative Percentage
1	Wilayah Persekutuan	72	6.010	6.010
2	Sembilan	45	3.756	9.766
3	Melaka	34	2.838	12.604
4	Kelantan	65	5.426	18.030
5	Pahang	65	5.426	23.456
6	Perlis	11	0.918	24.374
7	Kedah	85	7.095	31.469
8	Sarawak	87	7.262	38.731
9	Sabah	151	12.604	51.335
10	Pulau Pinang	67	5.593	56.928
11	Perak	101	8.431	65.359
12	Selangor	235	19.616	84.975
13	Terengganu	44	3.673	88.648
14	Johor Bahru	136	11.352	100
	Total	1198	100	

Source: WVS, 6th Wave, Malaysia

The regressand, *VOTING*, is a binary response variable, the respondent who has voted before is coded as 1 and 0 otherwise. There are 965 respondents (80.551%) from this sample have claimed that they have voted before in the general elections in Malaysia (see Table 4.11). The main focus of the third objective are to reveal the impacts of life satisfaction (*LIFE*), the use of digital media as information resources (*DM*), and the interaction between LIFE and DM (*LIFE* x *DM*) on *VOTING*. Unlike the life satisfaction in the first and second objective, *LIFE* is scaled from 1 (not at all satisfied) to 10 (very satisfied). Table 4.11 presents the descriptive statistics for the variables used, the majority of the respondents are quite satisfied with their lives where the average point for *LIFE* is 7.154 out of 10 points.

Table 4.11: Descriptive Statistics for *VOTING* Model

Variable	Observation	Mean	Standard Deviation	Min	Max
VOTING	1198	0.806	0.396	0	1
LIFE	1198	7.154	1.807	1	10
DM	1198	0.753	0.431	0	1
FINANCE2	1198	0.093	0.290	0	1
FINANCE3	1198	0.427	0.495	0	1
FINANCE4	1198	0.459	0.496	0	1
CHILD	1198	0.731	0.444	0	1
INTEREST	1198	2.422	0.792	1	4
PARTY	1198	2.649	0.769	1	4
BN	1198	0.653	0.476	0	1
MALAYSIAN	1198	3.515	0.561	1	4
AGE	1198	41.788	13.06	21	80
AGE squared	1198	1916.65	1170.67	441	6400
LOWEDU	1198	0.169	0.375	0	1
MEDIUMEDU	1198	0.659	0.474	0	1
MALAYS	1198	0.679	0.467	0	1

Notes:

VOTING is a dummy variable where 1 indicates that the respondent has voted before in the general elections in Malaysia; 0 otherwise.

There is 902 or 75.292% of the respondents obtain the information from Internet, email or hand phone (*DM*). For personal financial situation, 9.3% of the respondents claim that they spend some savings; 42.7% of the respondents tell that they just get by while 45.9% of the respondents can save money during the past year. We also include the dummy variable for whether having kids or not (*CHILD*) in the model and the sample shows that 876 or 73.122% are having at least a kid. Furthermore, this study also includes the identity variable which the respondents were asked to rate a rank from 1 (the least) to 4 (the highest) to see themselves as part of Malaysians (*MALAYSIAN*) to represent the civic duty element in the model. The average ranking for this variable is 3.515 out 4 which means respondents are having very strong sense of belongingness as a Malaysian.

For political attitudes, the sample exhibits moderate interest towards politics (*INTEREST*) which the average score is 2.422 out of 4 points and also moderate confidence on the political party (*PARTY*) with a mean score of 2.649 out of 4 points. Last but not least, this study also includes the partisan variable (*BN*) which the respondents were asked if they would vote for BN coalition in the next general election. There are more than half of respondents which about 65.275% will vote for BN coalition as shown in Table 4.11. It is about 67.863% of the sample are Malays which well represents the Malays population in Malaysia. Moreover, the respondents are quite educated where it is only 16.9% of the respondents who just complete primary school or have no chance to obtain education (*LOWEDU*) and the rest are those who complete at least secondary school and above.

Table 4.12 shows a simple correlation analysis among the variables used in the analysis. We find that the main variable, *LIFE* is positively correlated to the *VOTING* which imply that people with higher life satisfaction tend to vote, vice versa, but it is not significant. On the other hand, the second main variable - *DM* is significantly and negatively associated with *VOTING*. In addition, the correlations between *VOTING* and most of the remaining variables (*CHILD*, *MALAYS*, *AGE*, *PARTY*, *INTEREST*, *BN*, and *MALAYSIAN*) are positive and significant.

Table 4.12: Correlation Analysis for *VOTING* Model

Variables	VOTING	LIFE	DM	FINANCE2	FINANCE3	FINANCE4	KID	INTEREST	PARTY	BN	MALAYSIAN
VOTING	1.000										
LIFE	0.029	1.000									
DM	-0.096***	0.016	1.000								
FINANCE2	0.077***	0.029	0.023	1.000							
FINANCE3	-0.088***	-0.065	0.009	-0.276***	1.000						
FINANCE4	0.068**	0.051	-0.016	-0.294***	-0.795***	1.000					
CHILD	0.344***	0.046	-0.094***	-0.014	0.013	-0.012	1.000				
INTEREST	0.131***	0.065**	0.119***	0.023	-0.009	-0.002	0.054*	1.000			
PARTY	0.109***	0.126***	-0.065**	0.071	-0.020	-0.011	0.074**	0.238***	1.000		
BN	0.080***	0.092***	0.001	0.009	-0.023	0.018	0.060**	0.098***	0.195***	1.000	
MALAYSIAN	0.090***	0.070**	-0.040	0.071	-0.082***	0.038	0.023	0.141***	0.181***	0.098***	1.000
AGE	0.382***	0.020	-0.204***	0.039**	0.023	-0.057	0.536***	0.074**	0.067**	0.063**	0.042
LOWEDU	0.115***	-0.009	-0.221***	-0.022	0.033	-0.028	0.194***	0.0068	0.018**	0.007	-0.010
MEDIUMEDU	-0.037	0.043	0.107***	0.005	-0.057**	0.058**	-0.054	-0.007	0.000	0.009	0.038
MALAYS	0.064**	0.071**	-0.017	-0.051	-0.051	-0.051	0.111***	0.166***	0.185***	0.159***	0.135***

Variables	AGE	LOWEDU	MEDIUMEDU	MALAY
AGE	1.000			
LOWEDU	0.391***	1.000		
MEDIUMEDU	-0.251***	-0.629***	1.000	
MALAYS	0.003	0.049*	0.045	1.000

Note: The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$.

This study also found that *LOWEDU* is positively and significant correlated with *VOTING* but *MEDIUMEDU* is uncorrelated with *VOTING*. More importantly, all the absolute value of correlation coefficients is less than 0.80. These imply that the following regression analysis would be free from the multicolinearity problem that always found in the survey data. Additionally, the variance inflation factor (VIF) results also shows that the regression analysis is free from multicollinearity where all the VIF values for each variable are less than 10. (see Appendix V).

4.4.1   The Impact of *LIFE* and *DM* on *VOTING*

Table 4.13 shows the results on the relationship between *VOTING* and *LIFE* together with the other control variables. It starts with the null model, Column (0), without any explanatory variables. This null model assumes that the likelihood to vote is not affected by any factors and the residual from each state is different from each other. The reason to estimate this null model is to get to know the fraction of the variance between states compared to the total variance. If the fraction is large enough, the HLM analysis is suitable to be used in this study. The Intra-class Correlation Coefficient (ICC) would show the portion of the total variance that contributed by the state level. ICC is commonly used to test the nested data (Raudenbush & Bryk, 2002; Tavares & Raudla, 2018).

Table 4.13: *LIFE* and Probability of *VOTING*

	(0)	(1)	(2)	(3)	(4)
Dependent variable: *VOTING*	Null model	Fixed intercept (logit model)	Fixed intercept (logit with state dummies)	Fixed and random intercept	random intercept and random slope
LIFE		-0.040	-0.055	**-0.053**	0.008
		(0.057)	(0.062)	**(0.051)**	(0.078)
AGE		0.263***	0.314***	**0.305***	0.304***
		(0.027)	(0.030)	**(0.044)**	(0.044)
AGE squared		-0.002***	-0.003***	**-0.003***	-0.003***
		(0.000)	(0.000)	**(0.000)**	(0.000)
INTEREST		0.302*	0.309*	**0.315***	0.314***
		(0.155)	(0.182)	**(0.120)**	(0.121)
PARTY		0.217*	0.176*	**0.180**	0.174
		(0.115)	(0.104)	**(0.130)**	(0.133)
FINANCE2		2.755***	2.963***	**2.947***	2.998***
		(0.463)	(0.517)	**(0.613)**	(0.623)
FINANCE3		1.492***	1.594***	**1.603***	1.632***
		(0.433)	(0.491)	**(0.502)**	(0.512)
FINANCE4		2.032***	2.117***	**2.146***	2.192***
		(0.449)	(0.454)	**(0.502)**	(0.512)
MALAYSIAN		0.229	0.428**	**0.396**	0.396**
		(0.142)	(0.208)	**(0.166)**	(0.169)
CHILD		0.511*	0.421	**0.433*	0.430*
		(0.291)	(0.306)	**(0.226)**	(0.228)
LOWEDU		0.130	0.015	**0.033**	0.071
		(0.431)	(0.469)	**(0.357)**	(0.362)
MEDIUMEDU		0.179	0.006	**0.037**	0.048
		(0.222)	(0.198)	**(0.227)**	(0.229)
MALAY		0.140	0.303	**0.275**	0.307
		(0.228)	(0.224)	**(0.207)**	(0.211)
BN		0.156	0.185	**0.177**	0.191
		(0.211)	(0.196)	**(0.193)**	(0.195)
Constant	1.632***	-9.274***	-11.242***	**-10.392***	-10.845***
	(0.164)	(0.907)	(1.163)	**(1.264)**	(1.305)
Random-effects parameters					
Constant	0.237**	-	-	**0.453**	0.920
	(0.128)	-	-	**(0.226)**	(1.394)
LIFE	-	-	-	**-**	0.032
	-	-	-	**-**	(0.035)
Covariance	-	-	-	**-**	
(Constant, LIFE	-	-	-	**-**	-0.142
	-	-	-	**-**	(0.213)
Likelihood Ratio test	-	-	-	**-**	3.900
[P-value]	-	-	-	**-**	[0.1678]
ICC	0.053**	-	-	**0.121**	0.218
	(0.027)	-	-	**(0.053)**	0.259

Notes:
One tail: 0.1 = 1.28155/0.05=1.645/0.01=2.32635, Robust standard error cluster state_id, Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Higher ICC is better which it indicates that HLM is appropriate to be used. The ICC from the null model is 0.053 while it is 0.121 in the HLM with fixed slope and random intercept in Column (3); both are significant at 5% of significance level. When it comes to the more complex model, HLM with random intercept and random slope in Column (4), the ICC is 0.218 but it is insignificant. Furthermore, not only the covariance between constant and life satisfaction under the random effects parameters is insignificant but the random coefficients of constant and life satisfaction are respectively insignificant too. All these indicate that the HLM with random intercept and random slope in Column (4) is not appropriate to be used.

Additionally, failing to consider the state clustering would cause type 1 errors, for instance, the value of test statistic is higher than the true value. Hence, the logit models from column (1) and (2) in Table 4.13 are served as robustness checking in terms of sign and significance of the variables. As such, the HLM with fixed slope and random intercept is the most appropriate approach to be used for the third study objective in this study, hence, the results of this approach are interpreted and discussed in details. Review back to column (3) in Table 4.13 where the regression only includes life satisfaction in the model, LIFE is negatively related to the *VOTING* (with the estimated coefficient = -0.053) which it matches with the expected sign but it is insignificant. This implies that life satisfaction itself does not contribute to the voting intention. How about with the presence of digital model?

Table 4.14: *LIFE*, *DM*, and Probability of *VOTING*

Dependent variable: *VOTING*	(1) Fixed intercept (logit model)	(2) Fixed intercept (logit with state dummies)	(3) Fixed and random intercept	(4) random intercept and random slope
LIFE	-0.037	-0.053	**-0.050**	0.013
	(0.058)	(0.062)	**(0.051)**	(0.079)
DM	-0.299	-0.290	**-0.310**	-0.341
	(0.303)	(0.257)	**(0.243)**	(0.246)
AGE	0.265***	0.315***	**0.305*** **	0.304***
	(0.027)	(0.029)	**(0.044)**	(0.044)
AGE squared	-0.002***	-0.003***	**-0.003*** **	-0.003***
	(0.000)	(0.000)	**(0.000)**	(0.000)
INTEREST	0.319**	0.330*	**0.337*** **	0.340***
	(0.161)	(0.190)	**(0.122)**	(0.123)
PARTY	0.207*	0.167	**0.170**	0.165
	(0.118)	(0.105)	**(0.131)**	(0.134)
FINANCE2	2.757***	2.974***	**2.958*** **	3.003***
	(0.472)	(0.528)	**(0.611)**	(0.621)
FINANCE3	1.507***	1.597***	**1.608*** **	1.632***
	(0.450)	(0.497)	**(0.500)**	(0.510)
FINANCE4	2.043***	2.138***	**2.166*** **	2.209***
	(0.459)	(0.460)	**(0.501)**	(0.511)
MALAYSIAN	0.219	0.421**	**0.387** **	0.383**
	(0.144)	(0.209)	**(0.166)**	(0.169)
CHILD	0.511*	0.423	**0.434***	0.435*
	(0.299)	(0.311)	**(0.227)**	(0.229)
LOWEDU	0.048	-0.050	**-0.040**	-0.011
	(0.477)	(0.510)	**(0.361)**	(0.367)
MEDIUMEDU	0.149	-0.015	**0.013**	0.020
	(0.244)	(0.213)	**(0.229)**	(0.231)
MALAY	0.135	0.304	**0.274**	0.307
	(0.226)	(0.211)	**(0.208)**	(0.212)
BN	0.169	0.198	**0.191**	0.208
	(0.208)	(0.194)	**(0.193)**	(0.196)
Constant	-8.075***	-10.124***	**-9.257*** **	-9.675***
	(1.222)	(0.964)	**(1.397)**	(1.420)
Random-effects parameters				
Constant	-	-	**0.446** **	0.870
	-	-	**(0.222)**	(1.399)
LIFE	-	-	**-**	0.032
	-	-	**-**	(0.035)
Covariance	-	-	**-**	-0.139
(Constant, LIFE)	-	-	**-**	(0.215)
Likelihood Ratio test	-	-	**-**	4.380
[P-value]	-	-	**-**	[0.112]
ICC	-	-	**0.119** **	0.209
	-	-	**(0.052)**	(0.265)

Notes:
One tail: 0.1 = 1.28155/0.05=1.645/0.01=2.32635, Robust standard error cluster state_id , Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table 4.14 is the extension of Table 4.13 where this study includes one more variable which is *DM* into the models. It is found that both sign and insignificance of the coefficients for *LIFE* remained unchanged as in Table 4.13. Furthermore, the estimates of *DM* are negative and insignificant across the columns, from (1) to (4) in Table 4.14. These results indicate that digital media itself does not help to trigger voting intention. In other words, life satisfaction and digital media do not stimulate voting intention respectively. What if these two variables interact? Are there any sparks?

4.4.2   The Interaction Effect between *LIFE* and *DM* on *VOTING*

Table 4.15 demonstrates the results for the role of *LIFE* in motivating *VOTING* with the condition on *DM*. The inclusion of the interaction (*LIFE* x *DM*) terms into the models makes the analysis results better in terms of significance of the regressors. Although the ICC in column (4) is 0.177 but it is insignificant. On the other hand, the HLM with fixed and random intercept approach (column (3)) provides the best results as the ICC is 0.118 (which is higher than the null model, 0.053 in Table 4.13) and it is significant at 5% significance level. This means that the intercepts across the state clusters are different while the slope of regressors on *VOTING* across the state clusters are same. The following analysis is made based on the results in Column (3) of Table 4.15.

190

Table 4.15: Role of *LIFE* on the Probability of *VOTING* with Condition on *DM*

Dependent variable: *VOTING*	(1) Fixed intercept (logit model)	(2) Fixed intercept (logit with state dummies)	(3) Fixed and random intercept	(4) random intercept and random slope
LIFE	-0.184	-0.189	**-0.188***	-0.130
	(0.120)	(0.126)	**(0.099)**	(0.114)
DM	-1.754	-1.641	**-1.682***	-1.794**
	(1.113)	(1.243)	**(0.875)**	(0.870)
LIFE X *DM*	0.204	0.188	**0.191***	0.205*
	(0.170)	(0.186)	**(0.116)**	(0.116)
AGE	0.267***	0.318***	**0.308*****	0.308***
	(0.026)	(0.031)	**(0.045)**	(0.045)
AGE squared	-0.002***	-0.003***	**-0.003*****	-0.003***
	(0.000)	(0.000)	**(0.001)**	(0.001)
INTEREST	0.324**	0.337*	**0.344*****	0.343***
	(0.159)	(0.186)	**(0.122)**	(0.123)
PARTY	0.216*	0.174*	**0.177**	0.173
	(0.115)	(0.103)	**(0.131)**	(0.134)
FINANCE2	2.770***	2.996***	**2.979*****	3.018***
	(0.486)	(0.545)	**(0.611)**	(0.621)
FINANCE3	1.536***	1.639***	**1.648*****	1.676***
	(0.462)	(0.517)	**(0.500)**	(0.510)
FINANCE4	2.084***	2.183***	**2.209*****	2.253***
	(0.455)	(0.465)	**(0.500)**	(0.512)
MALAYSIAN	0.214	0.419**	**0.385****	0.378**
	(0.145)	(0.211)	**(0.167)**	(0.169)
CHILD	0.524*	0.429	**0.442***	0.442*
	(0.298)	(0.311)	**(0.227)**	(0.229)
LOWEDU	0.070	-0.018	**-0.009**	0.029
	(0.498)	(0.542)	**(0.362)**	(0.368)
MEDIUMEDU	0.133	-0.023	**0.003**	0.008
	(0.234)	(0.209)	**(0.229)**	(0.231)
MALAY	0.140	0.307	**0.276**	0.307
	(0.226)	(0.212)	**(0.208)**	(0.212)
BN	0.163	0.194	**0.186**	0.204
	(0.205)	(0.193)	**(0.194)**	(0.196)
Constant	-8.075***	-10.124***	**-9.257*****	-9.675***
	(1.222)	(1.964)	**(1.397)**	(1.420)
Random-effects parameters				
Constant	-	-	**0.440****	0.842
	-	-	**(0.220)**	(1.38)
LIFE	-	-	**-**	0.033
	-	-	**-**	(0.036)
Covariance (Constant, *LIFE*)	-	-	**-**	-0.141
	-	-	**-**	(0.216)
Likelihood Ratio test	-	-	**-**	4.750
[P-value]	-	-	**-**	[0.093]
ICC	-	-	**0.118****	0.177
	-	-	**(0.052)**	(0.263)

Notes:
One tail: 0.1 = 1.28155/0.05=1.645/0.01=2.32635, Robust standard error cluster state_id, Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

After including the interaction term between life satisfaction and digital media (*LIFE* x *DM*) into the models, the life satisfaction is significantly and negatively related to the voting intention. The estimated coefficient of -0.188 implies that that life satisfaction and voting intention go in an opposite direction without digital media. Individuals who are not satisfied with life have greater intention to vote vis-à-vis those with greater life satisfaction. The intuition is arguably straightforward: vote becomes a mean of releasing frustration and nothing people would want to change if everything goes well in life. Hence, election outcome is more likely to reflect a proportional preference among voters with different life satisfactions.

Such result can be explained by two views: Firstly, Malaysians who are satisfied with their life tend to not vote might be due to the "happy ignorance" or "contented idleness" in which people with higher life satisfaction incline to be political apathy and hence they are more likely to be absent from political participation such as voting (Veehoven, 1988). The second reason may be due to the bad administration under BN coalition that create dissatisfaction of Malaysians such as the serious corruption, high inflation rate, and unmatched paid rise to the price rise (Noh, 2014; Welsh, 2013; Moten, 2011; Brown, 2008; Wong, 2005). To certain extent, all these may create some life hassle to her people life. In turn, the dissatisfied Malaysians would like to vote desperately to hope for a change of government.

The result in Column (3) also indicates a significant negative linkage between *DM* and *VOTING*. The significant estimates of -1.682 at a 10% significance level shows that respondents who use digital media as news sources is lower than their counterparts by 1.682 percentage point, ceteris paribus. Such results are similar to the works by Willnat et al. (2013) and Miner (2015) in Malaysia context. Willnat et al. (2013) explained their results by the nature of their dataset. Willnat et al. (2013) found little variance in their sample respondents where only 26.81% respondents chose not to vote and hence the voting likelihood could not be affected by the use of online media.

On the other hand, Miner (2015) found the use of Internet diffusion contribute to the vote swung from BN coalition to the opposition coalition but not the voting turnout rate in the general election. Nevertheless, in this study, the results might due to the nature of online news and the perception of digital media users towards the received news. Most of the online political information were biased to the respective political parties or candidates (Kasim & Sani, 2016). Furthermore, the online information could easily be manipulated (Lim, 2016). Consequently, the digital media users might be get distracted from voting.

Figure 4.6: The Predicted Probability of *VOTING* and *LIFE* with / without interaction with *DM* from the HLM Modelling
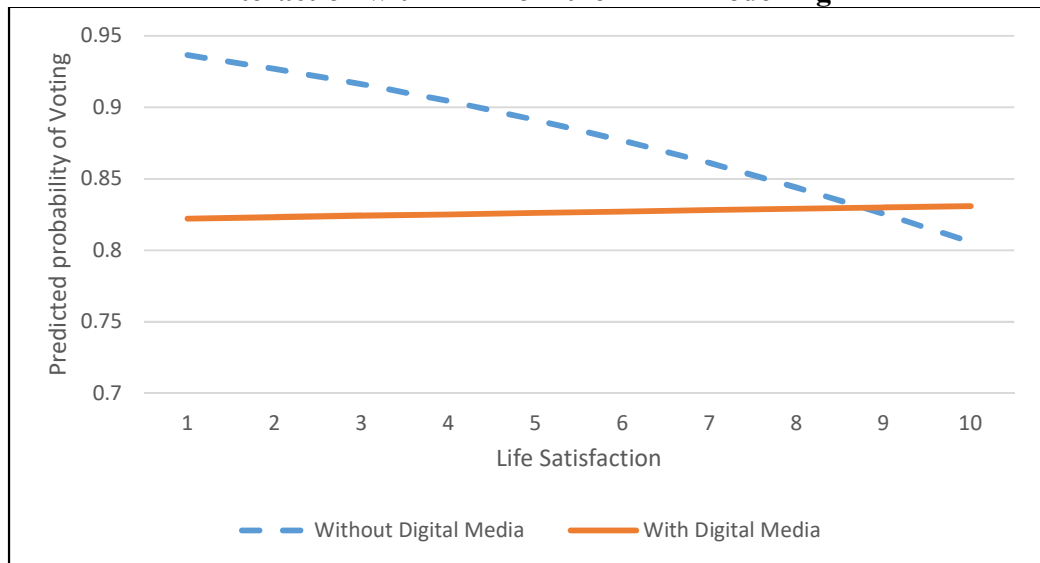
Notes: The graph is extracted based on the regression in Column (3) in Table 4.15.

Even though both estimates of *LIFE* and *DM* are significant and negative respectively, the estimates of the interaction term, *LIFE* x *DM* is significant positive, 0.191 at a 10% significance level. The total impact of the interaction term on voting intention can be observed in Figure 4.6. The dotted line shows that life satisfaction and voting intention go in an opposite direction without digital media. Individuals who are not satisfied with life are more likely to vote compare to those with greater life satisfaction.

Hence, the voting intention disparities which caused by different levels of life satisfaction occur with a probability discrepancy of about 0.13 between the lowest-level and the highest-level of life satisfaction. This clearly illustrates that voters are quite emotion in the sense that they release their frustration about their low life satisfaction through voting. This may due to the bad administration under

194

BN coalition that creates life dissatisfaction of Malaysians such as serious corruption, high inflation rate, and unmatched paid rise to the price rise (Noh, 2014; Welsh, 2013; Moten, 2011; Brown, 2008; Wong, 2005). Hence, election outcome is more likely to reflect a proportional preference among voters with different life satisfactions.

However, by democratizing access to information with the presence of digital media, we obtain a flatter line which is labelled as "with digital media" in Figure 4.6. It is obvious that the voting intention inequalities are reduced to a probability discrepancy of about 0.02 between the lowest-level and the highest-level of life satisfaction while the voting intention still remains high at a probability between 0.82 to 0.84 across different levels of life satisfaction. These results reflect that digital media plays an important role in transmitting information. It allows voters to access more information about national affairs, political party campaign and the details of candidates (Spierings & Jacobs, 2014; Tolbert & McNeal, 2003).

Consequently, voters are more conscious of national affairs and know better the needs for national's well-being. When comes to an election, voters will be calmer and tend to vote for country's well-being instead of overly focusing on personal well-being. Hence, we can conclude that digital media help to sooth voters' emotions and make everyone have an equal proportional parallel to vote. Therefore, the government or policy makers may encourage voters to excess more information through digital media before an election.

195

Moreover, the results also indicate that *AGE* is inverted- U related to the *VOTING* where the youths and senior citizens are less likely to vote compared to the middle age group. Similar pattern between age and voting are found in some works (Gallego, 2007; Burr, Caro & Moorhead, 2002; Zhong & Chen, 2002; Flavin & Keane, 2012). Generally, youths are more distracting from voting due to their cynicism (Dermody, Hanmer-Lloyd & Scullion, 2010), political apathy (Kimberlee, 2002), and the change of value from politics to other aspect such as environmental issues (Wilkinson & Mulgan, 1995), and etc. On the other hand, middle age group is having more stable living and they are more active in political participation compared to the senior citizens (Burr et al., 2002).

Furthermore, the results also show a positive linkage between *INTERST* and *VOTING* in the sample which it is consistent with the previous findings (Brooks & Geer, 2007; Dolan & Holbrook, 2001; Gimpel, Lay & Schuknecht, 2003). Generally, interest will trigger action (Davidson, 1963). Therefore, people with higher political interest is more likely to vote. Additionally, this study also finds that confidence on political party will help to boost the voting intention (the estimates of 0.249). Dalton and Weldon (2007) also found the similar results and explained that lacking confidence on political party may cause voters to doubt the trustworthy of the political party and thus the turn out rate in low.

The voting intention model in this study is partly constructed based on the economic voting theory where people will vote when the economic is good.

