PERCEPTION OF YOUTH ON THE RETIREMENT PLANNING IN MALAYSIA

BY

CHAI WEN YI

CHIN SIEW THOONG

LEE SWEE LI

LUM SENG KIT

YEO TENG HUI

A final year project submitted in partial fulfilment of the requirements for the degree of

BACHELOR OF FINANCE (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE

DEPARTMENT OF FINANCE

AUGUST 2019

Copyright @ 2019

ALL RIGHTS RESERVED. No part of this paper may be reproduced, stored in a retrieval system or transmitted in any form or by any means, graphic, electronic, mechanical, photocopying, recording, scanning or otherwise, without the prior consent of the authors.

DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university or other institutes of learning.

(3) Equal contribution has been made by each group in completing the research project.

(4) The word count of this research report is 24,586

Name of Student:	Student ID:	Signature:
CHAI WEN YI	16ABB07164	_____
CHIN SIEW THOONG	15ABB03460	_____
LEE SWEE LI	16ABB07053	_____
LUM SENG KIT	16ABB06667	_____
YEO TENG HUI	16ABB07357	_____

Date: 15 August 2019

ACKNOWLEDGEMENT

Firstly, we would like to express our deepest thanks to our supervisor, Pn. Noor Azizah Binti Shaari. It is our pleasure and honour to have him as our supervisor, for his keen assistance, guidance, and supervision at every stage of our research.

We appreciate valuable advice given by Encik Ahmad Harith Ashrofie Bin Hanafi for further improve on our research.

We also owe a deep sense of gratitude to all the participants who actively participated in this research. Their feedback and suggestions are extremely valuable for our research.

Finally, it is always our foremost duty to extend our special gratitude to our family and friends for their sincere emotional support and encouragement that led to the completion of this project.

DEDICATION

The final year project is especially dedicated to Pn. Noor Azizah Binti Shaari, Encik Ahmad Harith Ashrofie Bin Hanafi, our families, friends, and respondents. Thank for your support when we need it most.

TABLE OF CONTENTS

Pages

Copyright Page…….……..... ii

Declaration……..……... iii

Acknowledgement……..…… iv

Dedication……..……. v

Table of Content……..…….…….. vi

List of Tables……..…… xi

List of Figures……..…….. xiii

List of Abbreviations……..……... xiv

List of Appendices……..……... xv

Preface……..……..... xvi

Abstract……..……..... xvii

CHAPTER 1 RESEARCH OBJECTIVE 1

1.0 Introduction 1

1.1 Research Background.....1

1.3 Research Objective.....8

1.3.1 General Objective 8

1.3.2 Specific Objective.....9

1.4 Research Question.....9

1.5 Significance of the study 10
1.5.1 Youth 10
1.5.2 Government 10
1.5.3 Insurance firm 11
1.5.4 Employee Provident Fund (EPF) 11
1.6 Conclusion 12
CHAPTER 2 LITERATURE REVIEW 13
2.0 Introduction 13
2.1 Theoretical Review 13
2.1.1 Continuity Theory 13
2.1.2 Life Cycle Model Theory 14
2.1.3 Theory of Planned Behaviour (TPB) 15
2.1.4 Symbolic Interaction Theory 15
2.2 Review of variable 16
2.2.1 Dependent Variable 16
2.2.2 Independent variables 17
2.3 Conceptual Framework 39
2.3.1 Financial Literacy 40
2.3.2 Income Level 41
2.3.3 Savings behaviour 42
2.3.4 The relationship of financial literacy, demographics factors and retirement planning. 42
2.3.5 The relationship of income level, demographics factors and retirement planning. 43
2.3.6 The relationship of savings behaviour, demographic factor and retirement planning. 44

2.4 Hypothesis Development 45

2.4.1 Financial Literacy and Retirement planning 45

2.4.2 Income level and Retirement planning 45

2.4.3 Saving behaviour and Retirement planning.....46

2.4.4 Relationship between Demographic, Financial Literacy and Retirement Planning 46

2.4.5 Relationship between Demographic, Income level and Retirement Planning 47

2.4.6 Relationship between Demographic, Saving behaviour and Retirement Planning 47

2.5 Conclusion.....48

CHAPTER 3 METHODOLOGY 49

3.0 Introduction 49

3.1 Research Design.....49

3.2 Sampling Design 50

3.2.1 Sampling Techniques 50

3.2.2 Target Population 50

3.2.3 Sampling Size 50

3.3 Data Collection Method 51

3.4 Data Processing 53

3.4.1 Data Collection 53

3.4.2 Data Recording 54

3.4.3 Data Evaluation 54

3.4.4 Interpretation of results and findings.....54

3.5 Research Instruments 54

3.6 Data Analysis 55
3.6.1 Descriptive Analysis 55
3.6.2 Review of Data Analysis 56
3.7 Conclusion 57
CHAPTER 4 DATA ANALYSIS 58
4.0 Introduction 58
4.1 Descriptive Analysis 58
4.1.1 Respondent Demographic Profile 59
4.1.2 Dependent Variable – Retirement Planning 61
4.1.3 Independent Variable- Financial Literacy 62
4.1.4 Independent Variable- Savings Behavior 63
4.1.5 Independent Variable- Income Level 64
4.1.6 Mediator – Age 65
4.1.7 Mediator – Gender 66
4.1.8 Mediator – Education Level 67
4.2 Inferential Analysis 68
4.2.1 Explanation of Target Endogenous Variable Variance 68
4.2.2 Inner Model Path Coefficient Sized and Significance 69
4.2.3 Reliability and Validity Test 70
4.2.4 Bootstrapping Analysis 77
4.3 Conclusion 82

CHAPTER 5 DISCUSSION, CONCLUSION AND IMPLICATION 83

5.0 Introduction 83

5.1 Discussion of major findings 85

5.1.1 Financial literacy and retirement planning 85

5.1.2 Income level and retirement planning 86

5.1.3 Savings behaviour and retirement planning 87

5.1.4 Demographic Variables-Financial Literacy-Retirement Planning 87

5.1.5 Demographic Variables- Income Level- Retirement Planning 89

5.1.6 Demographic Variables-Savings Behaviour -Retirement Planning 90

5.2 Implication of study 91

5.3 Limitation of study 91

5.4 Recommendations 93

5.5 Conclusion.....95

References 96

LIST OF TABLES

Pages

Table 4. 1: States of the Respondents 59

Table 4. 2: Descriptive Statistics for Dependent Variable – Retirement Planning..... 61

Table 4. 3: Description Statistics for Independent Variable- Financial Literacy 62

Table 4. 4: Description Statistics for Independent Variable- Savings Behavior 63

Table 4. 5: Description Statistics for Independent Variable- Income Level..... 64

Table 4. 6: Descriptive Statistics for Mediator– Age 65

Table 4. 7: Descriptive Statistics for Mediator– Gender 66

Table 4. 8: Descriptive Statistics for Mediator– Education Level..... 67

Table 4. 9: R^2 result of Dependent Variable and Mediators Variable 69

Table 4. 10: The Outer Model Loading Results from PLS-SEM 70

Table 4. 11: Cronbach's Alpha Result from PLS-SEM..... 72

Table 4. 12: Composite Reliability Result from PLS-SEM..... 73

Table 4. 13: Average Variance Extracted (AVE) Result from PLS-SEM..... 74

Table 4. 14: Fornell-Larcker Result from PLS-SEM..... 75

Table 4. 15: Heterotrait-Monotrait Ratio (HTMT) Result from PLS-SEM..... 76

Table 4. 16: Bootstrapping Result from PLS SEM (Total Direct) 77

Table 4. 17: Bootstrapping Result from PLS SEM (Total Indirect)..... 78

Table 4. 18: Bootstrapping Result from PLS SEM (Outer Loading) 79

Table 4. 19: Bootstrapping Result from PLS SEM (Mediating Latent Variable) 81

Table 5. 1: Summary result of the hypothesis testing..... 83

LIST OF FIGURES

Pages

Figure 1: Conceptual Framework 39

Figure 2: Flow Chart of Data Processing..... 53

Figure 3: States of the Respondents..... 60

Figure 4: Result of PLS-SEM 68

LIST OF ABBREVIATIONS

AMOS	Analysis of Moments Structures
ANOVA	Analysis of Variance
APIM	Actor-Partner Independence Model
APIM	Actor-Partner Independence Model
ATM	Automated Teller Machine
AVE	Average Variance Extracted
CHARLS	China Health and Retirement Longitudinal Study
EPF	Employees Provident Fund
FOS	Federal Office of Statistics
FSC	Financial Supervisory Commission
GDPI	Gross Domestic Product Index
HTM	Hold to Maturity
HTMT	Heterotrait-Monotrait Ratio
INGOs	International Non-governmental Organizations
IT	Information Technology
KMO	Kaiser-Meyer-Olkin
LIAM	Life Insurance Association of Malaysia
OLS	Ordinary Least Square
PLSC	Partial Lease Square Correlation
PLS-SEM	Partial Least Square
PRS	Private Retirement Scheme
SCF	Survey of Consumer Finances
SHARE	Survey of Health, Ageing and Retirement in Europe
SPSS	Statistical Package for Social Sciences
TPB	Theory of Planned Behaviour
YRA	Youth Retirement Account

LIST OF APPENDICES

Pages

Appendix 1: Survey Questionnaire 110

Appendix 2: Result of State of Respondents 120

Appendix 3. 1: Result of Target Variable Variance 121

Appendix 3. 2: Result of Outer Loadings 121

Appendix 3. 3: Result of Construct Reliability and Validity 122

Appendix 3. 4: Result of Fornell-Larcker 122

Appendix 3. 5: Result of Hetoretrait-Monotrait Ratio (HTMT) 123

Appendix 3. 6: Result of Total Direct Effect 123

Appendix 3. 7: Result of Total Indirect Effect 123

Appendix 3. 8: Result of Bootstrapping Outer Loading 124

Appendix 3. 9: Result of Specific Indirect Effect 126

Appendix 4. 1: Result of Turnitin Report 127

PREFACE

This research project submitted for the purpose of fulfilment the goal of requirement for the pursuit of Bachelor of Finance (Hons) in UTAR. We had selected the topic "Perception of Youth on The Retirement Planning in Malaysia" for conduct this research project. This study had included four independent variables for conduct in this study, which are the Financial Literacy, Savings Behaviour and Income Level whereas dependent variables is Retirement Planning. The demographic factor such as the Age, Gender and Education Level act as mediator to investigate the indirect relationship with the independent variables and dependent variables. Besides, Malaysia resident plays an important role for examine to conduct the study that influence the perception of youth on the retirement planning in Malaysia.

Abstract

This study aims to examine the relationship between the retirement planning and the three independents variables, which are income level, financial literacy and savings behaviour. Indirect effect on independent variables and retirement planning through demographic variables: age, gender and education level being examined. The targeted respondents referring to youth because aims to raise the awareness of retirement planning for the youth. Data in this research used is primary data and collected questionnaire from youth in thirteen states of Malaysia in order to understand their perspectives. The results retrieved are generated by 311 sets of the questionnaire from the respondents. Through the Partial Least Square (PLS-SEM) the results showed there is significant relationship between retirement planning and independent variables is. The results from the indirect effect of mediator variables towards independent variables and dependent variables showed that age and gender are significant relationship. However, the mediator variables of education level showed insignificant relationship to intermediate independent variables and dependent variables. This research will be benefits for the future researcher, government and the investment company to better understand the perception of youth towards the retirement planning in Malaysia.

CHAPTER 1 RESEARCH OBJECTIVE

1.0 Introduction

Retirement planning is an essential plan for individuals to live comfortably in retired life. According to The Minimum Retirement Age Act 2012, 60 years old is the retirement age for Malaysian. People will always desire to live comfortable and free from restraint, therefore holding enough fund as the backed up for the future life is getting crucial. Due to there are a lot of spending will be incurred which may not easily to figure out likes daily expenses, unpredictable events and emergency use.

A proper plan for retirement estimates the future cash flow and ensure the money being prepared able to achieve the retirement savings goals. By conducting the retirement planning in earlier stage will benefits people to accumulate the fund gradually and cultivate the habits of savings. However, people will always neglect the planning for retirement. According to Malay Mail (2017), Malaysian in range of lack of retirement planning and low awareness. Due to people tend to have less attention and lose sight for future life.

This study focuses on investigate the relationship between retirement planning and the determinants to influencing people do retirement planning, which is financial literacy, income level and saving behaviour. It is also examining the indirect effect between independent variables and retirement planning through demographic factors which is gender, age and education level. Besides that, the targeted respondent is youth Malaysia. As defined in the youth societies and youth development act, youth range between the ages of 15-40.

1.1 Research Background

According to Jomo (2017), Malaysia is aging population, by 2035, over 65 should be 15% of the population. At present, most Malaysians' EPF savings are hardly enough for them to live a decent life after retirement. Life expectancy of Malaysian has been increased. The Malaysian life expectancy at birth in 2015 for men and women was 72.5 years and 77.4 years. Suppose someone live until 75 years old, does not have huge medical expenses and outstanding debt, the average savings of RM 194,000 only bring RM 810 per month. In year 2017, EPF had increase the minimum saving target under 55 to RM 228,000 from RM197, 000. However, only 18% of members had reach the goal and it still far than expected. By 2021, at least 50% of the members have to reach the lower level. Low return on investment and allowed to exit for example housing, health and education which means less for retirement. According to the EPF, 70% of members who withdraw pension funds at the age of 55 will reduce their savings is less than ten years after retirement. Therefore, most of EPF savings are insufficient to escape poverty after retirement. There are 32 million workforces in Malaysia, of whom are in working age between the ages of 15 and 65. Only 48% of the 14.5 million workforce has active EPF accounts. This is because many employees in the working class and other randomly employed employees do not have active EPF accounts, while many employees in the agricultural and informal sectors are self-employed.

Investment traditionally is low risk, domestic and fixed income assets, especially Malaysia sovereign bonds, remain large. According to Jomo (2017), in the hold to maturity (HTM) investment assets, the EPF has been progressive total zero coupon bond. By 2015, these assets accounted for 29% of HTM's total assets, increase rapidly from 2.7% in 2006. Since the EPF savings could not provide enough retirement fund for most retired employees to live in non-poverty line, they could not meet their intended purpose. More than four over five of members, their EPF savings rate is low wages, low returns and tall household debt do not serve most Malaysians. EPF and other pension fund professionals must provide the best services to their key stakeholders such as retirees, current and future, but political interposal has prevented EPF professionals from serving interests of their members

better. According to the Central Bank Malaysia (2013) and EPF (2016), showed that 88% EPF members earn less that RM5,000 monthly. This reflects a relatively low labour income of 33% compared to Malaysia's GDPI, compared with 44% in Singapore, 54% and 57% in South Kore and Australia. Labour income as a percentage of the gross domestic product index (GDPI) is 50%. According to the Teh and Noraina (2018), due to the survey, most EPF members with incomes below RM 5000 monthly indicated that their savings were estimated at RM 480, 000 at the age of 60. Assuming that life expectancy of 75 years, the total contribution to the EPF was from individuals and employers. 22% comes from the monthly salary. In this case, the retirement income will be RM 2,666 monthly (excluding inflation), so the lifestyle of EPF members cannot be maintained, but it needs to be halved compared to pre-retirement lifestyle. As reported by Financial Stability and Payment Systems Report (2015), the results had been proved that, there is a 76% of Malaysians that they were failed to accumulate at least RM10,000 when they are facing an emergency. Most of the individual range at the age of 20-35, are involved in taking loans from bank such as high cost of borrowings, personal loan and credit card borrowings (Asian Institute of Finance, 2015). Despite expanding life expectancy in Malaysia, just 40% are financially prepared for their retirement (Financial Stability and Payment Systems Report, 2015). Due to the debt level keep increasing, the ability of borrowers to pay back are progressively delicate to changes in income level as well as the interest rate. Significantly the more stressing is that Malaysian youthful are supposedly the main group into this financial complexity (Jamal et al, 2015). Scarcity of financial knowledge that control their financial literacy are said to be the main contributions of the issue which will reflect the status of people to seek for the professional personal financial planning. Because of the people who have poor financial knowledge and awareness, the total savings of Malaysian households is moderately low while majority of them have not given any idea on the retirement planning (Jamal et al, 2015).

Retirement savings is one issue of aggressively concern all over the place. Retirement may appear to be far away later, yet it needs planning presently to ensure that retirees have enough to help themselves. There is still a majority part of the people who are still clutching on to "wait and see" behaviour, they do nothing for retirement planning and expecting the retired life will remains as their pre-

retirement standard of living. Due to this issue the attempt of the policy makers and financial institutions when the level of those planning for their retirement is still insignificant. The study that proved by Asian Institute of Finance (2015), they mentioned that while youth in Malaysians might be common sense and well-educated, most of them pay insufficient attention towards savings for the long-term financial opportunity. Despite the expanding media and government initiatives to highlight the recent intense shortage in retirement savings amassed by most of the Malaysians, the reality remains almost 70% of Malaysians who have less than RM50,000 have saved up for the retirement through their working lifestyle (Chin, 2015). The study tended to an imperative knowledge difference in the extant literature by concentrating on the retirement savings behaviour conduct inside a developing economy setting (Koe and Ken, 2018).

According to Mansor et al. (2015), they found having an adequate income will reduce the issue during retirement. Income level is a crucial determinant to determine the retirement wealth growth. The relativity low per capital earning among the Malaysians may constrain the intention to do retirement planning. Based on Kaur and Hassan (2018), they found that income will significant affect the amount of money that saved for retirement. High income and compose with better education or skilled occupation are positively related with the characterized commitment retirement finance levels. Higher income level people may result more willingness to go for investment. They will tend to buy assets or property and do various investment to increase their extra income to do retirement planning. However, lower income people will tend to keep their money in their pocket and tend to less savings for the retirement because they did not earn as much as higher income level people. Age is one of the variables is interesting to know. In Malaysia, with the population 32 million of people, 69% of the population referring to ‘working age’ which between aged of 19 to 65. According to Jomo (2017), life expectancy among Malaysian has been increasing. Life expectancy at birth in 2015 was 72.5 years for male while 77.4 years for female. There is always question for asking what age best time is to start for retirement planning. In fact, if retirement planning is being prepared earlier will be better off. However, people always neglect this fact. Reported by the Life Insurance Association of Malaysia (LIAM), those people in the 20’s think that they are to earlier to think about retirement, while

in 30's and 40's tends to hold perception about they are prepared since they have their EPF pension fund. The EPF annual report in 2015 discloses that many Malaysians have short of retirement amount in their pension funds while they reach 55, compelling them to prolong their working years (Mazlinda, 2015). This maybe the reason why there is more workers who willing to continue be in work even reaching retirement period. Some of retirees may even return to workplace after retirement. According to Zaihan and Noar (2017), findings shows that as the age bracket growth, the awareness level of retirement planning growth as well. Those 40 years and above shows higher percentage of "high" recognition level as compared to those in the age range of 40 years and below. When closer to retirement age people might only have thought of what they are going to do when reaching retirement. They will start to arrange for their retirement goals which can be desire for travelling, purchase anything they dream for, doing nothing and rest. However, without strong financial support these kinds of after retired goals will never come true. As believe by normative age-related influences, people about 50 years become more concern in retirement planning than younger people. Observed studies support that savings and retirement planning significantly differ as a purpose of age (Barnhoorn et al, 2016). People might seek for more advice from financial professionals to have better and optimize plan for their financial planning. The previous study showed that junior members and those with a lesser funding are inclined to call for manegerial topics, whereas senior members, and those who have more funding, are inclined to call for Investment or Other. As expected, senior fellow is inclined to call for Retirement Planning (Clark et al, 2018).