However, the indicator of economic performance in this study is referring to financial condition at individual level. The dummy variables, *FINANCE2*, *FINANCE3*, and *FINANCE4* are significantly and positively related to *VOTING*. These results suggest that Malaysian with better personal financial conditions tend to vote. These results support the findings by Liberini et al. (2015), Duch (2001), and Lewis-Beck and Nadeau (2011).

This branch of study agreed to 'pocketbook' voting where people with greater financial wellbeing tend to vote in order to sustain the current political system which is beneficial to their personal financial situation. However, this result is contradictory to the negative relationship between life satisfaction and voting intention. One possible explanation is personal financial circumstance is just a part of life satisfaction, it cannot fully represent life satisfaction.

From the altruism voting point of views, people will vote for other's wellbeing too. This study assumes that "other's wellbeing" including the welfare for next generation. Therefore, this study also includes the variable of having own child (*CHILD*) as one of the independent variables. The estimates of *CHILD*, 0.442, indicate that Malaysians with having child is more willing to vote than those who have no kid at 10% significance level. These results match with what had happened in real that Malaysians tended to vote for better future for next generation during the bad administration under BN coalition before May 2018.

One of the political candidates, Lim Kit Siang from opposition coalition in the 14th General Election have written an open letter and published on the online news portal to 15 million voters before the Election Day (Lim, 2018). The content of such letter was to encourage voters to vote for future generation of Malaysians (Lim, 2018). As a result, the opposition coalition, Pakatan Harapan, won the election for the first time on 9 May 2018. Comparing to the results which obtained in Ng et al. (2017), they find that whether the voters having children or not did not contribute to the likelihood of voting for BN coalition. Together with the results obtained in this study, it is obvious that Malaysians intend to vote for a change of Government to eliminate BN hegemony.

The estimated coefficient of *MALAYSIAN* is 0.385 and it is significant at 5% significance level. One of the common explanations to the positive relationship between identity and voting intention is civic duty (Blais, Daoust, Dassonneville, & Péloquin-Skulski, 2019; Smets & Van Ham; 2013; Blais & Galais, 2016). In view of this, this study also implies that Malaysians vote due to their civic duty. Although numerous studies have argued that educated individuals tend to participate in the political events like voting because they have more money, time, knowledge and the ability to access political information (Pianta, 2020), this study finds that education is not related to voting intention.

Not just education but ethnic group belonging is also found to be insignificant in explaining voting intention. These results are consistent with some

local studies (Ng et al., 2017; Mohd Hed & Grasso, 2020). This may be due to the strong hope of Malaysians to change a government through voting regardless to their education levels and also their ethnic group belonging. Additionally, this study also demonstrates that party preference in favor of BN is not associated with voting intention. This may due to the preference for the opposition was in stark contrast to the people's solid support for BN in most of the previous general elections (Sun, 2014).

For robustness checking, this study also run a Tobit regression (see Appendix W), the obtained results are quite similar to the HLM modelling results. A similar graph like Figure 4.6 is also obtained based on the Tobit modelling (see Appendix Y).

4.4.3 Conclusion

There are a few conclusions this study can draw based on the HLM analysis. In the Malaysian context, Ng et al (2017) found that life satisfaction is positively related to the likelihood of voting the ruling party based on the sixth wave WVS. However, with the same data source, this HLM results in this study show that life satisfaction and voting intention go in an opposite direction without digital media. Individuals who are not satisfied with life have greater intention to vote vis-à-vis those with greater life satisfaction. The intuition is arguably straightforward: vote becomes a mean of releasing frustration and nothing people would want to change

if everything goes well in life. Hence, election outcome is more likely to reflect a proportional preference among voters with different life satisfactions.

This result may explain why the turnout rate at the ballot box were high in the last three General Elections in Malaysia where the turnout rates were 74.74% (in GE-12), 84.84% (in GE-13), and 82.32% (in GE-14) (Kamaruddin & Rogers, 2020). The high turnout rate might due to the life dissatisfaction of Malaysians. Hence, Malaysians might vote for a new government which could bring more benefits and wellbeing to the country and Malaysians. If the ruling government wish to remain their office in the next election, they may always prioritize people's wellbeing.

Furthermore, this study obtains the result that digital media itself is negatively associated with the intention to vote which is consistent with numerous past studies in Malaysia (Willnat et al., 2013; Miner, 2015). To be different from those past studies, this study further examines the interacting effect of digital media in the relationship between life satisfaction and voting intention. By democratizing access to information with the presence of digital media, voting intention is levelled irrespective of the degree of life satisfaction.

Therefore, voters are encouraged to excess more information through digital media before an election. Gaining a better understanding of national affairs instead of overly focusing on personal life satisfaction helps to make a right voting decision

if vote or not to vote. In view of this, the government or policy makers may need to monitor the trustworthy of the news that spread via digital media.

Apart from the life satisfaction and digital media, this study also finds that age, political interest, the confidence towards the political party, individual financial circumstances, civil duty and having kid(s) are the motivations for Malaysians to vote. In order to increase the voting rate in future, the government may look into these few factors too. The political party may perform well and always do well for the country and people's well beings in order to win the confidence of Malaysians towards the political party. In turn, Malaysians will perform their civil duty and vote for a capable government.

CHAPTER 5

SUMMARY, CONCLUSION AND IMPLICATIONS

5.1   Introduction

This chapter consists of three sections. The first section delivers a summary of key findings of this study. The following section suggests about the implications of the study for the Government, policy makers and individuals based on the current findings of this study. Then, the last section is ended by suggesting some future studies on SWB in Malaysia.

5.2   Summary of the Study

With the flourishing economic growth and the advancement of technology throughout the world today, people are not just seeking for basic needs to live. Better quality of life is demanded which it is not just about the material wellbeing but also the psychological wellbeing. Hence, many country leaders and scholars have realised that the world classical measure of the economic performance and social progress – GDP is inadequately to indicate how well the people doing. As such, the idea of 'go beyond GDP' in measuring human wellbeing has raised and thus caused the studies on SWB are ballooning in size in the last two decades.

What are the current issues that motive this study to focus on Malaysian SWB? Firstly, a significant drop in Malaysian Happiness. The 2019 World Happiness Report has shown that the changes in Malaysian happiness from 2005-2008 to 2016-2018 is a drop of 0.679 out of 10 points which was the most serious drop among the ASEAN countries. Secondly, the inadequacy of current Malaysian SWB indicator – MWI. The subjective indices at individual level is absent from the computation of MWI. Lastly, the Malaysian Psychiatric Association has studied that the commit suicide rate in Malaysia has increased by 60% since 1960. If people are embraced with an abundance of happiness and life satisfaction, they would not simply end their lives.

So, what make Malaysians happy and satisfy with their life? Hence, the main objective of this study is to discover the determinants of SWB in Malaysia. Based on the past literature, SWB is a multi-dimensional phenomenon that of interest of variety fields of study, such as happiness economics and psychology. Happiness economists measure SWB more on material or tangible good needs such as income, employment, education, and demographical factors. From the psychologists' standpoint, SWB are more related to psychological wellbeing likes feelings, moods, perceptions, and values. Hence, the literature of SWB are quite scatter in the sense that scholars study about SWB based on their schools of thought. The similar research pattern is found in the context of Malaysia.

In order to fill the research gap, this study intends to construct a comprehensive SWB model with the theoretical support of Maslow's hierarchy of needs in which it incorporates both materialism and psychological needs in explaining human motivations towards better SWB. Furthermore, most of the local SWB studies are conducted based on the particular age groups or ethnic groups. Studies with variety age group and ethnic groups throughout all states in Malaysia are still limited. Hence, this study employs the 6th wave of World Values Survey (WVS) data that consists of 1209 respondents across 13 states and the federal territories Kuala Lumpur throughout Malaysia for the first objective empirical analysis.

This study measures the SWB based on happiness and life satisfaction. Furthermore, a variety of components that representing Malaysian perceived needs on physiological, safety, belongingness, self-esteem and self-actualization are constructed by the categorical principal component approach (CATPCA). Besides, this study also includes some control and demographical variables which are health satisfaction, income level, importance of God in life, perceived democracy, age, employment status, education, religion denomination, marital status, and the number of kids at home to make the analysis more comprehensive.

Then, the happiness models are regressed by the ordered probit modelling approaches due to the variable of happiness is ordinal scaled in nature ($HA = 1, 2, 3$ and 4). On the other hand, this study employs probit modelling approaches for

regressing life satisfaction models as life satisfaction is a binary response variable (LS = 1 and 0). The results illustrate that the variables which influence the likelihood of being happier and being satisfied with life are quite different, especially the needs underlying the Maslow's hierarchy of needs.

This study finds that the safety needs from financial satisfaction and safety in neighborhood, belongingness needs, self-esteems needs through making parents proud and respect to human right, and self-actualization needs are positively related to the probability of being very happy. On the other hand, only the safety needs from financial satisfaction and self-esteem needs from having freedom and respect to human right are positively related to the probability of being satisfied with life. Nevertheless, health satisfaction, relative income, the importance of God, and perceived democracy are significant determinants of Malaysian SWB.

The main conclusion can be drawn from these results is Malaysians are still trapped at the safety needs and self-esteem needs in the pursuit of SWB, albeit the components of safety needs and self-esteem needs affects happiness and life satisfaction differently. In other words, material needs and psychologically needs are quite equally important to make Malaysians being happier and satisfied with life. Furthermore, this study shows that the determinants for happiness and life satisfaction are quite different. Therefore, they may not be suitable to use interchangeably in accounting Malaysian SWB to avoid unbiased analysis.

Examining the moderating effects of religiosity on the relationship between B40 and self-actualization and SWB is the second objective of this study. The blooming economic and the advancement of science and technology have been accompanied with the collapse of human virtue ethics (Sachs 2013). Humans become selfish, apathy, and losing virtue ethics behaviors in the chase of material wellbeing. Hence, the editors of World Happiness Report, Helliwell et al. (2012) suggested that religion is one of the new policy priorities throughout the world to restore the virtue ethics in the pursuit of SWB. Religions can be the basis for a shared ethical framework in a diverse and pluralistic society (Sachs, 2013). May Malaysian government and policy makers consider this suggestion on having religion-related policies to boost up Malaysian SWB?

Malaysia's government is quite concern about the welfare of B40, always this income group is provided some financial aids or living subsidies. However, long-term financial aids are not an ideal way to help the poor, they may be demotivated to work and rely more on the government financial aids. In fact, they should have encompassed good moral and ethics to fight for their tight financial circumstances. One of the ways to equip them good ethics is through religions because most religions share some basic ethical principles (Stander et al., 1994; Sachs, 2013). As such, this study attempts to test the moderating effects of religiosity between B40 and SWB.

On the other hand, the concept of virtue ethics is similar to the self-actualization by Malsow (1970) where everyone should do good to live well with their potentials. Furthermore, the results from the first objective of study reveal that self-actualization needs have positive association with Malaysian happiness. With the presence of religiosity, will the happiness of self-actualizing become greater? Therefore, this is study also investigating the moderating impact of religiosity in the relationship between self-actualization and SWB.

The existing literature on the religiosity's direct impact on SWB is quite established and mostly support that religiosity helps to stimulate greater SWB. Recently, scholars attempt to further investigate the indirect impact of religiosity, more precisely, the buffer effects of religiosity in the adverse life circumstances through the income channel. However, the findings are still inconclusive. Furthermore, there is still no study is done on the buffer effects of religiosity on the SWB in Malaysians' context. To expand the literature, this study also examines the moderating effects of religiosity on SWB not only through the material-based channel (via high income group) but also the psychological channel (via self-actualization).

For the second study objective's empirical analysis, the same dataset with 1209 respondents as the first objective of study is used. SWB are still indicated by both happiness and life satisfaction. Meanwhile, the importance of god in life and the frequency of prayers respectively are served as religiosity indicators which the

formal one represents religious faith while the latter one signifies religious practice. For income groups, this study determines the groups according to the formal income classifications in Malaysia: B40, M40, and T20. The M40 is served as benchmark groups in the modellings while two dummy variables are created to represent B40 and T20.

The CatPCA component for self-actualization needs from the first objective still remains in the happiness and life satisfaction modelling. In order to examine the moderating impact of religiosity on SWB, this study includes the interaction terms between income groups and religiosity as well as the interaction terms between self-actualization and religiosity into the happiness and life satisfaction modellings. The inclusion of religiosity variables and its interaction terms with income groups and self-actualization are theoretically supported by the authentic happiness theory which argued that religion is one of the ways to stimulate virtue happiness. Then, those models are estimated by the ordered probit and probit modelling approaches.

The empirical results disclose a few insights: (i) B40's SWB is lower than other income groups; (ii) However, religious faith helps to remove the unhappiness of B40; and (iii) religious faith and prayers help to improve SWB of being self-actualization. As such, this study can conclude that religious faith is more important than religious practice in comforting the unhappiness of B40 and boosting the SWB

of being self-actualization. Nevertheless, moderate religiosity is encouraging as the extreme religiosity do not bring any benefits to SWB.

The last objective of this study is to investigate the potential role of life satisfaction in triggering the political behavior (voting) with the catalyst of the use of digital media as news resources. Reviewing back the electoral landscape in Malaysia for the last decade, Malaysians were so aggressive in the general election with the intention to change a new government. Some local studies deemed that the strong desire to vote is due to the bad administration of BN coalition which it had created many hassles such as the unmatched paid rise to the high inflation rate, the reduction in the subsidiaries for petrol, serious corruption culture, and etc. All these might cause low life satisfaction of Malaysians yet no study is done on whether Malaysian life satisfaction can trigger voting intention.

Moreover, the digital media such as Internet, emails, and smartphones has transformed the electoral arena quite significantly throughout the world. The voters can easily expose to the international and local political news as their reference to made decision on voting. In other words, the digital media helps to increase the transparency of news and the speed of spreading news. In Malaysian general elections since 2008, both politic coalitions use digital media to promote their candidates as well as their election campaigns. Would this digital media help to amplify the impact of life satisfaction on voting intention? The studies on this matter is yet to be fully conducted in the case of Malaysia.

Many past studies also showed that democracy process such as voting can make people happy because they are allowed to take part in the political participation. However, the studies on the potential driven force of life satisfaction on voting intention is still limited. So far, only a study is found in the context of Malaysia, Ng et al. (2017) revealed that Malaysians who are more satisfied with their life are more likely to vote for BN coalition. Ng et al. (2017) focus on voting preference to a particular political party but it is nothing about the general voting intention. Furthermore, the study did not take into the account of the powerful use of digital media as news source in the general election in Malaysia. To fill up the gap, this study aims to test if the digital media is a catalyst to the impact of life satisfaction on voting intention in Malaysia.

The voting intention model is theoretically supported by a mixed of voting theories, namely, the rational, economic, and altruism voting theories. The rational voting theory emphasized that voters are generally selfish in the sense that they vote for the sake of their wellbeing. In view of this, life satisfaction might be a good indicator to proxy the voters' wellbeing. Therefore, matching with the past voting intention in the last decade in Malaysia, this study hypothesizes a negative relationship between life satisfaction and intention to vote. Meanwhile, economic voting theory highlighted that people will vote when the economy is good to sustain the ruling government in their office. As such, this study employs the financial circumstances at individual level to reflect the economy at national level. The

relationship between individual financial circumstances and voting intention is expected to be positive.

The altruism voting theory claims that one of the voting motives is to vote for others wellbeing. In line with this, this study assumes "others" as next generation, or more specifically, the children of voters. That is the reason why this study includes the variable of having kids as one of the independent variables in the models. It is presumed that Malaysians who are having kid(s) are more likely to vote as they vote for their next generation benefits. On top of these three main variables, this study also considered the use of digital media as news source, voting preference to BN coalition, political interest, the confidence towards the political party, identity as a Malaysian, age, age squared, education and race (Malay) as explanatory variables in the models.

In order to examine the moderating role of digital media in the linkage between life satisfaction and voting intention, the interaction term between life satisfaction and digital media is taken into the account. The HLM results demonstrate that life satisfaction and the use of digital media as news source do not influence the voting intention respectively. However, when these two variables are interacted, the significant results are obtained. The models which including the interaction term between life satisfaction and digital media provide the evidences that life satisfaction goes opposite with the intention voting intention. However,

with the presence of digital media, voting intention is levelled irrespective of the degree of life satisfaction.

Moreover, the analysis also supports the economic and altruism voting theory in the case of Malaysia where people with having better financial circumstances and having own children tend to vote in the general election. Additionally, the results also show a voting pattern where youth and senior citizens are less likely to vote compared to adults at middle age. Last but not least, the higher political interest and the greater confidence to political party would motivate Malaysians to vote too. The suggestions for policy implication and future studies based on all these obtained results will be discussed in the next sub-section.

5.3   Implications of the Study

Measuring SWB is important as adequate measurement matter for policy and policy matters for people's wellbeing (Seaford, 2013; Hicks et al., 2013; Exton & Shinwall, 2018). For some past studies, SWB is measured by happiness and life satisfaction interchangeably (Bernini & Tampieri, 2019; Okulicz-Kozaryn, 2010). However, this study finds that happiness and life satisfaction are two different facets of SWB where the determinants of happiness and life satisfaction are not similar. As such, the government, policy makers and scholars may be caution in the

use of the right indicators of SWB to match their objectives to avoid any biased analysis.

Among the needs, this study shows that Malaysians care more about the safety and self-esteem needs in their pursuit of SWB. Therefore, the government and policy makers may look into these two aspects, especially the policies that related to enhancing Malaysians financial satisfaction and protecting human rights. Furthermore, this study also finds that health satisfaction, relative income, the importance of God and democracy are positively associated with SWB. Therefore, the government may consider these few factors in improving Malaysian SWB.

This study not just reveals the direct positive impact of religiosity on Malaysian SWB but also the moderating impacts of religiosity between B40 and self-actualization and SWB. These results suggest that the government and policy makers may look into the religion related policies to improve Malaysian SWB. With the significant moderating role of religiosity on the unhappiness of B40, this study suggests that the government may help B40 group through religions by equipping them good virtue ethics to fight for their poor financial circumstances, which not just providing them financial aids or higher subsidies.

Additionally, this study also provides some evidences that religiosity help to improve the SWB of being self-actualizing. The government and policy makers may consider to integrate the religious teaching into the syllabus of education in

both primary and secondary school. In fact, with the current education system, Al-Quran class has been made it official and compulsory for Islamic students. For non-Islamic students, they are instructed to take the subject named "Morale". Instead of having morale classes, the Ministry of Education may introduce the religious classes based on different religion denomination to the non-Islamic students.

The results from the last objective of study divulges that without the digital media, life satisfaction goes oppositely with the intention to vote. This implies that vote becomes a mean of releasing frustration and election outcome tends to reflect a proportional preference among voters with different life satisfactions. By democratizing access to information with the presence of digital media, voting intention is levelled irrespective of the degree of life satisfaction. This hints that access to political information is important. Voters can understand better the national affairs instead of overly focusing on personal life satisfaction. As a result, voters can make a right voting decision if vote or not to vote.

For future general elections, Malaysians are encouraged to access more information via digital media before making the decision to vote. Undoubtedly, not every news on digital media is true. Some people may spread the fake news online to distract voters' decision in voting. As such, the government and policy makers may play a role in monitoring and investigating the truthfulness of digital news. Most importantly, the government may always prioritize Malaysian SWB in policy

making. This helps to avoid the emotional voting from different levels of life satisfaction and also to sustain the royalty of voters in future elections.

In addition, the results also show that Malaysians with better financial circumstances, having kid(s), greater confidence towards political party and with higher political interest are more willing to vote. Hence, this study further suggest that the government and policy makers may tailor make the economic development policy properly to bring better economic advancement to the country and improve people financial circumstances. In turn, people will have higher confidence towards the ruling political party and appreciate the efforts of the government by voting them again in the future election. Lastly, the government may trigger Malaysian political interest through education or encourage Malaysians to be more active in the political forum through social media.

5.4   Limitations and Future Research Directions

This study only focuses on Malaysian context on cross-sectional basis due to the lack of longitudinal data. Furthermore, the subjective survey data about Malaysians' SWB has not been officially collected by the Malaysia Department of Statistic. However, in many other countries such as United Kingdom, Bhutan and France, the Government have put the efforts to make the survey data on SWB as official statistic in the nation in favor to trace the social economic progress and

development on people's welfare. With the longitudinal data, scholars can further investigate both direct and indirect effects and causality of both economic and psychological needs on Malaysians' SWB in the short- and long- terms.

Given that SWB is multi-dimensional, this study uses happiness and life satisfaction as the positive proxies of SWB. However, some negative measures such as depression and anxiety are not included in the study due to the data unavailability in the WVS. Hence, this could be the future research direction. Additionally, the world is recently experiencing the COVID-19 pandemic which it brings a lot of impacts to SWB. However, this study does not include any COVID-19 related factors in the analysis due to the use of data for the latter analysis. The addition of COVID-19 related variables would definitely help us to reconsider the determinants of SWB in Malaysia. Again, this could be the new area to explore in SWB studies.

Furthermore, this study just revealed the buffet effects of religiosity in reducing the unhappiness of *B40*. In other words, the potential of religion as an aid mechanism in other aspects of life is not fully discovered. For example, nowadays many people are the active users on the social media such as Facebook, Instagram, and Twitter. The cases of cyber bully are getting more and more not only in Malaysia but globally, some young people get hurts and depressed from the cyber bully and commit suicide. Would religious value or teaching help to eliminate the unhappiness or depressions from cyber bully? This may be something we can study in the future.

Since the religiosity has been proven to stimulate greater SWB through self-actualization, future studies on how to promote and encourage Malaysians to be more religious seems to have its value and demand. As such, the future empirical studies may study religiosity as the dependent variable in the modelling with the potential determinants such as education at home, formal education, involvement in religious social activities and etc. Furthermore, the potential moderators or mediators may have to be identified as well in order to reveal both direct and indirect impact of religiosity on SWB more in depth.

Lastly, this study has provided the evidence that life satisfaction would stimulate the voting intention in Malaysia. Future study may further investigate which satisfaction from which specific aspects of life matter the most in triggering the voting intention. On the other hand, the access to information through digital media help to reduce the emotional voters from different levels of life satisfaction. Therefore, future study may look into the policies that could help to safeguard the use of digital media in the electoral landscape. All these would help to sustain the royalty of voters' and remain the ruling government in the office for next general election.

For empirical analysis, this study uses a dummy variable to proxy the use of digital devices, which could be taken as the first-level digital divide. The second level of digital divide which involves skills, competence and abilities to use the Internet may also matters. However, due to data limitation, this study cannot

explore this aspect. In addition, when examining the linkage between life satisfaction and voting intention, the identification problem (two subjective measures and the collinearity between life satisfaction and other covariates) is quite hard to rule out. One possible way is to introduce the objective outcome variables – for instance, the real voting behavior and also the number of votes for particular political parties. As such, the identification strategies should be improved in future.

References

Abbey, A., & Andrews, F. M. (1985). Modeling the psychological determinants of life quality. *Social Indicators Research*, *16*(1), 1-34.

Abdel-Khalek, A. M., & Tekke, M. (2019). The association between religiosity, well-Being, and mental health among college students from Malaysia. *Revista Mexicana de Psicología*, *36*(1), 5-16.

Achour, M., Binti Abdul Khalil, S., Binti Ahmad, B., Mohd Nor, M. R., & Zulkifli Bin Mohd Yusoff, M. Y. (2017). Management and supervisory support as a moderator of work–family demands and women's well-being: A case study of Muslim female academicians in Malaysia. *Humanomics*, *33*(3), 335-356.

Achour, M., Grine, F., Nor, M. R. M., & MohdYusoff, M. Y. Z. (2015). Measuring religiosity and its effects on personal well-being: A case study of Muslim female academicians in Malaysia. *Journal of Religion and Health*, *54*(3), 984-997.

Ading, C. E., Seok, C. B., Hashmi, S. I., & Maakip, I. (2012). Religion and gender differences in stress, happiness and life satisfaction. *Southeast Asia Psychology Journal*, *1*, 46-55.

Adnan, H., & Hamdan, M. (2013). Malaysia's 13th General Election in Sabah: Factors determining the winners. *Jebat: Malaysian Journal of History, Politics & Strategy, 40*(2), 93-112.

Afrasibi, S., & Fattahi, Z. (2017). A comparative study of self-actualization in psychology and Islam. *World Family Medicine Journal: Incorporating the Middle East Journal of Family Medicine*, *99*(5548), 1-8.

Aldrich, J. H., Gibson, R. K., Cantijoch, M., & Konitzer, T. (2016). Getting out the vote in the social media era: Are digital tools changing the extent, nature and impact of party contacting in elections? *Party Politics*, *22*(2), 165-178.

Alesina, A., Di Tella, R., & MacCulloch, R. (2004). Inequality and happiness: Are Europeans and Americans different? *Journal of Public Economics*, *88*(9-10), 2009-2042.

Ali, S. S., & Hasan, H. (2019). Does religiosity affect multidimensional poverty? Evidence from World Values Survey (2010-2014). *Journal of King Abdulaziz University: Islamic Economics*, *32*(2), 3-24.

Alkhawaldeh, A. M., Salleh, S. M., & Halim, F. B. (2016). An empirical study in voting behavior and political brand. *International Business Management*, *10*(18), 4365-4372.

Al-Seheel, A. Y., & Noor, N. M. (2016). Effects of an Islamic-based gratitude strategy on Muslim students' level of happiness. *Mental Health, Religion & Culture*, *19*(7), 686-703.

Ananthram, S., & Chan, C. (2016). Religiosity, spirituality and ethical decision-making: Perspectives from executives in Indian multinational enterprises. *Asia Pacific Journal of Management*, *33*(3), 843-880.

Annett, A. (2016). Human flourishing, the common good, and Catholic social teaching. In J. Sachs, L. Becchetti, & A. Annett (Eds.), *World happiness report 2016: Special Rome edition* (Vol. 2, pp. 38–65). New York, NY: Sustainable Development Solutions Network.

Antonietti, R., Farina, F., & Fontini, F. (2016). A rational explanation for the redistribution paradox. Theory and empirical evidence. *Scottish Journal of Political Economy*, *63*(5), 539-555.

Anuar, M. K. (2005). Politics and the media in Malaysia. *Kasarinlan: Philippine Journal of Third World Studies*, *20*(1), 25-47.

Appau, S., Churchill, S. A., & Farrell, L. (2019). Social integration and subjective wellbeing. *Applied Economics*, *51*(16), 1748-1761.

Ardelt, M. (2003). Effects of religion and purpose in life on elders' subjective well-being and attitudes toward death. *Journal of Religious Gerontology*, *14*(4), 55-77.