Since the life expectancy had showing that female (77.4 years) have longer life compare with male (72.5 years). Female should also more actively involve themselves in retirement planning. According to Jamaludin and Gerrans (2015), female members are significantly less anticipating making an investment options in Malaysia. Rare of female members making the investment choice is only 35% compare to male members. Female is known as more conservative and less confidence in risk taking. They will be less likely doing their financial planning and investment. However, male is inclined plan for their retirement planning instead of female. According to Mahdzan and Tabiani (2013), revealed that female is less financial information and saving behaviours compare with male who is more likely

have positive saving behaviours in retirement planning. Male is higher probability of having positive savings. Male will be more risk taking which behave actively involved in financial planning and other investments. They will also more reaching to financial information to have better plan for retirement. However, this might be risky for female for no prepare for retirement. Female should have more enlightened about the usefulness of retirement planning. As stated by Department of Statistics Malaysia, in year 2017, enrolment in government and government-aided school were 4,888.6 thousand, dropped 45 thousand from 2016. The decreased was due to decline of 28.2 thousand in lower secondary and 15.0 thousand in upper secondary as against 2016. Concurrently, primary enrolment also decreased 5.2 thousand to 2,678.6 thousand as compared to previous year. Education level plays an important factor to influence people manage for their retirement scheme. According to Mansor et al. (2015), revealed that education level has effective positive relationship with retirement scheme. According to Hassan et al. (2016), education present a significant positive relationship with retirement scheme. People who had greater levels of education (certificate and above) were more secure in their planning for retirement than others. The declined number of people continuing pursue studies may become the problem. Due to the lower education level and lower probability for them to prepare retirement planning. It is essential for people to being educated which may increase their awareness to do retirement planning. What people must consider is not only savings for daily necessities but more than this. In fact, the expenses incurred in retired life is more than what easily can figure out. The medicine cost and emergency event will be causing more expenses after retired. In this case, it is important for youth have awareness to prepare retirement planning earlier.

1.2 Problem Statement

Retirement planning is crucial for most of the people to ensure for sustainability of expenditure after retired. A survey performed by the EPF in year 2017 shows that household reserve money in Kuala Lumpur and other states city; found that over 90 percent of respondent does not have enough savings for retirement (Thiagarajan, 2017). Apparently, this often come with the citizen does not actively involved in retirement planning. Lack of citizen involve in retirement planning contribute to the reason of insufficient retirement planning knowledge being possessed. In this research, mainly focus to determine whether youth have intention to involve in retirement planning and determinants influence them in retirement planning. Financial literacy factor included in this research which recommended by past researcher to identify the relationship with retirement planning (Moorthy et al., 2013). Retirement planning is persuasive correlated with financial literacy, which found that low level of financial literacy relies more on voluntary savings programs for fund expenditure in retirement life even with high education level (Boisclair et al, 2017). According to Kim et al. (2014), income level should be a consideration on predict individual retirement planning. Thus, the income level would conduct in this research to clarify the connection between with the retirement planning, which to know the income level of the people affect decision on retirement planning of the people would use their income on survival first before distribute part of it for savings for retirement purpose. Moreover, past researcher applied traditional savings habit on examine the relationship with the retirement planning (Fern and Pez, 2015). Thus, this study conduct using savings behaviour on identify the relationship with retirement planning instead of savings habit, which to prove that savings behaviour is more important than savings habit with recommend by past researcher (Rameli and Marimuthu, 2018). This study tends to fulfil past research gaps, which can provide support to identify relationship between demographic factor and retirement planning. Past researcher using demographical factor such as age and gender as the dependent variables in their research but does not include it as mediators, which indirect effect the financial literacy towards retirement planning and other independent variables (Andrade et al, 2014). Furthermore,

Visyalini (2018) found that the education level does not affect the retirement planning since founded some educated people does not adopting retirement planning, but still able to maintain living standards in retirement life. This obviously violated previous past research that found education level fully affect retirement planning due to the educated people are more rational convert their knowledge on evaluate and adoption an effective retirement planning (Selvaradui, 2018). Thus, this study tends to include the education level as one of the demographic factors as mediator to clarify the indirect effect on the relationship between the retirement planning and independent variables, such as financial literacy, income level and savings behaviour.

1.3 Research Objective

This study is to investigate the determinants that domination the perspective of the Malaysia youth on retirement planning.

1.3.1 General Objective

This research aims to explore the connection between retirement planning and the determinants, which are the financial literacy, income level and savings behaviour. Furthermore, this research intends to inspect the financial literacy, income level and savings behaviour have indirect effect on retirement planning through the demographic variables.

1.3.2 Specific Objective

I. To investigate the relationship between financial literacy and retirement planning.

II. To identify the relationship between income level and retirement planning.

III. To inspect the relationship between the saving behaviour and retirement planning.

IV. To examine the financial literacy indirect effect on retirement planning through demographic factor.

V. To verify the income level indirect effect on retirement planning through demographic factor.

VI. To scrutinize the saving behaviour indirect effect on retirement planning through demographic factor.

1.4 Research Question

I. Is there a relationship between financial literacy and retirement planning?

II. Is there a relationship between income level and retirement planning?

III. Is there a relationship between savings behaviour and retirement planning?

IV. Is the financial literacy has indirect effect on retirement planning through demographic factor?

V. Is the income level has indirect effect on retirement planning through demographic factor?

VI. Is the savings behaviour has indirect effect on retirement planning through demographic factor?

1.5 Significance of the study

1.5.1 Government

Government as second beneficiary for this research when they draw up the policy. This is because through this research government will be more understand clearly about perception of youth towards the retirement planning. This help them to impose their policies more effectively when their policy targeted group as youth. Financial literacy is expected as important factor to influence the youth perception towards the retirement planning. If youth equip themselves with comprehensive financial literacy towards the retirement planning, they will have better retirement life.

1.5.2 Youth

This probe hope to increase the awareness of prepare retirement planning earlier in their life cycle which specifically for youth. It also provided the comprehensive information about future retirement planning in Malaysia context. Most of the researchers target workforce as their respondents in their retirement planning research. However, this research targeted youth as respondents. This is because youth, should equip with comprehensive and correct financial knowledge towards retirement planning which will benefits them when they retired. Even though, retirement life still far from youth but earlier to prepare may getting them closer to retirement goals.

1.5.3 Insurance firm

Besides that, insurance firm may benefit from the results in this research when they draw up their packages and their insurances policy to the beneficiary. They should tailor an optimal and suitable plan for youth to ensure retired life is being well secured. As mentioned, insurances firm play the role to assists their policy holder to know about the usefulness of the financial literacy to reduce problem of insufficient fund for retirement.

1.5.4 Employee Provident Fund (EPF)

Other parties that will benefit from this research will be the EPF. This is because the finding provided the information regarding the perception of the youth towards the retirement planning. EPF is encouraged to refer this research when drawing up the policy to attract youth prepare for retirement planning. Most retirement planning research field investigate direct relationship between the independent variable and retirement planning. However, this research added mediator to make it more interesting. One of research contribution in this research is investigate inter relationships between independent variable, mediators and retirement planning. To future researcher, this research provided baseline for them to extend the retirement planning with different mediator variables.

1.5.5 Future researcher

The parties that will benefit from this research is future researcher that interest to make research in retirement planning topic. Future researcher may derive their research objective from this research limitation to have clear research direction. Besides that, this research helps the future researcher be aware and knowledgeable in retirement planning area especially in youth respondent. It would help them to be a better analyst and it can be a help as a future reference for more studies in the future.

1.6 Conclusion

This chapter is introducing the research background, research objectives, research questions, hypothesis of the research, significance of study and problem statement that is related with research. This research overall explains the background and the perception of the youth on retirement planning. Most of the youth have less understanding and awareness in preparing retirement planning in early stage. Therefore, adequate of time will consumed to educate youth the right behaviour and attitude for retirement planning.

CHAPTER 2 LITERATURE REVIEW

2.0 Introduction

This stage will be referring to few theories which related with dependent variable retirement planning and independent variable financial literacy, income level and savings behaviour. Demographic variables as mediator variable between independent variables and dependent variable. It also reviews few researcher studies in retirement planning but their respondents more on workforce and not in Malaysia context. In following chapter, this research proposed a conceptual framework to explain the relationships. At the last part of this chapter, this research proposed few hypotheses related with the independent variables; mediator variables; dependent variable.

2.1 Theoretical Review

2.1.1 Continuity Theory

Continuity theory was being applied on this study for conduct the individual retirement planning. This theory states that the individuals mostly supervised by internal mental structure, which referring to individuals tend to continue current pattern of behaviour such as habit and lifestyle across the time, it requires lot of time consume to manipulate it (Atchley, 1999). This theory recently used by Cooper and Beehr (2015), conduct about the continuity theory on retirement, which contribute better suggestion for conduct this study. Most of the individual put — current lifestyle and habit on their consideration on making planning or decision. The individual mostly begin to imagine their retirement life when they are

considered as youth. The lifestyle with continuously working individual tends to continue working during the retirement life, which affect the decision on adopt retirement planning. Thus, this theory is readily applicable on retirement planning, as the individuals likely to enjoy pre-retirement lifestyle. This mostly happen on the workaholic individuals who continuous working rest of the life and less consider retirement as their part of life.

2.1.2 Life Cycle Model Theory

The theory that implemented this study is life cycle model theory. This theory applied as consider the time point of over the lifetime of an individual that have different point of view on making decision planning based on their income level and financial literacy as the life cycle for an individual. Thus, this affect the behavioural towards retirement planning over the life cycle, which tend to achieve preferred supply of consumption needs with different life time but expose to the constraint composed by an individual (Blinder et al, 1982). An individual exists with different perspective on different time point of life cycle due to the condition of the individual confront. In youth age, individuals tend to presume retirement planning still far and less emphasis the ways to achieve retirement goals due to low income and financial literacy in their stages. This give rise to savings behaviour of a youth age individual in adopting the retirement planning. Beyond that, increasing in financial literacy and income level over the lifetime experiences and age begin closer to retirement planning. When age brackets increased and influenced by real world experiences, people tend to attach retirement planning. Thus, the life cycle model theory is pleased to be carry out for conduct research since different lifetime of an individual exists with different of income level as the time past and different level of financial literacy as growth older towards the retirement planning. This theory also used recently by Masran and Hassan (2017), in conduct their study to examine the determinates influence workers towards the retirement planning and proved that is good to be conduct study towards retirement planning.

2.1.3 Theory of Planned Behaviour (TPB)

Theory of planned behaviour (TPB) suitable for conduct in this study. This theory is the supplement of logical behaviour. This theory usually adopting by the researcher to understand and forecasting human behaviour (Ajzen, 1991). Thus, this theory used recently by Rameli and Marimuthu (2018), on conduct their study about behavioural intention on perform action on retirement planning, which states this theory is good for predict the savings behaviour of individual towards retirement planning. This theory states that positive and negative attitude toward the actual human behaviour, perceived of behavioural control and subjective norms are the main factor affecting individual behaviour. Theory of planned behaviour can be applying to savings behaviour of the individual, the positive behavioural towards savings would tend to increase the individual willingness on adopting retirement planning, which would give security to the future that off from work. Perceived of behavioural control on savings which tends to force the individual to action on the behavioural. The individual that tend to positive looking on savings behaviour are more likely making retirement planning due to the action on making savings plan with the savings behavioural action.

2.1.4 Symbolic Interaction Theory

Symbolic interaction theory mostly used for social science research fields. It is addressing the individual interaction through symbolic term such as words, gesture and unique role (Aksan et al, 2009). It refers most of the fact are direct by; kind of symbol ways that lead the individual impose on events and object. Symbolic interaction theory contributes to identify the attitude of youth towards retirement planning with the transformation of view influenced by different in age and gender. The most important components in symbolic interaction theory namely; interaction (Meltzer el al, 1975). The differential of age, gender and education level of individual would lead to influence others, which provide different point of view and advices lead to affect others to change mind-set towards the retirement planning because the social interaction process.

2.2 Review of variable

2.2.1 Dependent Variable

2.2.1.1 Retirement Planning

Retirement refer a worker permanently end from work. In norm, retirement age in between 50 to 60 years old according to different policy and culture in countries. In Malaysia, people serve retirement planning at the bottom line and only rely on EPF (Hassan, 2016). A great mass of employees tends to rely on pension fund to cover their retirement daily expenses however the issues of insufficient amount in pension fund raising. Due to rise in medical cost and emergency pay-out neglected by most people. According to Teh and Noraina (2018), by 2030, Malaysia might step into social aging population, however Malaysians unready to overcome the futures. Government support and provide incentives for Private Retirement Scheme (PRS) by strengthening the third pillar of the World Bank's pension conceptual framework. For example, voluntary individual pension plans. According to Teh and Noraina (2018), apprehensive situation which has 62% of Malaysia's workforce does not draw proper retirement planning. Equally important is the Malaysian government's continued support and incentives for retirement savings such as PRS and the possibility of introducing publicly managed public pension schemes that are not currently implemented in Malaysia. According to Mustafa et al. (2017), proper and optimize retirement planning require comprehensive planning and suitable mental symmetry. As known, retirement defined as level of discretion in an individual's life; however, a proper scheme with financial revise will better for retirement. Even though retirement planning seems to be too far however early planning is encouraged globally. Appropriate scheme is desired to ensure competent aid for retirees. This study will identify what are the factors influencing people doing and preparing their retirement planning; at the same time, the youth' perception towards this retirement planning. Noar (2019), found that Malaysia citizen retire as the age reached the compulsory age, which is 60 years old but only for those who are financial secured. People who have no proper retirement planning and insufficient

fund in account forced to continue working as to maintain their living standards and survival. Since that, Malaysia citizens are highly promoted to adopt retirement planning earlier or else too late to regret it.

2.2.2 Independent variables

2.2.2.1 Financial literacy

Financial literacy acts as determinates which highly contribute to this research. According to Nga and Yeoh (2018), the research findings clarify that financial knowledge is statistically significant positive influence retirement savings behaviour for Malaysians. This is an apt indication that good financial literacy crucial to foster more responsible financial practices. Seven questions concerning respondents' financial preparedness for retirement in terms of their savings, EPF contributions, and other financial planning initiatives to evaluate 160 respondents from Klang Valley region in Malaysia. Their research focus on seven questions. Positive correlated between financial literacy and retirement planning, such as one has cogitation as regards how to prepare after retirement; having a private pension scheme or having dedicate severance pay to a private pension scheme. Their research applied two dummies to estimate employees in private sectors (Ricci and Caratelli, 2015). However, their research deflect study on the private pension scheme while this research relates on the perception of youth in retirement planning.

Based on the analysis, the results being concluded financial literacy statistically significant to financial preparedness for retirement. Primary data was collected from 384 respondents from the 29 state Corporations using self-administered questionnaires and the data was analysed using descriptive and inferential statistic (Agunga et al, 2017). Their research was used primary data which is similar data collection method with this research. Indeed, financial knowledge consists variety of aspect such as savings; investment; retirement planning. Hence, findings indicate financial literacy education indeed exists a strong domination on retirement planning. Interview protocols were used to collect data from 10 elderly people who are aged 55 and above from Klang Valley (Selvadurai et al, 2018). In this research,

will mainly focus investigate whether financial literacy significant to retirement planning.

The outcome attained from their research; financial knowledge has significance in the belief of retirement planning behaviour in the midst of lecturers. Researchers had mentioned that lecturers shall draw a clear retirement goal, which will train them to be enlightened enough and ready for retirement. Respondents picked from three polytechnics using cluster sampling method. Descriptive and inferential analyses were applied to analyse the data (Mustafa et al, 2017). Their research was focusing the respondents from polytechnics while this research will focus on thirteen states in Malaysia. According to Bomikazi et al. (2017), personal's retirement finance sufficiency domination by his/her financial literacy. Individuals with financial literacy know amount to preserve for retirement and best ways to invest their reserve. Desk research was pledged to gain as much sources as probable to apprehend the matter. Financial literacy that will give the most influence to the retirement planning management among Sime Darby Research employees. The sample is the employees that come from the Sime Darby Research in Banting branch (Zainon et al, 2017). Their research mainly focuses on Sime Darby Research employees only which might result different view from this research because of different job and environment basis.

According to Nejati et al. (2015), straightforward and positive relationship between retirement planning and financial literacy. Today there is a variety of plans for retirement, it better to know how to design for their retirement and what best way of retirement scheme. The statistical samples of this research were selected through the random sampling method which have 59 respondents. Cronbach's alpha has been used to localize the questionnaire. Their research only has 59 respondents which consider insufficient to represent the population whereas this research will consist more respondents to be more accurate on investigate the relationship between financial literacy and retirement planning.

Financial literacy is technique and enlightenment that enables individuals to make competent decisions using their financial resources. According to the Brown and Graf (2013), the researcher gave survey to 1500 household among 20 to 74 years old as representative to investigate the degree of financial literacy in Switzerland

and identify how financial literacy and retirement planning have relationship. The researcher uses standardization issues to measure financial culture that captures knowledge about three element financial ideas which is compound interest, inflation and risk diversification. Result clarify that financial literacy have positive relationship with retirement planning which prefer a retirement saving account. It is better to reduce the rank of age from 20-74 to 19- 28 to know about the respondents' regards financial literacy. As stated by Anderson et al. (2017), result obtained shows that financial literacy and retirement planning are positively correlation, but it mainly imposed by perception rather than real literacy. It is managing self-awareness and literacy has lower forecast ability. The researcher measures financial literacy among LinkedIn members by giving the survey, supplement standard questions and other questions that enabling researcher to measure own perceptions of financial knowledge. Result show that only around 3% are non-reactive while around 75% respondents figure out the amount for retirement. It is better trying to use PLS as methodology while previous researchers use OLS. According to the Agnew et al. (2013), the study is to investigate the relationship between financial knowledge and retirement scheme. Result show that financial knowledge and retirement planning are positive related. The researchers customized a survey to 1024 Australians that includes questions requiring numeracy. As changes in retirement systems in whole world have led to a move in personal obligation for financial decisions, research to measure financial knowledge and assess its relevance to financial decision making has become increasingly important. It is better to be proof that financial literacy will affect and give the positive relationship in this present research. According to Cucinelli and Bongini (2019), the purpose of their paper is to investigate the main predictors of college youth' intention to invest in retirement planning. The result shows highest degree of financial literacy positively relationship with retirement scheme. Authors use theory of planned behaviour model and the survey is random sample of 633 Italian university. The lower of financial literacy, the higher chances to make a wrong choice such as willing to buy mortgage with high interest rate but less able to plan for retirement. This study must confirm with the financial literacy that will impact retirement planning.

However, evidence showed that there is insignificant relationship between financial literacy and retirement scheme. According to Sabri et al. (2015), findings confirm that financial literacy will encourage appropriate of financial administrative system, which will enhance retirement assurance. Their study emphasis influence of financial literacy on retirement confidence indirectly. Their study was performed using maximum likelihood estimation in Amos 18 to estimate 722 women working in government agencies in four states in Peninsular Malaysia. Their research is mainly focus on government agencies which less reflect on the reality to predict the real relationship between financial literacy and retirement planning. As believed by Social security study group members (2018), their research found no relationship between the financial literacy and retirement savings considered by the log investments and log of current value of pension reserve. The results from 515 responses were analysed working age Kenyans. Their research only focuses on working age while this research will focus more on the perception on youth in retirement planning which may consists of both working age and non-working age. To find out exactly relationship, which is significant or insignificant, financial literacy is crucial variables included in the research. Besides that, according to Koposko (2013), lack of financial literacy is one of difficulty dominant to insufficient financial scheme practices. Her study had found that early learning experiences may crucial in constructing people retirement scheme practices later in life. Data analysed by Analysis of Moments Structures (AMOS) software which targeted the youth attending a large, mid-western state university. Even though her research proved insignificant relationship between financial literacy and retirement planning, however she claims early learning will help for early plan for retirement. In this research, will clarify significant or insignificant relationship between financial literacy and retirement planning.

According to Reyers et al. (2015), the study explores to significance of financial literacy to become an independent variable and not in structural model. Researchers claim the reason of financial literacy index were significantly related with education levels. Binary logistic regression applied to analyses statistics. Their research had proved that financial literacy cannot be the factors to influence retirement planning due to correlated with education level however this research will use the education

level as the mediator to examine whether it is significant between financial literacy and retirement planning with existing education level.