Ariffin, W. N. J. W., Abd Ghani, N., Abd Latip, M. F., Amin, W. A. A. W. M., Chik, W. M. Y. W., Adam, F., & bin Abd Wahab, M. A. (2021). Religion as an indicator of social well-being in Malaysia. In *First International Conference on Science, Technology, Engineering and Industrial Revolution (ICSTEIR 2020)* (pp. 524-529). Atlantis Press.

Assor, A., Benita, M., Shi, Y., Goren, R., Yitshaki, N., & Wang, Q. (2021). The authentic inner compass as a well-being resource: Predictive effects on vitality, and relations with self-esteem, depression and behavioral self-realization. *Journal of Happiness Studies*, https://doi.org/10.1007/s10902-021-00373-6.

Aw, E. C. X., & Sabri, M. F. (2020). Single mothers' subjective well-being: Empirical evidence from Malaysia. *Health Care for Women International*, *42*(4-6), 756-777.

Aziz, R., Mustaffa, S., Samah, N. A., & Yusof, R. (2014). Personality and happiness among academicians in Malaysia. *Procedia-Social and Behavioral Sciences*, *116*, 4209-4212.

Badawi, A. A. (2007). *The 2008 budget speech.* Retrieved from: http://lampiran1.hasil.gov.my/pdf/pdfam/Speech2008.pdf

Ball, R., & Chernova, K. (2008). Absolute income, relative income, and happiness. *Social Indicators Research*, *88*(3), 497-529.

Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and social Psychology*, *76*(2), 258-269.

Bank Negara Malaysia. (2020). Economic & Monetary Review 2019: Governor's Foreword. Retrieved from https://www.bnm.gov.my/ar2019/emr-foreword.php

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497.

Baumeister, R. F., Tice, D. M., & Vohs, K. D. (2018). The strength model of self-regulation: Conclusions from the second decade of willpower research. *Perspectives on Psychological Science*, *13*(2), 141-145.

Baumgartner, J. C., & Morris, J. S. (2010). MyFaceTube politics: Social networking web sites and political engagement of young adults. *Social Science Computer Review*, *28*(1), 24-44.

Behere, P. B., Das, A., Yadav, R., & Behere, A. P. (2013). Religion and mental health. *Indian Journal of Psychiatry*, *55*(2), 187-194.

Beitel, M., Bogus, S., Hutz, A., Green, D., Cecero, J. J., & Barry, D. T. (2014). Stillness and motion: An empirical investigation of mindfulness and self-actualization. *Person-Centered & Experiential Psychotherapies*, *13*(3), 187-202.

Beja, E. L. (2018). The U-shaped relationship between happiness and age: evidence using World Values Survey data. *Quality & Quantity*, *52*(4), 1817-1829.

Bennett, L. R. (2005). *Women, Islam and modernity: Single women, sexuality and reproductive health in contemporary Indonesia*. London: Routledge Curzon.

Bernini, C., & Tampieri, A. (2019). Happiness in Italian cities. *Regional Studies*, *53*(11), 1614-1624.

Beyerlein, K., & Hipp, J. R. (2005). Social capital, too much of a good thing? American religious traditions and community crime. *Social Forces*, *84*(2), 995-1013.

Bimber, B. (2001). Information and political engagement in America: The search for effects of information technology at the individual level. *Political Research Quarterly*, *54*(1), 53-67.

Binder, M., & Coad, A. (2013). "I'm afraid I have bad news for you…" Estimating the impact of different health impairments on subjective well-being. *Social Science & Medicine*, *87*, 155-167.

Blais, A. (2000). *To vote or not to vote?* Pittsburgh, PA: University of Pittsburgh Press.

Blais, A., Daoust, J. F., Dassonneville, R., & Péloquin-Skulski, G. (2019). What is the cost of voting? *Electoral Studies, 59*, 145-157.

Blais, A., & Galais, C. (2016). Measuring the civic duty to vote: A proposal. *Electoral Studies*, *41*, 60-69.

Blanchflower, D. G. (2020). *Is happiness U-shaped everywhere? Age and subjective well-being in 132 countries*. Retrieved from https://www.dartmouth.edu/~blnchflr/papers/U-shape%20132%20countries%20dec23rd%202019.pdf

Blanchflower, D. G., & Clark, A. E. (2019). *Children, unhappiness and family finances: Evidence from one million Europeans*. National Bureau of Economic Research Paper No. w25597. Retrieved from https://www.nber.org/papers/w25597.pdf.

Blanchflower, D. G., & Oswald, A. J. (2004). Money, sex and happiness: An empirical study. *Scandinavian Journal of Economics*, *106*(3), 393-415.

Blanchflower, D. G., & Oswald, A. J. (2008). Hypertension and happiness across nations. *Journal of Health Economics*, *27*(2), 218-233.

Böckerman, P., & Ilmakunnas, P. (2006). Elusive effects of unemployment on happiness. *Social Indicators Research*, *79*(1), 159-169.

Bodhi, B. (2011). What does mindfulness really mean? A canonical perspective. *Contemporary Buddhism*, *12*(01), 19-39.

Boo, M. C., Yen, S. H., & Lim, H. E. (2016). A note on happiness and life satisfaction in Malaysia. *Malaysian Journal of Economic Studies*, *53*(2), 261-277.

Boo, M. C., Hwa, Y. S., & Eam, L. H. (2020). Income and subjective well-being: A case of study. *Kajian Malaysia: Journal of Malaysian Studies*, *38*(2), 91-114.

Bomhoff, E. J., & Siah, A. K. L. (2019). The relationship between income, religiosity and health: Their effects on life satisfaction. *Personality and Individual Differences*, *144*, 168-173.

Boulianne, S. (2015). Social media use and participation: A meta-analysis of current research. *Information, Communication & Society*, *18*(5), 524-538.

Boulianne, S. (2019). Revolution in the making? Social media effects across the globe. *Information, Communication & Society*, *22*(1), 39-54.

Bowler, K. (2013). *Blessed: A history of the American prosperity gospel*. Oxford, New York: Oxford University Press.

Braithwaite, S. R., Delevi, R., & Fincham, F. D. (2010). Romantic relationships and the physical and mental health of college students. *Personal Relationships*, *17*(1), 1-12.

Brockmann, H. (2010). Why are middle-aged people so depressed? Evidence from West Germany. *Social Indicators Research*, *97*(1), 23-42.

Brooks, D. J., & Geer, J. G. (2007). Beyond negativity: The effects of incivility on the electorate. *American Journal of Political Science*, *51*(1), 1-16.

Brown, G. K. (2005). Playing the (non) ethnic card: The electoral system and ethnic voting patterns in Malaysia. *Ethnopolitics*, *4*(4), 429-445.

Brown, G. K. (2008). Federal and state elections in Malaysia, March 2008. *Electoral Studies*, *4*(27), 740-744.

Brown, P. H., & Tierney, B. (2009). Religion and subjective well-being among the elderly in China. *The Journal of Socio-Economics*, *38*(2), 310-319.

Brummelman, E., & Sedikides, C. (2020). Raising children with high self-esteem (but not narcissism). *Child Development Perspectives*, *14*(2), 83-89.

Brummelman, E., Thomaes, S., & Sedikides, C. (2016). Separating narcissism from self-esteem. *Current Directions in Psychological Science*, *25*(1), 8-13.

Brzezinski, M. (2019). Top incomes and subjective well-being. *Journal of Economic Psychology*, *73*, 60-65.

Brzozowski, M., & Visano, B. S. (2020). "Havin' money's not everything, not havin' it is": The importance of financial satisfaction for life satisfaction in financially stressed households. *Journal of Happiness Studies*, *21*(2), 573-591.

Burr, J. A., Caro, F. G., & Moorhead, J. (2002). Productive aging and civic participation. *Journal of Aging Studies*, *16*(1), 87-105.

Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. New York: Russell Sage Foundation.

Caton, S., Hall, M., & Weinhardt, C. (2015). How do politicians use Facebook? An applied social observatory. *Big Data & Society*, *2*(2), 1-18.

CEIC. (2020). Malaysia National Government Debt. Retrieved from https://www.ceicdata.com/en/indicator/malaysia/national-government-debt

Chan, M. (2017). Media use and the social identity model of collective action: Examining the roles of online alternative news and social media news. *Journalism & Mass Communication Quarterly*, *94*(3), 663-681.

Chang, R., & Page, R. C. (1991). Characteristics of the self-actualized person: Visions from the East and West. *Counseling and Values*, *36*(1), 2-10.

Cheah, Y. K., & Tang, C. F. (2011). *The role of socio-demographic factors on self-rated happiness: The case of Malaysia.* MPRA Paper No. 29419. Retrieved from https://mpra.ub.uni-muenchen.de/29419/1/MPRA_paper_29419.pdf

Cheah, Y. K., & Tang, C. F. (2013). The socio-demographic determinants of self-rated happiness: The case of Penang, Malaysia. *Hitotsubashi Journal of Economics, 54*, 1-16.

Chew, A. (2019). Malaysia's dangerous racial, religious trajectory. Retrieved from https://www.malaysiakini.com/news/493320

Ch'en, K.Y. (1977). *Lao Tzu: Text, notes, and comments*. Translated and Adapted by R.Y.W. Young & R.T. Ames. San Francisco: Chinese Materials Center.

Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, *84*(1), 97-110.

Chong, A., & Gradstein, M. (2015). On education and democratic preferences. *Economics & Politics*, *27*(3), 362-388.

Choong, K. F., Ong, F. S., & Moschis, G. P. (2013). Materialism and well-being: The moderating effects of religiosity on young Malaysian consumers. *Journal of Beliefs & Values*, *34*(2), 178-188.

Chu-Liang, L. U. O. (2009). Absolute income, relative income and subjective well-being: Empirical test based on the sample data of urban and rural households in China. *Journal of Finance and Economics*, *11*, 140-165.

Church, A. T., Katigbak, M. S., Locke, K. D., Zhang, H., Shen, J., de Jesús Vargas-Flores, J., & Ching, C. M. (2013). Need satisfaction and well-being: Testing self-determination theory in eight cultures. *Journal of Cross-Cultural Psychology*, *44*(4), 507-534.

Churchill, S. A., Appau, S., & Farrell, L. (2019). Religiosity, income and wellbeing in developing countries. *Empirical Economics*, *56*(3), 959-985.

Churchill, S. A., & Mention, A. L. (2020). Innovation and subjective wellbeing among older people. In S. A. Churchill, L. Farrell, & S. Appau (Eds.), *Measuring, understanding and improving wellbeing among older people* (pp. 265-281). Singapore: Palgrave Macmillan.

Clark, A. E. (2007). *Born to be mild? Cohort effects don't (fully) explain why well-being is u-shaped in age*. Retrieved from https://halshs.archives-ouvertes.fr/halshs-00590307/document.

Clark, A. E. (2018). Four decades of the economics of happiness: Where next? *Review of Income and Wealth*, *64*(2), 245-269.

Clark, A. E., & Oswald, A. J. (1996). Satisfaction and comparison income. *Journal of Public Economics*, *61*(3), 359-381.

Clark, A. E., Diener, E., Georgellis, Y., & Lucas, R. E. (2008). Lags and leads in life satisfaction: A test of the baseline hypothesis. *The Economic Journal*, *118*(529), 222-243.

Clark, A., & Lelkes, O. (2005). *Deliver us from evil: Religion as insurance*. Retrieved from https://halshs.archives-ouvertes.fr/halshs-00590570/document

Clark, M. A., O'Neal, C. W., Conley, K. M., & Mancini, J. A. (2018). Resilient family processes, personal reintegration, and subjective well-being outcomes for military personnel and their family members. *American Journal of Orthopsychiatry*, *88*(1), 99.

Cohen, A. B. (2002). The importance of spirituality in well-being for Jews and Christians. *Journal of Happiness Studies*, *3*(3), 287-310.

Cotton, S., Zebracki, K., Rosenthal, S. L., Tsevat, J., & Drotar, D. (2006). Religion/spirituality and adolescent health outcomes: A review. *Journal of Adolescent Health*, *38*(4), 472-480.

Crandall, R., & Jones, A. (1991). Issues in self-actualization measurement. *Journal of Social Behavior and Personality*, *6*(5), 339-344.

Cuñado, J., & de Gracia, F. P. (2012). Does education affect happiness? Evidence for Spain. *Social Indicators Research*, *108*(1), 185-196.

D'Ambrosio, C., Jäntti, M., & Lepinteur, A. (2020). Money and happiness: Income, wealth and subjective well-being. *Social Indicators Research*, *148*(1), 47-66.

Dalton, R. J., & Ong, N. N. T. (2001). *The Vietnamese public in transition: The 2001 World Values Survey*. Retrieved from https://escholarship.org/content/qt5ms901w7/qt5ms901w7.pdf

Davidson, D. (1963). Actions, reasons, and causes. *The Journal of Philosophy*, *60*(23), 685-700.

Davis, L., & Wu, S. (2019). The taste for status in international comparison. *Journal of Happiness Studies*, *21*, 2237-2256.

Deaton, A., & Stone, A. A. (2014). Evaluative and hedonic wellbeing among those with and without children at home. *Proceedings of the National Academy of Sciences*, *111*(4), 1328-1333.

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227-268.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, *49*(3), 182-185.

Department of Statistics Malaysia. (2010). *Population distribution and basic demographic characteristic*. Retrieved from http://www.statistics.gov.my/portal/download_Population/files/census2010/Taburan_Penduduk_dan_Ciri-ciri_Asas_Demografi.pdf

Department of Statistics Malaysia. (2020). Malaysian Well-being Index 2018. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/ctheme&menu_id=U3VPMldoYUxzVzFaYmNkWXZteGduZz09&bul_id=UHpYdlBUZFhUU0RoTTJidFc0SWwrZz09

Department of Statistics Malaysia. (2020). Malaysia economic performance fourth quarter 2019. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=100&bul_id=WWk2MDA3R1k1SlVsTjlzU3FZcjVlUT09&menu_id=TE5CRUZCblh4ZTZMODZIbmk2aWRRQT09

Dermody, J., Hanmer-Lloyd, S., & Scullion, R. (2010). Young people and voting behaviour: Alienated youth and (or) an interested and critical citizenry? *European Journal of Marketing*, *44*(3/4), 421-435

deSilver, D. (2014). Facebook is a news source for many, but only incidentally. Retrieved from http://www.pewresearch.org/fact-tank/2014/02/04/facebook-is-a-news-source-for-many-but-only-incidentally/

Devine, J., Hinks, T., & Naveed, A. (2019). Happiness in Bangladesh: The role of religion and connectedness. *Journal of Happiness Studies*, *20*(2), 351-371.

Dhandra, T. K. (2019). Achieving triple dividend through mindfulness: More sustainable consumption, less unsustainable consumption and more life satisfaction. *Ecological Economics*, *161*, 83-90.

Di Fabio, A., & Palazzeschi, L. (2015). Hedonic and eudaimonic well-being: The role of resilience beyond fluid intelligence and personality traits. *Frontiers in Psychology*, *6*, 1367. DOI: 10.3389/fpsyg.2015.01367

Di Tella, R., Haisken-De New, J., & MacCulloch, R. (2010). Happiness adaptation to income and to status in an individual panel. *Journal of Economic Behavior & Organization*, *76*(3), 834-852.

Di Tella, R., MacCulloch, R. J., & Oswald, A. J. (2001). Preferences over inflation and unemployment: Evidence from surveys of happiness. *American Economic Review*, *91*(1), 335-341.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, *95*(3), 542-575.

Diener, E., & Biswas-Diener, R. (2002). Will money increase subjective well-being? *Social Indicators Research*, *57*(2), 119-169.

Diener, E., & Clifton, D. (2002). Life satisfaction and religiosity in broad probability samples. *Psychological Inquiry*, *13*(3), 206-209.

Diener, E., & Diener, M. (2009). Cross-cultural correlates of life satisfaction and self-esteem. In E. Diener (Ed.), *Culture and well-being. The collected works of Ed Diener* (pp. 71-91). Dordrecht: Springer Netherlands.

Diener, E., & Lucas, R. E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of Happiness Studies, 1*(1), 41–78.

Diener, E., Diener, M., & Diener, C. (2009). Factors predicting the subjective well-being of nations. In E. Diener (Ed.), *Culture and well-being. The collected works of Ed Diener* (pp. 43-70). Dordrecht: Springer Netherlands.

Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist, 61* (4), 305–314.

Diener, E., Ng, W., Harter, J., & Arora, R. (2010). Wealth and happiness across the world: Material prosperity predicts life evaluation, whereas psychosocial prosperity predicts positive feeling. *Journal of Personality and Social Psychology*, *99*(1), 52-61.

Diener, E., Oishi, S., & Lucas, R. E. (2015). National accounts of subjective well-being. *American Psychologist*, *70*(3), 234-242.

Diener, E., Oishi, S., & Tay, L. (2018). Advances in subjective well-being research. *Nature Human Behaviour*, *2*(4), 253-260.

Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research*, *28*(3), 195-223.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*(2), 276-303.

Diener, E., Tay, L., & Myers, D. G. (2011). The religion paradox: If religion makes people happy, why are so many dropping out? *Journal of Personality and Social Psychology*, *101*(6), 1278-1290.

Dimitrova, D. V., Shehata, A., Strömbäck, J., & Nord, L. W. (2014). The effects of digital media on political knowledge and participation in election campaigns: Evidence from panel data. *Communication Research*, *41*(1), 95-118.

Dolan, K. A., & Holbrook, T. M. (2001). Knowing versus caring: The role of affect and cognition in political perceptions. *Political Psychology*, *22*(1), 27-44.

Dolan, P., Metcalfe, R., & Powdthavee, N. (2008). *Electing happiness: does happiness affect voting and do elections affect happiness*. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.533.1496&rep=rep1&type=pdf

Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, *29*(1), 94-122.

Dolan, P., & White, M. P. (2007). How can measures of subjective well-being be used to inform public policy? *Perspectives on psychological science*, *2*(1), 71-85.

Donnelly, G. E., Zheng, T., Haisley, E., & Norton, M. I. (2018). The amount and source of millionaires' wealth (moderately) predict their happiness. *Personality and Social Psychology Bulletin*, *44*(5), 684-699.

Douthitt, R. A., MacDonald, M., & Mullis, R. (1992). The relationship between measures of subjective and economic well-being: A new look. *Social Indicators Research*, *26*(4), 407-422.

Downs, A. (1957). *An Economic Theory of Democracy.* New York: Harper and Row.

Duch, R. M. (2001). A developmental model of heterogeneous economic voting in new democracies. *American Political Science Review*, *95*(4), 895-910.

Dudley, R. (2018). Suicide epidemic is a concern. Retrieved from https://www.thestar.com.my/opinion/letters/2018/06/15/suicide-epidemic-is-a-concern/

Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In P. A. David, & M. W. Reder (Eds.), *Nations Are Households in Economic Growth.* (pp. 89-125). New York: New York Academic Press.

Easterlin, R. A. (1995). Will raising the incomes of all increase the happiness of all? *Journal of Economic Behavior & Organization*, *27*(1), 35-47.

Easterlin, R.A. (2001). Income and happiness: Towards a unified theory. *The Economic Journal*, 111, 465-484.

Easterlin, R. A. (2003). Explaining happiness. *Proceedings of the National Academy of Sciences*, *100*, 11176-11183.

Easterlin, R. A. (2006). Life cycle happiness and its sources: Intersections of psychology, economics, and demography. *Journal of Economic Psychology*, *27*(4), 463-482.

Easterlin, R. A. (2010). Happiness, growth and the life cycle. *Europe Journal of Psychology*, *7*(2), 395-398.

Easterlin, R. A., & Angelescu, L. (2012). Modern economic growth and quality of life: Cross-sectional and time series evidence. In K. C. Land (Ed.), *Handbook of social indicators and quality-of-life research*. (pp.113-136). London: Springer.

Economic Unit Planning Malaysia. (2011). *Malaysian quality of life 2011. EPU, Prime Ministers Department.* Retrieved from https://www.academia.edu/5547099/Malaysian_Quality_of_Life_2011

Economic Planning Unit (2013). *Malaysian Well-being Report 2013*. Economic Planning Unit. Retrieved from: https://www.epu.gov.my/sites/default/files/Pembentangan%20MWI%202013_2Disemb%20er%202013.pdf

Edlin, A., Gelman, A., & Kaplan, N. (2007). Voting as a rational choice: Why and how people vote to improve the well-being of others. *Rationality and Society*, *19*(3), 293-314.

Eichhorn, J. (2012). Happiness for believers? Contextualizing the effects of religiosity on life-satisfaction. *European Sociological Review*, *28*(5), 583-593.

Eleftheriou-Smith, L-M. (2017). Malaysian atheist group under investigation over alleged Muslim apostate members. Retrieved from https://www.independent.co.uk/news/world/asia/malaysia-atheist-group-muslim-apostate-members-lapsed-faith-south-east-asia-a7881301.html.

Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York, NY: Lyle Stuart.

Ellison, C. G. (1991). Religious involvement and subjective well-being. *Journal of Health and Social Behavior, 32*(1), 80-99.

Emmons, R. A. (2007). *Thanks! How the new science of gratitude can make you happier*. New York: Houghton Mifflin Harcourt.

Ercolano, S., Gaeta, G. L., & Romano, O. (2014). Environmental tax reform and individual preferences: An empirical analysis on European micro data. *Journal of Behavioral and Experimental Economics*, *51*, 1-11.

Esqueda, O. J. (2014). Biblical worldview: The Christian higher education foundation for learning. *Christian Higher Education*, *13*(2), 91-100.

Eveland, W. P. (2004). The effect of political discussion in producing informed citizens: The roles of information, motivation, and elaboration. *Political Communication*, *21*(2), 177-193.

Exton, C., & Shinwell, M. (2018). Policy use of well-being metrics: Describing countries' experiences. Retrieved from https://read.oecd-ilibrary.org/economics/policy-use-of-well-being-metrics_d98eb8ed-en#page1

Feezell, J. T., Conroy, M., & Guerrero, M. (2016). Internet use and political participation: Engaging citizenship norms through online activities. *Journal of Information Technology & Politics*, *13*(2), 95-107.

Feitosa, F., & Galais, C. (2020). How stable is the sense of civic duty to vote? A panel study on the individual-level stability of the attitude. *International Journal of Public Opinion Research, 32*(2), 344-353.

Ferrer-i-Carbonell, A. (2005). Income and well-being: An empirical analysis of the comparison income effect. *Journal of Public Economics*, *89*(5-6), 997-1019.

Ferriss, A. L. (2002). Religion and the quality of life. *Journal of Happiness Studies*, *3*(3), 199-215.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. London: Sage.

FitzRoy, F., Franz-Vasdeki, J., & Papyrakis, E. (2012). Climate change policy and subjective well-being. *Environmental Policy and Governance*, *22*(3), 205-216.

Flavin, P., & Keane, M. J. (2012). Life satisfaction and political participation: Evidence from the United States. *Journal of Happiness Studies*, *13*(1), 63-78.

Flavin, P., Pacek, A. C., & Radcliff, B. (2014). Assessing the impact of the size and scope of government on human well-being. *Social Forces*, *92*(4), 1241-1258.

Francis, P. (2015). Encyclical letter of the Holy Father on care for our common home. Retrieved from http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html

François, A., & Gergaud, O. (2019). Is civic duty the solution to the paradox of voting? *Public Choice*, *180*(3), 257-283.

Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, *13*(2), 172-175.

French, S., & Joseph, S. (1999). Religiosity and its association with happiness, purpose in life, and self-actualization. *Mental Health, Religion & Culture*, *2*(2), 117-120.

Frey, B. S. (2008). *Happiness: A revolution in economics*. London, England: MIT Press.

Frey, B. S., & Stutzer, A. (2018). *Economics of happiness*. Switzerland: Springer International Publishing.

Frey, B.S., and Stutzer, A. (2000). Happiness, economy and institutions. *The Economic Journal, 110* (466), 918-938.

Fukuda, K. (2013). A happiness study using age-period-cohort framework. *Journal of Happiness Studies*, *14*(1), 135-153.

Furnham, A., & Cheng, H. (2000). Perceived parental behaviour, self-esteem and happiness. *Social Psychiatry and Psychiatric Epidemiology*, *35*(10), 463-470.

Galais, C., & Cardenal, A. S. (2017). When David and Goliath campaign online: The effects of digital media use during electoral campaigns on vote for small parties. *Journal of Information Technology & Politics*, *14*(4), 372-386.

Galiani, S., Gertler, P. J., & Undurraga, R. (2018). The half-life of happiness: Hedonic adaptation in the subjective well-being of poor slum dwellers to the satisfaction of basic housing needs. *Journal of the European Economic Association*, *16*(4), 1189-1233.

Gallego, A. (2007). Unequal political participation in Europe. *International Journal of Sociology*, *37*(4), 10-25.

Gallup Inc. (2009). *Gallup-Healthways Well-Being Index: Methodology report for indexes*. Retrieved from http://www.iowahealthieststate.com/webres/File/Progress/Gallup-Healthways%20Well-Being%20Index%20Methodology%202008-2013.pdf

Gardner, J., & Oswald, A. J. (2006). Do divorcing couples become happier by breaking up? *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, *169*(2), 319-336.

Garson, G. D. (2013). Fundamentals of hierarchical linear (multilevel) modeling. In G. D. Garson (Ed.), *Hierarchical linear modeling. Guide and applications*. (pp. 1–37). Thousand Oaks, CA: SAGE.

Gebauer, J. E., & Maio, G. R. (2012). The need to belong can motivate belief in God. *Journal of Personality*, *80*(2), 465-501.

Gebauer, J. E., Nehrlich, A. D., Sedikides, C., & Neberich, W. (2013). The psychological benefits of income are contingent on individual-level and culture-level religiosity. *Social Psychological and Personality Science*, *4*(5), 569-578.

Gerdtham, U. G., & Johannesson, M. (2001). The relationship between happiness, health, and socio-economic factors: results based on Swedish microdata. *The Journal of Socio-Economics*, *30*(6), 553-557.

Ghazali, R. (2017). Non-believers need to be tracked down, says minister. Retrieved from https://www.thestar.com.my/news/nation/2017/08/08/non-believers-need-to-be-tracked-down-says-minister/

Ghayad, R., & Dickens, W. T. (2012). What can we learn by disaggregating the unemployment-vacancy relationship? *FRB of Boston Public Policy Brief no.*12-3, 1-13.

Gimpel, J. G., Lay, J. C., & Schuknecht, J. E. (2003). *Cultivating democracy: Civic environments and political socialization in America*. Washington, DC: Brookings Institute.

Glass, J., Simon, R. W., & Andersson, M. A. (2016). Parenthood and happiness: Effects of work-family reconciliation policies in 22 OECD countries. *American Journal of Sociology*, *122*(3), 886-929.

GNH Centre Bhutan. (2008). *The 9 domains of GNH*. Retrieved from http://www.gnhcentrebhutan.org/what-is-gnh/the-9-domains-of-gnh/

Goidel, K., Gaddie, K., & Ehrl, M. (2017). Watching the news and support for democracy: Why media systems matter. *Social Science Quarterly*, *98*(3), 836-855.

Goldstein, K. (1965). Stress and the Concept of Self-Realization. In S. Z. Klausner (Ed.) *The quest for self-control*. (pp. 341-355). New York: The Free Press.

Gomez, J. (2014). Social media impact on Malaysia's 13th general election. *Asia Pacific Media Educator*, *24*(1), 95-105.

Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R., & Heldreth, C. (2015). From "we" to "me": Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology*, *109*(1), 53-74.

Greene, K. V., & Yoon, B. J. (2004). Religiosity, economics and life satisfaction. *Review of Social Economy*, *62*(2), 245-261.

Grover, S. L. (2021). Different respect motivates different people: How self-esteem moderates the effects of respect on performance. *Personality and Individual Differences*, *168*, 110312.

Gruber, J. H. (2005). *Religious market structure, religious participation, and outcomes: Is religion good for you?* National Bureau of Economic Research Paper No.W11377. Retrieved from https://www.nber.org/papers/w11377.pdf.

Gueorguieva, V. (2008). Voters, MySpace, and YouTube: The impact of alternative communication channels on the 2006 election cycle and beyond. *Social Science Computer Review*, *26*(3), 288-300.

Guillen-Royo, M., Velazco, J., & Camfield, L. (2013). Basic needs and wealth as independent determinants of happiness: An illustration from Thailand. *Social Indicators Research*, *110*(2), 517-536.

Hackney, C. H., & Sanders, G. S. (2003). Religiosity and mental health: A meta–analysis of recent studies. *Journal for the Scientific Study of Religion*, *42*(1), 43-55.

Hall, S. S., & Willoughby, B. J. (2019). Relative work and family role centralities: Predicting changes in marriage and family beliefs. *Marriage & Family Review, 55*(7), 667-685.

Haque, M. S. (2002). E-governance in India: Its impacts on relations among citizens, politicians and public servants. *International Review of Administrative Sciences*, *68*(2), 231-250.

Hargittai, E., & Shaw, A. (2013). Digitally savvy citizenship: The role of Internet skills and engagement in young adults' political participation around the 2008 presidential election. *Journal of Broadcasting & Electronic Media*, *57*(2), 115-134.

Hasson-Ohayon, I., Braun, M., Galinsky, D., & Baider, L. (2009). Religiosity and hope: A path for women coping with a diagnosis of breast cancer. *Psychosomatics*, *50*(5), 525-533.

Hastings, O. P., & Roeser, K. K. (2020). Happiness in hard times: Does religion buffer the negative effect of unemployment on happiness? *Social Forces*, *99*(2), 447-473.

Hayo, B. (2007). Happiness in transition: An empirical study on Eastern Europe. *Economic Systems*, *31*(2), 204-221.

Hayo, B., & Seifert, W. (2003). Subjective economic well-being in Eastern Europe. *Journal of Economic Psychology*, *24*(3), 329-348.

Head, J. (2020). How Malaysia's government collapsed in two years. Retrieved from https://www.bbc.com/news/world-asia-51716474

Headey, B., Schupp, J., Tucci, I., & Wagner, G. G. (2010). Authentic happiness theory supported by impact of religion on life satisfaction: A longitudinal analysis with data for Germany. *The Journal of Positive Psychology*, *5*(1), 73-82.

Headey, B., & Wooden, M. (2004). The effects of wealth and income on subjective well-being and ill-being. *Economic Record*, *80*, 24-33.

Hedayat-Diba, Z. (1997). The self-object functions of the Koran. *The International Journal for the Psychology of Religion*, *7*(4), 211-236.

Held, M., Müller, J., Deutsch, F., Grzechnik, E., & Welzel, C. (2009). Value structures and dimensions: Evidence from the German WVS. *World Values Research, 2*(3), 56–77.

Helliwell, J. F., & Huang, H. (2008). How's your government? International evidence linking good government and well-being. *British Journal of Political Science*, *38*(4), 595-619.

Helliwell, J. F., & Putnam, R. D. (2004). The social context of well–being. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, *359*(1449), 1435-1446.

Helliwell, J., Layard, R., & Sachs, J. D. (2012). *World Happiness Report 2012*. New York: Sustainable Development Solutions Network. Retrieve from: https://www.earth.columbia.edu/sitefiles/file/Sachs%20Writing/2012/World%20Happiness%20Report.pdf

Helliwell, J., Layard, R., & Sachs, J. D. (2019). *World Happiness Report 2019,* New York: Sustainable Development Solutions Network. Retrieved from https://s3.amazonaws.com/happiness-report/2019/WHR19.pdf

Heo, J., Lin, S. F., Kondo, N., Hwang, J., Lee, J. K., & Oh, J. (2019). Values and happiness among Asian adolescents: A cross-national study. *Journal of Youth Studies*, *22*(3), 420-435.

Hetherington, E. M. (2003). Intimate pathways: Changing patterns in close personal relationships across time. *Family Relations*, *52*(4), 318-331.

Hicks, S., Tinkler, L., & Allin, P. (2013). Measuring subjective well-being and its potential role in policy: Perspectives from the UK Office for national statistic. *Social Indicators Research*, *114*, 73-86.

Hilbert, S., Goerigk, S., Padberg, F., Nadjiri, A., Übleis, A., Jobst, A., Dewald-Kaufmann, J., Falkai, P., Bühner, M., Naumann, F. and Sarubin, N. (2019). The role of self-esteem in depression: A longitudinal study. *Behavioural and Cognitive Psychotherapy*, *47*(2), 244-250.

Hill, P. C., Pargament, K. I., Hood, R. W., McCullough, J. M. E., Swyers, J. P., Larson, D. B., & Zinnbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, *30*(1), 51-77.

Hill, P. L., Allemand, M., & Roberts, B. W. (2013). Examining the pathways between gratitude and self-rated physical health across adulthood. *Personality and Individual Differences*, *54*(1), 92-96.

Hills, P., & Argyle, M. (2001). Emotional stability as a major dimension of happiness. *Personality and Individual Differences*, *31*(8), 1357-1364.

Holbert, R. L., Zeng, C., & Robinson, N. W. (2017). Adopting an integrated behavioral model approach to the study of news media exposure: A focus on experiential and instrumental attitudes toward politics. *Mass Communication and Society*, *20*(4), 573-593.

Hooker, K., & Siegler, I. C. (1992). Separating apples from oranges in health ratings: Perceived health includes psychological well-being. *Behavior, Health, & Aging, 2*, 81-92.

Howard, P. N., & Hussain, M. (2013). *Democracy's fourth wave? Digital media and the Arab Spring*. New York, NY: Oxford University Press.

Howell, H., & Howell, C. (2008). The relation of economic status to subjective well-being in developing countries: A meta-analysis. *Psychological Bulletin, 134*, 536 –560.

Huang, L. H. (2018). Can stronger family connections alleviate the adverse effects of unemployment on happiness? Evidence from Asian countries. *Journal of Reviews on Global Economics*, *7*, 225-245.

Huang, L. H. (2019). Well-being and volunteering: Evidence from aging societies in Asia. *Social Science & Medicine*, *229*, 172-180.

Huang, W. C. (1996). Religion, culture, economic and sociological correlates of suicide rates: a cross–national analysis. *Applied Economics Letters*, *3*(12), 779-782.

Hudson, J., & Jones, P. (2002). In search of the good samaritan: Estimating the impact of 'altruism' on voters' preferences. *Applied Economics*, *34*(3), 377-383.

Ibrahim, R., Tan, J. P., Hamid, T. A., & Ashari, A. (2018). Cultural, demographic, socio-economic background and care relations in Malaysia. In Wongboonsin, P. & Tan, J-P. (Eds.), *Care Relations in Southeast Asia* (pp. 41-98). Leiden, Boston: BRILL.

Immerzeel, T., & Pickup, M. (2015). Populist radical right parties mobilizing 'the people'? The role of populist radical right success in voter turnout. *Electoral Studies*, *40*, 347-360.

Inglehart, R., & Klingemann, H. D. (2000). Genes, culture, democracy, and happiness. In E. Diener, & E. M. Suh (Eds.), *Subjective well-being across cultures*. (pp. 165-183). Cambridge, MA: MIT Press.

Inglehart, R., & Norris, P. (2003). The true clash of civilizations. *Foreign Policy*, *135*, 63-70.

Inglehart, R., Foa, R., Peterson, C., & Welzel, C. (2008). Development, freedom, and rising happiness: A global perspective (1981–2007). *Perspectives on Psychological Science*, *3*(4), 264-285.

Ismail, I. (2019). 2020 Budget: A boost for Malaysia's tech industry. Retrieved from https://www.nst.com.my/lifestyle/bots/2019/10/529831/2020-budget-boost-malaysias-tech-industry

Ivtzan, I., Chan, C. P., Gardner, H. E., & Prashar, K. (2013). Linking religion and spirituality with psychological well-being: Examining self-actualisation, meaning in life, and personal growth initiative. *Journal of Religion and Health*, *52*(3), 915-929.

Jamal, A., Kizgin, H., Rana, N. P., Laroche, M., & Dwivedi, Y. K. (2019). Impact of acculturation, online participation and involvement on voting intentions. *Government Information Quarterly, 36*(3), 510-519.

Jankowski, R. (2007). Altruism and the decision to vote: Explaining and testing high voter turnout. *Rationality and Society*, *19*(1), 5-34.

Jayakumar, A. X. (2019). Imperative that Malaysia stays ahead of the pack. Retrieved from https://www.nst.com.my/opinion/columnists/2019/09/524317/imperative-malaysia-stays-ahead-pack

Joo, S. H., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, *25*(1), 25-50.

Joshanloo, M. (2018). Income satisfaction is less predictive of life satisfaction in individuals who believe their lives have meaning or purpose: A 94-nation study. *Personality and Individual Differences*, *129*, 92-94.

Joshanloo, M., & Weijers, D. (2016). Religiosity moderates the relationship between income inequality and life satisfaction across the globe. *Social Indicators Research*, *128*(2), 731-750.

Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: Foundations of hedonic psychology*. New York: Russell Sage Foundation.

Kamaruddin, N., & Rogers, R. A. (2020). Malaysia's democratic and political transformation. *Asian Affairs: An American Review*, *47*(2), 126-148.

Kamarudin, N., Yen, S. H., & See, K. F. (2020). Social capital and subjective well-being in Malaysia. *Malaysian Journal of Social Sciences and Humanities*, *5*(6), 1-10.

Kamath, J., & Ashok, H. S. (2015). Religiousness and self-actualization - An Empirical Study. *Journal of Psychosocial Research*, *10*(2), 347-355.

Karabati, S., Ensari, N., & Fiorentino, D. (2019). Job satisfaction, rumination, and subjective well-being: A moderated mediational model. *Journal of Happiness Studies*, *20*(1), 251-268.

Kashdan, T. B., Stiksma, M. C., Disabato, D. J., McKnight, P. E., Bekier, J., Kaji, J., & Lazarus, R. (2018). The five-dimensional curiosity scale: Capturing the bandwidth of curiosity and identifying four unique subgroups of curious people. *Journal of Research in Personality*, *73*, 130-149.

Kasim, A., & Sani, M. A. M. (2016). The 2013 general elections in Malaysia: An analysis of online news portals. *Kasetsart Journal of Social Sciences*, *37*(2), 119-125.

Kasser, T., & Ahuvia, A. (2002). Materialistic values and well-being in business students. *European Journal of Social Psychology*, *32*(1), 137-146.

Kaufman, S. B. (2018). Self-actualizing people in the 21st century: Integration with contemporary theory and research on personality and well-being. *Journal of Humanistic Psychology*, 1-33.

Keng, S. H., & Wu, S. Y. (2014). Living happily ever after? The effect of Taiwan's national health insurance on the happiness of the elderly. *Journal of Happiness Studies*, *15*(4), 783-808.

Kenyon, A., & Marjoribanks, T. (2007). Transforming media markets: The cases of Malaysia and Singapore. *Australian Journal of Emerging Technologies and Society, 5*(2), 103-118.

Kesebir, P. (2018). Scientific answers to the timeless philosophical question of happiness. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being* (pp. 1-13). Salt Lake City, UT: DEF Publishers.

Khalid, K. M., & Awang, H. (2008). Voting patterns: Evidence from the 2004 Malaysian general elections. *Journal of Politics and Law.*, *1*(4), 33-44.

Kim, A. E. (2003). Religious influences on personal and societal well-being. *Social Indicators Research*, *62*(1-3), 149-170.

Kim, D., & Johnson, T. J. (2006). A victory of the Internet over mass media? Examining the effects of online media on political attitudes in South Korea. *Asian Journal of Communication*, *16*(1), 1-18.

Kim, H. S., & Moore, M. T. (2019). Symptoms of depression and the discrepancy between implicit and explicit self-esteem. *Journal of Behavior Therapy and Experimental Psychiatry*, *63*, 1-5.

Kim, S., Baek, J., & Heo, E. (2019). A new look at the democracy–environment nexus: Evidence from panel data for high-and low-income countries. *Sustainability*, *11*(8), 1-14.

Kimberlee, R. H. (2002). Why don't British young people vote at general elections? *Journal of Youth Studies*, *5*(1), 85-98.

Kinari, Y., Ohtake, F., Kimball, M., Morimoto, S., & Tsutsui, Y. (2019). Happiness before and after an election: An analysis based on a daily survey around Japan's 2009 election. *Japan and the World Economy*, *49*, 187-194.

King, K. A., Vidourek, R. A., Davis, B., & McClellan, W. (2002). Increasing self-esteem and school connectedness through a multidimensional mentoring program. *Journal of School Health*, *72*(7), 294-299.

Koenig, H. G., George, L. K., & Siegler, I. C. (1988). The use of religion and other emotion-regulating coping strategies among older adults. *The Gerontologist*, *28*(3), 303-310.

Kongarchapatara, B., Moschis, G. P., & Ong, F.S. (2014). Understanding the relationships between age, gender, and life satisfaction: The mediating role of stress and religiosity. *Journal of Beliefs & Values*, *35*(3), 340-358.

Kooshiar, H., Yahaya, N., Hamid, T. A., Abu Samah, A., & Sedaghat Jou, V. (2012). Living arrangement and life satisfaction in older Malaysians: the mediating role of social support function. *PloS one, 7*(8): e43125. doi:10.1371/journal.pone.0043125

Kooshair, H., Yahaya, N., Hamid, T. A., & Abu Samah, A. (2014). Gender as a moderator of the relation among social support functions and life satisfaction in older Malaysians. *Journal of Women & Aging*, *26*(1), 22-38.

Kreiss, D., Lawrence, R. G., & McGregor, S. C. (2018). In their own words: Political practitioner accounts of candidates, audiences, affordances, genres, and timing in strategic social media use. *Political Communication*, *35*(1), 8-31.

Küng, H. (1996). *Yes to a global ethic*. New York: Continuum Intl Pub Group.

Küng, H., & Moltmann, J. (1986). *Christianity among World Religions. Concilium*, *vol. 183*. Edinburgh, Scotland: T & T Clark.

Lago, I., & Blais, A. (2019). Decentralization and electoral swings. *Regional Studies*, 1-12.

Lam, B. C., Haslam, C., Haslam, S. A., Steffens, N. K., Cruwys, T., Jetten, J., & Yang, J. (2018). Multiple social groups support adjustment to retirement across cultures. *Social Science & Medicine*, *208*, 200-208.

Lamu, A. N., & Olsen, J. A. (2016). The relative importance of health, income and social relations for subjective well-being: An integrative analysis. *Social Science & Medicine*, *152*, 176-185.

Lavigne, G. L., Vallerand, R. J., & Crevier-Braud, L. (2011). The fundamental need to belong: On the distinction between growth and deficit-reduction orientations. *Personality and Social Psychology Bulletin*, *37*(9), 1185-1201.

Layard, P. R. G. (2005). *Happiness. Lessons from a new science*. London: Penguin Books.

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. *Advances in Experimental Social Psychology*, *32*, 1–62.

Lee, E., & Mock, M. R. (1996). Chinese families. *Ethnicity and Family Therapy*, *3*, 302-318.

Lelkes, O. (2006). Tasting freedom: Happiness, religion and economic transition. *Journal of Economic Behavior & Organization*, *59*(2), 173-194.

Lenoir, F. (2015). *Happiness: A philosopher's guide*. Brooklyn, New York: Melville House.

Levin, K., Inchley, J., Currie, D., & Currie, C. (2012). Subjective health and mental well-being of adolescents and the health promoting school: A cross-sectional multilevel analysis. *Health Education*, *112*(2), 170-184.

Lewis, M. A., McBride, C. M., Pollak, K. I., Puleo, E., Butterfield, R. M., & Emmons, K. M. (2006). Understanding health behavior change among couples: An interdependence and communal coping approach. *Social Science & Medicine*, *62*(6), 1369-1380.

Lewis-Beck, M. S., & Nadeau, R. (2011). Economic voting theory: Testing new dimensions. *Electoral Studies*, *30*(2), 288-294.

Liberini, F., Redoano, M., & Proto, E. (2017). Happy voters. *Journal of Public Economics*, *146*, 41-57.

Lilleker, D. G. (2015). Interactivity and branding: Public political communication as a marketing tool. *Journal of Political Marketing*, *14*(1-2), 111-128.

Lilleker, D. G., Koc-Michalska, K., Negrine, R., Gibson, R., Vedel, T., & Strudel, S. (2017). Social media campaigning in Europe: Mapping the terrain. *Journal of Information Technology & Politics, 14*(4), 293-298.

Lim, C., & Putnam, R. D. (2010). Religion, social networks, and life satisfaction. *American Sociological Review*, *75*(6), 914-933.

Lim, H. E., Shaw, D., Liao, P. S., & Duan, H. (2020). The effects of income on happiness in East and South Asia: Societal values matter? *Journal of Happiness Studies*, *21*(2), 391-415.

Lim, K. S. (2018). *An open letter to the 15 million voters before May 9*. Retrieved from https://www.malaysiakini.com/news/423555

Lim, M. (2016). Digital media and Malaysia's electoral reform movement. In W. Berenschot, H. S. Nordholt, L. Bakker (Eds.), *Citizenship and Democratization in Southeast Asia* (pp. 211-237). Leiden, The Netherlands: Brill.

Lim, M. (2016). Sweeping the unclean: Social media and the Bersih electoral reform movement in Malaysia. *Global Media Journal, 14*(27), 1- 10.

Lin, J. H. (2016). Differential gains in SNSs: Effects of active vs. passive Facebook political participation on offline political participation and voting behavior among first-time and experienced voters. *Asian Journal of Communication*, *26*(3), 278-297.

Lin, K., Xu, Y., Huang, T., & Zhang, J. (2013). Social exclusion and its causes in East Asian societies: Evidences from SQSQ survey data. *Social Indicators Research*, *112*(3), 641-660.

Lomazzi, V. (2018). Using alignment optimization to test the measurement invariance of gender role attitudes in 59 countries. *Methods, Data, Analyses: a Journal for Quantitative Methods and Survey Methodology (mda)*, *12*(1), 77-103.

Lorenzini, J. (2015). Subjective well-being and political participation: A comparison of unemployed and employed youth. *Journal of Happiness Studies*, *16*(2), 381-404.

Lu, L., Gilmour, R., Kao, S. F., & Huang, M. T. (2006). A cross-cultural study of work/family demands, work/family conflict and wellbeing: The Taiwanese vs British. *Career Development International*, *11*(1), 9-27.

Lu, Y., Heatherly, K. A., & Lee, J. K. (2016). Cross-cutting exposure on social networking sites: The effects of SNS discussion disagreement on political participation. *Computers in Human Behavior*, *59*, 74-81.

Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2003). Reexamining adaptation and the set point model of happiness: Reactions to changes in marital status. *Journal of Personality and Social Psychology*, *84*(3), 527-539.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, *131*(6), 803–855.

Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, *9*(2), 111-131.

Ma, J., Dong, G., Chen, Y., & Zhang, W. (2018). Does satisfactory neighbourhood environment lead to a satisfying life? An investigation of the association between neighbourhood environment and life satisfaction in Beijing. *Cities*, *74*, 229-239.

Madhumita, S., Meram, A., & Pranab, K. S. (2021). A study to assess the comprehensive well-being among the working versus retired elderly population in Selangor, Malaysia. *Journal of Womens Health Safety Research*, *5*(2), 231-237.

Magin, M., Podschuweit, N., Haßler, J., & Russmann, U. (2017). Campaigning in the fourth age of political communication. A multi-method study on the use of Facebook by German and Austrian parties in the 2013 national election campaigns. *Information, Communication & Society*, *20*(11), 1698-1719.

Malaysian Communications and Multimedia Commission. (2018). Internet users survey 2018: Statistical brief number twenty-three. Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018.pdf

Maltby, J., & Day, L. (2002). Religious experience, religious orientation and schizotypy. *Mental Health, Religion & Culture*, *5*(2), 163-174.

Manganelli, L., Thibault-Landry, A., Forest, J., & Carpentier, J. (2018). Self-determination theory can help you generate performance and well-being in the workplace: A review of the literature. *Advances in Developing Human Resources*, *20*(2), 227-240.

Margolis, R., & Myrskylä, M. (2011). A global perspective on happiness and fertility. *Population and Development Review*, *37*(1), 29-56.

Maridal, J. H. (2017). A worldwide measure of societal quality of life. *Social Indicators Research*, *134*(1), 1-38.

Markussen, T., Fibæk, M., Tarp, F., & Tuan, N. D. A. (2018). The happy farmer: Self-employment and subjective well-being in rural Vietnam. *Journal of Happiness Studies*, *19*(6), 1613-1636.

Mascaro, N., & Rosen, D. H. (2008). Assessment of existential meaning and its longitudinal relations with depressive symptoms. *Journal of Social and Clinical Psychology*, *27*(6), 576-599.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370-396.

Maslow, A.H. (1970) *Motivation and personality* (2nd ed). New York: Harper & Row.

Maslow, A. H. (1971). *The farther reaches of human nature*. New York: Viking.

Masoom, M. R., Abdula, A. T., & Islam, J. (2016). One dimensional 'social values' in the globalized world: Empirical evidence from Netherland, Singapore, Zimbabwe and Rwanda. *Management Dynamics in the Knowledge Economy, 4*(3), 357-385.

McBride, M. (2001). Relative-income effects on subjective well-being in the cross-section. *Journal of Economic Behavior & Organization, 45*(3), 251-278.

McCullough, M. E., Emmons, R. A., Kilpatrick, S. D., & Mooney, C. N. (2003). Narcissists as "victims": The role of narcissism in the perception of transgressions. *Personality and Social Psychology Bulletin, 29*(7), 885-893.

McMahon, D. M. (2004). From the happiness of virtue to the virtue of happiness: 400 BC–AD 1780. *Daedalus, 133*(2), 5-17.

MCOR (Merdeka Center for Opinion Research) (2008) Peninsula Malaysia Voter Opinion Poll: Perspectives on Issues, the Economy, Leadership and Voting Intentions, Selangor: MCOR. Retrieved from http://www.merdeka.org/ pages/02_research.html

Meulman, J. J., & Heiser, W. J. (2005). *Categorical principal component analysis (CATPCA), SPSS Categories, 14*. Chicago, IL: SPSS Inc.

Mikulincer, M., & Shaver, P. R. (2007). Boosting attachment security to promote mental health, prosocial values, and inter-group tolerance. *Psychological Inquiry, 18*(3), 139-156.

Milbrath, L. W., & Goel, M. L. (1977). *Political participation: How and why do people get involved in politics* (2nd ed.)*?* Chicago: Rand McNally.

Miller, B. K., Zivnuska, S., & Kacmar, K. M. (2019). Self-perception and life satisfaction. *Personality and Individual Differences, 139*, 321-325.

Milyavskaya, M., Philippe, F. L., & Koestner, R. (2013). Psychological need satisfaction across levels of experience: Their organization and contribution to general well-being. *Journal of Research in Personality, 47*(1), 41-51.

Miner, L. (2015). The unintended consequences of Internet diffusion: Evidence from Malaysia. *Journal of Public Economics, 132*, 66-78.

Mohan, A. (2020). Self-esteem and psychological well-being of adolescent children in single parent families. *Indian Journal of Public Health Research & Development*, *11*(5), 32-37.

Mohd Hashim, I. H., & Mohd Zaharim, N. (2020). Happiness among Malaysian adolescents: The role of sociodemographic factors and everyday events. *SAGE Open*, *10*(3), 2158244020940695.

Mohd Hed, N., & Grasso, M. T. (2020). Age group differences in political activism in Malaysia. *Journal of Youth Studies*, *23*(6), 765-779.

Momtaz, Y. A., Hamid, T. A., Ibrahim, R., Yahaya, N., & Abdullah, S. S. (2012). Moderating effect of Islamic religiosity on the relationship between chronic medical conditions and psychological well-being among elderly Malays. *Psychogeriatrics*, *12*(1), 43-53.

Momtaz, Y. A., Ibrahim, R., Hamid, T. A., & Yahaya, N. (2010). Mediating effects of social and personal religiosity on the psychological well-being of widowed elderly people. *OMEGA-Journal of Death and Dying*, *61*(2), 145-162.

Momtaz, Y. A., Ibrahim, R., Hamid, T. A., & Yahaya, N. (2011). Sociodemographic predictors of elderly's psychological well-being in Malaysia. *Aging & Mental Health*, *15*(4), 437-445.

Moniruzzaman, M., & Farzana, K. F. (2018). Malaysia'14th General Election: End of an epoch, and beginning of a new? *Intellectual Discourse*, *26*(1), 207-228.

Morales-Vives, F., De Raad, B., & Vigil-Colet, A. (2014). Psycho-lexically based virtue factors in Spain and their relation with personality traits. *The Journal of General Psychology, 141*(4), 297-325.

More, K. R., Quigley-McBride, A., Clerke, A. S., & More, C. (2019). Do measures of country-level safety predict individual-level health outcomes? *Social Science & Medicine*, *225*, 128-138.

Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2007). *Digital citizenship: The Internet, society, and participation*. Cambridge, MA: MIT Press.

Moten, A. R. (2011). Changing political culture and electoral behavior in Malaysia. *Asian Affairs: An American Review*, *38*(1), 39-56.