Aluodi et al. (2017), studies the outcome of financial literacy on retirement planning among insurance area worker conclude that financial literacy among employee was not associated with the retirement planning although in insurance sector with excessive degree of education on financial knowledge. The individual with extraordinary knowledge mostly depends on their high confidence in making financial decision, thereby the high educate individual able to make efficient savings on their retirement planning, even able to adopt an efficient retirement planning in future. The financial literacy insignificant with retirement planning because one with high level of financial education will know the benefit of the retirement planning for future (Masran and Hassan, 2017). The high level of financial education contain mind-set with the advantage will obtain with retirement planning. Their able to make an efficient planning such as accumulate funds, control major expenditure or through the financial activities such as investment to raise preparedness toward retirement planning. The individual tend to make sufficient human capital investment with familiar in financial product more likely efficient on financially manage them self during retirement (Kalmi and Ruuskanen, 2015). This can be concluded these types of individual still able to maintain their living standard by holding the financial product during retirement, which generate income for them. Besides that, it's not only with the basic knowledge on financial literacy improve the retirement planning, high educate in financial literacy with behavioural constantly access on the financial information such as financial statement, payroll slip and bills would lead toward better retirement planning (Meir et al, 2016). Such accessibility on financial information is a tool for enhance the financial literacy toward better retirement planning. This can be explaining the individual able to obtain information about the current situation and analyses the situation for adopting a suitable retirement planning, not all individual has same financial situation. Without the accessibility of financial information, it difficult to adopting an efficient retirement planning. Awareness of financial literacy toward retirement on women are stronger than men (Kalmi and Ruuskanen, 2015). This mainly due to the women are more likely strong in self-manage than men and women are to be more attentive in solving problem. There are a similar study conducted by Githui

(2014),which study in the informal sector in Kenya, which the individual with low level on financial literacy causing a poverty problem to a country, which the old age dependency stands at 56%. The individual in low level on financial literacy does not contain any awareness about the consequences about the retirement life. Mostly this individual come from low-income level group, which does not provide education to their next generation. This causing them does not contain knowledge in planning for their retirement. The government will be stressing for helping these old age dependency group, which provide incentive for survive on monthly and causing huge expenditures to the government. This supported by the evidence of the study conducted by Castro-gonz and Rico (2014), in Puerto Rico, which these individual and groups most of them expect depends on the government's pension plan during their retirement life.

This reflect the lack of knowledge and planning towards the retirement planning, which does not know importance of knowing the matters of retirement planning. During the survey process, their found that the target groups refuse to try the mathematical or any relevant financial question, same as the attitudes refuse to make plans or any relevant budgeting.

Moreover, the income level and financial literacy direct influences the retirement planning which the study conducted by Kaur and Hassan (2018) among the Malaysian, which most of them are depends the Malaysia Employees Provident funds for during the retirement life. This mainly due to the low financial literacy rate on Malaysia adults (Tai and Sapuan, 2018). The statistical study found that only 36% among the Malaysia adults are financial literate. This group of adults contain strong of financial skill would be more confidence on maintain their living standard after retirement and no agony about the retirement life. It is important to obtain knowledge about the financial concept, which enable individual or groups to establish and adopt efficient retirement plan towards retirement life.

The financial literate individuals to be found that holding diversified portfolio for reduce risk in investment, which this superiority intend to implement efficient retirement scheme (Koh and Mitchell, 2019). Regard this situation, the individual with superior in financial literacy would invest on risk less investment such as property, which bring financial security. If any crisis expose during the investment

period, financial literate individual still can holding the investment property for keep survive during the retirement period. Hui et al. (2016), financial literacy closely related to financial confidences, which is the key to transform the financial literacy into desirable behaviours, this study conducted on among near seniors and seniors. The individuals with high financial knowledge and confidences tend to keep themselves informed on the financial trends. Moreover, there is an study carried out by Mitchell (2015) among the employees in united states, which found that the employees inclined to participate in retirement savings. This mostly are highly educated financial knowledge groups that consider retirement planning is important for their future life. As stated by Prast and Van Soest (2016), financial knowledge is key role on financial literacy for improve decision in retirement planning, it states that individual are more towards saving a fixed shares with financial intension toward retirement planning instead of immediate savings. Financial intension related to individual financial knowledge, which contribute an idea for action it. Besides that, Bačová et al. (2017) found that the financial profession related might more adopting more efficient in financial scheme for retirement. Financial profession would more confidence on using their financial knowledge to implement for plan toward retirement planning. Moreover, the financial literacy crucial for financial dependency during retirement (Le Roux, 2017). It states that the financial literacy could lead to financial dependency with their knowledge on generate income during their retirement, this led to not depends more on the retirement planning as well there are confidence above on their financial literacy, which this study is conducted in South Africans. There are 96% of participants agree upon to gain more knowledge on financial or even consult with the financial profession. Overall, Malaysia was the country that does not cultivate on retirement planning compare with others developed country that used to be value on retirement planning. This mostly is because Malaysia citizen are more depends on the policy that implement by the government for compulsory do savings every month that charged from their income, this make the local Malaysia citizen does not cultivate a habit to design retirement planning. Moreover, local citizen does not want to improve their knowledge on financial making, since the local citizen are taking care by the government with the policy implemented such as Employees Provident Funds.

Retirement planning known as complicated procedure consists a certain degree of financial knowledge and uncertainty that retirement planning and financial literacy are highly correlated. People with financial literate will in general be secured by retirement planning when contrasted with those who are in financially illiterate. People who are in financial literate well known the significance of the retirement planning and will typically accumulate fund to prepare for retirement. Moreover, people who are in financially illiterate or unskilled will tend to overestimate their funds and pension income (Sabri and Juen, 2014). Financial literacy can lead to improvement in financial situation (Boisclair et al, 2017). In other words, their research proved that people who are strong in the general of financial literate will be well known for their retirement planning.

On the report of Zait and Bertea (2015), financial literacy comprises of five measurements, financial knowledge, financial communication ability, ability to use financial knowledge for choice taking, real use of financial instruments as known as financial behaviour, and financial confidence. Besides, researchers proposed each measurement require to allude something like financial areas.

2.2.2.2 Income level

Past research proved significance of contribution of income level towards retirement planning. The total size of the independent employment income gives rise to the contribution towards retirement plans. The research data from a total of a random sample of one of the 1,000 respondents of the universe of the tax filing which towards on the population. Robustness tests used to analyse the data in the research (Joulfaian, 2018). It researches very different from the research, which used the tax filing population for the data while the research will use primary data from respondents. According to Thakur et al. (2017), the analysis from the research discovered, that majority of the respondents want to retire in the next future 20 years and above are notwithstanding regard on the age, income and profession. The total respondents were 1144 used in the research. For the validity of the questionnaire Cronbach Alpha, KMO measures of adequacy conducted. It research had considered different age that has a different perception of retirement which includes

more age in research. According to Patel (2017), the results showed that income has a significant impact on the way of retirement saving. The means that the increase or decrease in income of the respondent has an impact on the retirement saving behaviour of the employees. Data retrieved from 400 Private Sector employees from each region of Gujarat like Ahmedabad, Mehsana, Rajkot and Surat. ANOVA test conducted to study the effect of Income. According to Nyoro and Ogemba (2016), the research results show income level playing a distinct role of factor towards predict planning on future retirement. Researchers emphasise that the public faced difficulty in balancing the consumption and saving at the same time, which the evidence shows that most of the employees with insufficient income faced these difficulties on a separate part of income for savings towards the purpose of retirement planning with over-consumption for daily living. The result shows the public institutes in country Mombasa nominated about total 353 employees from used of test statistics using both purposive and stratified random sampling responded towards the questionnaire. The advance test of Chi-Square and Contingency Coefficient used with the aid of Statistical Package for Social Sciences (SPSS) for measurement of the connotation and regression analysis. From above mentioned research, which is Patel (2017), and Nyoro and Otieno (2016) were mainly focuses on one sector, which is private and public institutions respectively, however, the findings showed the same result to prove the significant relationship between income level and retirement planning on private sector. Regard to the research will examine the relationship between income level and retirement planning from private and between the public universities.

According to Jalil et al. (2013), study explored individual's monthly salary is mostly influence decisions towards the budget planning of financial after retirement. A primary data from the Malaysian public in Selangor state collected with the use of the advance self-structured questionnaire was established. The analysis advance test of Cronbach's alpha as the main method to evaluate the data. The findings indicate that income level shows a significant towards the determinant of retirement planning. It results showed that the rise of the money saving for retirement purpose is significant with the rise of the income that received. The method of Stratified sampling purposely used to select respondents from each of the sampled schemes. T-test used to examine the data (Onduko et al, 2015). It studied for the public sector

in Malaysia, which might result in less accuracy to represent population. According to Olejnik and Bialowas (2013), income level is significant retirement planning which mostly agreed by the retired group. It assumed that the higher the income no matter present or expected, the more often a household saves for the period of old age. The research has conducted on 493 working individuals – Polish residents. The measures of descriptive statistics and correlation coefficients been used in the analyses of the data collected. The research had applied a large sample size to gives more accurate to the study's findings.

However, there are also proved to argue income level is insignificant to retirement planning. According to Payne (2014), income indirectly related to retirement savings rate, they did not assume what percentage of it income an individual saved for retirement directly. Said another way, increasing one's income does not mean individuals will make the decision to save more for retirement. The study consisted of 500 families, which typically included responses from both parents and the target child. Actor-Partner Independence Model (APIM) used when research questions are estimating both the intrapersonal and the interpersonal relationship patterns. It is reasonable that individuals will not save more even though it is income increased because they may use the money for others purpose which beside of retirement planning. In the case, the research will identify whether individuals will save for retirement planning if increased income level.

According to Kepha (2017), it is studies concluded that the income level does not fundamentally influence retirement planning although it has an inverse relationship with it. It claimed income level would only affect consumption, savings and investment. The study adopted a self-administered semi-structured questionnaire with open and closed questions to collect primary data. The proxy data for the selection of a probability sample provided with the used of the pilot test and for purpose of conducting a detection towards the weaknesses in design and composition. The mentioned research indicated that most of the individuals will only save more money on for It spending instead of planning for retirement however the research will clarify whether income level significant to retirement planning.

According to Kaur and Hassan (2018), proves the low-income level of individual or groups unsuccessful on conduct planning for retirement. Due to the low- income

level of individual or groups only enough to keep survive with the income level but insufficient excessive income for savings for retirement planning. This may due to the policy factor with minimum wages and inflation factor causing the major expenditure for daily use rise, it causes the low-income level individual and group enable to plan to save a portion of money for their retirement planning. Moreover, low-income level of individual or group even not enough of income for their major expenditure for daily uses, as they need loan for purchase houses and car to maintain It living standards, savings for retirement planning would be a difficult move for low-income individual and groups to adopt it. Furthermore Mohidin et al. (2013), found income level has no effects toward more intention for retirement planning. This concluded that the high-income group obtained more tendency plan for their future and more self-assurance on maintaining living standard during retirement with obtained kind of education about retirement planning during their high school and university period. High income-level individual or groups have preparedness on excessive funds for their future retirement. Thus, this proves that the kind of individuals contains a high education level because due to high-income earnings. It makes the kind of individuals does not worry about retirement life with the preparedness of excessive funds and even most of it able to generate retirement income during retirement life. Overall, high-income level groups are not depending on making retirement planning because they contain confidence on maintaining living standards during the retirement planning, which makes the rational investment or retirement income such as property investment with collecting rental, purchase risk-free assets. In adversely, low-income level groups powerless to do so towards the retirement planning even there are intended to do so. The is because the living cost is already exceeding the total of income; low-income groups faced difficulties on surviving for daily life, not to even mention for distributing a part of savings from their income for adopting a retirement planning.

According to Cheong and Vikneswaran (2016), their discovered that educated male with high financial wealth and high-income level related to greater financial literacy and financial knowledge. Other than that, they found some older households with low income would be in less financial knowledge compare who are in high-income level individuals.

Research done by Ng et al. (2013) proven that youth need to control their living costs and expenses for saving money in financial planning. This guarantee enough funds for emergency funds and financial goals. Likewise, the youthful and the older adults are less likely of the knowledge in planning wisely in the financial decisions. Moreover, the researchers proved that income level is playing one of the serious issues towards affecting youth perception of financial scheme decision.

The research found that income and education are imperative indicators of financial literacy. The financial literacy increments strongly with the level of income and education in retirement planning. The findings of the research have discovered that income and education are positively related with high income and high education are significantly less liable to use high expense methods of borrowing. There are more likely to have a preparatory fund and already planned for their retirement. Moreover, those individuals who using high cost borrowing method and less inclined to have a backup reinforcement crisis reserves have encountered a large income shock because of unsure occurrences. Recommendations given by the researcher is critical to have an emergency fund and improve the retirement security of them (Scheresberg, 2013). His research showed a positive significant relationship towards income level between with retirement planning, he pointed out that high-income groups are given more intention to save more money for their future.

2.2.2.3 Savings behaviour

According to Hsion and Dambaravdan (2016), the research distributes into family savings behaviour and personal savings behaviour. The result showed both significantly positive, the suggesting that individuals with good savings behaviour are more likely to conduct a diversification towards retirement planning. The research concludes that a person's saving behaviour is a key factor affecting the level of retirement planning in Taiwan. The data derived from the National Financial Literacy Survey conducted by the Taiwan Financial Supervisory Commission (FSC). The research consists of both family and personal savings, which interesting and less study by the previous study. The research will consist of youth. According to Zazili et al. (2017), the findings show savings behaviour has a

positive association towards retirement planning. It proved that increase in savings give rise in conduct retirement planning. The questionnaires collect data from a young professional in private sectors around Klang-Valley who aged between 20 until 34 years old. Reliability analysis used in the study to identify the relationship between savings behaviour and retirement planning. Their research focuses on savings behaviour in the young professional group, which may result in different perception with the research, which focuses on the youth group. The research will confirm whether the different group of individuals will be having the same perception, which results in the significant positive relationship of the savings behaviour towards retirement planning.

As stated by Social security study group members (2018), the results show that the realities of financing need towards retirement planning not supported by the progression of saving and investment behaviour. Their research indicated that no matter how many individuals had saved, they will not use it for retirement. In the research, clarify whether individuals contribute extra savings for conduct planning towards retirement.

According to Kimiyaghalam et al. (2017), it showed insufficient research study on identifying the factors, which the savings behaviour is positive cause significant towards retirement planning. Financial literacy and tendency towards plans and future coordination with retirement planning showed partial mediation relationship with the inclusion of saving behaviour in the study results. Total of 900 respondents with the nationality of Malaysians which living in the Klang Valley area conducted with the use of questionnaires survey. The method applied to evaluate data is Convergent Validity Analysis. Their research is interesting which consists the saving behaviour as mediator variable while the research will use specific demographical type variables, which is the selected of age, gender and education level to become demographic mediator variables for conduct the research.

Rameli and Marimuthu (2018) concluded that retirement planning impact savings behaviour as well and savings behaviour would also affect the result of retirement planning. The study concluded that individual attitudes toward retirement reflect the saving behaviour of the individual. The individual attitudes with more motivate toward retirement tend to be intense on retirement planning. Saving behaviour of

an individual is highly aware and deliberate on the financial decision in retirement planning. Thus, retirement planning with a high awareness of savings behaviour arrives close to retirement with a high level of wealth. The strongest the awareness on savings behaviour, the greater the probability form a habit toward retirement planning. Besides that, research studies conducted by Masran and Hassan (2017) supported the variable personal savings behaviour is positive significant towards retirement planning, which affect retirement planning as well, to sustain the life-living standard after retired from work, the individuals save money to meet their future need, savings for daily expenditure during retirement. As believe by Patel and Acharya (2017), found savings behaviour toward retirement on men are acting more compared with a female which study conducted in India. They found that men likely to be responsible to earn more income contribute for family, which contribute more income acting in savings behaviour for family future life. Men mostly remain in work while female will stay home to take care of family. Men would likely to think rationally for family future. Men would likely to make planning for family future such as education for children and emergency fund purpose.

Saving presented as variables that influencing the personal financial management since the human being generally settled on the financial decision through sufficient saving accessible. Past researchers found that financial education influence the saving behaviour and implement the saving behaviour depend on the objectives and build up personal finance management. According to Ng et al. (2013), the research found direct positive significant relationship with saving behaviour towards the money attitude, they suggest that who have a positive attitude toward cash will effectively seek out money management knowledge as an approach to upgrade range of abilities. Furthermore, they call attention to seeking behaviour could create more elevated amount of personal finance literacy.

The researches have proved effect of financial literacy on the approach towards saving, saving intentional, and savings behaviour. Most of the college and the university youth in Malaysia chosen for conducted studies (Jamal et al, 2015). They utilized factors including assertiveness towards financial literacy with saving to anticipate saving behaviour. They proved financial literacy result direct positive significantly affected just as on saving behaviour. According to Badshah et al. (2014), they analysed the connection flanked by financial literacy toward short-term

investment expectation among 46 respondents of potential providers of capital in country Pakistan. Finding on the conducted research confirmed that financial literacy significantly related to the intention of the individuals to invest. In other words, their research focuses on saving behaviour in the potential investors, which will have a different perception with the research because the research is focusing on the youth group.

It is imperative to take note that numerous individuals do not understand the significance of putting something aside for retirement. Particularly female and single heads of families do not have the concept about 70% of wages should be sacrificed something aside for the purpose retirement. Most of the individuals never plan with respect toward the amount of the money needed to save for the purpose of future retirement life. Many individuals will spend cash carelessly derived of deduction consideration (Sabri and Juen, 2014). However, the research found that individuals with a lack of the financial education will influence on conduct financial planning in life and poor of general financial knowledge and resulting in a meagre saving decision for retirement life.

2.2.2.4 Mediator variables

Demographic variables

2.2.2.4.1 Age

Age crucial in demographic variables that influencing retirement planning. Results found that forecasters advice seeking for retirement planning age which older contributed higher portion than younger. Result conducted from Mercer (Australia) and the Super Trust, Corporate Division (Clark et al, 2016). Youth become the focus study group in this research.

As stated by Jimenez et al. (2018), age showed a positive significant result in retirement planning. They showed result most of the young age respondents showed

grander level toward conduct financial retirement planning which characterized with basic high level of education. Total sample size of 948 Spanish workers aged from 30-63 years sample size employed in Spanish institution with full-time employment were conducted, SPSS used to conduct a method test which the multi-regression analysis. Their research consists longer range of age from 30-63 years result in various interpretation on retirement planning. According to Mahdzan et al. (2017), its findings from study disclose that age shows significantly related to the likelihood of planning for retirement. Results reveal that individuals that conduct planning for retirement mostly from the group age from 41-50 years old. Total 270 sample size respondents work in Kuala Lumpur Malaysia collected through self-structured questionnaires. Two advance tests conducted by Two-sample t-test and one-way ANOVA tests to examine relationship between ages toward retirement planning. Research conducted with ANOVA tests to determine relationship between age and retirement planning while the research select to apply Partial Least Square (PLS) method.

According to Chou et al. (2015) result shows lower associations age towards the connection with retirement savings planning. This concluded old age financial security mainly depends on financial support from the adult children especially for middle-aged workers. Result of response rate with 73.0 percent with total sample size 999 respondents. Method used is Cronbach's alpha. Most Malaysian think that regardless what age with them, they will not think about retirement planning because their children will take care of them. The research will identify whether age will influence the retirement planning.

Results showed that respondents' age were insignificant towards retirement planning behaviour. This result shows no variances between younger or elder groups individuals influence toward retirement planning behaviour among EPF employees. The research conducted with total 172 employees respondent sample size from Kedah, Penang and Perlis. There are two types of advance test which are Pearson(r) and One-way variance analysis (ANOVA) conducted to evaluate the data (Talib and Manaf, 2017). The research focuses to study the EPF employees which are better off to consist of Non-EPF employees. According to Shanmugha (2018), age does not influence retirement planning. Most of the young from Information Technology (IT) employees claiming they will not even think for their

retirement planning even though they are considered as a high-income group. Primary data collected from the IT employees through the structured questionnaire. One-way ANOVA and advance test, which is the independent significant of t-test, used to study toward impact of various socio-demographic variables on retirement confidence. Their research focuses young employees from IT sectors which have less interest in financial planning may cause different result with this research focuses to identify the perception of youth on retirement planning.

Age is recognised as standout amongst most foremost and considered indicators for retirement savings and retirement planning. Study proved by Foster (2017) recognized various attributes related to young group age individuals are ostensible under saving. Lack of knowledge about allowances and professional advisory panel for guidance, the lack of confidence trust toward the providers, and apparent incapability accept cost of current assurances and near-sighted perspective toward pensions. Their resulted in apparent for bargain for younger age individuals to put something aside for future retirement purposes or set apart mire fir retirement involves building individual frames of mind and behaviours. Young ages individuals should start investing. Positively significant related to amplification of retirement commitment demonstrates that there exist contrasts as far as retirement planning behaviour among age groups (Yusof and Sabri, 2017). Their research proved young ages of individuals should start save money or conduct action for invest certain wealth funds for future retirement planning, researchers disclosed that age is positive significant towards retirement planning.

2.2.2.4.2 Gender

Gender proved to significant to retirement planning. Study findings showed significant relation between gender towards retirement. It resulted that male had higher mean score compare with female in adjustment retirement which means female more negative attitude to retirement planning. The Self-Administered Questionnaire, Retirement Adjustment Scale, and Retirement Resources Inventory used for data collection purposed for research. The Cross-sectional descriptive design was implemented (Fadila and Alam, 2016). The research results indicated

demographic factors gender base human resulted significant impact on retirement planning. Result shows female is less financially literate toward retirement compared with men. Study conducted online using questionnaires method total 107 respondents to obtain primary data about respondents towards awareness retirement planning. Data tabulated and analysed using Excel (Zaihan and Noar, 2017). According to Jamaludin and Gerrans (2015), research focuses preference available for EPF members involve investment with use of savings in approved unit trusts. Gender showed positive significant towards investing in the unit trusts that approved by the government. The results recommended that man EPF members are significantly more likely to plan for retirement future direction. The sample created with the representative of EPF membership with a targeted range of employment drawn from six larger official institutions. The study findings on Doaa and Raefa (2016), Zaihan and Noar (2017), and Jamaludin and Gerrans (2015), had proved male be more involved in retirement planning compare with female. In the research, will identify whether male or female is more significant to retirement planning.

Lei and Liu (2018) conduct research to investigate gender will affect retirement planning. Research result shows impact of retirement on cognition has significant gender heterogeneity and shown significant on men. Male blue-collar workers may adopt more active lifestyle after retirement and have greater beneficial impact on cognition. Result in urban China and conducted used of data officially from China Health and Retirement Longitudinal Study (CHARLS) 2011 until 2015. Study confirm that men more pay attention to lifestyle after retirement to have concept of retirement planning. According to Fapohunda (2015), result revealed significant relationship between genders towards retirement planning. Past researcher uses secondary data and conduct by Federal Office of Statistics (FOS). The researcher conducts primary data between in May and August 2014 in Lagos Nigeria. Result shows that only 13% female respondents “very positive” about their fully retired safe lifestyle compared with 22% male respondents. Research confirm male more emphasize on retirement than female.

According to Rey-Ares et al. (2015), their study had does not support gender affect towards decision to save purposely for future retirement. It showed negative relationship insignificant between genders toward retirement planning. The analysis use of sample data set from the Survey of Health, Ageing and Retirement in Europe,

(SHARE) sponsored by European Commission, German Ministry of Education and Research, US National Institute on Ageing and different international foundations. Their research indicates gender brings no differences in retirement planning. As stated by Mansor et al (2015), gender insignificant to retirement planning. They had emphasis gender differences resulted does not bring any significant effect towards making retirement planning decision. Both genders have same behaviour and rights for seeking guidance from professionals to conduct financial planning. 80 respondents were nominated as sample size to epitomize overall population. Total data sample size result collected from 80 respondents were analysed by using software SPSS 19.0. There are argued to have different view on gender influence retirement planning. This research will reveal actual relationship between gender and retirement planning.

Andrade et al. (2014) found female more efficient toward retirement planning than male. Men typically more expertise on financial literate than female but men considered retirement is natural process and consider it when retirement comes to front. In adversely, female contain mindful toward unplanned obstacles occur huge problems during lifetime. The study supported by Selvaadurai, (2018) conduct study of retirement among Malaysia elderly individuals above 55 age. It states that female more family oriented than men, they consider more on children future education and retirement life with survey found over 56.3% female think retirement planning is important with total 623 respondents included men. Female mind-sets more towards for own family than men reason men needed to work for earnings income to maintain living standards. Besides that, Lee and Kuttyzholova (2016) conduct study in Kazakhstan found females with low education level and low income are most vulnerable groups in retirement planning. Females in Kazakhstan does not obtain education and culturally income mostly from their husband and controlled by husband. They unable control over income, which unable to make retirement planning. Situation mostly happens in close mind-set country; husband be the main leader in family. Female unable make any objection regards husband action plan and most family husband does not allow their wife work because their mind-set.

In female perspective on wealth, the mind-sets of females tend to be conservative especially in related to money. According to the research done by Ng et al. (2013)

has proven female have lesser financial knowledge compare to men. Men are preferable in calculation subjects while the female is lean toward in language and theoretical subjects, for example, it demonstrates female weaker in the subject of Personal Financial Planning and Management as they have less enthusiasm for financial compared to men.

Based on previous researcher findings, Ng et al. (2013), male with the desire for being the householder while a female with desire for being the family carer. Furthermore, the male has the obligation to take care of their family and manage or control the fund of their family. For instance, they had planned to invest a small part of total salary and constrained the expenditures for their family. In the manner, men showed to be more likely to see preferable better financial mind-sets than female. The researcher also carried out the research to discover regardless of whether male or female is better in the basic financial knowledge, monthly expenses and savings fund.

Other than that, research that proven by Trenow et al. (2016) uncovered that female attitudes towards pensions are different contrasted with those towards other financial decisions. Some of them are regularly increasingly occupied in other categories of savings method and more inspired to increase toward wealth. Moreover, another research that found by Mansor et al. (2015), Malaysia demonstrated that differences for gender human base do not convey any distinct effect toward decision-making on the retirement and referenced the probability of both gender base behaviours toward professional retirement help chasing is equally equivalent. The respondents shown in the studies are wellbeing experts with high wages and education level.

According to Lei and Liu (2018), the result shows female had negative and less significant with retirement planning. The previous researcher uses CHARLS data in Urban China. In the study, the previous researchers focus on the near and post-retirement individual in China urban's sector and around the age of 45 to 70. The study must confirm that female is negative relationship with retirement planning. According to Lee et al (2017), the result shows that both sexes, which are male, and females are showing a significant negative effect on the retirement plan. The research is to examine financial preparation for the retirement of United States

groups of men and females using the 2013 Survey of Consumer Finances (SCF). Traditionally, older workers of men and female did not seriously plan to retire before workers were very close to the actual retirement decision. Due to previous research, can do on the research state that the workers for both genders will start to plan for retirement planning before close to actual retirement period.

2.2.2.4.3 Education level

Education level will directly affect for the financial planning especially for retirement. The research suggests that workers have less savings due to lower level of their education but for the high-level education workers have a better savings. More schooling direct people to save more for retirement on their own. Datasets that link survey respondents Canada to their administrative tax records are used (Messacar, 2017). Education generally has more significant predictor towards the financial scheme. Most of the time spent out by labour force pursuing aim of educational goals would not be measured as a negative issue in terms of the retirement income as supplementary education could increase knowledge, skills and career advancements. Analysis of Variance (ANOVA) applied to measure the financial scheme for post-retirees by demographic features with total 990 questionnaires were distributed in Klang Valley (Tan, 2015). It is good to having large amount of sample size which may result more accuracy and closer to the population. According to Hiscott (2013), it is reasonable to claim that those retirees who 'have their financial house in order' in terms of greater investments, fewer debts and access to private pensions are much more likely to be higher in socio-economic status, reflected in higher levels of educational attainment. General Social Survey (GSS) is used to survey all respondents in 2002 and 2007 surveys (aged 45 years and older). His research focus on respondents who are aged 45 years and older which is different with this research which will focus on youth' group. Through this, this research can confirm whether income level will influence retirement planning on perception of youth.

From the study results, education presented significantly positive relative with retirement scheme behaviour. Individuals who achieved higher education level

(certificate of diploma and the above) will be more self-confident in their retirement scheme. That is a total of 500 working people in the private sectors from Malaysia which are in the Kuala Lumpur state and the Selangor state have participated in the study. Cronbach Alpha is used to analyses the data (Hassan et al, 2016). It is good to have targeted groups of respondents which is focus on diploma and above. According to Kerubo (2014), education level is stated to influence the level of financial attentiveness for retirement among the workers of the International Non-governmental Organizations (INGOs). The study finds that majority of the respondents who doing retirement planning are graduates which underscore the higher levels of skills in the sector. The study applied convenience sampling to administer questionnaires to 60 employees of the INGOs. Collected data was analysed in a multiple regression model. Her research is focus on the nongovernment group which is different with this research which target the youth group to become the main respondent to confirm the connection among the education level towards the retirement planning.

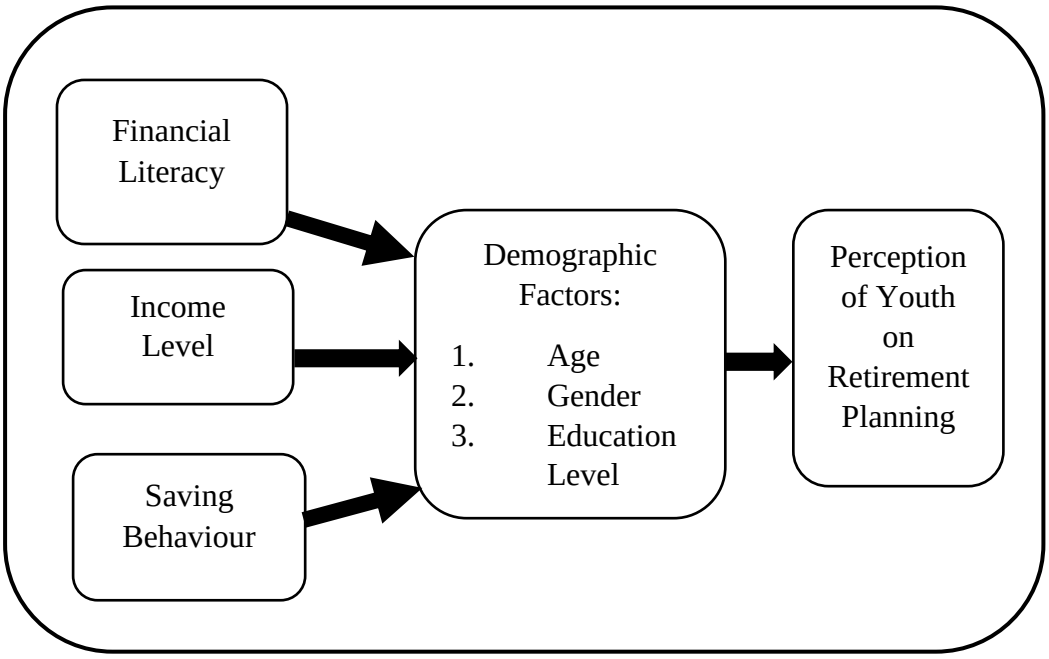
According to Lee et al. (2016), financial arrangement from the American men and women are conducting by 2013 Survey of Consumer Finances (SCF). Result proves that education level has a significant positive domination on retirement plan. Researchers use probit analysis and multiple regression models to run data. People with higher education have abilities and choices to maintain their lifestyles because of their expertise and skills. The research should confirm whether the high education level will be more professional in managing their retirement planning. According to Sabri and Juen (2017), their research aimed towards reveal determinants that will affect the female employees of their retirement confidence in the Malaysian government sector. 447 of women employees will represent the Peninsular Malaysia government sector to take in the research. Outcome shows that the education level is correlated for retirement confidence. When achieve higher education, will have enough money to save for retirement. For those who had lower education level which will lead to low confidence in retirement planning. However, there is also researched to prove that education level is not affecting towards the retirement planning. According to Selvadurai (2018), higher level of education does not necessarily result in successful retirement planning. There are educated people who do not know how to plan their finance well and they spend inefficiency. Since

there are confusing findings which is the real connection between the education level and the retirement planning. This study will use the education level to become mediator to clarify the relationship among the education level and the retirement planning.

According to Lee et al. (2018), this research is to examine the retirement of the American men and women about their financial preparation by using the Survey of Consumer Finances 2013 (SCF). Result shows that the education level has significant negatively effecting on the retirement plan. Researchers use probit analysis and multiple regression models to run data. People with higher education have abilities and choices to maintain their lifestyles because of their expertise and skills. This research should confirm whether the level of education will influence relationship on independent variables and dependent variable.

2.3 Conceptual Framework

Figure 1: Conceptual Framework



Conceptual Framework Source: Adapted from Mansor et al (2015), Sabri and Juen (2014), Morthy et al. (2012) and Nga and Yeoh (2018).

2.3.1 Financial Literacy

Financial literacy disclosed by experience, expertise and the needs of the people, to take a positive influence on their personal participation of the consumers in the financial markets and services (Jonubi and Abad, 2013). Based on the researchers, Lusardi and Mitchell (2013), financial literacy brings the capability of a person to procedure financial facts and settle on educated choices about the total of financial planning and wealth. People compose with high financial literate will in general be progressively sure of the retirement because they comprehend and accrue their prosperity to become an approach to get ready for their retirement. Financial Literacy believed to be determinants that will impact the savings behaviour of the retirement and has been specified unmistakable quality to be a method that expanding controlled reserves due to the saving for the retirement expects individuals to image retirement life. People who are financially uninformed report are more awful results on their economic, speculation and retirement scheme choices (Emma et al, 2017).

Mahdzan and Tabiani (2013), reviewed 200 people as sample that look into determinants impact personal savings behaviour and highlighted with financial literacy. People with low financial literacy are low probable to save as much as high financial literacy. Outcomes demonstrate that people have a moderately good dimension of essential monetary learning, for example, calculating the interest rates and the knowledge on comparative insecurity of the financial assets. Outcomes likewise discovered the elder people are more probable to have a positive savings, which holding other determinants unchanged.

A research that found by Emma et al (2017), the financial literacy and the retirement planning utilize National Survey that investigated people who organize their assets and make their financial decisions. By utilizing the data, the researchers found that the retirement planning and the financial literacy are intensely positively significant. They affirmed that the women who have lesser financially educated are less intention to manage for their retirement effectively.

2.3.2 Income Level

Income act as crucial determinants variable as sufficient funds or wealth assets easiness preparation of retirement. The research found by Mohamad et al. (2015), some of the individuals who had a greater income are further inspired to receive advices from the experts or specialists to speculate and do investment choice, but for the individuals who from lesser income due to they are having a lesser income so they will not able to seek for the experts or professional help on their retirement investment choices. On the report of Juliet (2014), income level was positively significant to the retirement planning, he recommended that the higher income, the more positive his or her attitude lean to retirement. Based on the research from Mohamad et al. (2015), it showed that the labour will tend to seek after distinctively several types of the financial education that are obtainable according through their monthly wages. Specialists are instigated that the higher income individuals are more gradually ideal on the financial education on domain planning whereas individuals who are low level income are further gradually on the financial education on liability clearance, loan purchasing and make provisions.

According to Zabri et al. (2016), they found that to build up the connection between the retirement planning and factor that influencing retirement planning. This result proved the income level domination on retirement planning. They found out money attitudes and the related of the retirement factors between the scholars in the advanced learning in Malaysia. The research proved, scholars have a positive outlook to the money and their wages that come into sight to be main helper demonstrating that female scholars and individuals from the public colleges are more progressively positive outlooks to the retirement scheme. The income accessibility was showed the greatest essential determinants and the disbursement for the education of children was the main inherent conflict region.

2.3.3 Savings behaviour

Based on Sabri and Juen (2014), many people have a low awareness of retirement confidence, especially women. Much of people does not concern about important of retirement planning. Given the poor retirement plans of Malaysians, it is important to study the financial readiness of Malaysians for their retirement. One of the components that will impact retirement planning is the behaviour of savings. As believed by Sabri and Juen (2014), the result show that saving behaviour and retirement confidence are positive correlated which mean saving behaviour will influence retirement planning. Savings behaviour is crucial to accumulate needed fund and spendable income when reach to retirement age. Malaysia pension fund system, Employee Provident Fund (EPF) are benefit to retiree to cultivate the habits of savings in account. However, it seems unlikely to fully secure when reaching to retirement. Especially for retirees bearing housing loan which forced to payout monthly. If negligence of these considerations, whole retirement life explored in uncertainty and unsecured.

2.3.4 The relationship of financial literacy, demographics factors and retirement planning.

Mediator variables which consists of age, gender, and education level will intermediate the relationship of independent variables and dependent variables. Financial literacy data from more than 140 countries indicate gender differences in all economies from developing to developed economies (Lusardi et al, 2015). Retirement is a phase to be go through and participate in specific social activities and ideal life become lesser. Individuals who does not plan to retirement requires continuous to work, even reaching to retirement age, but lifestyle remained. As stated by Mansor et al, (2015), result shows education level and age correlation but gender are not. Previous result still needs to be confirmed in this research whether gender have relationship towards retirement scheme. Individual intend to concern with retirement scheme and preparation for retirement when age and education improved. According to Mansor et al. (2015), people with higher education will

have more investment knowledge about retirement planning than those with lower educations level. According to Mugerman et al. (2016), result showed positive relationship between demographic factors and financial literacy which also will affect retirement planning. In difference education level, people will be absorbing difference knowledges from every stage. The higher the education level, people tends to share different financial knowledges and opinions. In society or educational field, people will actively be discussing on topic related with financial plans or even retirement planning.

2.3.5 The relationship of income level, demographics factors and retirement planning.

Relationship among income level and retirement planning intermediated by demographic variables. According to Talib and Manaf (2017), show positively significant perspective toward the retirement from the Malaysian academics and the results proved that the significant differences between the demographics factors like age, gender and education level against the income level. Differences in age influence working individual in different perspective towards retirement planning. People with a distinctive commitment plans, have bigger obligation regarding in managing retirement plans than those with distinctive benefit plans.

According to Emma and Amos (2017), demonstrated positive relationship between age, gender and education level to the retirement scheme and saving practices. Findings discovered that elder people, men, high educated level and high-income level are identified with a greater retirement readiness. People with mentioned characteristics consider doing more retirement preparation because of the opportunity structures. Moreover, contemplates on personality have similarly uncovered that specific qualities are positively correlated to retirement planning and saving. As stated by Ali et al (2015), They found that the income level is an overwhelming demographic factor in affecting the financial behaviour in the retirement planning while the financial confidence and the financial knowledge are positively significant subjective factors.

2.3.6 The relationship of savings behaviour, demographic factor and retirement planning.

Savings behaviour cultivate good habit for ordinary layman. According to Jonubi and Abad (2013), the relationship between demographic factor and saving behaviour are positive related toward retirement planning. As people get older, people intend to do more savings due to older people are more prefer to pay attention to retirement. According to Jonubi and Abad (2013), the elderly life cycle expenditures are lower such as education, wedding and household expenses. The higher the education level means that people need to have better understand their personal financial problems, so individuals can make proper financial decisions and have more capability to plan for future. Individual may concern about the important of saving behaviour will influence retirement planning due to the higher education level.