Mousteri, V., Daly, M., Delaney, L., Tynelius, P., & Rasmussen, F. (2019). Adolescent mental health and unemployment over the lifespan: Population evidence from Sweden. *Social Science & Medicine*, *222*, 305-314.

Mroczek, D. K., & Spiro III, A. (2005). Change in life satisfaction during adulthood: Findings from the veterans affairs normative aging study. *Journal of Personality and Social Psychology*, *88*(1), 189-202.

Mulla, Z. R., & Krishnan, V. R. (2014). Karma-yoga: The Indian model of moral development. *Journal of Business Ethics*, *123*(2), 339-351.

Munir, S. (2018). Social media and shaping voting behavior of youth: The Scottish referendum 2014 case. *The Journal of Social Media in Society*, *7*(1), 253-279.

Musek, J. (2017). Values related to the religious adherence. *Psychological Topics*, *26*(2), 451-480.

Myers, D. G. (2000). The funds, friends, and faith of happy people. *American Psychologist*, *55*(1), 56.

Myers, D.G. (2008). Religion and human flourishing. In M. Eid, & R. J. Larsen (Eds.), *The science of subjective well-being* (pp. 323-346). New York: Guilford Press.

Myers, D. G., & Diener, E. (2018). The scientific pursuit of happiness. *Perspectives on Psychological Science*, *13*(2), 218-225.

Myerson, R. B. (2000). Large poisson games. *Journal of Economic Theory*, *94*(1), 7-45.

Myrskylä, M., & Margolis, R. (2014). Happiness: Before and after the kids. *Demography*, *51*(5), 1843-1866.

Nanziri, E. L. (2016). Financial inclusion and welfare in South Africa: Is there a gender gap? *Journal of African Development*, *18*(2), 109-134.

Nason-Clark, N. (2004). When terror strikes at home: The interface between religion and domestic violence. *Journal for the Scientific Study of Religion*, *43*(3), 303-310.

Ndoma, I., & Tumin, M. (2011). Virtual civil society: Malaysia's 2008 general elections revisited. *Global Journal of Human Social Science, 11*(8), 41-49.

Negri, F. (2019). Economic or cultural backlash? Rethinking outsiders' voting behavior. *Electoral Studies*, *59*, 158-163.

Neira, I., Lacalle-Calderon, M., Portela, M., & Perez-Trujillo, M. (2019). Social capital dimensions and subjective well-being: A quantile approach. *Journal of Happiness Studies, 20*(8), 2551-2579.

New Economics Foundation. (2016). *Happy Planet Index 2016 Methods Paper*. Retrieved from https://static1.squarespace.com/static/5735c421e321402778ee0ce9/t/578dec7837c58157b929b3d6/1468918904805/Methods+paper_2016.pdf

Ng, J. W. J., Vaithilingam, S., & Chua, J. M. (2019). Determinants of well-being for developing and developed countries and their role in policy-making: A panel data analysis. *Malaysian Journal of Economic Studies*, *56*(1), 85-105.

Ng, J. W. J., Vaithilingam, S., & Rangel, G. J. (2017). The role of life satisfaction on election voting preferences in Malaysia. *Asian Journal of Social Science*, *45*(1-2), 149-175.

Ng, Y. K. (1978). Economic growth and social welfare: The need for a complete study of happiness. *Kyklos*, *31*(4), 575-587.

Ngamaba, K. H. (2017). Determinants of subjective well-being in representative samples of nations. *European journal of public health*, *27*(2), 377-382.

Ngamaba, K. H., Armitage, C., Panagioti, M., & Hodkinson, A. (2020). How closely related are financial satisfaction and subjective well-being? Systematic review and meta-analysis. *Journal of Behavioral and Experimental Economics*, *85*, 101522.

Nikolaev, B. (2015). Living with mom and dad and loving it… or Are you? *Journal of Economic Psychology*, *51*, 199-209.

Noh, A. (2014). Malaysia 13th General Election: A short note on Malaysia's continuing battle with ethnic politics. *Electoral Studies*, *34*, 266-269.

Noll, H. H. (2013). Subjective social indicators: Benefits and limitations for policy making—An introduction to this special issue. *Social Indicators Research*, *114*(1), 1-11.

Noor, N. M. (2008). Work and women's well-being: Religion and age as moderators. *Journal of Religion and Health*, *47*(4), 476-490.

Norris, P., & Inglehart, R. (2011). *Sacred and secular: Religion and politics worldwide*. London, England: Cambridge University Press.

Norris, P., & Inglehart, R. (2015). The impact of human security on social trust and tolerance. In Boss, M (Ed), *Bringing culture back in: Cultural diversity, religion, and the state* (pp. 183-204). Denmark: Narayana Press.

Nussbaum, M. C. (2001). *Women and human development: The capabilities approach* (Vol. 3). London, England: Cambridge University Press.

OECD. (2019). How's life? Retrieved from http://www.oecdbetterlifeindex.org/#/11111111111

Office for National Statistics. (2011). Personal well-being user guidance. Retrieved from https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/personalwellbeingsurveyuserguide

Ofodile, C. N. (2005). *The Impacts of Religion and Education on the Self-Esteem of Adolescents from Divorced and Intact Families in Nigeria*. Retrieved from https://files.eric.ed.gov/fulltext/ED491425.pdf

Ohme, J., de Vreese, C. H., & Albaek, E. (2018). The uncertain first-time voter: Effects of political media exposure on young citizens' formation of vote choice in a digital media environment. *New Media & Society*, *20*(9), 3243-3265.

Ohtake, F. (2004). The effects of unemployment on happiness. *The Japanese Journal of Labour Studies*, *528*, 59-68.

Okulicz-Kozaryn, A. (2010). Religiosity and life satisfaction across nations. *Mental Health, Religion & Culture*, *13*(2), 155-169.

Okun, M. A., & George, L. K. (1984). Physician-and self-ratings of health, neuroticism and subjective well-being among men and women. *Personality and Individual Differences*, *5*(5), 533-539.

Oreopoulos, P., & Salvanes, K. G. (2011). Priceless: The nonpecuniary benefits of schooling. *Journal of Economic Perspectives*, *25*(1), 159-84.

Owen, A. L., Videras, J., & Willemsen, C. (2008). Democracy, participation, and life satisfaction. *Social Science Quarterly*, *89*(4), 987-1005.

Pacek, A. C., & Radcliff, B. (2008). Welfare policy and subjective well-being across nations: An individual-level assessment. *Social Indicators Research*, *89*(1), 179-191.

Pargament, K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry*, *13*(3), 168-181.

Park, M. S. A., & Joshanloo, M. (2021). Satisfaction with life declines with age in Malaysia: An exploratory analysis of factors influencing subjective well-being in a developing/middle-income country. *Applied Research in Quality of Life*, *16*(2), 471-486.

Patall, E. A., Cooper, H., & Robinson, J. C. (2008). The effects of choice on intrinsic motivation and related outcomes: A meta-analysis of research findings. *Psychological Bulletin*, *134*(2), 270-300.

Patrick, H., Knee, C. R., Canevello, A., & Lonsbary, C. (2007). The role of need fulfillment in relationship functioning and well-being: A self-determination theory perspective. *Journal of Personality and Social Psychology*, *92*(3), 434-457.

Perelli-Harris, B., Hoherz, S., Lappegård, T., & Evans, A. (2019). Mind the "Happiness" gap: The relationship between cohabitation, marriage, and subjective well-being in the United Kingdom, Australia, Germany, and Norway. *Demography*, *56*(4), 1219-1246.

Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. (2007). Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology*, *2*(3), 149-156.

Peterson, C., & Seligman, M. E. (2004). *Character strengths and virtues: A handbook and classification* (Vol. 1). Oxford University Press.

Pew Research Center. (2016). Global Uptick in Government Restrictions on Religion in 2016. Retrieved from https://www.pewforum.org/2018/06/21/global-uptick-in-government-restrictions-on-religion-in-2016/

Pew Research Center. (2017). Historical trends of public trust. Retrieved from https://www.people-press.org/2019/04/11/public-trust-in-government-1958-2017/

Philippe, F. L., Koestner, R., Beaulieu-Pelletier, G., & Lecours, S. (2011). The role of need satisfaction as a distinct and basic psychological component of autobiographical memories: A look at well-being. *Journal of Personality*, *79*(5), 905-938.

Pianta, M. (2020). Italy's political upheaval and the consequences of inequality. *Intereconomics*, *55*(1), 13-17.

Pierewan, A. C., & Tampubolon, G. (2015). Happiness and health in Europe: a multivariate multilevel model. *Applied Research in Quality of Life*, *10*(2), 237-252.

Plouffe, R. A., & Tremblay, P. F. (2017). The relationship between income and life satisfaction: Does religiosity play a role? *Personality and individual Differences*, *109*, 67-71.

Powdthavee, N. (2011). *Life satisfaction and grandparenthood: Evidence from a nationwide survey.* Retrieved from https://www.econstor.eu/bitstream/10419/52042/1/669718440.pdf

Powdthavee, N., Lekfuangfu, W. N., & Wooden, M. (2015). What's the good of education on our overall quality of life? A simultaneous equation model of education and life satisfaction for Australia. *Journal of Behavioral and Experimental Economics*, *54*, 10-21.

Prawitz, A., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). In charge financial distress/financial well-being scale: Development, administration, and score interpretation. *Journal of Financial Counseling and Planning*, *17*(1), 34-50.

Proyer, R. T., Gander, F., Wellenzohn, S., & Ruch, W. (2016). Addressing the role of personality, ability, and positive and negative affect in positive psychology interventions: Findings from a randomized intervention based on the authentic happiness theory and extensions. *The Journal of Positive Psychology*, *11*(6), 609-621.

Puchalski, C. M., Dorff, R. E., & Hendi, I. Y. (2004). Spirituality, religion, and healing in palliative care. *Clinics in Geriatric Medicine*, *20*(4), 689-714.

Puchalski, C. M., Vitillo, R., Hull, S. K., & Reller, N. (2014). Improving the spiritual dimension of whole person care: reaching national and international consensus. *Journal of Palliative Medicine*, *17*(6), 642-656.

Radcliff, B. (2001). Politics, markets, and life satisfaction: The political economy of human happiness. *American Political Science Review*, *95*(4), 939-952.

Rahim, M. A. R. A. (2013). The effect of life satisfaction and religiosity on happiness among post graduates in Malaysia. *IOSR Journal of Humanities and Social Science*, *11*(1), 34-38.

Rajaratnam, U. D. (2009). Role of traditional and online media in the 12th general election, Malaysia. *The Journal of the South East Asia Research Centre for Communications and Humanities*, *1*(1), 33-58.

Ramirez, S. A. (2009). Subprime bailouts and the pedator state. *University of Dayton Law Review.*, *35*(1), 81-112.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (Second Edition). Thousand Oaks, California: Sage.

Ray, C., & Wyatt, T. R. (2018). Religion and spirituality as a cultural asset in medical students. *Journal of Religion and Health*, *57*(3), 1062-1073.

Rayo, L., & Becker, G. S. (2007). Evolutionary efficiency and happiness. *Journal of Political Economy, 115*(2), 302–337.

Ruedin, D. (2019). Attitudes to immigrants in South Africa: Personality and vulnerability. *Journal of Ethnic and Migration Studies*, *45*(7), 1108-1126.

Research Associates of Canadian Index of Wellbeing (CIW). (2015). About the Canadian Index of Wellbeing. Retrieved from https://uwaterloo.ca/canadian-index-wellbeing/about-canadian-index-wellbeing

Riggio, H. R., Uhalt, J., & Matthies, B. K. (2014). Unanswered prayers: Religiosity and the God-serving bias. *The Journal of Social Psychology*, *154*(6), 491-514.

Riker, W. H., & Ordeshook, P. C. (1968). A theory of the calculus of voting. *American Political Science Review*, *62*(1), 25-42.

Rizvi, M. A. K., & Hossain, M. Z. (2017). Relationship between religious belief and happiness: A systematic literature review. *Journal of Religion and Health*, *56*(5), 1561-1582.

Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston, MA: Houghton Mifflin.

Rojas, M. (2020). The Well-Being Situation in Latin America. In *Well-Being in Latin America. Human Well-Being Research and Policy Making* (pp. 31-55). Springer, Cham. doi:10.1007/978-3-030-33498-7_4

Rosen, D. H., & Crouse, E. M. (2000). Integration of Taoism and the psychologies of Jung, Erikson, and Maslow. *The Psychology of Mature Spirituality: Integrity, Wisdom, Transcendence*, 95-103.

Ryan, R. (2009). Self-determination theory and well-being. *Social Psychology*, *84*(822), 848-849.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54-67.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, *52*(1), 141-166.

Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, *9*(1), 139-170.

Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, *83*(1), 10-28.

Ryff, C. D., Singer, B. H., & Palmersheim, K. A. (2004). Social inequalities in health and well-being: The role of relational and religious protective factors. *How Healthy Are We*, 90-123.

Sabri, M. F., Dass, T. M., Burhan, N. A. S., Wahab, H. A. R. A., Wijekoon, R., & Simanjuntak, M. (2021). Determinants of life satisfaction among female-headed households in Malaysia. *International Journal of Business and Society*, *22*(1), 276-295.

Sachs, J. D. (2013). Restoring virtue ethics in the quest for happiness. In J. Helliwell, R. Layard, & J. D. Sachs (Eds.). *World Happiness Report 2013* (pp. 80-97). New York: Sustainable Development Solutions Network.

Sahdra, B. K., Shaver, P. R., & Brown, K. W. (2010). A scale to measure nonattachment: A Buddhist complement to Western research on attachment and adaptive functioning. *Journal of Personality Assessment*, *92*(2), 116-127.

Sakip, S. R. M., Hassan, K., & Mansor, A. (2016). Community happiness the distinct role of environment setting relatedness. *Malaysian Journal of Sustainable Environment*, *1*(1), 12-27.

Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of risk and uncertainty*, *1*(1), 7-59.

Sani, M., & Azizuddin, M. (2014). The social media election in Malaysia: the 13th General Election in 2013. *Kajian Malaysia: Journal of Malaysian Studies*, *32*(2), 123-147.

Sani, M. A. M. & Shah, D. D. A. H. (2020). Freedom of religious expression in Malaysia. *Journal of International Studies, 7*, 33-49.

Sarracino, F. (2013). Determinants of subjective well-being in high- and low-income countries: Do happiness equations differ across countries? *The Journal of Socio-Economics*, *42*(3), 51-66.

Schimmel, J. (2009). Development as happiness: The subjective perception of happiness and UNDP's analysis of poverty, wealth and development. *Journal of Happiness Studies*, *10*(1), 93-111.

Schroeder, R. D., & Frana, J. F. (2009). Spirituality and religion, emotional coping, and criminal desistance: A qualitative study of men undergoing change. *Sociological Spectrum*, *29*(6), 718-741.

Scorsolini-Comin, F., Fontaine, A. M. G. V., Koller, S. H., & Santos, M. A. D. (2013). From authentic happiness to well-being: The flourishing of positive psychology. *Psicologia: Reflexão e Crítica*, *26*(4), 663-670.

Seaford, C. (2013). The multiple uses of subjective well-being indicators. *Social Indicators Research*, *114*, 29-43.

Seligman, M. E. (2002). Positive psychology, positive prevention, and positive therapy. *Handbook of positive psychology*, *2*(2002), 3-12.

Seligman, M. E., Parks, A. C., & Steen, T. (2004). A balanced psychology and a full life. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, *359*(1449), 1379-1381.

Senik, C. (2014). The French unhappiness puzzle: The cultural dimension of happiness. *Journal of Economic Behavior & Organization*, *106*, 379-401.

Sern, T. J., & Zanuddin, H. (2014). Malaysia's 13th general election: Political communication and public agenda in social media. *Asian Journal for Public Opinion Research, 1*(2), 73-89.

Shah, S. A., Safian, N., Ahmad, S., Wan Ibadullah, W. A. H., Mohammad, Z. B., Nurumal, S. R., & Shobugawa, Y. (2021). Factors associated with happiness among Malaysian elderly. *International Journal of Environmental Research and Public Health*, *18*(7), 3831.

Sharma, S. (2019). Democratic values, freedom, control and life satisfaction. *Economic Affairs*, *64*(1), 217-231.

Sharma, S., & Mehrotra, S. (2018). The spiritual revolution in India from the ritual to the spiritual Indian: Factors shaping spiritual seeking in modern Indians. *Journal of Spirituality in Mental Health*, *20*(3), 225-238.

Sharon, A. (2019). *Malaysia's digital economy expected to expand*. Retrieved from https://opengovasia.com/malaysias-digital-economy-expected-to-expand/

Siah, P. C. (2015). Perceived parental sex discrimination, happiness and self-esteem: children's perspective. *Vulnerable Children and Youth Studies*, *10*(4), 314-320.

Silberman, I. (2005). Religion as a meaning system: Implications for the new millennium. *Journal of Social Issues*, *61*(4), 641-663.

Silvia, P. J., & Kashdan, T. B. (2009). Interesting things and curious people: Exploration and engagement as transient states and enduring strengths. *Social and Personality Psychology Compass*, *3*(5), 785-797.

Singh, K., Leong, S. M., Tan, C. T., & Wong, K. C. (1995). A theory of reasoned action perspective of voting behavior: Model and empirical test. *Psychology & Marketing*, *12*(1), 37-51.

Singh, M., Khan, W., & Osmany, M. (2014). Gratitude and health among young adults. *Indian Journal of Positive Psychology*, *5*(4), 465.

Smeltzer, S., & Paré, D. J. (2015). Challenging electoral authoritarianism in Malaysia: the embodied politics of the Bersih movement. *Interface: A Journal on Social Movements*, *7*(2), 120-144.

Smets, K., & Van Ham, C. (2013). The embarrassment of riches? A meta-analysis of individual-level research on voter turnout. *Electoral studies*, 32(2), 344-359.

Smith, C. (2003). Theorizing religious effects among American adolescents. *Journal for the Scientific Study of Religion*, *42*(1), 17-30.

Snoep, L. (2008). Religiousness and happiness in three nations: A research note. *Journal of Happiness Studies*, *9*(2), 207-211.

Solanki, H. K., Kaur, A., Das, M., Awasthi, S., & Jain, S. (2019). Coping mechanism used by homemakers in Kumaon region (Uttarakhand, India) to deal with stress in their day-to-day life. *Journal of Family Medicine and Primary Care*, *8*(3), 1138-1144.

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, *139*(1), 213-240.

Soydemir, G. A., Bastida, E., & Gonzalez, G. (2004). The impact of religiosity on self-assessments of health and happiness: Evidence from the US Southwest. *Applied Economics*, *36*(7), 665-672.

Spierings, N., & Jacobs, K. (2014). Getting personal? The impact of social media on preferential voting. *Political Behavior*, *36*(1), 215-234.

Stander, V., Piercy, F. P., Mackinnon, D., & Helmeke, K. (1994). Spirituality, religion and family therapy: Competing or complementary world? *The American Journal of Family Therapy*, *22*(1), 27-41.

Stavrova, O., Schlösser, T., & Fetchenhauer, D. (2011). Are the unemployed equally unhappy all around the world? The role of the social norms to work and welfare state provision in 28 OECD countries. *Journal of Economic Psychology*, *32*(1), 159-171.

Steele, L. G., & Lynch, S. M. (2013). The pursuit of happiness in China: Individualism, collectivism, and subjective well-being during China's economic and social transformation. *Social Indicators Research*, *114*(2), 441-451.

Steger, M. F., Kashdan, T. B., & Oishi, S. (2008). Being good by doing good: Daily eudaimonic activity and well-being. *Journal of Research in Personality*, *42*(1), 22-42.

Steger, M. F., Kashdan, T. B., Sullivan, B. A., & Lorentz, D. (2008). Understanding the search for meaning in life: Personality, cognitive style, and the dynamic between seeking and experiencing meaning. *Journal of Personality*, *76*(2), 199-228.

Steiner, L., Leinert, L., & Frey, B. S. (2010). Economics, religion and happiness. *Zeitschrift für Wirtschafts-und Unternehmensethik*, *11*(1), 9-24.

Stenseng, F., Forest, J., & Curran, T. (2015). Positive emotions in recreational sport activities: The role of passion and belongingness. *Journal of Happiness Studies*, *16*(5), 1117-1129.

Stiglitz, J., Sen, A. K., & Fitoussi, J. P. (2009). *The measurement of economic performance and social progress revisited: Reflections and overview*. Retrieved from https://hal-sciencespo.archives-ouvertes.fr/file/index/docid/1069384/filename/wp2009-33.pdf

Stiglitz, J., Fitoussi, J. P., & Durand, M. (2018). *Beyond GDP: Measuring what counts for economic and social performance*. Retrieved from https://www.oecd-ilibrary.org/economics/beyond-gdp_9789264307292-en

Stone, A. A., Broderick, J. E., Wang, D., & Schneider, S. (2020). Age patterns in subjective well-being are partially accounted for by psychological and social factors associated with aging. *Plos one*, *15*(12), e0242664.

Stone, A. A., Schwartz, J. E., Broderick, J. E., & Deaton, A. (2010). A snapshot of the age distribution of psychological well-being in the United States. *Proceedings of the National Academy of Sciences*, *107*(22), 9985-9990.

Stutzer, A., & Frey, B. S. (2003). Institutions matter for procedural utility: An economic study of the impact of political participation possibilities. In R. Mudambi, P. Navarra, & G. Sobbrio (Eds.), *Economic welfare, international business and global institutional change* (pp. 81-99). Cheltenham: Edward Elgar.

Stutzer, A., & Frey, B. S. (2006). Does marriage make people happy, or do happy people get married? *The Journal of Socio-Economics*, *35*(2), 326-347.

Suh, E. M., & Oishi, S. (2002). Subjective well-being across cultures. *Online Readings in Psychology and Culture*, *10*(1), 1-11.

Sulaiman, S. (2008). Awani – Survey by Zentrum Future Studies Malaysia. In Liow, J. C. (2012). *Malaysia's March 2008 general election: Understanding the new media factor. The Pacific Review*, *25*(3), 293-315.

Sulemana, I., & Agyapong, E. (2019). Subjective well-being and political participation: Empirical evidence from Ghana. *Review of Development Economics*, *23*(3), 1368-1386.

Sulemana, I., Bugri Anarfo, E., & Quartey, P. (2019). International remittances and household food security in Sub-Saharan Africa. *Migration and Development*, *8*(2), 264-280.

Sullivan, L. M., Dukes, K. A., & Losina, E. (1999). An introduction to hierarchical linear modelling. *Statistics in Medicine*, *18*(7), 855-888.

Sun, O. E. (2014). Malaysian Chinese in a transitioning Malaysia. *The 13th Malaysia Elections: Issues, Trends and Future Trajectories, edited by Mohamed Nawab Mohamed Osman.* Singapore: S. Rajaratnam School of International Studies.

Swigger, N. (2012). What you see is what you get: Drawing inferences from campaign imagery. *Political Communication*, *29*(4), 367-386.

Swinyard, W. R., Kau, A. K., & Phua, H. Y. (2001). Happiness, materialism, and religious experience in the US and Singapore. *Journal of Happiness Studies*, *2*(1), 13-32.

Tabellini, G. (2010). Culture and institutions: Economic development in the regions of Europe. *Journal of the European Economic Association*, *8*(4), 677-716.

Tan, C. C., Khor, K. S., & Ooi, P. B. (2020). *Depression, anxiety, stress, and satisfaction with life: Moderating role of interpersonal needs among university students.* Retrieved from https://assets.researchsquare.com/files/rs-22880/v3/07a676dd-95fe-486a-99f5-bcba65e19783.pdf?c=1631857473

Tan, S. A., Nainee, S., & Tan, C. S. (2021). The mediating role of reciprocal filial piety in the relationship between parental autonomy support and life satisfaction among adolescents in Malaysia. *Current Psychology, 40*(2), 804-812.

Tang, G., & Lee, F. L. (2013). Facebook use and political participation: The impact of exposure to shared political information, connections with public political actors, and network structural heterogeneity. *Social Science Computer Review*, *31*(6), 763-773.

Tang, Z. (2014). They are richer but are they happier? Subjective well-being of Chinese citizens across the reform era. *Social Indicators Research*, *117*(1), 145-164.

Tao, H. L. (2008). What makes devout Christians happier? Evidence from Taiwan. *Applied Economics*, *40*(7), 905-919.

Tao, H. L. (2019). Marriage and happiness: Evidence from Taiwan. *Journal of Happiness Studies*, *20*(6), 1843-1861.

Tavares, A. F., & Raudla, R. (2018). Size, density and small scale elections: A multi-level analysis of voter turnout in sub-municipal governments. *Electoral Studies*, *56*, 1-13.

Tay, L., & Diener, E. (2011). Needs and subjective well-being around the world. *Journal of Personality and Social Psychology*, *101*(2), 354.

The Australian Unity Wellbeing Research Team. (2017). *Australian Unity Wellbeing Index*. Retrieved from: https://www.australianunity.com.au/~/media/corporate/documents/annual%20reports/wellbeing%20index/wellbeing%20index%202017.pdf

The Malaysian Communications and Multimedia Commission. (2018). *Internet Users Survey 2018*. Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018.pdf

The National Economic and Development Board (NESDB, Thailand). (2006). *The Green and Happiness Index*. Retrieved from http://www.happysociety.org/ppdoconference/session_papers/session2/Juthamas-GHI.pdf

the Star Online. (2018). Suicide epidemic is a concern. Retrieved from https://www.thestar.com.my/opinion/letters/2018/06/15/suicide-epidemic-is-a-concern/

Toft, M. D. (2007). Getting religion? The puzzling case of Islam and civil war. *International Security*, *31*(4), 97-131.

Tolbert, C. J., & McNeal, R. S. (2003). Unraveling the effects of the Internet on political participation? *Political Research Quarterly*, *56*(2), 175-185.

Tomer, J. F. (2011). Enduring happiness: Integrating the hedonic and eudaimonic approaches. *The Journal of Socio-Economics*, *40*(5), 530-537.

Tufekci, Z., & Wilson, C. (2012). Social media and the decision to participate in political protest: Observations from Tahrir Square. *Journal of Communication*, *62*(2), 363-379.

Ulloa, B. F. L., Møller, V., & Sousa-Poza, A. (2013). How does subjective well-being evolve with age? A literature review. *Journal of Population Ageing*, *6*(3), 227-246.

Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *A short guide to gross national happiness index*. *The Centre for Bhutan Studies*. Retrieved from https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/11807/Short-GNH-Index.pdf?sequence=1

Valikhani, A., Ahmadnia, F., Karimi, A., & Mills, P. J. (2019). The relationship between dispositional gratitude and quality of life: The mediating role of perceived stress and mental health. *Personality and Individual Differences*, *141*, 40-46.

Van Praag, B. M. (2004). *The connexon between old and new approaches to financial satisfaction.* Retrieved from https://www.econstor.eu/bitstream/10419/18851/1/cesifo1_wp1212.pdf

Van Praag, B. M., & Kapteyn, A. (1973). Further evidence on the individual welfare function of income: An empirical investigation in The Netherlands. *European Economic Review*, *4*(1), 33-62.

Van Praag, B. M., Romanov, D., & Ferrer-i-Carbonell, A. (2010). Happiness and financial satisfaction in Israel: Effects of religiosity, ethnicity, and war. *Journal of Economic Psychology*, *31*(6), 1008-1020.

Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, *23*(3), 263-280.

Vasudha, S., & Prasad, R. (2017). Narcissism, happiness and self-actualization. In *2017 International Conference on Advances in Computing, Communications and Informatics (ICACCI)* (pp. 2349-2358). IEEE.

Veenhoven, R. (1988). The utility of happiness. *Social Indicators Research*, *20*(4), 333-354.

Veenhoven, R. (2000). The four qualities of life. *Journal of Happiness Studies*, *1*(1), 1-39.

Veenhoven, R. (2009). The international scale interval study: Improving the comparability of responses to survey questions about happiness. In V. Møller & V. Huschka (Eds), *Quality of life and the millennium challenge* (pp. 45-58). Dordrecht, The Netherlands: Springer.

Veenhoven, R. (2010). Capability and happiness: Conceptual difference and reality links. *The Journal of Socio-Economics*, *39*(3), 344-350.

Verme, P. (2009). Happiness, freedom and control. *Journal of Economic Behavior & Organization*, *71*(2), 146-161.

Voland, E. (2009). *Evaluating the Evolutionary Status of Religiosity and Religiousness*. In E. Voland & W. Schiefenhövel (Eds.), *The Biological Evolution of Religious Mind and Behavior* (pp. 9-24). Dordrecht, The Netherlands: Springer.

Voukelatou, V., Gabrielli, L., Miliou, I., Cresci, S., Sharma, R., Tesconi, M., & Pappalardo, L. (2021). Measuring objective and subjective well-being: dimensions and data sources. *International Journal of Data Science and Analytics*, *11*(4), 279-309.

Wang, C. H., Weng, D. L. C., Barnstead, L., & DuMond, G. (2018). Disrespect for human rights and contentious participation: Evidence from China. *Journal of Chinese Political Science*, *23*(4), 537-561.

Wang, S. I. (2007). Political use of the Internet, political attitudes and political participation. *Asian Journal of Communication*, *17*(4), 381-395.

Ward, G. (2015). Is happiness a predictor of election results? Retrieved from https://cep.lse.ac.uk/pubs/download/dp1343.pdf

Ward, G. (2020). Happiness and voting: Evidence from four decades of elections in Europe. *American Journal of Political Science*, *64*(3), 504-518.

Ward, S. J., & King, L. A. (2019). Exploring the place of financial status in the good life: Income and meaning in life. *The Journal of Positive Psychology*, *14*(3), 312-323.

Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, *64*(4), 678-691.

Watson, P. J., Milliron, J. T., Morris, R. J., & Hood Jr, R. W. (1995). Religion and the self as text: Toward a Christian translation of self-actualization. *Journal of Psychology and Theology*, *23*(3), 180-189.

Weimann, J., Knabe, A., & Schöb, R. (2015). *Measuring happiness: The economics of well-being*. London, England: Mit Press.

Welsh, B. (2013). Malaysia's elections: A step backward. *Journal of Democracy*, *24*(4), 136-150.

Węziak-Białowolska, D. (2016). Quality of life in cities–Empirical evidence in comparative European perspective. *Cities*, *58*, 87-96.

Whitehead, R., Bates, G., Elphinstone, B., Yang, Y., & Murray, G. (2018). Letting go of self: The creation of the nonattachment to self-scale. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2018.02544/full?report=reader

Wilcox, W. B., & Nock, S. L. (2006). What's love got to do with it? Equality, equity, commitment and women's marital quality. *Social Forces*, *84*(3), 1321-1345.

Wilkinson, H., & Mulgan, G. (1995). *Freedom's children: work, relationships and politics for 18–34 year olds in Britain today*. London: DEMOS.

Willnat, L., Wong, W. J., Tamam, E., & Aw, A. (2013). Online media and political participation: The case of Malaysia. *Mass Communication and Society*, *16*(4), 557-585.

Wilson, A. (2020). Why did Malaysia's Prime Minister just resign? Retrieved from https://foreignpolicy.com/2020/02/25/malaysia-prime-minister-mahathir-mohamad-resign-politics-anwar-ibrahim-kuala-lumpur/

Winkelmann, L., & Winkelmann, R. (1995). Happiness and unemployment: A panel data analysis for Germany. *Konjunkturpolitik-Applied Economics Quarterly, 41,* 293-307.

Witvliet, C. V., Richie, F. J., Root Luna, L. M., & Van Tongeren, D. R. (2019). Gratitude predicts hope and happiness: A two-study assessment of traits and states. *The Journal of Positive Psychology*, *14*(3), 271-282.

Wolfsfeld, G., Yarchi, M., & Samuel-Azran, T. (2016). Political information repertoires and political participation. *New Media & Society*, *18*(9), 2096-2115.

Wong, C. H. (2005). The federal and state elections in Malaysia, March 2004. *Electoral Studies*, *24*(2), 311-319.

Wood, A. M., Froh, J. J., & Geraghty, A. W. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review*, *30*(7), 890-905.

Woon, C. Y. (2018). Internet spaces and the (re) making of democratic politics: The case of Singapore's 2011 General Election. *GeoJournal*, *83*(5), 1133-1150.

World Bank. (2019). Malaysia economic monitor June 2019: Re-energizing the public service. Retrieved from https://www.worldbank.org/en/country/malaysia/publication/malaysia-economic-monitor-june-2019-re-energizing-the-public-service

World Bank. (2020). World Development Indicator. Retrieved from https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?view=map

WVS. (2014). *6th Wave Questionnaires, Malaysia*. Retrieved from https://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp

Xia, C., & Shen, F. (2018). Political participation in Hong Kong: The roles of news media and online alternative media. *International Journal of Communication*, *12*, 1569-1590.

Yahaya, N., Abdullah, S. S., Momtaz, Y. A., & Hamid, T. A. (2010). Quality of life of older Malaysians living alone. *Educational Gerontology*, *36*(10-11), 893-906.

Yahaya, N., Momtaz, Y. A., Othman, M., Sulaiman, N., & Mat, F. (2012). Spiritual well-being and mental health among Malaysian adolescents. *Life Science Journal*, *9*(1), 440-448.

Yan, J., & Sorenson, R. (2006). The effect of Confucian values on succession in family business. *Family Business Review*, *19*(3), 235-250.

Yap, C. C., Mohamad Som, R. B., Sum, X. Y., Tan, S. A., & Yee, K. W. (2021). Association Between Self-Esteem and Happiness Among Adolescents in Malaysia: The Mediating Role of Motivation. *Psychological Reports*, 00332941211005124.

Yu, C. H., Trier, H., & Slama, M. (2019). A data mining and data visualization approach to examine the interrelationships between life satisfaction, secularization and religiosity. *Journal of Religion and Health*, *58*(1), 271-288.

Yusof, S. A. (2019). Ethnic disparity in financial fragility in Malaysia. *International Journal of Social Economics, 46* (1), 31-46.

Zaller, J. R. (1987). Diffusion of political attitudes. *Journal of Personality and Social Psychology*, *53*(5), 821.

Zhong, Y., & Chen, J. (2002). To vote or not to vote: An analysis of peasants' participation in Chinese village elections. *Comparative Political Studies*, *35*(6), 686-712.

Appendix A: The Figure Showing the Average Life Satisfaction (Malaysia) Based on the WVS by 2012 World Happiness Report

Figure 2.6 Average Life Satisfaction by Country - Part 1
(WVS wave 4-5 & EVS wave 3-4)
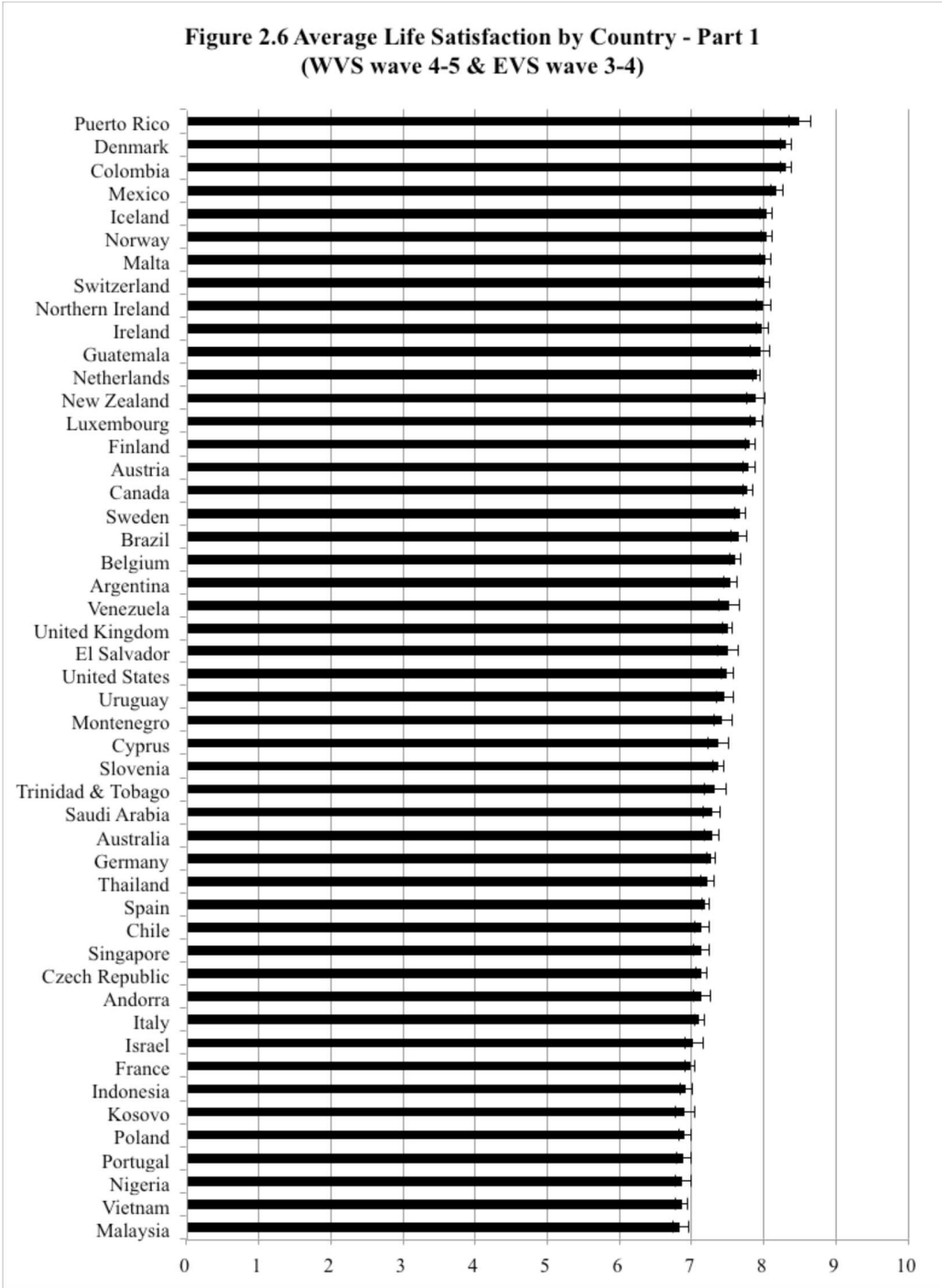
Source: 2012 World Happiness Report

Appendix B: The Figure Showing the Average Life Satisfaction (Malaysia) Based on the GWP by 2012 World Happiness Report

Figure 2.5 Average Life Satisfaction by Country - Part 1 (GWP 07-10)
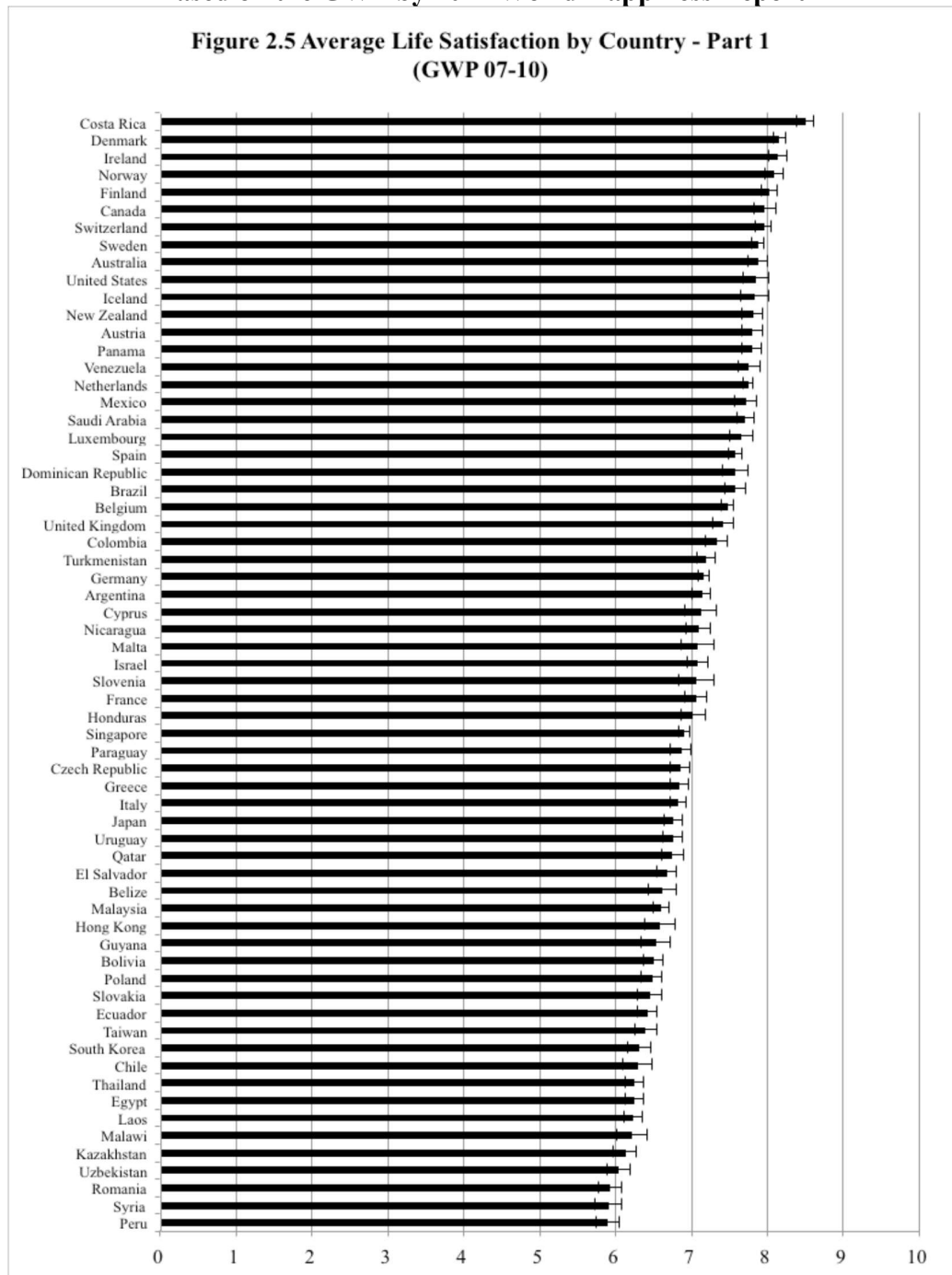
Source: 2012 World Happiness Report

Appendix C: OLS estimates for *HA* (with *AGE* and *AGE squared*)

VARIABLES	(1)	(2)	(3)	(4)	(5)
Maslow Hierarchical of needs					
BASIC	0.032**	0.018	0.019	0.021	0.025*
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Safety needs:					
NEIGHBORHOOD		0.121***	0.118***	0.109***	0.108***
		(0.022)	(0.022)	(0.022)	(0.022)
FINANCIAL		0.033***	0.033***	0.030***	0.030***
SATISFACTION		(0.008)	(0.008)	(0.008)	(0.008)
BELONG			0.038**	0.028*	0.034**
			(0.015)	(0.015)	(0.015)
Esteem needs:					
PROUD				0.058*	0.060**
				(0.030)	(0.030)
FREEDOM				0.008	0.007
				(0.009)	(0.009)
RESPECT				0.077***	0.081***
				(0.021)	(0.021)
ACTUALIZATION					0.038***
					(0.015)
Control variables					
HEALTH	0.265***	0.240***	0.235***	0.231***	0.231***
SATISFACTION	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
INCOME	0.049***	0.037***	0.035***	0.033***	0.032***
	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)
GOD	0.037***	0.033***	0.028***	0.025***	0.027***
	(0.009)	(0.009)	(0.009)	(0.010)	(0.010)
DEMOCRATIC	0.034***	0.024***	0.022***	0.015*	0.015*
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
AGE	**-0.001**	**-0.003**	**-0.005**	**-0.005**	**-0.005**
	(0.007)	**(0.007)**	**(0.007)**	**(0.007)**	**(0.007)**
AGE squared	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
PAIDJOB	0.006	0.016	0.024	0.019	0.012
	(0.038)	(0.037)	(0.037)	(0.037)	(0.037)
EDUCATION	-0.008	-0.007	-0.007	-0.005	-0.004
	(0.009)	(0.009)	(0.008)	(0.008)	(0.008)
MUSLIM	0.050	0.045	0.043	0.046	0.046
	(0.036)	(0.035)	(0.035)	(0.035)	(0.035)
HINDU	0.081	0.064	0.057	0.043	0.046
	(0.060)	(0.059)	(0.059)	(0.059)	(0.059)
MARRIED	-0.000	-0.008	-0.006	-0.005	-0.002
	(0.044)	(0.043)	(0.043)	(0.043)	(0.043)
KID	0.006	0.006	0.006	0.008	0.008
	(0.010)	(0.010)	(0.010)	(0.010)	(0.009)
CONSTANT	1.799***	1.507***	1.622***	1.274***	1.262***
	(0.179)	(0.182)	(0.187)	(0.214)	(0.214)
Observations	1,209	1,209	1,209	1,209	1,209
Adj. R^2	0.199	0.229	0.232	0.241	0.245

Note:

The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$

Appendix D: OLS estimates for *LS* (with *AGE* and *AGE squared*)

VARIABLES	(1)	(2)	(3)	(4)	(5)
Maslow Hierarchical of needs					
BASIC	0.007	0.007	0.007	0.008	0.009
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Safety needs:					
NEIGHBORHOOD		-0.021	-0.021	-0.027	-0.027
		(0.016)	(0.016)	(0.016)	(0.016)
FINANCIAL		0.038***	0.038***	0.033***	0.033***
SATISFACTION		(0.006)	(0.006)	(0.006)	(0.006)
BELONG			-0.000	-0.005	-0.005
			(0.011)	(0.011)	(0.011)
Esteem needs:					
PROUD				0.000	0.000
				(0.022)	(0.022)
FREEDOM				0.023***	0.023***
				(0.007)	(0.007)
RESPECT				0.035**	0.036**
				(0.016)	(0.016)
ACTUALIZATION					0.005
					(0.011)
Control variables					
HEALTH	0.057***	0.039**	0.039**	0.034**	0.034**
SATISFACTION	(0.015)	(0.015)	(0.016)	(0.016)	(0.016)
INCOME	0.038***	0.027***	0.027***	0.026***	0.026***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
GOD	0.010	0.013*	0.013*	0.010	0.011
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
DEMOCRATIC	0.019***	0.015***	0.015***	0.010	0.010
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
AGE	**0.004**	**0.001**	**0.001**	**0.001**	**0.000**
	(0.005)	**(0.005)**	**(0.005)**	**(0.005)**	**(0.005)**
AGE squared	**-0.000**	**-0.000**	**-0.000**	**-0.000**	**-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
PAIDJOB	0.005	0.005	0.005	-0.004	-0.005
	(0.028)	(0.027)	(0.027)	(0.027)	(0.027)
EDUCATION	0.017***	0.016***	0.016***	0.016**	0.016**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
MUSLIM	-0.033	-0.031	-0.031	-0.033	-0.033
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)
HINDU	-0.050	-0.049	-0.049	-0.060	-0.059
	(0.044)	(0.043)	(0.043)	(0.043)	(0.043)
MARRIED	-0.010	-0.025	-0.025	-0.022	-0.021
	(0.032)	(0.031)	(0.032)	(0.031)	(0.031)
KID	0.012	0.014*	0.014*	0.014**	0.014**
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
CONSTANT	0.014	0.027	0.026	-0.092	-0.094
	(0.130)	(0.133)	(0.137)	(0.157)	(0.157)
Observations	1,209	1,209	1,209	1,209	1,209
Adj. R^2	0.071	0.104	0.103	0.114	0.113

Note:
The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$

Appendix E: Ordered logit Estimates on *HA*

VARIABLES	(1)	(2)	(3)	(4)	**(5)**
Maslow Hierarchical of needs					
BASIC	0.031**	0.016	0.017	0.020	**0.025**
	(0.015)	(0.015)	(0.015)	(0.015)	**(0.016)**
Safety needs:					
NEIGHBORHOOD		0.135***	0.130***	0.123***	**0.122***
		(0.024)	(0.024)	(0.025)	**(0.025)**
FINANCIAL		0.035***	0.036***	0.033***	**0.033***
SATISFACTION		(0.009)	(0.009)	(0.009)	**(0.009)**
BELONG			0.042**	0.032*	**0.040**
			(0.016)	(0.017)	**(0.017)**
Esteem needs:					
PROUD				0.062*	**0.065**
				(0.032)	**(0.032)**
FREEDOM				0.008	**0.006**
				(0.010)	**(0.010)**
RESPECT				0.085***	**0.090***
				(0.024)	**(0.024)**
ACTUALIZATION					**0.046***
					(0.016)
Control variables					
HEALTH	0.266***	0.248***	0.242***	0.241***	**0.242***
SATISFACTION	(0.024)	(0.024)	(0.024)	(0.024)	**(0.024)**
INCOME	0.050***	0.038***	0.036***	0.033***	**0.031***
	(0.009)	(0.009)	(0.009)	(0.009)	**(0.009)**
GOD	0.036***	0.033***	0.028***	0.025**	**0.027***
	(0.010)	(0.010)	(0.010)	(0.010)	**(0.010)**
DEMOCRATIC	0.035***	0.027***	0.025***	0.017*	**0.017*
	(0.008)	(0.009)	(0.009)	(0.009)	**(0.009)**
LAGE	-0.444	-0.383	-0.460	-0.602	**-0.656**
	(0.921)	(0.930)	(0.934)	(0.941)	**(0.944)**
LAGE squared	0.067	0.055	0.065	0.086	**0.094**
	(0.129)	(0.130)	(0.131)	(0.132)	**(0.132)**
PAIDJOB	0.004	0.015	0.023	0.019	**0.010**
	(0.040)	(0.041)	(0.041)	(0.041)	**(0.041)**
EDUCATION	-0.010	-0.009	-0.009	-0.007	**-0.007**
	(0.009)	(0.009)	(0.009)	(0.009)	**(0.009)**
MUSLIM	0.052	0.045	0.044	0.049	**0.049**
	(0.037)	(0.038)	(0.038)	(0.038)	**(0.038)**
HINDU	0.085	0.078	0.070	0.060	**0.066**
	(0.060)	(0.061)	(0.062)	(0.063)	**(0.063)**
MARRIED	-0.009	-0.020	-0.017	-0.012	**-0.007**
	(0.045)	(0.046)	(0.046)	(0.046)	**(0.046)**
KID	0.006	0.006	0.006	0.007	**0.007**
	(0.010)	(0.010)	(0.010)	(0.010)	**(0.010)**
N	1,209	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.137	0.161	0.165	0.173	**0.178**
Approximate LR test	11.56	12.65	12.37	14.23	**18.32**

Notes:

The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Approximate LR test shows that the parallel assumption is met.