According to Baljit and Zubair (2018), the result showed that education level is significant in retirement planning among Malaysia's Generation Y, but age and gender were insignificant. This need to be confirmed whether age and gender were insignificant in this research. High living cost, worrying debt increase ad unpredictable performance in Malaysia currency have greatly contributed to the savings behaviour of retirement plans. Individuals tend to pay more attention to retirement scheme and improve their education. So, that individual will learn different way of saving for retirement planning. Education will explore more enlightenment and facts on retirement scheme. Age and retirement may different because can touch when still small. It does not need to wait until working just realize that retirement planning is important. Men and women also have various perception in saving behaviour toward retirement scheme. Around of the society will give different impact on retirement planning and will cause them to have different idea.

2.4 Hypothesis Development

2.4.1 Financial Literacy and Retirement planning

H_0: There is no relationship between financial literacy and retirement planning.

H_1: There is relationship between financial literacy and retirement planning.

Financial literacy referring to person capability in processing financial information and make the right choice to make financial planning as well as financial decision such as insurance, investment and retirement planning. Result showed people with more comprehensive financial knowledge will intend to actively involve themselves in retirement planning in the method of accumulating their wealth (Meir et al, 2017; Niu and Zhou, 2017).

2.4.2 Income level and Retirement planning

H_0: There is no relationship between income level and retirement planning.

H_1: There is relationship between income level and retirement planning.

Income level refers to a person earning wither is active income or passive income. The results showed high income people intend to plan retirement plans, while low income people give priority to debt settlement (Thakur et al, 2017). According to Juliet (2014), found that people who have a positive perspective to retirement scheme or vice versa come from higher income level. People from higher income group tend to obtain financial information regarding the retirement planning actively (Mohamad et al, 2015).

2.4.3 Saving behaviour and Retirement planning

H_0: There is no relationship between savings behaviour and retirement planning.

H_1: There is relationship between savings behaviour and retirement planning.

Saving behaviour refers intention that people tend to save such as people saving behaviour may tend in education which they save their income for school fees or further education. Result shows that saving behaviour will influence the retirement planning (Mohamad et al, 2015). This consistent with other researcher showed connection between the savings behaviour and retirement planning. (Hsiao et al, 2016; Clark et al, 2017).

2.4.4 Relationship between Demographic, Financial Literacy and Retirement Planning

H_0: Financial literacy will not have an indirect effect on retirement planning through demographic variable.

H_1: Financial literacy will have an indirect effect on retirement planning through demographic variable.

Demographic act as mediator between financial literacy and retirement planning. Result shows positive relationship between demographic and the financial literacy. Higher the education level the more financial literacy being composed (Meir et al, 2017). The other factor that included in this demographic is age and gender. Result shows correlation between financial literacy, gender and age (Young, 2013; Taft et al, 2013; Bucher et al, 2017).

2.4.5 Relationship between Demographic, Income level and Retirement Planning

H_0: Income level will not have an indirect effect on retirement planning through demographic variable.

H_1: Income level will have an indirect effect on retirement planning through demographic variable.

Relationship between the demographic variable proved by researcher with absolute relationship between income level and age. Result shows relationship between age and income level (Bierman, 2014). More research shows that, income level has relationship between the gender and education level (Chung et al, 2017; Bartik and Hershbein 2018; Kreft, 2016).

2.4.6 Relationship between Demographic, Saving behaviour and Retirement Planning

H_0: Saving behaviour will not have an indirect effect on retirement planning through demographic variable.

H_1: Saving behaviour will have an indirect effect on retirement planning through demographic variable.

According to Madhzan and Victorian (2013), the saving behaviour have positive relationship between demographic. The result shows that the older the person the more intention he will save for the retirement. While for the education level result shows uncorrelated between the education level and savings behaviour. It indicates that whether the person education level high or low will not affect his savings behaviour (Baljit and Zubair, 2018). Result shows correlated between savings behaviour and gender (Fisher and Yao, 2017).

2.5 Conclusion

Determinants influenced the retirement planning examined in several previous studies. Previous studies focus more on the direct effect of common contributing factors, financial literacy and income level towards retirement planning. While the less previous study on direct effect of savings behaviour towards retirement planning will become this research objective. Besides that, emphasis on probe into indirect effect of independent variables and dependent variable mediated by demographic variables.

CHAPTER 3 METHODOLOGY

3.0 Introduction

Research project crucial to further develop knowledge by process of collecting and analysing data into understandable information and conform to perception of youth in Malaysia thus making appropriate decision making on the topic examined. The research design, sampling design, data collection methods and proposed analysis tools would be further discussed for conduct this study.

3.1 Research Design

Quantitative Research Design applied to targeted respondents and asked the same questions to ensure the entire data sample being analysed fairly. It aims on collecting statistics and widespread it over a group of people or to clarify circumstances. Descriptive Research as one of the designs under Quantitative Research Design which collecting the statistics that express the events. Tools used to arrange statistics into design that arises during analysis. Descriptive research expects to know what is ordinary presented in a population. This design usually does not involve forecast or manipulate results (Swatzell and Jennings, 2007).

3.2 Sampling Design

3.2.1 Sampling Techniques

Simple random sampling designed used in this research. Each of the individual is chosen by the equal chance from the whole population (West, 2016). In other words, this technique is used to pick a small proportion from the population to represent the population is smaller picture. Distribution from this kind of techniques will not have any criteria or formula needed to be fulfil. Selection sample from the population is completely in same chance and probability there for this method also called method of chances. The list of the subject that in whole population called sampling frame (Elfil and Negida, 2017). Simple random sampling will shorter the research period because it will come out a conclusion from the large population.

3.2.2 Target Population

This research is targeting on youth from 13 states in Malaysia. According to The Commonwealth (2019), 13 states in Malaysia: Selangor, Pahang, Johor, Sabah, Sarawak, Perak, Kedah, Penang, Kelantan, Malacca, Terengganu, Negeri Sembilan and Perlis. As defined in the youth societies and youth development act, youth range between the ages of 15-40.

3.2.3 Sampling Size

Table 3.1: Table for Determining Sample Size from a Given Population

TABLE

Table for Determining Sample Size from a Given Population

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note: *N* is population size, *S* is sample size. Sources: Krejcie and Morgan, 1970

As table above from (Krejcie and Morgan,1970) elaborate that how many sample sizes is sufficient for known population. However, youth population in Malaysia is unknown therefore the sampling technique used is non-probability sampling. According to Moorthy et al. (2012), their research using the 300 respondents to do their research topic regards retirement scheme behaviour in Malaysia. There are 300 respondents pick from the total population, 53 million internet users in Indonesia and it considered as adequate to represent the characteristic in population (Pratminingsih, 2013). After referring these two journals mentioned above, 300 respondents are adequate in topic retirement planning and millions of the population in Indonesia. This conclude that 300 sampling size in this research is sufficient. Google questionnaire form will be distributed to these 300 respondents in 13 states of Malaysia.

3.3 Data Collection Method

Intention for this research to analyse perspective of Malaysia youth towards retirement planning, which only focus among Malaysia youth. The primary data applied in data collection method and target respondents as Malaysia youth. Hence, the questionnaire method applied in this research study to gather the statistics and questionnaire apply online form and physical form for collect the data.

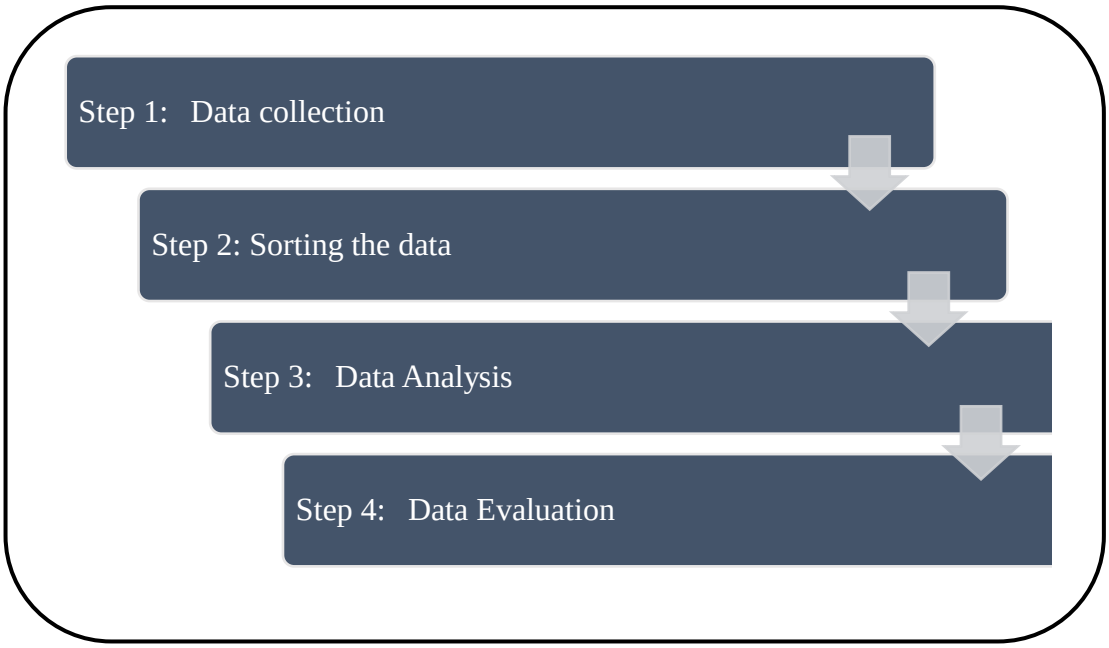
Primary Data

Primary data referring to real-time statistics derived by researcher in first time. It widely used to collect the data to solving problems arise. It known as sources include surveys, observations, experiments, questionnaire, and personal interview on the other contrary (Ajayi, 2017). Questionnaire method applied to gather the statistics. Due to it efficient collecting huge number of statistics in shorter time. Questionnaire will be set and hand out to targeted respondents in online and physical form.

3.4 Data Processing

Data processing crucial towards conduct methodology part. Research able to obtain more comprehensive point of views and solving problems through process data collection, data arrangement, data analysis and data interpretation. In general, computer system conducts a set of operations towards the relevant data and convert to meaningful information for conduct interpretation.

Figure 2: Flow Chart of Data Processing



3.4.1 Data Collection

Data collection implies a procedure of collecting and estimating information from assorted sources, which allow an individual to respond relevant questions and assess possible result. Statistics that embrace for this research are primary data. The data acquired from the questionnaire that this research relegated to Malaysian youth.

3.4.2 Data Recording

Data recording implies a procedure of statistics document, few statistics document compute a database. Microsoft Excel will analyse the relationship of independent variables by recording statistics. Questionnaire will hand-operated typing into Microsoft Excel and take out irrelevant questionnaire.

3.4.3 Data Evaluation

Data evaluation is a process of systematic application of statistics to describe, review and assess statistics. SMART Partial Least Square (SMART PLS) program version 3.0 applied to run all statistics. SMART PLS conducting test using descriptive analysis which include partial least square regression, mediating analysis and partial least square correlation. All tests performed used to confirm that there are no errors in the regression model.

3.4.4 Interpretation of results and findings

Interpretations of results and findings means that understanding the result and explained the performing. In this part, this research will go to analyses the results. Through the result, will show that the relationship in the specific context.

3.5 Research Instruments

Questionnaire are effective mechanisms for collecting certain information effectively. It provides effective and able easily collecting large amount of information from 300 samples of respondents in short period. Questionnaire are easy, cheap and fastest to analyses compare to others such as telephone survey. The

questionnaire severely restricts respondents to read and answer all questions. The information that provided by respondents can converted into qualitative data easily. Questionnaire is commonly used to obtain information and collecting data which familiar for respondents due to clear and straightforward questions enable respondents to quickly respond. The demographic states profile of the respondent will be collected before entering to the main questionnaire. The main questionnaire will separate into few sections: Section A, Section B, Section C. Section A, five questions allocated which regarding to the dependent variables: retirement planning. Section B regarding to the independent variables with included eighteen questions and separate to three parts. Five questions presented in saving behaviour, seven questions presented in financial literacy and six questions presented in income level. Section C similar with Section B, which consist of fifteen question regarding to the demographic factors, mediator variables and separate into three parts. Each part allocated five questions regarding to mediator variables.

3.6 Data Analysis

3.6.1 Descriptive Analysis

Descriptive analysis usually is used the sample from the survey in the form of table and summary charts. The summary data and table are associated with the reports to plainly clarify about the graphs and tables. The demographic states profile of the respondents and the central tendencies of the main three section questionnaires will be analyse by using the descriptive analysis. Demographic states profile of the respondents is statistic profile which is characterized as information about the characteristics of a sample.

3.6.2 Review of Data Analysis

The assessment of legitimacy carried out to pledge for quality and trustable result. Since the significant and good reliability coefficient does not ensure a precise measure on the construct. The results of the construct legitimacy of the test will give a clearer picture of the quality measures (Hair et al, 2014). Prior testing examine determinants domination to independent variables and dependent variable, estimation models need to include the perception legitimacy and reliability. Based on this study, the statistic software, SMART PLS 3 is developed by the researcher Ringle et al (2005), this software applied to analyse statistics being gathered. The output such as mediation analysis, partial least square correlation and partial least square regression are form by the researcher of this study with the supportive of SMART PLS 3.

3.6.2.1 Partial least square regression

Partial least squares (PLS) regression is method that use to eliminates the predictor variables into small unconnected elements and present least squares regression on components. It can generalize and connect characteristics from principle element analysis and multiple regression. It efficient for forecast dependent variables from large independent variables (Abdi, 2003). Multiple least regression can apply to many varibles. While, if number of predictors too big, it probable retrieve the sample statistics perfectly while fail to determnine new statistics perfectly. It referring as over-fitting. Besides of manifest factors, there is also few latent factors that existing in variables. The PLS can extract these latent factors (Tobias, 1995).

3.6.2.2 Partial lease square correlation (PLSC)

Partial least square is an approach that target to find the shared information or common information between the two predictors variable. Predictor variables required maximal covariance between each other (Abdi and Williams, 2013). This

method able to handle large data set and the sophisticated experimental analysis which is suitable for our research. The latent variable is deriving from the original variable that will present part of the covariance between variables. Besides that, PLSC originally is descriptive multivariate technique further inferential step to ensure the reliability of the result (Tucker, 1958).

3.6.2.3 Mediation Analysis

Mediation explained the underlying effects that link pre-existing and the consequences of the variables (Carrion et al, 2017). Mediation analysis applied to analyse the effect and the relationship between dependent variable and independent variables included mediator variables. Total Effect Value would be examining with use of “Bootstrapping” test. The data under “Bootstrapping” reports can interpret by using T- statistics. Hence, the T- statistics showed higher than 1.96 under significant level of 5% resulted to exogenous variables to be positive significant for this study.

3.7 Conclusion

Methodologies discussed and reported in this section. Descriptive research applied in research design for collecting and describe the data and conduct for the statistical analysis. In this research, the sampling design, data collection method, data processing and data analysis conducted. Thus, the next chapter begin to investigate and examining the data from the respondent’s questionnaires and able to obtain detailing information towards statistical data in this research.

CHAPTER 4 DATA ANALYSIS

4.0 Introduction

Chapter 4 focusing on examine, interpreting and reporting statistics. 311 sets of questionnaires are giving out to the targeted respondents in Malaysia. The analysis will be classified into two which are Descriptive analysis and Inferential analysis. The inferential analysis is accomplished by using PLS-SEM software.

4.1 Descriptive Analysis

The Descriptive Analysis is a useful test, which allows the researcher easy to conduct summarization and interpretation for the respondent characteristics through bar charts, histogram or any relevant graphical presentation (Loeb et al, 2017). Descriptive analysis showing the geographical information of respondents whether in percentage distribution or frequency. Moreover, the central tendencies of the research likes: mean, median and standard deviation from Section A, Section B and Section C will generated through PLS SEM software for every statement used to conduct this research.

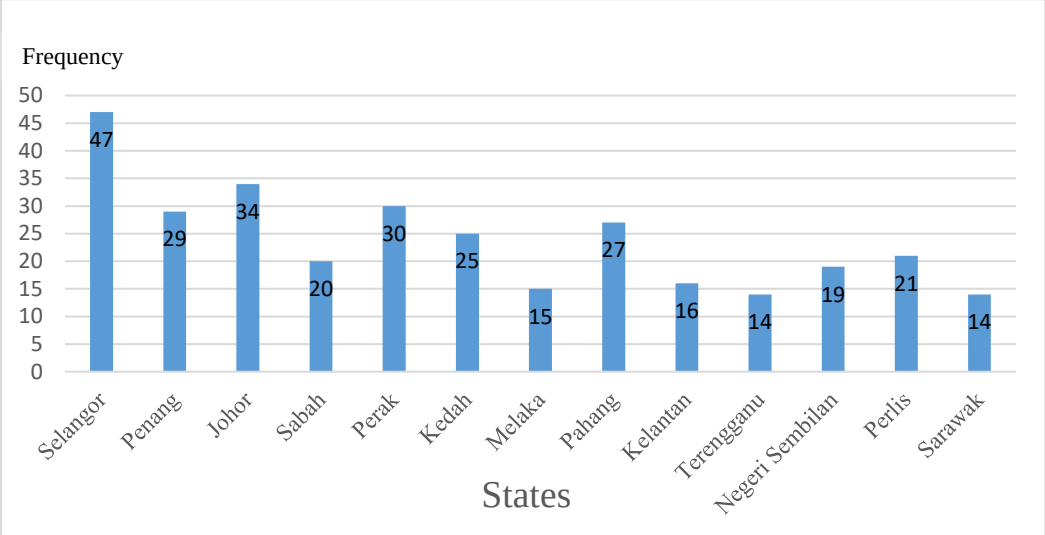
4.1.1 Respondent Demographic Profile

Table 4. 1 States of the Respondents

States	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Selangor	47	15.10%	15.10%	15.10%
Penang	29	9.30%	9.30%	24.40%
Johor	34	10.90%	10.90%	35.30%
Sabah	20	6.40%	6.40%	41.70%
Perak	30	9.60%	9.60%	51.30%
Kedah	25	8.00%	8.00%	59.40%
Melaka	15	4.80%	4.80%	64.20%
Pahang	27	8.70%	8.70%	72.90%
Kelantan	16	5.10%	5.10%	78.00%
Terengganu	14	4.50%	4.50%	82.50%
Negeri Sembilan	19	6.10%	6.10%	88.60%
Perlis	21	6.80%	6.80%	95.40%
Sarawak	14	4.50%	4.50%	**100%**
Total	**311**	**100%**	**100%**	

Source: Developed for the research

Figure 3: States of the Respondents



Source: Developed for the research

Table 4.1 and Figure 3 demonstrate respondents from states of Malaysia take part in this survey. Total of 311 respondents has participated in this research. For the West of Malaysia, 47 respondents (15.1%) comes from Selangor, 29 respondents (9.30%) comes from Penang, 34 respondents (10.90%) comes from Johor, and 30 respondents (9.60%) comes from Perak. Moreover, there are 25 respondents (8.00%) comes from Kedah, 15 respondents (4.80%) comes from Melaka, 27 respondents (8.70%) comes from Pahang, 16 respondents (5.10 %) comes from Kelantan, 14 respondents (4.50%) comes from Terengganu. 19 respondents (6.10%) comes from Negeri Sembilan and 21 respondents (6.80%) comes from Perlis. For the East of Malaysia, 20 respondents (6.40%) comes from Sabah and 14 respondents (4.50%) comes from Sarawak.

4.1.2 Dependent Variable – Retirement Planning

Table 4. 2 Descriptive Statistics for Dependent Variable -Retirement Planning

Statements	Mean	Standard Deviation
1. Do you think retirement planning is important?	4.215	0.719
2. Do you think retirement planning is still far from you?	4.219	0.792
3. Do you think retirement planning is complicated?	4.270	0.844
4. Do you think retirement planning should be started earlier?	3.961	1.096
5. Do you think retirement planning able to benefit in your future retirement life?	4.161	0.651

Source: Developed for the research

Table 4.2 describe the dependent variable which is retirement planning question of mean and the standard deviation.

Based on table 4.2, statement of "Do you think retirement planning is complicated" achieve highest mean scores which is 4.219. While the statement of "Do you think retirement planning should started earlier" has lowest mean scores 3.961.

For standard deviation, statement of "Do you think retirement planning should be started earlier" has highest standard deviation scores (1.096) while "Do you think retirement planning able to benefit in your future retirement life" has lowest standard deviation scores (0.651).

4.1.3 Independent Variable- Financial Literacy

Table 4. 3 Description Statistics for Independent Variable- Financial Literacy

Statements	Mean	Standard Deviation
1. I will do budgeting for my own financial.	4.051	0.974
2. I will record my daily expenses.	4.161	0.756
3. I will compare the price of goods before I buy.	4.183	0.819
4. I will attend financial seminar to improve my financial knowledge.	3.675	1.094
5. I will avoid maxing out the limit of my ATM card.	4.048	1.106
6. As long as retirement concerned, I would like to invest.	4.048	1.106
7. I tried to figure out the amount that I need to prepare for retirement.	4.058	1.098

Source: Developed for the research

Table 4.3 describes the independent variable which is financial literacy question of mean and standard deviation.

Result above in table 4.3, the statement of "I will compare the price of goods before I buy" reaches the highest value of the mean score (4.183). On the other hand, the statement of "I will attend financial seminar to improve my financial knowledge" reaches the lowest value of the mean score (3.675).

Furthermore, standard deviation has two statements reach the highest value (1.106) which is the statement of "I will avoid maxing out the limit of my ATM card." And the statement of "As long as retirement concerned, I would like to invest.". Moreover, the lowest value (0.756) of the standard deviation is from the statement of "I will record my daily expenses.".

4.1.4 Independent Variable- Savings Behavior

Table 4. 4 Description Statistics for Independent Variable- Savings Behavior

Statements	Mean	Standard Deviation
1. I will open a savings account to save money.	4.141	0.910
2. I will not waste money on buying expensive things	4.132	1.057
3. I will save money for my future emergency fund.	4.350	0.831
4. I will save money to do some investments.	4.151	1.027
5. I will do a planning for vacation; however, I will save money.	3.859	1.054

Source: Developed for the research

Table 4.4 describes independent variable savings behaviour question of mean and standard deviation.

As stated by result table 4.4, highest value of the mean score (4.350) is from the statement of "I will save money for my future emergency fund". However, lowest value of the mean score (3.859) from the statement of "I will do a planning for vacation; however, I will save money".

For standard deviation, highest value standard deviation (1.057) belongs to the statement of "I will not want money on buying expensive things". Moreover, the lowest value standard deviation (0.831) from the statement "I will save money for my future emergency fund".

4.1.5 Independent Variable- Income Level

Table 4. 5 Description Statistics for Independent Variable- Income Level

Statements	Mean	Standard Deviation
1. Retirement is important, I would like to take a part of income to do investment	3.566	1.225
2. I will save a part of income for retirement.	3.704	1.266
3. Income level will affect and important for my retirement planning.	3.949	1.026
4. My current income level is sustainable for my future retirement.	3.894	1.255
5. If I have high salary, I would plan for retirement planning	3.891	1.120
6. Employees who had low salary, they prefer debt purchasing rather than retirement planning.	4.193	0.999

Source: Developed for the research

Table 4.5 describes independent variable, income level which consists of mean and standard deviation.

As stated by result in table 4.5, highest value of mean score (4.193) belongs to the statement of "Employees who had low salary, they prefer debt purchasing rather than retirement planning.". As for the lowest value of the mean score (3.566) is from the statement of "Retirement is important, I would like to take a part of income to do investment".

Next, the highest value of the standard deviation score (1.266) "I will save a part of income for

retirement." As for the lowest value standard deviation (0.999) belongs to statement of "I will save a part of income for retirement".

4.1.6 Mediator – Age

Table 4. 6 Descriptive Statistics for Mediator– Age

Statements	Mean	Standard Deviation
1. Along with the growth of age, increased level of financial literacy will encourage retirement planning.	4.238	0.799
2. As age bracket increased, contribution for retirement planning from income will increase also.	4.238	0.762
3. When close to retirement age, people tend to increase their sources of income to retire comfortably.	3.981	0.949
4. 30's and 40's holds the perception that their savings in EPF is sufficient for their retirement	4.122	0.793
5. 30's and 40's retirement planning only rely on EPF savings.	2.595	1.299

Source: Developed for the research

Table 4.6 describes mediator variable, age question of the mean and standard deviation.

Based on table 4.6 showed highest mean scores (4.238) from two statement which is "Along with the growth of age, increased level of financial literacy will encourage retirement planning" and "As age bracket increased, contribution for retirement planning from income will increase also". However, the lowest mean score (2.595) is from the statement of "30's and 40's retirement planning only rely on EPF savings". For the standard deviation, statement of "30's and 40's retirement planning only rely on EPF savings" has highest standard deviation scores (1.299) whereas statement "As age bracket increased, contribution for retirement planning from income will increase also" has lowest standard deviation score (0.762).

4.1.7 Mediator – Gender

Table 4. 7 Descriptive Statistics for Mediator– Gender

Statements	Mean	Standard Deviation
1. Male are known as more financial literacy which may result more in retirement planning.	4.051	0.974
2. Male have more interest in financial literacy to do their retirement planning.	4.161	0.756
3. Male are more willing contribute higher portion of income for their retirement planning.	4.183	0.819
4. Male will seek for various sources of income to increase their retirement savings.	3.675	1.094
5. Male will ensure their savings is sufficient for to cover expenses incurred in retirement life.	4.048	1.106

Source: Developed for the research

Table 4.7 describes mediator variable, gender question of mean and standard deviation.

Based on table 4.7, highest mean scores (4.183) gained by the statement of "Male are more willing contribute higher portion of income for their retirement planning" whereas the lowest mean score (3.675) is from statement of "Male will seek for various sources of income to increase their retirement savings".

For standard deviation, the highest score (1.106) is from the statement of "Male will ensure their savings is sufficient for the cover expenses incurred in retirement life" whereas lowest standard deviation score (0.756) from statement "Male have more interest in financial literacy to do their retirement planning'.

4.1.8 Mediator – Education Level

Table 4. 8 Descriptive Statistics for Mediator– Education Level

Statements	Mean	Standard Deviation
1. People who have higher education level tend to have more financial literacy to have better plan for their retirement.	4.212	0.717
2. Higher educated people will not be misleading of financial information for their retirement planning.	4.212	0.794
3. People who are highly educated will have comprehensive savings plan for retirement.	4.260	0.845
4. Educated people tend to use their income wisely for their retirement planning.	3.952	1.103
5. Educated people will contribute more portion of income for retirement planning.	4.161	0.651

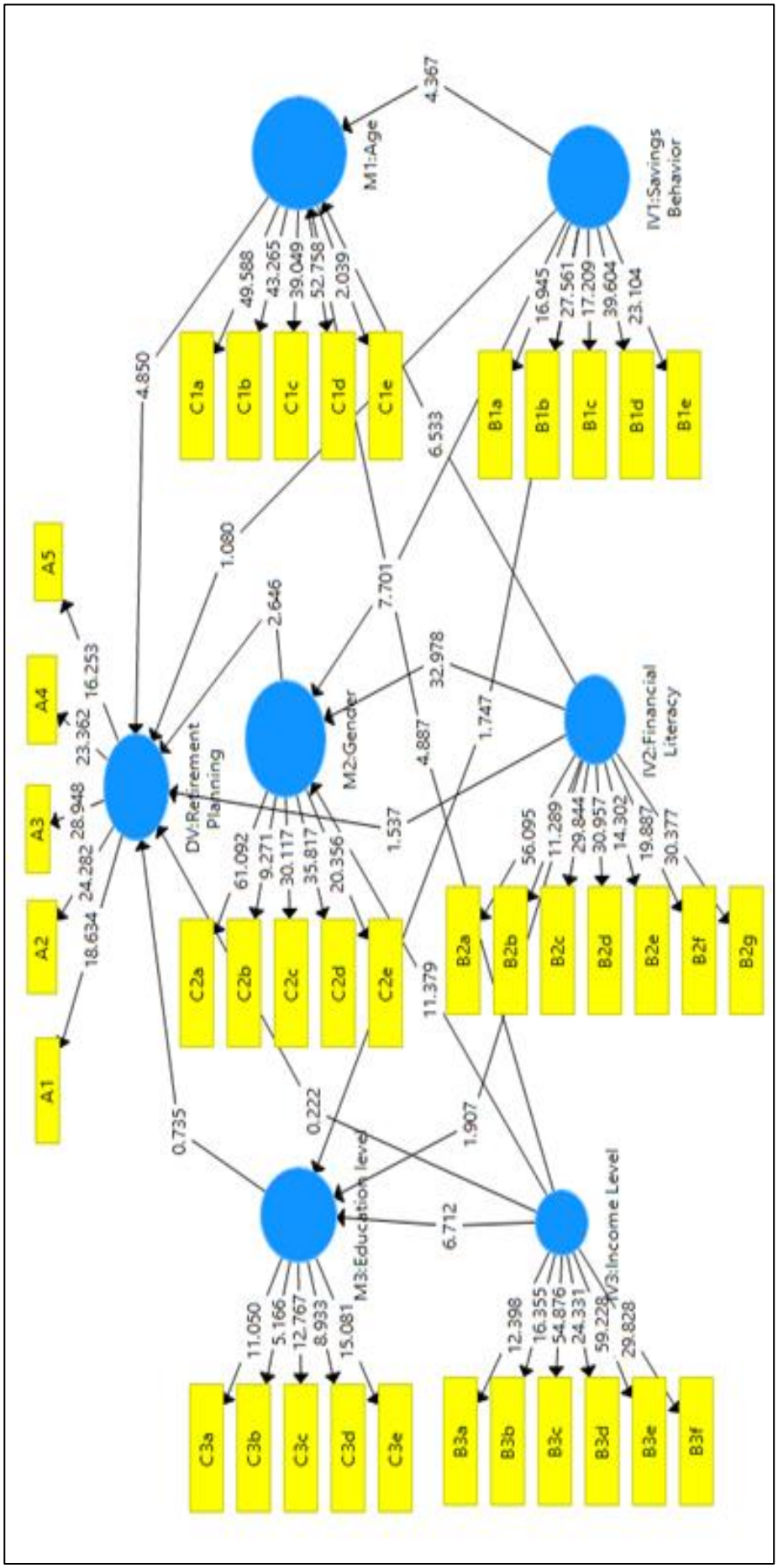
Source: Developed for the research

Table 4.8 describes mediator variable, education level question of mean and standard deviation. Based on table 4.8, statement of "People who are highly educated will have comprehensive savings plan for retirement" has the highest mean score (4.260) while statement of "Educated people tend to use their income wisely for their retirement planning" has lowest mean score (3.952).

For standard deviation, statement of "Educated people tend to use their income wisely for their retirement planning" has highest standard deviation score (1.103) whereas statement "Educated people will contribute more portion of income for retirement planning" has lowest standard deviation score (0.651).

4.2 Inferential Analysis

Figure 4: Result of PLS-SEM



Source: Developed for the research

4.2.1 Explanation of Target Endogenous Variable Variance

Table 4. 9 R^2 result of Dependent Variable and Mediators Variable

	R^2
Retirement Planning	**0.589**
Age	**0.495**
Gender	**0.959**
Education Level	**0.073**

Source: Developed for the research

Table 4.9 show result of coefficient of determination (R^2) for dependent variable and mediator variables from PLS-SEM, the R^2 value of retirement planning is 0.589, this indicate the independent variables (financial literacy, savings behaviours and income level) clarify 58.90% of variance in retirement planning. Retirement Planning variable can explain by 49.50% (R^2 = 0.495) of variance in Age. Moreover, dependent variable can be explained as 95.90% (R^2 = 0.959) of the variance in Gender. Retirement Planning can be explained by 7.30% (R^2 = 0.073) of the variance in Education Level.

4.2.2 Inner Model Path Coefficient Sized and Significance

Based on result in Figure 4 shows that, financial literacy (6.533) has strongest domination on the age towards independent variables followed by income level (4.877) and saving behaviour (4.367). Moreover, the result shows that financial literacy (32.978) has strongest domination on gender towards independent variables, followed by income level (11.379) and saving behaviour (7.701). The result shows that the income level (6.712) has the strongest effect on the education level among the independent variables, followed by financial literacy (1.907) and saving behaviour (1.747). The result further explains that age (4.850) has greater effect on retirement planning followed by the gender (2.646) and education level (0.735). In overall, the result shows that the inner modal path coefficient more than the

significant value 0.1, which resulted the hypothesized path relationship of this model is statistically significant with the value over 0.1.

4.2.3 Reliability and Validity Test

Reliability and validity test conducted by PLS-SEM method is to analyse the reliability and validity of the variables, age, gender and education level treated as mediator variables indirect effect on saving behaviour, financial literacy and income level towards retirement planning.

4.2.3.1 Reliability Test – Indicator Reliability

Table 4. 10 The Outer Model Loading Results from PLS-SEM

	Retirement Planning	Savings Behaviour	Financial Literacy	Income Level	Age	Gender	Education Level
1	0.760						
2	0.764						
3	0.835						
4	0.771						
5	0.729						
1		0.713					
2		0.799					
3		0.724					
4		0.792					
5		0.706					
1			0.834				
2			0.593				
3			0.767				
4			0.763				

5			0.677				
6			0.736				
7			0.751				
1				0.697			
2				0.755			
3				0.834			
4				0.759			
5				0.861			
6				0.767			
1					0.861		
2					0.865		
3					0.814		
4					0.881		
5					-0.161		
1						0.863	
2						0.568	
3						0.784	
4						0.770	
5						0.760	
1							0.775
2							0.657
3							0.789
4							0.775
5							0.809

Source: Developed for the research

Table 4.10 shows questions for this research considered as valid and acceptable to conduct the research. However, one of the questions in age variable shows invalid. This explained that most of the questions exceed the minimum requirement standard for factor loading value which is 0.7. The factor loading value for this outer loading result shows to determine the validity of questionnaire for each of the variables this indicate that the factor loading value for the research question must be equal or exceed 0.7. However, there is acceptable situation for the questionnaire

there only have exploratory research, but the factor loading value is equal or exceed above 0.4 (Hulland, 1999).

4.2.3.2 Reliability Test – Internal Consistency Reliability Result from PLS-SEM

Table 4. 11 Cronbach's Alpha Result from PLS-SEM

Variables	Number of Items	Cronbach's Alpha	Result of Reliability
Retirement Planning	5	0.831	Good
Savings Behavior	5	0.802	Good
Financial Literacy	7	0.857	Good
Income level	6	0.882	Good
Age	5	0.745	Good
Gender	5	0.806	Good
Education Level	5	0.829	Good

Source: Developed for the research

Cronbach's alpha reliability as the most common study method to assess the reliability in the social and the organizational sciences (Cronbach, 1951). Higher value resulting accuracy of scale. As believe by Nunnaly (1978), the value that places at 0.7 or above are acceptable reliability coefficient. Table 4.11 shows all

variables are reliable at the value Cronbach's Alpha 0.7 and above. Income level shows the greatest value (0.882) among all the independent variables followed by the financial literacy and savings behaviour which are 0.857 and 0.802, both variables exceeds the minimum requirement of 0.7. According to Sekaran and Bougie (2013), it claimed that all the variables consider good and reliability.

Table 4. 12 Composite Reliability Result from PLS-SEM

Variables	Number of Items	Cronbach's Alpha	Result of Reliability
Retirement Planning	5	0.881	Good
Savings Behavior	5	0.864	Good
Financial Literacy	7	0.891	Good
Income level	6	0.903	Good
Age	5	0.839	Good
Gender	5	0.867	Good
Education Level	5	0.874	Good

Source: Developed for the research.

Internal consistency reliability is measured by Cronbach's alpha but normally would be applied in social science research. Bagozzi and Yi (1988) suggested that composite reliability may use to replace Cronbach's alpha to calculate the internal consistency reliability of variables with a minimum requirement of value 0.6.

Table 4.12 shows that income level (0.903) has the greatest value among all the variables, following by financial literacy (0.891), retirement planning (0.881) and savings behaviour (0.864). The result concludes that this model validity as all the variables are in a composite reliability value which exceeded the value of 0.6.

4.2.3.3 Validity Test – Convergent Validity

Table 4. 13 Average Variance Extracted (AVE) Result from PLS-SEM

Variables	Number of Items	AVE	Result of Validity
Retirement planning	5	0.597	Good
Savings Behavior	5	0.560	Good
Financial literacy	7	0.540	Good
Income level	6	0.610	Good
Age	5	0.591	Good
Gender	5	0.570	Good
Education level	5	0.582	Good

Source: Developed for the research.

Average Variance Extracted (AVE) use to measure convergent validity. Convergent validity normally used in sociology, psychology and other behavioural studie because the two constructs theoretically should be related. AVE used to measure the degree of variance captured by a construct related to the degree of variance from measurement error. Ensuring convergent validity test valid, the variables value must greater than 0.5 level. Table 4.13 shows that, all of the variables are good and

reliable as accepted level. Income level shows the greatest convergent validity (0.610) whereas others variable shows average convergent validity value is higher than 0.5, savings behavior (0.560), financial literacy (0.540), age (0.591), gender (0.570) and education level (0.582). All variables had shown the significant convergent validity result.

4.2.3.4 Validity Test – Discriminant Validity

Table 4. 14 Fornell-Larcker Result from PLS-SEM

	Retirement Planning	Savings Behaviour	Financial Literacy	Income Level	Age	Gender	Education Level
Retirement Planning	0.772						
Savings Behaviour	0.676	0.748					
Financial Literacy	0.686	0.826	0.735				
Income Level	0.407	0.669	0.693	0.781			
Age	0.645	0.642	0.666	0.379	0.769		
Gender	0.717	0.842	0.967	0.592	0.639	0.755	
Education Level	0.005	-0.156	-0.082	-0.227	0.049	-0.051	0.763

Source: Developed for the research.

From table 4.14, the Fornell-Lacker test is a must in research especially research having the latent variable to prevent the multicollinearity problem. This test compares the correlation of the latent construct with square root of the average variance extracted (AVE). Test result show that retirement planning (0.772), income level (0.781), age (0.769) and education level (0.763) is the highest among the column and the row. For the Savings behaviour (0.748), Financial literacy

(0.735) and the gender (0.755) all is not the highest among the column and row. However, these 3 variables remain the second highest or the third highest compare with the row and column. In the overall picture, this result is acceptable.

Table 4. 15 Heterotrait-Monotrait Ratio (HTMT) Result from PLS-SEM

	Retirement planning	**Saving behaviour**	**Financial Literacy**	**Income level**	**Age**	**Gender**	**Education level**
Retirement Planning							
Savings Behaviour	0.819						
Financial Literacy	0.783	0.976					
Income level	0.448	0.719	0.730				
Age	0.827	0.831	0.834	0.422			
Gender	0.855	1.036	1.150	0.608	0.822		
Education Level	0.161	0.255	0.280	0.234	0.239	0.278	

Source: Developed for the research.

Table 4.15 refer discriminant validity problem in variable. According the Heterotrait-Monotrait (HTMT) it has the criterions of the $HTMT_{0.85}$. This method is more empirical evidence and more sensitivity to detect the discriminant validity problem. The result shows that retirement planning-gender (0.855), saving behaviour-financial literacy (0.976), saving behaviour-gender (1.036) and financial literacy-gender (1.15) all of this have the problem multicollinearity between the latent variable. The interesting that the combination gender-retirement planning is not detecting by the previous method while HTMT method able to detect it. Problem incur may due to the measurement is the same between the construct object. It means that, there may occur the overlapping item between the respondent perception.

4.2.4 Bootstrapping Analysis

4.2.4.1 Significance Analysis of the Direct and Indirect Effect (Total Direct and Indirect)

Table 4. 16 Bootstrapping Result from PLS SEM (Total Direct)

Variables	Direct Effects	T-Value	Significance (P < 0.05)	Results of significance
Saving Behaviour → Retirement Planning	0.409	4.967	0.000	Yes
Financial Literacy → Retirement Planning	0.491	5.998	0.000	Yes
Income Level → Retirement Planning	-0.206	3.276	0.001	Yes

Source: Developed for the research.