Appendix F: OLS estimates for *HA*

VARIABLES	(1)	(2)	(3)	(4)	(5)
Maslow Hierarchical of needs					
BASIC	0.032**	0.017	0.018	0.021	**0.024**
	(0.015)	(0.015)	(0.015)	(0.015)	**(0.015)**
Safety needs:					
NEIGHBORHOOD		0.121***	0.117***	0.109***	**0.108*****
		(0.022)	(0.022)	(0.022)	**(0.022)**
FINANCIAL		0.032***	0.033***	0.030***	**0.030*** **
SATISFACTION		(0.008)	(0.008)	(0.008)	**(0.008)**
BELONG			0.038**	0.028*	**0.034** **
			(0.015)	(0.015)	**(0.015)**
Esteem needs:					
PROUD				0.059*	**0.060** **
				(0.030)	**(0.030)**
FREEDOM				0.008	**0.007**
				(0.009)	**(0.009)**
RESPECT				0.077***	**0.081*** **
				(0.021)	**(0.021)**
ACTUALIZATION					**0.038*** **
					(0.015)
Control variables					
HEALTH	0.265***	0.240***	0.235***	0.231***	**0.231*** **
SATISFACTION	(0.021)	(0.021)	(0.021)	(0.021)	**(0.021)**
INCOME	0.049***	0.037***	0.035***	0.033***	**0.032*** **
	(0.008)	(0.009)	(0.009)	(0.009)	**(0.009)**
GOD	0.037***	0.033***	0.028***	0.025***	**0.026*** **
	(0.009)	(0.009)	(0.009)	(0.010)	**(0.010)**
DEMOCRATIC	0.034***	0.024***	0.022***	0.015*	**0.015* **
	(0.008)	(0.008)	(0.008)	(0.008)	**(0.008)**
LAGE	-0.369	-0.354	-0.425	-0.533	**-0.558**
	(0.885)	(0.869)	(0.868)	(0.863)	**(0.861)**
LAGE squared	0.056	0.051	0.060	0.076	**0.080**
	(0.124)	(0.121)	(0.121)	(0.121)	**(0.120)**
PAIDJOB	0.006	0.013	0.021	0.017	**0.010**
	(0.038)	(0.037)	(0.037)	(0.037)	**(0.037)**
EDUCATION	-0.008	-0.007	-0.007	-0.005	**-0.004**
	(0.009)	(0.009)	(0.009)	(0.009)	**(0.008)**
MUSLIM	0.050	0.045	0.044	0.047	**0.046**
	(0.036)	(0.035)	(0.035)	(0.035)	**(0.035)**
HINDU	0.081	0.065	0.057	0.043	**0.046**
	(0.060)	(0.059)	(0.059)	(0.059)	**(0.059)**
MARRIED	-0.003	-0.011	-0.010	-0.007	**-0.004**
	(0.044)	(0.044)	(0.043)	(0.043)	**(0.043)**
KID	0.006	0.006	0.006	0.007	**0.008**
	(0.010)	(0.010)	(0.010)	(0.010)	**(0.009)**
CONSTANT	2.386	2.059	2.292	2.122	**2.148**
	(1.551)	(1.525)	(1.525)	(1.519)	**(1.515)**
Observations	1,209	1,209	1,209	1,209	**1,209**
Adj. R^2	0.199	0.228	0.232	0.241	**0.245**

Note:
The asterisk (*) represents the significant level: * p < 0.10, ** p < 0.05, and *** p < 0.10

Appendix G: Logit Estimates on *LS*

VARIABLES	(1)	(2)	(3)	(4)	(5)
Maslow Hierarchical of needs					
BASIC	0.005	0.004	0.004	0.006	**0.006**
	(0.010)	(0.010)	(0.010)	(0.010)	**(0.010)**
Safety needs:					
NEIGHBORHOOD		-0.016	-0.015	-0.022	**-0.022**
		(0.016)	(0.016)	(0.016)	**(0.016)**
FINANCIAL		0.034***	0.034***	0.030***	**0.030***
SATISFACTION		(0.005)	(0.005)	(0.005)	**(0.005)**
BELONG			-0.001	-0.005	**-0.004**
			(0.011)	(0.011)	**(0.011)**
Esteem needs:					
PROUD				0.005	**0.005**
				(0.020)	**(0.020)**
FREEDOM				0.018***	**0.018***
				(0.006)	**(0.006)**
RESPECT				0.034***	**0.034**
				(0.015)	**(0.015)**
ACTUALIZATION					**0.004**
					(0.010)
Control variables					
HEALTH	0.051***	0.034**	0.034**	0.030**	**0.030**
SATISFACTION	(0.015)	(0.014)	(0.014)	(0.014)	**(0.014)**
INCOME	0.033***	0.022***	0.023***	0.022***	**0.022***
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
GOD	0.010	0.013**	0.013**	0.011*	**0.011***
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
DEMOCRATIC	0.017***	0.014***	0.015***	0.010*	**0.009***
	(0.005)	(0.005)	(0.005)	(0.005)	**(0.005)**
LAGE	-0.401	-0.572	-0.569	-0.707	**-0.714**
	(0.615)	(0.595)	(0.595)	(0.592)	**(0.593)**
LAGE squared	0.059	0.081	0.081	0.100	**0.100**
	(0.086)	(0.083)	(0.083)	(0.083)	**(0.083)**
PAIDJOB	0.019	0.013	0.012	0.007	**0.007**
	(0.028)	(0.027)	(0.027)	(0.026)	**(0.026)**
EDUCATION	0.017***	0.016***	0.016***	0.016***	**0.016***
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
MUSLIM	-0.032	-0.028	-0.028	-0.031	**-0.031**
	(0.025)	(0.024)	(0.024)	(0.024)	**(0.024)**
HINDU	-0.057	-0.053	-0.052	-0.064	**-0.064**
	(0.052)	(0.050)	(0.050)	(0.052)	**(0.052)**
MARRIED	-0.001	-0.016	-0.016	-0.010	**-0.010**
	(0.030)	(0.028)	(0.028)	(0.028)	**(0.028)**
KID	0.011	0.013*	0.013*	0.013**	**0.013***
	(0.007)	(0.007)	(0.007)	(0.007)	**(0.007)**
N	1,209	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.084	0.123	0.123	0.136	**0.136**

Notes:

The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data.

Appendix H: OLS estimates for *LS*

VARIABLES	(1)	(2)	(3)	(4)	(5)
Maslow Hierarchical of needs					
BASIC	0.007	0.007	0.007	0.009	**0.009**
	(0.011)	(0.011)	(0.011)	(0.011)	**(0.011)**
Safety needs:					
NEIGHBORHOOD		-0.021	-0.021	-0.027*	**-0.027***
		(0.016)	(0.016)	(0.016)	**(0.016)**
FINANCIAL		0.039***	0.039***	0.034***	**0.034***
SATISFACTION		(0.006)	(0.006)	(0.006)	**(0.006)**
BELONG			0.000	-0.005	**-0.004**
			(0.011)	(0.011)	**(0.011)**
Esteem needs:					
PROUD				-0.000	**0.000**
				(0.022)	**(0.022)**
FREEDOM				0.023***	**0.023***
				(0.007)	**(0.007)**
RESPECT				0.036**	**0.036**
				(0.016)	**(0.016)**
ACTUALIZATION					**0.005**
					(0.011)
Control variables					
HEALTH	0.057***	0.039**	0.039**	0.034**	**0.034**
SATISFACTION	(0.015)	(0.015)	(0.016)	(0.016)	**(0.016)**
INCOME	0.038***	0.026***	0.026***	0.026***	**0.026***
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
GOD	0.011	0.013*	0.013*	0.011	**0.011**
	(0.007)	(0.007)	(0.007)	(0.007)	**(0.007)**
DEMOCRATIC	0.019***	0.015***	0.015***	0.009	**0.009**
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
LAGE	-0.368	-0.527	-0.527	-0.633	**-0.636**
	(0.646)	(0.635)	(0.635)	(0.632)	**(0.633)**
LAGE squared	0.053	0.073	0.073	0.088	**0.088**
	(0.090)	(0.089)	(0.089)	(0.088)	**(0.088)**
PAIDJOB	0.016	0.014	0.014	0.006	**0.005**
	(0.028)	(0.027)	(0.027)	(0.027)	**(0.027)**
EDUCATION	0.018***	0.017***	0.017***	0.017***	**0.017***
	(0.006)	(0.006)	(0.006)	(0.006)	**(0.006)**
MUSLIM	-0.035	-0.032	-0.032	-0.034	**-0.034**
	(0.026)	(0.026)	(0.026)	(0.026)	**(0.026)**
HINDU	-0.051	-0.049	-0.049	-0.060	**-0.060**
	(0.044)	(0.043)	(0.043)	(0.043)	**(0.043)**
MARRIED	0.003	-0.013	-0.013	-0.009	**-0.008**
	(0.032)	(0.032)	(0.032)	(0.032)	**(0.032)**
KID	0.012	0.014*	0.014*	0.014**	**0.014**
	(0.007)	(0.007)	(0.007)	(0.007)	**(0.007)**
CONSTANT	0.695	0.965	0.966	1.027	**1.030**
	(1.132)	(1.114)	(1.117)	(1.113)	**(1.113)**
Observations	1,209	1,209	1,209	1,209	**1,209**
Adj. R^2	0.071	0.105	0.103	0.114	**0.114**

Note:
The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$

Appendix I: Ordered Logit Estimates for the Moderation Effects of *GOD* on *HA* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	(4)
B40	-0.098**	0.156	-0.081*	**0.335***
	(0.042)	(0.157)	(0.043)	**(0.125)**
T20	0.039	-0.544	0.041	**-0.486**
	(0.094)	(0.198)	(0.094)	**(0.301)**
ACTUALIZATION	0.046***	0.050***	0.247***	**0.336***
	(0.016)	(0.016)	(0.091)	**(0.097)**
GOD	0.028***	0.037***	0.029***	**0.045***
	(0.010)	(0.012)	(0.010)	**(0.012)**
B40 X *GOD*		-0.029		**-0.053**
		(0.020)		**(0.021)**
T20 X *GOD*		0.085		**0.068**
		(0.074)		**(0.071)**
ACTUALIZATION X *GOD*			-0.022**	**-0.031***
			(0.010)	**(0.010)**
BASIC	0.028*	0.027*	0.030**	**0.029**
	(0.015)	(0.015)	(0.016)	**(0.016)**
NEIGHBORHOOD	0.123***	0.122***	0.125***	**0.123***
	(0.025)	(0.025)	(0.025)	**(0.025)**
FINANCIAL SATISFACTION	0.037***	0.037***	0.037***	**0.037***
	(0.009)	(0.009)	(0.009)	**(0.009)**
BELONG	0.043**	0.042**	0.044***	**0.042**
	(0.017)	(0.017)	(0.017)	**(0.017)**
PROUD	0.066**	0.068**	0.075**	**0.081**
	(0.032)	(0.032)	(0.032)	**(0.032)**
FREEDOM	0.006	0.005	0.006	**0.006**
	(0.010)	(0.010)	(0.010)	**(0.0100)**
RESPECT	0.093***	0.096***	0.091***	**0.096***
	(0.024)	(0.023)	(0.024)	**(0.024)**
HEALTH SATISFACTION	0.244***	0.244***	0.247***	**0.249***
	(0.024)	(0.024)	(0.024)	**(0.024)**
DEMOCRATIC	0.019**	0.017*	0.020**	**0.018***
	(0.009)	(0.009)	(0.009)	**(0.009)**
EDUCATION	-0.006	-0.007	-0.005	**-0.006**
	(0.009)	(0.009)	(0.009)	**(0.009)**
MARRIED	-0.006	-0.005	-0.003	**-0.002**
	(0.047)	(0.046)	(0.046)	**(0.047)**
KID	0.007	0.007	0.007	**0.008**
	(0.010)	(0.010)	(0.010)	**(0.010)**
N	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.175	0.177	0.177	**0.182**
Approximate LR test	22.65	25.49	25.65	**27.72**

Notes:

The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested.

Appendix J: OLS Estimates for the Moderating Effects of *GOD* on *HA* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	(4)
B40	-0.103***	0.149	-0.084**	**0.381****
	(0.039)	(0.179)	(0.040)	**(0.192)**
T20	0.031	-0.588	0.036	**-0.463**
	(0.082)	(0.628)	(0.082)	**(0.627)**
ACTUALIZATION	0.040***	0.043***	0.260***	**0.339****
	(0.015)	(0.015)	(0.086)	**(0.092)**
GOD	0.029***	0.036***	0.029***	**0.043****
	(0.010)	(0.011)	(0.010)	**(0.012)**
B40 X *GOD*		-0.028		**-0.051****
		(0.019)		**(0.021)**
T20 X *GOD*		0.066		**0.053**
		(0.066)		**(0.066)**
ACTUALIZATION X *GOD*			-0.024***	**-0.032****
			(0.009)	**(0.010)**
BASIC	0.028*	0.027*	0.030**	**0.029***
	(0.015)	(0.015)	(0.015)	**(0.015)**
NEIGHBORHOOD	0.110***	0.109***	0.112***	**0.111****
	(0.022)	(0.022)	(0.022)	**(0.022)**
FINANCIAL SATISFACTION	0.034***	0.034***	0.035***	**0.034****
	(0.008)	(0.008)	(0.008)	**(0.008)**
BELONG	0.036**	0.035**	0.036**	**0.035****
	(0.016)	(0.016)	(0.016)	**(0.016)**
PROUD	0.065**	0.066**	0.075**	**0.079****
	(0.030)	(0.030)	(0.030)	**(0.030)**
FREEDOM	0.009	0.007	0.011	**0.008**
	(0.011)	(0.011)	(0.011)	**(0.011)**
RESPECT	0.080***	0.083***	0.078***	**0.082****
	(0.021)	(0.021)	(0.021)	**(0.021)**
HEALTH SATISFACTION	0.235***	0.234***	0.237***	**0.237****
	(0.021)	(0.021)	(0.021)	**(0.021)**
DEMOCRATIC	0.017**	0.016*	0.018**	**0.016****
	(0.008)	(0.008)	(0.008)	**(0.008)**
EDUCATION	-0.004	-0.004	-0.004	**-0.004**
	(0.009)	(0.009)	(0.009)	**(0.008)**
MARRIED	-0.003	-0.002	0.000	**0.001**
	(0.043)	(0.043)	(0.043)	**(0.043)**
KID	0.007	0.007	0.007	**0.008**
	(0.010)	(0.010)	(0.010)	**(0.009)**
LAGE	-0.472	-0.507	-0.434	**-0.454**
	(0.865)	(0.866)	(0.864)	**(0.862)**
LAGE squarerd	0.070	0.074	0.064	**0.066**
	(0.121)	(0.121)	(0.121)	**(0.120)**
PAIDJOB	0.017	0.018	0.010	**0.010**
	(0.037)	(0.037)	(0.037)	**(0.037)**
MUSLIM	0.048	0.049	0.043	**0.043**
	(0.035)	(0.035)	(0.035)	**(0.035)**
HINDU	0.047	0.052	0.039	**0.042**
	(0.059)	(0.059)	(0.059)	**(0.059)**
Observations	1,209	1,209	1,209	**1,209**
Adj. R^2	0.254	0.242	0.244	**0.248**

Note:

The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$.

Appendix K: The Predicted Probability of Being Happy (*HA* = 2, 3, and 4) with and without Interaction Effects between *B40* and *GOD* by Ordered Logit Modelling
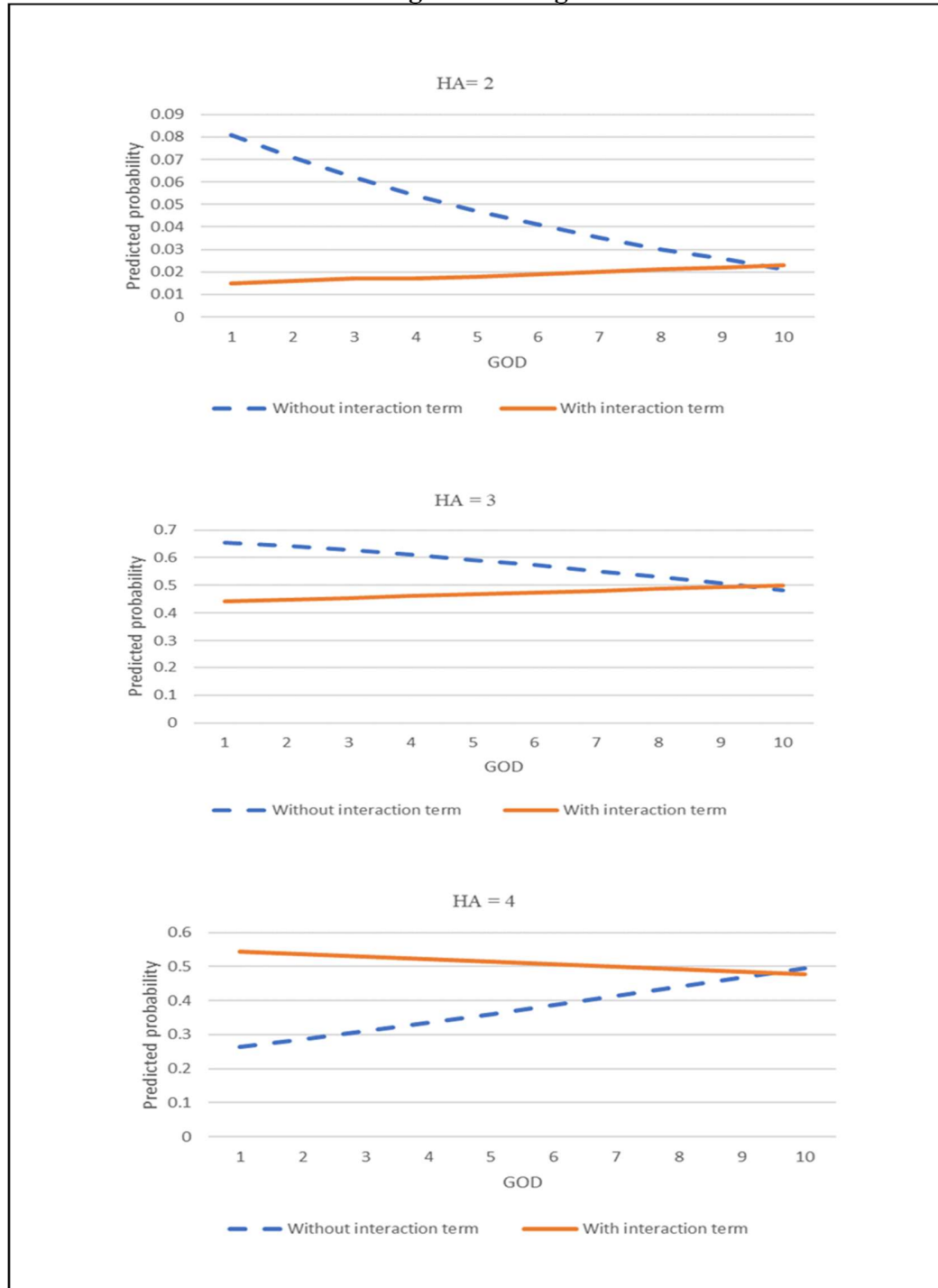
Note: The Predicted Probability is computed based on the results of Column (4) in Appendix I holding other independent variable at their average values and dummy variables as zero.

Appendix L: The Predicted Probability of Being Happy (*HA* = 2, 3, and 4) with and without Interaction Effects between *ACTUALIZATION* and *GOD* by the Ordered Logit Modelling
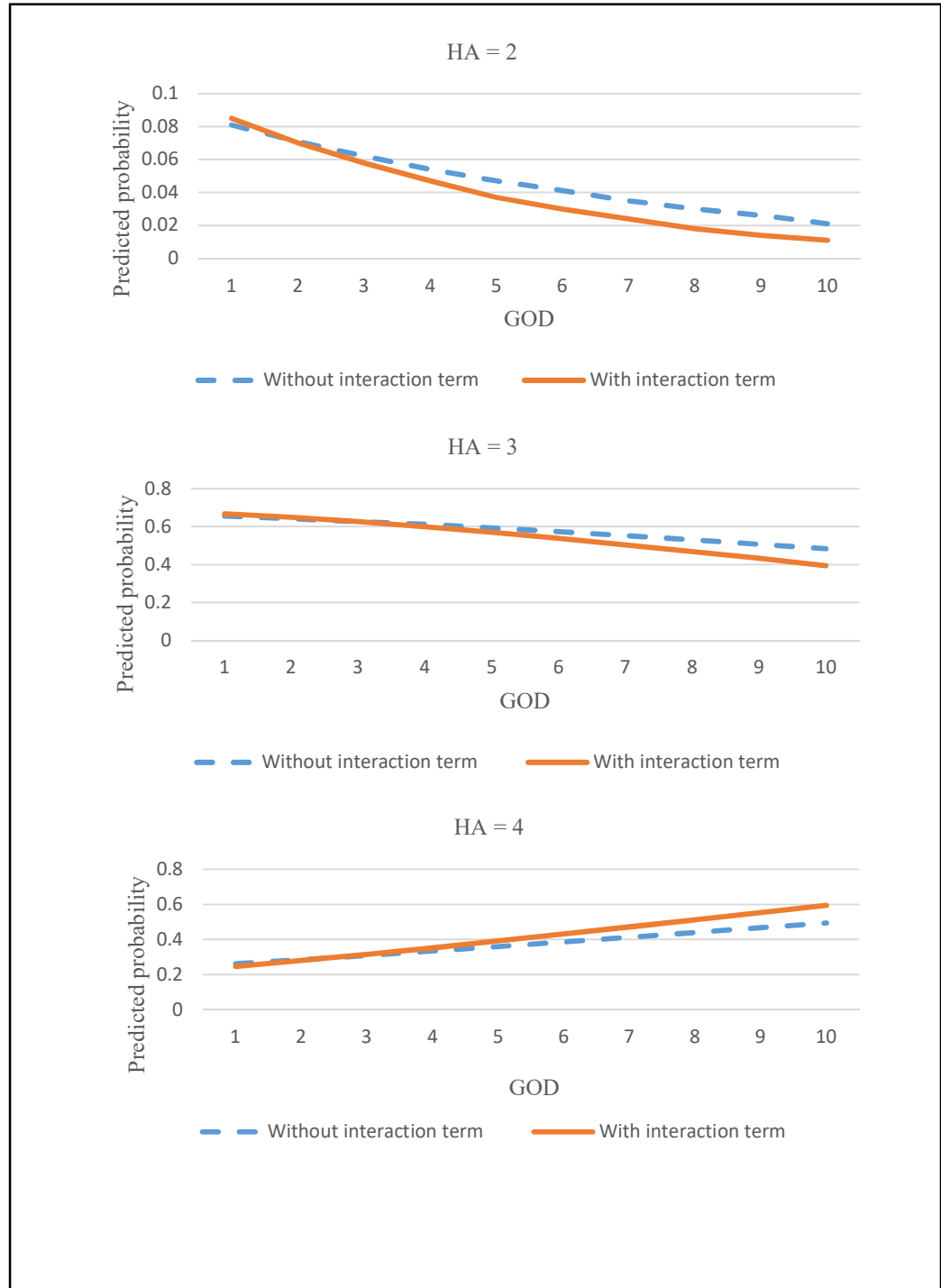
Note: The Predicted Probability is computed based on the results of Column (4) in Appendix I holding other independent variable at their average values and dummy variables as zero.

Appendix M: Ordered Logit Estimates for the Moderation Effects of
PRAYTIME* on *HA* through *B40* and *ACTUALIZATION

VARIABLES	(1)	(2)	(3)	(4)
B40	-0.113**	-0.063	-0.113***	**-0.080**
	(0.043)	(0.178)	(0.043)	**(0.184)**
T20	0.040	0.197	0.040	**0.198**
	(0.094)	(0.270)	(0.094)	**(0.270)**
ACTUALIZATION	0.042**	0.042**	0.021	**0.022**
	(0.016)	(0.016)	(0.054)	**(0.056)**
PRAYTIME	0.013	0.014	0.013	**0.013**
	(0.009)	(0.009)	(0.009)	**(0.009)**
B40 X *PRAYTIME*		-0.008		**-0.005**
		(0.027)		**(0.027)**
T20 X *PRAYTIME*		-0.030		**-0.030**
		(0.059)		**(0.059)**
ACTUALIZATION X *PRAYTIME*			0.004	**0.003**
			(0.008)	**(0.009)**
BASIC	0.028*	0.027*	0.027*	**0.027***
	(0.015)	(0.015)	(0.015)	**(0.015)**
NEIGHBORHOOD	0.126***	0.126***	0.126***	**0.126***
	(0.024)	(0.025)	(0.025)	**(0.025)**
FINANCIAL SATISFACTION	0.035***	0.035***	0.035***	**0.035***
	(0.009)	(0.009)	(0.009)	**(0.009)**
BELONG	0.050**	0.050**	0.049***	**0.050***
	(0.017)	(0.017)	(0.017)	**(0.017)**
PROUD	0.081**	0.081**	0.080**	**0.081***
	(0.031)	(0.031)	(0.031)	**(0.032)**
FREEDOM	0.009	0.009	0.009	**0.009**
	(0.010)	(0.010)	(0.010)	**(0.010)**
RESPECT	0.089***	0.089***	0.090***	**0.089***
	(0.024)	(0.024)	(0.024)	**(0.024)**
HEALTH SATISFACTION	0.242***	0.242***	0.241***	**0.241***
	(0.024)	(0.024)	(0.024)	**(0.024)**
DEMOCRATIC	0.019**	0.020**	0.019**	**0.020***
	(0.009)	(0.009)	(0.009)	**(0.009)**
EDUCATION	-0.005	-0.005	-0.005	**-0.005**
	(0.009)	(0.009)	(0.009)	**(0.009)**
MARRIED	-0.009	-0.008	-0.009	**-0.009**
	(0.046)	(0.046)	(0.046)	**(0.046)**
KID	0.009	0.009	0.009	**0.009**
	(0.010)	(0.010)	(0.010)	**(0.010)**
N	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.172	0.172	0.172	**0.172**
Approximate LR test	27.24	31.02	28.93	**32.14**

Notes:
The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested.

Appendix N: OLS Estimates for the Moderating Effects of *PRAYTIME* on *HA* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	(4)
B40	-0.111***	-0.075	-0.112***	**-0.097**
	(0.040)	(0.174)	(0.040)	**(0.178)**
T20	0.034	0.241	0.033	**0.238**
	(0.082)	(0.337)	(0.082)	**(0.337)**
ACTUALIZATION	0.037**	0.037**	0.004	**0.005**
	(0.015)	(0.015)	(0.052)	**(0.053)**
PRAYTIME	0.009	0.011	0.010	**0.011**
	(0.009)	(0.009)	(0.009)	**(0.009)**
B40 X *PRAYTIME*		-0.006		**-0.002**
		(0.027)		**(0.027)**
T20 X *PRAYTIME*		-0.033		**-0.033**
		(0.053)		**(0.053)**
ACTUALIZATION X			-0.005	**0.005**
PRAYTIME			(0.008)	**(0.008)**
BASIC	0.028*	0.027*	0.027*	**0.027***
	(0.015)	(0.015)	(0.015)	**(0.015)**
NEIGHBORHOOD	0.115***	0.115***	0.115***	**0.115***
	(0.022)	(0.022)	(0.022)	**(0.022)**
FINANCIAL	0.033***	0.033***	0.034***	**0.033***
SATISFACTION	(0.008)	(0.008)	(0.008)	**(0.008)**
BELONG	0.043***	0.043***	0.042***	**0.043***
	(0.015)	(0.016)	(0.015)	**(0.016)**
PROUD	0.081***	0.081***	0.080***	**0.081***
	(0.029)	(0.029)	(0.029)	**(0.029)**
FREEDOM	0.010	0.010	0.009	**0.009**
	(0.011)	(0.011)	(0.011)	**(0.011)**
RESPECT	0.078***	0.077***	0.078***	**0.078***
	(0.021)	(0.021)	(0.021)	**(0.021)**
HEALTH	0.234***	0.234***	0.233***	**0.233***
SATISAFCTION	(0.021)	(0.021)	(0.021)	**(0.021)**
DEMOCRATIC	0.018**	0.019**	0.018**	**0.018***
	(0.008)	(0.008)	(0.008)	**(0.008)**
EDUCATION	-0.003	-0.003	-0.003	**-0.003**
	(0.009)	(0.009)	(0.009)	**(0.009)**
MARRIED	-0.007	-0.006	-0.006	**-0.006**
	(0.043)	(0.043)	(0.043)	**(0.043)**
KID	0.009	0.009	0.009	**0.009**
	(0.010)	(0.010)	(0.010)	**(0.010)**
LAGE	-0.387	-0.386	-0.387	**-0.387**
	(0.868)	(0.868)	(0.868)	**(0.869)**
LAGE squared	0.057	0.057	0.057	**0.057**
	(0.121)	(0.121)	(0.121)	**(0.121)**
PAIDJOB	0.017	0.019	0.018	**0.019**
	(0.037)	(0.038)	(0.037)	**(0.038)**
MUSLIM	0.068*	0.068*	0.067*	**0.067***
	(0.036)	(0.036)	(0.036)	**(0.036)**
HINDU	0.058	0.057	0.057	**0.057**
	(0.060)	(0.060)	(0.060)	**(0.060)**
Observations	1,209	1,209	1,209	**1,209**
Adj. R^2	0.236	0.235	0.235	**0.234**

Note:

The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$.