Table 4. 17 Bootstrapping Result from PLS SEM (Total Indirect)

Variables	Indirect Effects	T-Value	Significance (P < 0.05)	Results of significance
Saving Behaviour → Retirement Planning	0.261	2.840	0.005	Yes
Financial Literacy → Retirement Planning	0.905	3.069	0.002	Yes
Income Level → Retirement Planning	-0.224	3.142	0.002	Yes

Source: Developed for the research

Bootstrapping analysis is a method to analyse and evaluate the 5000 set of different combinations to test the approximate level for the normality of data. Table 4.16 and Table 4.17 shows direct and indirect effects for the independent variables towards dependent variable. Result shows that the overall direct and indirect effect for this research is partial mediation. Partial mediation indicate that both result from direct and indirect effects are resulted significance. This indicate the independent variables has significantly effects toward the dependent variables after include with the mediator variables (Jr and Chen, 2010).

4.2.4.2 Bootstrapping Analysis – Outer Loading

Table 4. 18 Bootstrapping Result from PLS SEM (Outer Loading)

	Retirement Planning	Savings Behavior	Financial Literacy	Income Level	Age	Gender	Education Level
1	17.702						
2	24.493						
3	29.449						
4	22.948						
5	16.266						
1		16.690					
2		28.655					
3		16.483					
4		39.467					
5		24.306					
1			58.077				
2			11.140				
3			30.477				
4			31.220				
5			14.282				
6			19.707				
7			30.399				
1				12.162			
2				16.418			

3				52.753			
4				22.611			
5				60.244			
6				29.081			
1					53.288		
2					40.743		
3					35.591		
4					51.287		
5					1.891		
1						64.325	
2						9.0440	
3						30.127	
4						39.434	
5						19.963	
1							10.993
2							5.752
3							13.401
4							8.661
5							16.596

Source: Developed for the research.

Table 4.18 shows bootstrapping result for outer loading method. The result shows the questions for this research is significant because outer loading result T-Statistics higher than 5% significance value or value 1.96. Overall, the figure in the result from the outer loading table 4.18 shows most of the questions are significant except the age variables question 5 show weak significant value 1.891.

4.2.4.3 Bootstrapping Analysis – Mediating Latent Variable

Table 4. 19 Bootstrapping Result from PLS SEM (Mediating Latent Variable)

	T-Statistics
Savings Behaviour >> Age >> Retirement Planning	2.608
Financial Literacy >> Age >> Retirement Planning	4.842
Income Level >> Age >> Retirement Planning	3.334
Savings Behaviour >> Gender >> Retirement Planning	2.827
Financial Literacy >> Gender >> Retirement Planning	2.491
Income Level >> Gender >> Retirement Planning	2.304
Savings Behaviour >> Education level >> Retirement Planning	0.606
Financial Literacy >> Education level >> Retirement Planning	0.684
Income Level >> Education level >> Retirement Planning	0.743

Source: Developed for the research.

Mediating latent variables result shows age, gender and education level are the mediating variables that acts as intermediate that connect between independent variables- savings behaviour, financial literacy and income level towards the dependent variables- retirement planning. The mediator variables age and gender are highly significant towards dependent variables, which is the retirement planning. The result shows that savings behaviour, financial literacy and income level through Age is 2.608, 4.842 and 3.334, while through gender is 2.827, 2.491 and 2.304 respectively. Overall, it exceeds the minimum standard requirements of T- Statistics Value 1.96. However, the education level shows insignificant result act as mediating variables towards the retirement planning 0.606, 0.684 and 0.743, lowe than standard requirement of T- statistics value 1.96.

4.3 Conclusion

In conclusion, the PLS-SEM method develop the result for descriptive analysis and inferential analysis. Descriptive analysis show respondents answer according to the frequency of the distribution. Besides that, the result shows the mean, standard deviation in table form. Moreover, the data shows the respondents is from which state and converted into pie chart for evaluating and analysis. For inferential analysis in this research, the analysis method used is target endogenous variable variance, inner model path coefficient sized and significance, reliability and validity analysis, HTMT analysis all the result presented in table form. Mediator analysis method in this research is bootstrapping analysis. Overall the mediator analysis result considered as valid and acceptable because most result is significant. Hence, they fulfil the requirement conditions of conduct the test analysis.

CHAPTER 5 DISCUSSION, CONCLUSION AND IMPLICATION

5.0 Introduction

Chapter 5 provides conclusion and discussion for overall research result. Comprehensive result for hypothesis present in table form. Discussion on major findings regards hypothesis validity and research objective. Implication research provides academic perspective of managerial and theoretical implications. Moreover, limitations that faced during this research and recommendation suggested that future researcher may fulfil the gap based on this research limitation.

Table 5. 1 Summary result of the hypothesis testing

Test	Hypothesis	Hypothesis supported	Result
1. Financial literacy and retirement planning	H_1: There is relationship between financial literacy and retirement planning.	H_1 is supported.	T statistic 3.069>1.96 P value 0.002<0.05
2. Income level and retirement planning	H_1: There is relationship between income level and retirement planning.	H_1 is supported.	T statistic 3.142>1.96 P value 0.002<0.05
3. Saving behaviour and retirement planning	H_1: There is relationship between savings behaviour and retirement planning.	H_1 is supported.	T statistic 2.84>1.96 P value 0.005<0.05
4a) Relationship between	H_1: Financial literacy will have	H_1 is supported.	T statistic 4.842>1.96

demographic (Age), financial literacy and retirement planning	an indirect effect on retirement planning through demographic (Age)variable.		P value 0.000<0.05
4b) Relationship between demographic (Gender), financial literacy and retirement planning	H_1: Financial literacy will have an indirect effect on retirement planning through demographic (Gender) variable.	H_1 is supported.	T statistic 2.491>1.96 P value 0.013<0.05
4c) Relationship between demographic (Education level), financial literacy and retirement planning	H_1: Financial literacy will have an indirect effect on retirement planning through demographic (Education level) variable.	H_1 is not supported.	T statistic 0.684<1.96 P value 0.494>0.05
5a) Relationship between demographic (Age), income level and retirement planning	H_1: Income level will have an indirect effect on retirement planning through demographic (Age) variable.	H_1 is supported.	T statistic 3.334>1.96 P value 0.001<0.05
5b) Relationship between demographic (Gender), income level and retirement planning	H_1: Income level will have an indirect effect on retirement planning through demographic (Gender) variable.	H_1 is supported.	T statistic 2.304>1.96 P value 0.022<0.05
5c) Relationship between demographic (Education level), income level and retirement planning	H_1: Income level will have an indirect effect on retirement planning through demographic (Education level) variable.	H_1 is not supported.	T statistic 0.734<1.96 P value 0.458>0.05
6a) Relationship between demographic (Age), saving behaviour and retirement planning	H_1: Saving behaviour will have an indirect effect on retirement planning through	H_1 is supported.	T statistic 2.608>1.96 P value 0.009<0.05

	demographic (Age) variable.		
6b) Relationship between demographic (Gender), saving behaviour and retirement planning	H_1: Saving behaviour will have an indirect effect on retirement planning through demographic (Gender) variable.	H_1 is supported.	T statistic 2.827>1.96 P value 0.005<0.05
6c) Relationship between demographic (Education level), saving behaviour and retirement planning	H_1: Saving behaviour will have an indirect effect on retirement planning through demographic (Education level) variable.	H_1 is not supported.	T statistic 0.606<1.96 P value 0.545>0.05

5.1 Discussion of major findings

5.1.1 Financial literacy and retirement planning

Financial literacy, independent variable that giving impact towards the retirement planning. Table 5.1 result shows positive significant (P-value 0.002<0.05) relationship between the financial literacy and the retirement planning among youth respondent in Malaysia. Their research result shows positive and significant relationship between financial literacy and the retirement planning although their research is targeted respondent in Klang valley and the main research focus in private pension fund but there result shows the relationship consistent with this research (Nga and Yeoh, 2018). Besides that, more study proves the positive relationship between financial literacy and the retirement planning targeted respondents in Malaysia as polytechnic lecturers (Mustafa et al, 2017). The result supported by more researcher said that, direct and positive relationship between the financial literacy and the retirement savings even though this research only has 59 respondents but the result consistent with this youth research. Moreover, this research encourages people planning their retirement planning as early as possible

to prevent unwanted circumstances such as insufficiency income to cover the daily expenses during retirement life. According to Cucinelli and Bongini (2019), their research respondent targeted youth in Italian which same with this research targeted is youth. The result shows low financial literacy lead to high chance make wrong decision in their retirement planning which support this statement in table 5.1.

5.1.2 Income level and retirement planning

Result in the table 5.1 listed above shows positive relationship between income level and retirement planning (T statistic 3.142>1.96). According to Patel (2017), relationship between income level and retirement planning result positive and significant in employee. Total respondent their research up to 400 private sector workers which is reliable and empirical evidence to prove this relationship. There are more support positive and significant relationship by other researchers. This relationship proved by other research method like SPSS method the result show that respondent from low income level will not do their retirement planning (Ogemba, 2018). Besides that, respondent categories differential proves the same result with this significant and positive between the income level and retirement planning. Respondent divided in to two categories which is government sector worker and private sector worker it results the consistent relationship with this youth retirement research (Onduko et al, 2015). According to Kaur and Hassan (2018), their research show that individual from low-income level only used their income to cover their expenses. They will not consider the retirement planning issue. According to Scheresberg (2013), states positive relationship between the income level and retirement planning indicate respondents from high income level intend have more retirement savings.

5.1.3 Savings behaviour and retirement planning

Saving behaviour as independent variable applied. Table 5.1 above shows positive and significant relationship between the savings behaviour and the retirement planning (T statistic 2.84>1.96). According to Hsion and Dambaravdan (2016), their research located at the Taiwan however their result shows significant relationship between saving behaviour and retirement planning which consistent with result at the table 5.1. Moreover, positive relationship between the retirement planning and the savings behaviour that research conduct in the Klang valley and tested by the reliability test for it result (Zazili et al, 2017). Two-way relationship between savings behaviour and retirement planning indicate that these two variables will affect each other (Rameli and marimuthu, 2018). According to Jamel et al. (2015), their result shows significant relationship between savings behaviour and retirement planning. Same targeted youth respondent with this research.

5.1.4 Demographic Variables-Financial Literacy-Retirement Planning

As stated in table 5.1, age is proved to be significantly influence the financial literacy and retirement planning. It indicates the older people grow with more financial literacy will influencing them to have more intention to plan their retirement planning. Growing in age will influence people to receive more information from environment. This will aware them usefulness of retirement planning. According to Xiao et al (2015), it stated that when confidence level had increased with age then financial literacy will increase. Financial literacy can learnt and collected from education and real-world life practice. At the younger age, people tend to receive less information about how to manage their finance and bearing in higher loan compare older age. This causing them have less efficiently to do their retirement planning because less financial knowledge. According to Mbarire and Ali (2014), financial literacy is the lowest amongst the young and highest amongst the respondents age 40 between 60 and declines slightly for age 61 and above. As the age increased, people choose the best way to manage their fund as more understanding about those investment instruments. According to Henager

and Cube (2016), older age groups people resulting more financial literacy and strongly related to long term retirement scheme.

As stated by table 5.1, gender significantly influence financial literacy and retirement planning. Result refer male is more financial literacy and more actively involved in retirement planning than female. According to Lusardi and Mitchell (2014), female normally have lower score in financial literacy than male this indicate that female may have less answer than male. This is because male have more interest in managing the fund. Therefore, they are expose to more financial knowledge related environment. According to Lusardi and Wallace (2013), female tend to assess their financial literacy level more conservatively. Female behave more conservative in financial investment including retirement planning. According to Bucher-Koenen et al. (2017) his research supported that older female will have less financial literacy than older male in numerous countries.

Based on the table 5.1, education level shows that insignificant influence financial literacy and retirement planning. It indicates education level less domination financial literacy and people purpose to do retirement scheme. As believed by Fachrudin and Fachrudin (2016), their research supported that education level has insignificant relationship toward the investment which education level will not influence investor to make investment decision. Either high or low education level will not influence people financial knowledge because people may explore to real world life practice and prepare for retirement. According to Hastings et al. (2013), through their studies found that close to unrelated between education level and personal achievement on financial literacy.

5.1.5 Demographic Variables- Income Level- Retirement Planning

As stated in table 5.1, age shows to be correlated towards the income level and retirement planning. It indicates that age increase, their income level tends to increase as well, and they will conscious to plan for their retirement planning. Age developed significant and constant determinants in human behaviour to retirement scheme. Age influence pre-retirees and people in preparation procedure of retirement planning. This will lead to frame of mind and recognition changes in retirement and build retirees faithfulness in retirement. Besides that, reason that people increasing motivated to prepare retirement when age and income increased (Mansor et al, 2015). According to Talib and Manaf (2017), retirement planning is importance for the individual future, they need put more effort to plan especially near to retirement age. They prove that there is positive mind and perspective toward retirement in the group of Malaysian academics. Outcome indicate significant relationship between demographics determinants. For example, age against the income levels. Various age group of employees have an alternate point of view towards the retirement.

Based on the table 5.1, gender significantly affect the income level and retirement planning. This research show respondents strongly agree male is higher income level than the female. According to Cheong and Vikneswaran (2016), discovered that educated male with a high-income level and good financial wealth plan will have a greater financial literacy. This indicate that male with this criterion have more financial knowledge towards the retirement planning. The perspectives of women on income level and the process of planning their financial a different with male, women have lower awareness on it. They discovered that women think diffence with male, their mind and attitude are different especially in money issue. It concluded that men are more response towards how to manage their income towards their retirement planning. Research shows that gender will have a significant against the income level towards retirement planning. Male do earlier preparation for retirement compared to women (Mansor et al, 2015).

Based on the table 5.1, education level is insignificantly influence income level and retirement planning. Education level will not influence income level and intention

for retirement scheme. As believed by Jamal et al. (2015), their result shows attending in financial education class is insignificant with the financial management behaviour of youths. This is because intention of youth to learn and master the financial abilities and apply it in their daily practices are subjective. They might overlook they learn during the class they attended. According to Coady and Dizioli (2018), they found uncorrelated relationship between the education inequality and the income level in advanced countries. According to Juliet (2014), he found that those less educated individuals are seemed to in negative side aspects of their retirement planning. The level of education is insignificant towards the retirement planning. High educated people not necessary from high income level. However, low educated people not necessary from the low-income level.

5.1.6 Demographic Variables-Savings Behaviour-Retirement Planning

As stated in table 5.1, age significant towards savings behaviour and retirement planning. This indicate that the older age person may have more awareness on saving behaviour and lead to retirement planning. The older person leads to the positive perspective on saving behaviour and lead to the purpose on conduct retirement planning for future. The older person consider savings behaviour is important for their life tasking. This represent that an achievement that lead to better retirement life. In adversely, younger age desire to purchase favourable items than savings (Brown et al, 2016). As believed by Rengarajan et al. (2016), age between 20-40 is significant on savings behaviour due to increase of age with higher life expectancy item, such as technology items. Besides that, the current economic conditions forcing the older people to realize the important on savings behaviour to protect their future retirement life.

Based on the table 5.1 gender proved to be significantly towards the saving behaviour and retirement planning. The result shows the respondents are agree that male is value the important savings behaviour than female. According to the Bashir et al. (2013), the male have more savings than the female due to the differences in culture of the country. This indicate that males oriented from developing country like India and Pakistan will more relevant to financial knowledge and savings

behaviour compare with female. According to Fisher (2015) their research supported the female are less likely to conducted savings than males.

Based on the table 5.1, education level shows insignificantly dominations savings behaviour and retirement planning. Education level will not influence savings behaviour and intention for retirement planning. This indicate that high-educated people refuse to change introspection mindset behaviour. It refers that high-educated people no necessary conduct savings behaviour they may remain own perspective and behaviour. According to the research done by Meyer (2015), the action behaviour mostly affected by the mindset of the personalities not education level. According to Twyman (2014), most of the complex situation the personal mindset would direct decide the suitability of the behavioural and action on it. Hence, most of high education level people not necessary act on savings behaviour but save based on their mindset and attitudes perspectives.

5.2 Implication of study

As stated in results showed age and gender have significant relationship to mediate the independent variables and dependent variable. However, education level insignificant influence independent variables and dependent variable. Some implication suggested Malaysia to effectively raise the awareness of retirement planning to Malaysian.

Results of the study show that age is significant to influence independent variable and dependent variable. Government should increase the incentives to encourage youth prepare for retirement planning. For example, government can establish Youth Retirement Account (YRA) to encourage youth to join the plan which pump in money constantly into the account with retirement planning purposes. Youth who are 15 years old to 25 years old register YRA for retirement savings purposes can get 5% to 10% of incentive based on the amount of money deposited into account and only able to withdrawal when reaching retirement age. More money being deposited into account will receive higher incentive basis. This can educate people

a right financial literacy at the same time due to the strike to plan a fixed portion of income for retirement planning as incentive provided is more attractive than others investment. People also be trained to have a good savings behaviour/r which willing to save a portion of money in account instead of spending in entertainment and travelling. Through the scheme, youth will try to involve themselves into various investment to increase their income level in order to achieve higher incentive.

Since 15 years old as minimum age range to define "Youth", government shall encourage and cultivate youth who in age bracket of 15 to 17 participate retirement planning talk. Government authority should organize some talk which related to retirement in secondary school to educate them the importance of retirement planning and causes of without having optimize retirement planning in future. Since youth who are age 15 to 17 still consider immature and less knowledge about the retirement, they may hold inaccurate perception about retirement planning. Throughout the talk organized by government, youth able benefit to correct mindset and start their retirement planning earlier.

For youth perspective, they will be benefit from this research as enable them to increase the awareness of retirement planning. Youth communities are encouraged to actively organize and establish various activities related to retirement. The members of communities will stride forward to the retirement planning. Youth communities crucial as becoming the core of youth to anticipate in savings or even others financial plans. They shall strive to bring more information to youth and arise the awareness of youth towards a optimize financial plans. They can invite qualify and senior financial advisor to give talk; organize financial or retirement planning campaign; establish attractive financial activities. These can effectively increase the awareness of youth which better prepare and manage for their fund.

For insurance firm, they shall strive to motive female involve in retirement planning. Insurance firm can develop a policy named "Women Platinum Retirement Life". This policy may benefit and convenience for women to withdraw their money in account and save for retirement at the same time. It will function as half portions of money deposited in the card will utilized for retirement planning which unusable until the retirement age while half portions function likes debit card can be withdraw for daily usage. Insurance firm will pay 5% to 10% of interest into card which

depend on the amount deposited. The more money being deposited will receive higher interest paid. This encourage women to put more money and save because of the attractive interest paid.

For EPF, they should attract the intention of female to save for the retirement. EPF may increase the dividend rates that given to female and giving extra dividend in order to encourage them constantly and automatedly save more money in EPF account. The dividend rates provided can be adjusted which at least 2% higher than normal dividend rates. This will increase the intention of female to open the EPF account and even save more money due to attractive return.

Since the education level is insignificant to influence relationship between independent variables and dependent variable. Therefore, future researchers encouraged to include others demographic variables in the research related with topic of retirement planning. Other demographic variables can be marital status, religions and occupations.

5.3 Limitation of study

Firstly, less respondents from non-urban area to response the questionnaire. Reason of this maybe caused by respondents does not fully understand the questions from questionnaire. Due to questionnaire being distributed only in English version which may bring to them less interest to respond the questions. Besides that, questionnaires only distributed in google form which respondent may have difficulty in understanding and response the questions compare to physical form. Due to problems arise from respondents cannot receive face to face explanation and quick respond.