Appendix O: Logit Estimates for the Moderation Effects of *GOD* on *LS* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	(4)
B40	-0.074**	-0.035	**-0.056****	0.091
	(0.030)	(0.121)	**(0.030)**	(0.078)
T20	0.025	-0.794	**0.029**	-0.769
	(0.065)	(0.239)	**(0.063)**	(0.296)
ACTUALIZATION	0.005	0.005	**0.162*****	0.192***
	(0.010)	(0.011)	**(0.056)**	(0.060)
GOD	0.012*	0.012	**0.011***	0.016*
	(0.006)	(0.007)	**(0.006)**	(0.008)
B40 X *GOD*		-0.004		-0.018
		(0.012)		(0.013)
T20 X *GOD*		0.064		0.060
		(0.045)		(0.044)
ACTUALIZATION X *GOD*			**-0.017*****	-0.020***
			(0.006)	(0.006)
BASIC	0.009	0.009	**0.010**	0.009
	(0.010)	(0.010)	**(0.010)**	(0.010)
NEIGHBORHOOD	-0.021	-0.022	**-0.020**	-0.020
	(0.016)	(0.016)	**(0.016)**	(0.016)
FINANCIAL SATISFACTION	0.032***	0.032***	**0.033*****	0.032***
	(0.005)	(0.005)	**(0.005)**	(0.005)
BELONG	-0.001	-0.002	**-0.000**	-0.002
	(0.011)	(0.011)	**(0.010)**	(0.011)
PROUD	0.006	0.006	**0.014**	0.017
	(0.020)	(0.020)	**(0.020)**	(0.020)
FREEDOM	0.018***	0.018***	**0.019*****	0.019***
	(0.006)	(0.006)	**(0.006)**	(0.006)
RESPECT	0.037**	0.037**	**0.035****	0.035**
	(0.015)	(0.015)	**(0.015)**	(0.015)
HEALTH SATISFACTION	0.033**	0.033**	**0.035****	0.035**
	(0.014)	(0.014)	**(0.014)**	(0.014)
DEMOCRATIC	0.010*	0.010*	**0.010***	0.010*
	(0.006)	(0.006)	**(0.005)**	(0.005)
EDUCATION	0.016	0.016***	**0.017*****	0.017***
	(0.006)	(0.006)	**(0.006)**	(0.006)
MARRIED	-0.008	-0.007	**-0.005**	-0.005
	(0.028)	(0.029)	**(0.029)**	(0.028)
KID	0.013**	0.013**	**0.013****	0.013**
	(0.007)	(0.007)	**(0.007)**	(0.007)
N	1,209	1,209	**1,209**	1,209
Pseudo R_2	0.130	0.132	**0.138**	0.141

Notes:

The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested.
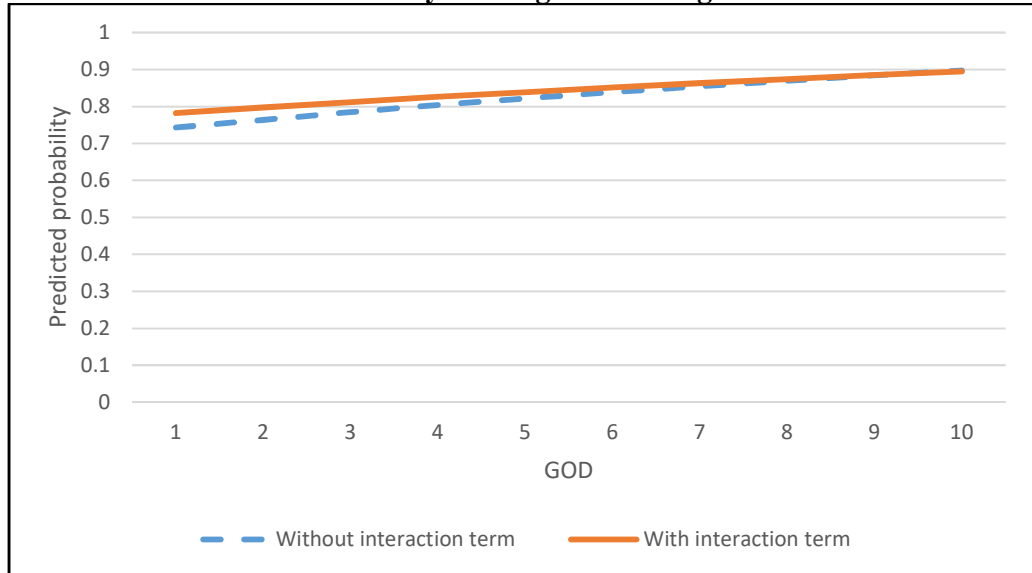
Appendix P: OLS Estimates for the Moderating Effects of *GOD* on *LS* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	**(3)**	(4)
B40	-0.091***	-0.082	**-0.074****	0.101
	(0.029)	(0.132)	**(0.029)**	(0.142)
T20	-0.011	-0.532	**-0.007**	-0.434
	(0.060)	(0.464)	**(0.060)**	(0.463)
ACTUALIZATION	0.008	0.008	**0.213****	0.241***
	(0.011)	(0.011)	**(0.063)**	(0.068)
GOD	0.014**	0.014	**0.014****	0.019**
	(0.007)	(0.008)	**(0.007)**	(0.009)
B40 X *GOD*		-0.001		-0.019
		(0.014)		(0.015)
T20 X *GOD*		0.056		0.046
		(0.049)		(0.049)
ACTUALIZATION X *GOD*			**-0.022****	-0.025***
			(0.007)	(0.007)
BASIC	0.012	0.012	**0.014**	0.013
	(0.011)	(0.011)	**(0.011)**	(0.011)
NEIGHBORHOOD	-0.024	-0.024	**-0.022**	-0.023
	(0.017)	(0.017)	**(0.016)**	(0.016)
FINANCIAL SATISFACTION	0.040***	0.040***	**0.041****	0.040***
	(0.006)	(0.006)	**(0.006)**	(0.006)
BELONG	-0.001	-0.001	**-0.001**	-0.001
	(0.012)	(0.012)	**(0.011)**	(0.011)
PROUD	0.012	0.013	**0.021**	0.023
	(0.022)	(0.022)	**(0.022)**	(0.022)
FREEDOM	0.005	0.004	**0.006**	0.005
	(0.008)	(0.008)	**(0.008)**	(0.008)
RESPECT	0.035**	0.036**	**0.033****	0.035**
	(0.016)	(0.016)	**(0.016)**	(0.016)
HEALTH SATISAFCTION	0.040**	0.040**	**0.042****	0.042***
	(0.016)	(0.016)	**(0.016)**	(0.016)
DEMOCRATIC	0.014**	0.014**	**0.015****	0.014**
	(0.006)	(0.006)	**(0.006)**	(0.006)
EDUCATION	0.019***	0.019***	**0.019****	0.019***
	(0.006)	(0.006)	**(0.006)**	(0.006)
MARRIED	-0.010	-0.009	**-0.007**	-0.006
	(0.032)	(0.032)	**(0.032)**	(0.032)
KID	0.014**	0.014**	**0.014****	0.014**
	(0.007)	(0.007)	**(0.007)**	(0.007)
LAGE	-0.511	-0.536	**-0.475**	-0.495
	(0.639)	(0.639)	**(0.636)**	(0.636)
LAGE squarerd	0.072	0.075	**0.067**	0.069
	(0.089)	(0.089)	**(0.089)**	(0.089)
PAIDJOB	0.015	0.015	**0.009**	0.009
	(0.028)	(0.028)	**(0.027)**	(0.027)
MUSLIM	-0.031	-0.030	**-0.034**	-0.034
	(0.026)	(0.026)	**(0.026)**	(0.026)
HINDU	-0.054	-0.052	**-0.062**	-0.059
	(0.043)	(0.044)	**(0.043)**	(0.043)
Observations	1,209	1,209	**1,209**	1,209
Adj. R^2	0.116	0.100	**0.108**	0.109

Note:

The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$.

Appendix Q: The Predicted Probability of Being Satisfied with Life (*LS* = 1 and 0) with and without Interaction Effects between *ACTUALIZATION* and *GOD* by the Logit Modelling

Note: The Predicted Probability is computed based on the modelling results of Column (3) in Appendix O holding other independent variable at their average values and dummy variables as zero.

Appendix R: Logit Estimates for the Moderation Effects of *PRAYTIME* on *LS* through *B40* and *ACTUALIZATION*

VARIABLES	(1)	(2)	(3)	**(4)**
B40	-0.072**	-0.269*	-0.067**	**-0.184**
	(0.031)	(0.167)	(0.030)	**(0.157)**
T20	0.027	-0.697***	0.027	**-0.722***
	(0.064)	(0.226)	(0.064)	**(0.201)**
ACTUALIZATION	0.004	0.003	0.085**	**0.081**
	(0.011)	(0.010)	(0.037)	**(0.038)**
PRAYTIME	-0.006	-0.011*	-0.008*	**-0.012*
	(0.006)	(0.007)	(0.006)	**(0.007)**
B40 X *PRAYTIME*		0.021		**0.014**
		(0.015)		**(0.016)**
T20 X *PRAYTIME*		0.079**		**0.082**
		(0.034)		**(0.034)**
ACTUALIZATION X *PRAYTIME*			-0.013**	**-0.013**
			(0.006)	**(0.006)**
BASIC	0.009	0.010	0.010	**0.011**
	(0.010)	(0.010)	(0.010)	**(0.010)**
NEIGHBORHOOD	-0.018	-0.018	-0.019	**-0.019**
	(0.016)	(0.016)	(0.016)	**(0.016)**
FINANCIAL SATISFACTION	0.032***	0.032***	0.032***	**0.032***
	(0.005)	(0.005)	(0.005)	**(0.005)**
BELONG	0.002	0.002	0.003	**0.002**
	(0.011)	(0.011)	(0.011)	**(0.011)**
PROUD	0.010	0.008	0.012	**0.009**
	(0.020)	(0.020)	(0.020)	**(0.020)**
FREEDOM	0.019***	0.019***	0.019***	**0.020***
	(0.006)	(0.006)	(0.006)	**(0.006)**
RESPECT	0.037**	0.038**	0.036**	**0.036**
	(0.015)	(0.015)	(0.015)	**(0.016)**
HEALTH SATISFACTION	0.032**	0.034**	0.035**	**0.037**
	(0.014)	(0.014)	(0.014)	**(0.014)**
DEMOCRATIC	0.010*	0.009*	0.010*	**0.010*
	(0.006)	(0.006)	(0.006)	**(0.005)**
EDUCATION	0.017***	0.017***	0.016***	**0.017***
	(0.006)	(0.006)	(0.006)	**(0.006)**
MARRIED	-0.007	-0.009	-0.009	**-0.010**
	(0.029)	(0.029)	(0.029)	**(0.029)**
KID	0.015**	0.014**	0.015**	**0.015**
	(0.007)	(0.007)	(0.007)	**(0.007)**
N	1,209	1,209	1,209	**1,209**
Pseudo R_2	0.127	0.133	0.132	**0.136**

Notes:
The table reports marginal effects and shows standard errors in parenthesis. The asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Insignificant approximate LR test shows that the parallel assumption is met. The insignificant control variables –*LAGE*, *LAGE squarerd*, *PAIDJOB*, *MUSLIM*, and *HINDU* are not reported in the table yet the evidence will be provided upon requested.

Appendix S: OLS Estimates for the Moderating Effects of *PRAYTIME* on *LS* through *B40* and *ACTUALIZATION*

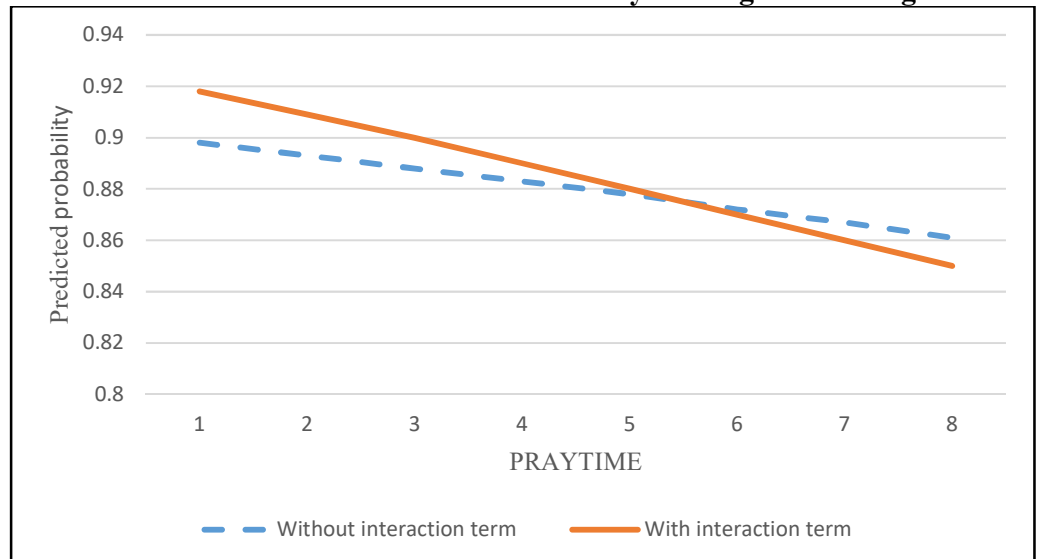| VARIABLES	(1)	(2)	(3)	(4)
B40	-0.089***	-0.261**	-0.085***	**-0.210**
	(0.029)	(0.128)	(0.029)	**(0.131)**
T20	-0.008	-0.428*	-0.006	**-0.422***
	(0.060)	(0.247)	(0.060)	**(0.247)**
ACTUALIZATION	0.007	0.006	0.086**	**0.078****
	(0.011)	(0.011)	(0.038)	**(0.039)**
PRAYTIME	-0.007	-0.011*	-0.008	**-0.012***
	(0.006)	(0.007)	(0.006)	**(0.007)**
B40 X PRAYTIME		0.027		**0.020**
		(0.020)		**(0.020)**
T20 X PRAYTIME		0.068*		**0.067***
		(0.039)		**(0.039)**
ACTUALIZATION X PRAYTIME			-0.013**	**-0.012***
			(0.006)	**(0.006)**
BASIC	0.013	0.014	0.014	**0.014**
	(0.011)	(0.011)	(0.011)	**(0.011)**
NEIGHBORHOOD	-0.019	-0.019	-0.019	**-0.019**
	(0.017)	(0.016)	(0.016)	**(0.016)**
FINANCIAL SATISFACTION	0.040***	0.040***	0.040***	**0.040****
	(0.006)	(0.006)	(0.006)	**(0.006)**
BELONG	0.003	0.002	0.003	**0.003**
	(0.011)	(0.011)	(0.011)	**(0.011)**
PROUD	0.019	0.018	0.021	**0.020**
	(0.022)	(0.022)	(0.022)	**(0.022)**
FREEDOM	0.005	0.006	0.006	**0.006**
	(0.008)	(0.008)	(0.008)	**(0.008)**
RESPECT	0.035**	0.037**	0.034**	**0.035****
	(0.016)	(0.016)	(0.016)	**(0.016)**
HEALTH SATISAFCTION	0.040**	0.041***	0.042***	**0.043****
	(0.016)	(0.016)	(0.016)	**(0.016)**
DEMOCRATIC	0.015**	0.014**	0.015**	**0.014****
	(0.006)	(0.006)	(0.006)	**(0.006)**
EDUCATION	0.019***	0.019***	0.019***	**0.019****
	(0.006)	(0.006)	(0.006)	**(0.006)**
MARRIED	-0.011	-0.013	-0.012	**-0.013**
	(0.032)	(0.032)	(0.032)	**(0.032)**
KID	0.016**	0.016**	0.016**	**0.016****
	(0.007)	(0.007)	(0.007)	**(0.007)**
LAGE	-0.447	-0.447	-0.446	**-0.447**
	(0.639)	(0.638)	(0.638)	**(0.638)**
LAGE squared	0.064	0.064	0.064	**0.064**
	(0.089)	(0.089)	(0.089)	**(0.089)**
PAIDJOB	0.016	0.011	0.014	**0.010**
	(0.028)	(0.028)	(0.028)	**(0.028)**
MUSLIM	-0.003	-0.005	-0.000	**-0.002**
	(0.026)	(0.026)	(0.026)	**(0.026)**
HINDU	-0.035	-0.033	-0.033	**-0.033**
	(0.044)	(0.044)	(0.044)	**(0.044)**
Observations	1,209	1,209	1,209	**1,209**
R-squared	0.114	0.118	0.118	**0.121**

Note:
The asterisk (*) represents the significant level: * p < 0.10, ** p < 0.05, and *** p < 0.10.

Appendix T: The Predicted Probability of Being Satisfied with Life Satisfaction (*LS* = 1 and 0) with and without Interaction Effects between *T20* and *PRAYTIME* by the Logit Modelling
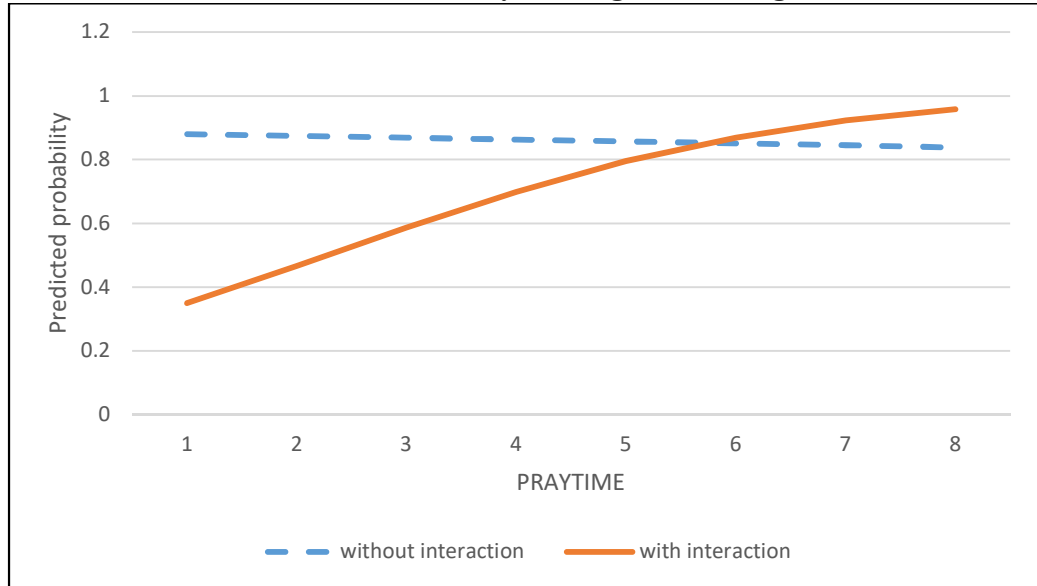
Note: The Predicted Probability is computed based on the results of Column (4) in Appendix R holding other independent variable at their average values and dummy variables as zero.

Appendix U: The Predicted Probability of Being Satisfied with Life Satisfaction (*LS* = 1 and 0) with and without Interaction Effects between *ACTUALIZATION* and *PRAYTIME* by the Logit Modelling

Note: The Predicted Probability is computed based on the modelling results of Column (4) in Appendix R holding other independent variable at their average values and dummy variables as zero.

Appendix V: Variance Inflation Factor (VIF) and Tolerance for the Regressors in *VOTING* Model

Variables	VIF	Tolerance
LIFE	1.03	0.969
DM	1.12	0.890
AGE	1.65	0.607
INTEREST	1.12	0.893
PARTY	1.15	0.866
FINANCE	1.01	0.991
MALAYSIAN	1.06	0.940
CHILD	1.44	0.696
EDUCATION	1.31	0.762
MALAY	1.10	0.905
BN	1.07	0.936

Appendix W: Tobit Estimates for *VOTING* Model

VARIABLES	(1)	(2)	(3)
LIFE	-0.006	-0.006	-0.024**
	(0.007)	(0.007)	(0.011)
DM		-0.050*	-0.253**
		(0.030)	(0.105)
LIFE X *DM*			0.028**
			(0.014)
AGE	0.056***	0.057***	0.057***
	(0.006)	(0.006)	(0.006)
AGE squared	-0.000***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)
INTEREST	0.041**	0.045***	0.045***
	(0.016)	(0.016)	(0.016)
PARTY	0.025	0.022	0.023
	(0.017)	(0.017)	(0.017)
FINANCE2	0.429***	0.433***	0.432***
	(0.094)	(0.094)	(0.094)
FINANCE3	0.275***	0.278***	0.281***
	(0.088)	(0.088)	(0.087)
FINANCE4	0.363***	0.365***	0.369***
	(0.087)	(0.087)	(0.087)
MALAYSIAN	0.029	0.027	0.027
	(0.023)	(0.023)	(0.023)
CHILD	0.115***	0.115***	0.116***
	(0.036)	(0.036)	(0.036)
LOWEDU	0.001	-0.010	-0.006
	(0.044)	(0.045)	(0.045)
MEDIUMEDU	0.014	0.012	0.011
	(0.034)	(0.034)	(0.034)
MALAY	0.026	0.025	0.024
	(0.028)	(0.028)	(0.028)
BN	0.033	0.033	0.033
	(0.027)	(0.027)	(0.027)
Constant	-1.308***	-1.269***	-1.152***
	(0.175)	(0.176)	(0.185)
Observations	1,196	1,196	1,196
Pseudo R^2	0.180	0.182	0.184

Notes:

Standard errors in parenthesis and the asterisk (*) represents the significant level: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.10$. Pseudo-R^2 measures the goodness of fit of model to the data. Column (1) reports the results with *LIFE* while Column (2) shows the results with *LIFE* and *DM*. Column (3) displays the estimates with the inclusion of an interaction term between *LIFE* and *DM*.

Appendix Y: The Predicted Probability of *VOTING* and *LIFE* with / without interaction of DM from the Tobit modelling
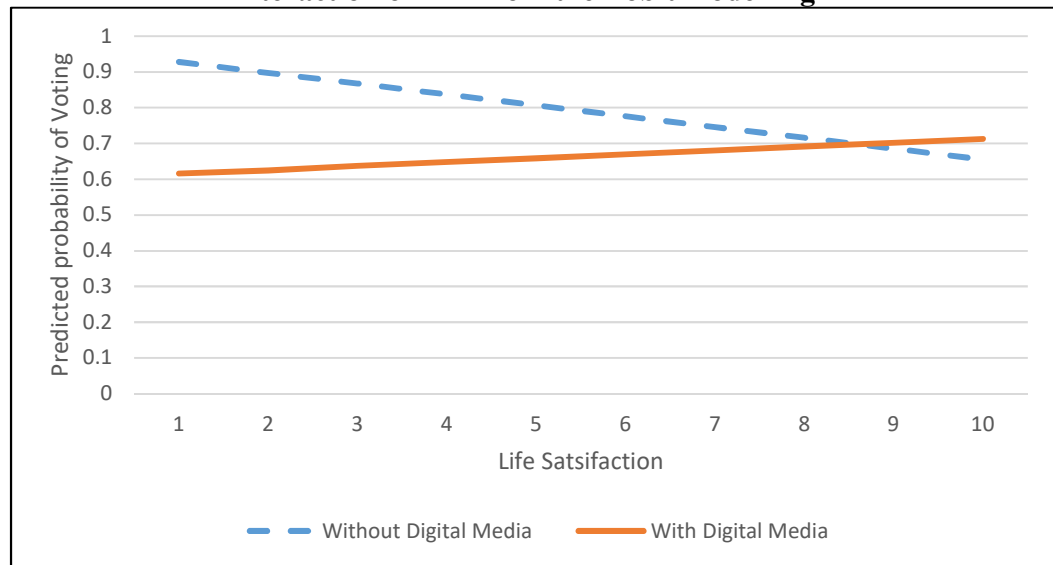
Note: The graph is extracted based on the regression in Column (3) in Appendix W.

BIODATA OF THE AUTHOR

Koay Ying Yin, Lecturer in Economics, Faculty of Business and Finance, Universiti Tunku Abdul Rahman, Malaysia

She obtained her Bachelor degree in Economics (Hons) from the Faculty of Economics, Universiti Kebangsaan Malaysia, in 2004. After gaining some years of working experience, she furthered her study in Master of Science in Economic Management and Policy, majoring in International Financial Economics, in University of Strathclyde, Scotland, United Kingdom and graduated in 2007. After that, she started her Ph.D. study on "The Paradox of Subjective Wellbeing: The Needs and It's Driven Force" with Universiti Tunku Abdul Rahman in 2014 to date. She is also a lecturer at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) and lecturing on quantitative subjects such as Quantitative Techniques I & II, Basic Econometrics and Econometrics. She has presented her Ph.D. work in a few international conferences and also secured a research grant as following:

Conference Proceeding

Y.Y. Koay, Y.K. Eng, & C.Y. Wong. "What do Malaysians care in the pursuit of happiness? A cross-sectional ordered logistic/probit model using World Values Survey". ISI Regional Statistics Conference 2014, Sajana Kijang, Bank Negara Malaysia, 16-19 November 2014.

Y.Y. Koay, Y.K. Eng, & C.Y. Wong. "Perceived happiness and self-rated health: The twins? A bivariate ordered probit models analysis using World Values Survey". The 3rd Malaysia Statistics Conference 2015, Sasana Kijang, Bank Negara Malaysia, 17-17 November 2015.

Y.Y. Koay, Y.K. Eng, & C.Y. Wong. "Tolerance for diversity and happiness in Malaysia: What is the missing link?". The 4th Malaysia Statistics Conference 2016, Sasana Kijang, Bank Negara, 15-15 November 2016.

Y.Y. Koay, Y.K. Eng, & C.Y. Wong. "The Easterlin's paradox revisited: The role of incentive-oriented fairness". The 5th Malaysia Statistics Conference 2017, Sasana Kijang, 29-29 November 2017.