Moreover, this research does not include the external economy factor that may affect the respondent perception. This indicates that the external economy factor possibly forcing the behaviour of respondents towards answering questionnaire that conducted on this research. The economy factor may have the potential power that acts as an external element that affects this research accuracy and reliability, which

is not able to fully represents the perspectives of the youth towards retirement planning in Malaysia.

On the other hand, this conducted research using a few factors as demographic variable as mediator to analysis the result which is age, gender and education level. This indicates that the limited type of mediator variables used in this research may unable to fully reflect the perspectives of youth to retirement scheme in Malaysia. Overall research might be affected as well with only using a few demographic factors as mediator variables.

Lastly, the limited independent variables used for this research, not fully represent the perspectives of the Malaysia youth towards retirement planning. This research using three independent variables may not able to fully explain the factor that influences the perspective of youth towards retirement planning. Thus, the limited independent variables may affect the finalise result of the research.

5.4 Recommendations

This research collected 311 questionnaires from respondents. Future researchers are encouraged to prepare the questionnaire in dual languages: English and Malay. Since the Malay as the official languages in Malaysia, therefore most of the respondents will be better understand the questions. This can benefit respondents from non-urban area to understand questions and more interest to respond. Besides that, future researchers also encouraged to distribute the questionnaires in physical form in order to quick respond to the respondents question. Researchers can explain about the questions thoroughly when respondents facing difficulty during answering the questions.

Besides the primary data, future researcher may include external economy factors such as inflation and cost of living in their research. This research included the savings behaviour as the independent variable, while the external factor inflation and cost of living giving the impact towards the savings behaviour. This is because under high inflation and cost of living will influence people intention to save less

to cover their daily expenses. External factors included in the retirement planning topic may lead to other results.

Moreover, this research using demographic variable as mediator variable between independent variables and dependent variable. Education level applied mediator variables lead to insignificant result between independent variables and dependent variable. Future researchers suggested to use more demographic variables to investigate the mediate relationship between independent variables and dependent variable to have different results.

Since limited independent variables become one of limitation on this research, future researchers are suggested to use more independent variables to better explain the determinants to influence youth in doing retirement planning. Policy makers provided bigger pictures to investigate the determinants influence the motive of youth in draw up an optimal retirement plans and encouraging them to start to plan earlier.

5.5 Conclusion

Research shows the perception of the youth on the retirement planning in Malaysia. Relationship between dependent variable (retirement planning) and independent variables (savings behaviour, financial literacy and income level) before and after added the mediator (demographics variables) to test through the effect between relationship. This research proves independent variables savings behaviour, financial literacy and income level correlated to retirement planning. Whereas mediator demographics variables age and gender have significant relationship, but education level is insignificant relationship. Thus, this research rising the awareness of retirement planning in youth stage.

REFERENCES

Abdi, H. (2010). Partial least squares regression and projection on latent structure regression (PLS Regression). *Wiley interdisciplinary reviews: computational statistics, 2*(1), 97-106.

Abdi, H., & Williams, L. J. (2013). Partial least squares methods: partial least squares correlation and partial least square regression. *In Computational toxicology* (pp. 549-579). Humana Press, Totowa, NJ.

Agnew, J. R., Bateman, H., & Thorp, S. (2013). Financial Literacy and Retirement Planning in Australia. Numeracy, 6(2)

Agunga Mourine, A. (2017). Financial Literacy and Financial Preparedness for Retirement among Permanent and Pensionable Employees in State Owned Corporations in Nairobi, Kenya. *International Journal of Business and Social Science, 8*(11).

Ajayi, O. V. (2017). Distinguish between primary sources of data and secondary sources of data. *Business State University, Makurdi*.

Ali et al (2015). Financial satisfaction and the influence of financial literacy in Malaysia. *Social Indicators Research, 120*(1), 137-156.

Aluodi, E., Njuguna, A., & Omboi, B. (2017). Effect of Financial Literacy on Retirement Preparedness among Employees in the Insurance Sector in Kenya, 12(10), 242–251.

Anderson, A., Baker, F., & Robinson, D. T. (2017). Precautionary savings, retirement planning and misperceptions of financial literacy. *Journal of financial economics, 126*(2), 383-398.

Andrade, C., Bazelais, W., & Das, N. (2014). The Effect of Financial Literacy on Retirement Planning. Retrieved from https://academyfinancial.org/resources/Documents/Proceedings/2013/B2_Andrade_Bazelais_Das.pdf

Asian Institute of Finance. (2015). Finance matters: understanding gen y, Retrieved from https://www.aif.org.my/clients/aif_d01/assets/multimediaMS/publication/Finance_Matters_Understanding_Gen_Y_Bridging_the_Knowledge_Gap_of_Malaysias_Millennials.pdf.

Bacova, V., Dudeková, K., & Kostovičová, L. (2017). Financial Planning for Retirement in Young Adults: Interaction of Professional Experience, Knowledge, and Beliefs Financial Planning for Retirement in Young Adults: *Interaction of Professional Experience, Knowledge, and Beliefs Studia Psychologica, 59(2), 84.*

Badshah, W., Hakam, U., Khan, A. S., & Saud, S. (2014). Factors fffecting short-term investment intensions of stock investors in Pakistan. *Management and Administrative Sciences Review*, 3(3), 464-469.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science, 16(1), 74-94.*

Baljit. K., & Zubair. H. (2018). Impact of age, gender, income, education and financial literacy towards retirement planning among generation 'y' in Malaysia. *International Journal of Education, Learning and Training, 3(*1)

Bank Negara Malaysia (2013). *Annual Report 2013*. Retrieved from http://www.bnm.gov.my/index.php?ch=en_publication&pg=en_ar&ac=19

Barnhoorn, J. S., Do¨hring, F. R., Van Asseldonk, E. H., & Verwey, W. B. (2016). Similar representations of sequence knowledge in young and older adults: A study of effector independent transfer. *Frontiers in Psychology, 7*, 1125.

Bartik, T. J., & Hershbein, B. (2018). Degrees of poverty: The relationship between family income background and the returns to education.

Bashir, T., Hassan, A., Nasir, S., Baber, A., & Shahid, W. (2013). Gender Differences in Saving Behavior and its Determinants : *Patron from Pakistan, 9*(6), 74–86.

Bierman, A. (2014). Reconsidering the relationship between age and financial strain among older adults. *Society and Mental Health, 4*(3), 197-214.

Blinder, A., Menchik, P., & Mitchell, O. (1982). Nber working paper series life-cycle effects on, (976).

Boisclair, D., Lusardi, A., & Michaud, P. C. (2017). Financial literacy and retirement planning in Canada. *Journal of Pension Economics & Finance, 16*(3), 277-296.

Bomikazi, Z. E. K. A., Rootman, C., & Kruger, J. (2017). A Review of The Factors Influencing Retirement Funding Adequacy: A South African Perspective. *International Journal of Management and Applied Science (IJMAS)*, *3*(9), 50-55.

Brown, M., & Graf, R. (2013). Financial literacy and retirement planning in Switzerland. *Numeracy, 6*(2), 6.

Brown, S., Taylor, K., Street, M., & Sheffield, S. (2016). Saving Behaviour from Childhood to Early Adulthood : *Analysis of British Panel Data*, (March 2013).

Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2017). How financially literate are women? An overview and new insights. *Journal of Consumer Affairs, 51*(2), 255-283.

Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2017). How financially literate are women? An overview and new insights. *Journal of Consumer Affairs, 51*(2), 255-283.

Carrión, G. C., Nitzl, C., & Roldán, J. L. (2017). Mediation analyses in partial least squares structural equation modeling: Guidelines and empirical examples. In *Partial Least Squares Path Modeling* (pp. 173-195). Springer, Cham,

Castro-gonz, K. C., & Rico, P. (2014). Financial literacy and retirement planning: *evidence from puerto rico, 8*(1), 87–98.

Cheong, P.S. & Vikneswaran, M. (2016). Factors Affect Financial Planning Among the Young Adults in Klang Valley. Retrieved from https://www.onlinejournal.in/IJIRV2I10/018.pdf.

Chou, K. L., Yu, K. M., Chan, W. S., Wu, A. M., Zhu, A. Y., & Lou, V. W. (2015). Perceived retirement savings adequacy in Hong Kong: An interdisciplinary financial planning model. *Ageing & Society, 35*(8), 1565-1586.

Chung, W., Lim, S. J., Lee, S., Kim, R., & Kim, J. (2017). Gender-specific interactions between education and income in relation to obesity: a cross-sectional analysis of the Fifth Korea National Health and Nutrition Examination Survey (KNHANES V). *BMJ open, 7*(12), e014276.

Clark, G. L., Fiaschetti, M., & Gerrans, P. (2016). Determinants of seeking advice within defined contribution retirement savings schemes. *Accounting & Finance, 59*, 563-591.

Clark, R., Lusardi, A., & Mitchell, O. S. (2017). Employee financial literacy and retirement plan behaviour: a case study. *Economic Inquiry, 55*(1), 248-259.

Coady, D., & Dizioli, A. (2018). Income inequality and education revisited: persistence, endogeneity and heterogeneity. *Applied Economics, 50*(25), 2747-2761.

Cooper, A. D., & Beehr, T. A. (2015). Retirement and Continuity Theory, 1–8. *Encyclopedia of Geropsychology*, 1-8.

Cronbach, L. J. (1951). Coefficient alpha and the interval structure of tests. *Psychometrika, 16*, 297–334.

Cucinelli, D., & Bongini, P. (2019). University youth and retirement planning: never too early. International Journal of Bank Marketing

De Bassa Scheresberg, C. (2013). Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy, 6*(2), 5.

Department of Statistics Malaysia. (2017). Education level. Retrieved from http://www.dosm.gov.my.

Elfil, M., & Negida, A. (2017). Sampling methods in clinical research; an educational review. *Emergency, 5*(1).

Emma, A. & Amos, N. (2017). Effect of Psychological Factors on Retirement Preparedness Among Employees in the Insurance Sector in Kenya. Retrieved from https://pdfs.semanticscholar.org/d678/819bec91d548a3e94d1199a14be27bc9ef47.pdf.

Employees Provident Funds (2015). *Annual report 2015*. Retrieved from http://www.kwsp.gov.my/portal/en/about-epf/annual-report/laporan-tahunan-2015

Employees Provident Funds (2016). *Annual report 2016*. Retrieved from http://www.kwsp.gov.my/portal/en/laporan-tahunan-2016

Fachrudin, K. R., & Fachrudin, K. A. (2016). The influence of education and experience toward investment decision with moderated by financial literacy. *Polish Journal of Management Studies, 14*.

Fadila, D. E. S., & Alam, R. R. (2016). Factors affecting adjustment to retirement among retiree's elderly persons. *Journal of Nursing Education and Practice, 6*(8), 112-122.

Fapohunda T. M. (2015). The Gender Factor in Retirement Planning. *International Journal of Management, 3*(1).

Fern, S., & Pez, Á. N. L. Ó. (2015). The determinants of privately saving for retirement: *the cases of Portugal and Spain, 1*(1), 69–92.

Financial Stability and Payment Systems Report. (2015). Market conduct and consumer empowerment. Central Bank of Malaysia. Retrieved from https://www.bnm.gov.my/files/publication/fsps/en/2015/cp04.p df.

Fisher, P. J. (2015). Gender Differences in Personal Saving Behaviors Gender Differences in Personal Saving Behaviors,

Fisher, P. J., & Yao, R. (2017). Gender differences in financial risk tolerance. *Journal of Economic Psychology, 61*, 191-202.

Foster, L. (2017). Young people and attitudes towards pension planning. *Social Policy and Society, 16*(1), 65-80.

Githui, T. (2014). Financial Literacy and Retirement Planning in the Informal Sector in Kenya, 2(1), 1–16.

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modelling*, Sage, Thousand Oaks, CA.

Hassan, K. H., Rahim, R. A., Ahmad, F., Zainuddin, T. N. A. T., Merican, R. R., & Bahari, S. K. (2016). Retirement planning behaviour of working individuals and legal proposition for new pension system in Malaysia. *J. Pol. & L., 9*, 43.

Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2013). Financial literacy, financial education, and economic outcomes. *Annu. Rev. Econ., 5*(1), 347-373.

Henager, R., & Cude, B. J. (2016). Financial Literacy and Long-and Short-Term Financial Behavior in Different Age Groups. *Journal of Financial Counseling and Planning, 27*(1), 3-19.

Hiscott, R. D. (2013). Determinants of post-retirement employment: Canadian evidence. *The Canadian Journal of Career Development/Revue canadienne de développement de carrière, 12*(2), 59-71.

Hsiao, Y. J., Lin, S. J., & Dambaravdan, C. (2016). Financial Literacy, Savings Behaviour, and Retirement Planning in Taiwan, 4(2), 1-22.

Hui, T. S. W., Nguyen, C., Palameta, B., & Gyarmati, D. (2016). The role of financial literacy in financial decisions and retirement preparedness among seniors and near-seniors. *Social Research and Demonstration Corporation.*

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic management journal, 20*(2), 195-204

Jabatan pendidikan tinggi. (2018). Macro-higher education institution 2018. [Data file]. Retrieved from http://www.mohe.gov.my/en/download/awam/statistik/2018-3/469-statistik-pendidikan-tinggi-2018-bab-1-makro-institusi-pendidikan-tinggi/file

Jalil, M. A., Razak, D. A., & Azam, S. F. (2013). Exploring factors influencing financial planning after retirement: structural equation modelling approach. *American Journal of Applied Sciences, 10*(3), 270.

Jamal, A. A. A., Ramlan, W. K., Karim, M. A., & Osman, Z. (2015). The effects of social influence and financial literacy on savings behaviour: A study on youth of higher learning institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science, 6*(11), 1.

Jamaludin, N., & Gerrans, P. (2015). Retirement savings investment decisions: Evidence from Malaysia. *Journal of the Asia Pacific Economy, 20*(4), 644-657.

Jimenez, I., Chiesa, R., & Topa, G. (2018). Financial planning for retirement: age-related differences among Spanish workers. *Journal of Career Development*, 0894845318802093.

Jomo, K. S. (2017, October 25). Most Malaysians cannot afford to retire. *The Star*. Retrieved from https://www.thestar.com.my/business/business-news/2017/10/25/most-malaysians-cannot-afford-to-retire/

Jonubi, A., & Abad, S. (2013). The impact of financial literacy on individual saving: an exploratory study in the Malaysian context. *Transformations in Business & Economics, 12*(1), 41-55.

Joulfaian, D. (2018). Saving for retirement by the self-employed. *Journal of Pension Economics & Finance, 17*(3), 316-334.

Juliet, A. (2014). The Influence of Retirement Planning Programs on Retirement Planning and Attitude Towards Retirement Among Employees of Selected Ghanaian Organizations. (Doctoral dissertation, University of Ghana).

Kalmi, P., & Ruuskanen, O. (2015). Financial literacy and retirement planning in Finland. *Journal of Pension Economics & Finance, 17*(3), 335-362

Kaur, B., & Hassan, Z. (2018). Impact of age, gender, income, education and financial literacy towards retirement planning among generation 'y' in Malaysia, 3(1). https://doi.org/10.24924/ijelt/2018.11/v3.iss1/30.53

Kepha, N. M. (2018). Financial Factors Affecting Retirement Planning by Savings and Credit Cooperative Societies Employees in Nakuru Town, Kenya (Doctoral dissertation, *JKUAT-COHRED*).

Kerubo, S. K. (2014). Determinants of financial preparedness for retirement among employees of international non-governmental organizations in Kenya (Doctoral dissertation, UNIVERSITY OF NAIROBI).

Kim, K. T., Hanna, S. D., & Chen, S. (2014). Consideration of retirement income stages in planning for retirement. *Journal of Personal Finance, 13(1), 52-64.*

Kimiyaghalam, F., Safari, M., & Mansori, S. (2017). The Effects of Behavioural Factors on Retirement Planning in Malaysia The Effects of Behavioural Factors on Retirement Planning in Malaysia, (July).

Klapper, L., Lusardi, A., & Oudheusden, P. (2015). Financial Literacy Around the World: Insights from the Standard & Poor's ratings services global financial literacy survey.

Koe, H.N. & Ken, K.Y. (2018). An Exploratory Model On Retirement Savings Behaviour: A Malaysian Study. *International Journal of Business and Society, 19(3), 637-659*

Koh, B. S. K., & Mitchell, O. S. (2019). Retirement Preparedness and Financial Literacy in Singapore: How Do the Self-Employed Compare?

Koposko, J. L. (2013). Parental and social influences on understanding of financial planning for retirement (Doctoral dissertation, Oklahoma State University).

Kreft, H. D. (2016). What We Can Learn from the Quantitative Relation between Education and Income. *Available at SSRN 2776907*.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement, 30*(3), 607-610.

le Roux, D. J. (2017). Retirement planning: could tax and financial literacy increase financial independence during retirement? (Doctoral dissertation, University of Pretoria)

Lee, S. H., & Kuttyzholova, A. (2016). Financial Literacy and Retirement Planning in Kazakhstan, 1(2), 87–106.

Lee, Y. D., Hassan, M. K., & Lawrence, S. (2018). Retirement preparation of men and women in their positive savings periods. *Journal of Economic Studies, 45*(3), 543-564.

Lei, X., & Liu, H. (2018). Gender difference in the impact of retirement on cognitive abilities: Evidence from urban China. *Journal of Comparative Economics, 46*(4),1425-1446.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of economic literature, 52*(1), 5-44.

Lusardi, A., & Wallace, D. (2013). Financial literacy and quantitative reasoning in the high school and college classroom. *Numeracy, 6*(2), 1.

Mahdzan, N. S., & Tabiani, S. (2013). The Impact of Financial Literacy on Individual Saving: An Exploratory Study in the Malaysian Context. *Transformations in Business and Economics, 121*(28), 41-55.

Mahdzan, N. S., & Victorian, S. M. P. (2013). The determinants of life insurance demand: A focus on saving motives and financial literacy. *Asian social science, 9*(5), 274.

Mahdzan, N. S., Mohd-Any, A. A., & Chan, M. K. (2017). The influence of financial literacy, risk aversion and expectations on retirement planning and portfolio allocation in Malaysia. *Gadjah Mada International Journal of Business, 19*(3), 267.

Malay Mail (2017). Malaysians' lack of retirement planning awareness worrying, financial planner says. *Malay Mail.* Retrieved from https://www.malaymail.com/news/malaysia/2017/11/13/malaysians-lack-of-retirement-planning-awareness-worrying-financial-planner/1509511

Mansor, M. F., Hong, C. C., Abu, N. H., & Shaari, M. S. (2015). Demographic Factors Associated with Retirement Planning: A Study of Employees in Malaysian Health Sectors. *Asian Social Science*, *11*(13), 108.

Masran, M. A., & Hassan, H. H. (2017). Factors Affecting Retirement Planning of Gen-Y Workers in Klang Valley Private Sectors, Malaysia, 1(4).

Mazlinda, Tengku. (2015). Life after retirement, do we have enough?.FIMM today. Published by Federation of Investment Managers Malaysia No 2. Retrieved from http://fimm.com.my/

Mbarire, T. T., & Ali, A. I. (2014). Determinants of financial literacy levels among employees of Kenya Ports Authority in Kenya. *Research Journal of Finance and Accounting*, *5*(16), 44-52

Meir, A., Mugerman, Y., & Sade, O. (2016). Financial literacy and retirement planning: Evidence from Israel. *Israel Economic Review 14*(1), 75-95

Messacar, D. (2017). The Effects of Education on Canadians' Retirement Savings Behaviour. Analytical Studies Branch Research Paper Series. *Statistics Canada.* 150 Tunney's Pasture Driveway, Ottawa, ON K1A 0T6, Canada.

Meyer, A. (2015). Does education increase pro-environmental behavior ? Evidence from Europe. *Ecological Economics*, *116*, 108–121.

Mitchell, O. S. (2015). Employee financial literacy and retirement plan behaviour: a case study.

Mohidin, R., Azlan, A., Jamal, A., Geetha, C., & Lim, T. S. (2013). Revisiting the Relationship Between Attitudes and Retirement Planning Behaviour: A Study on Personal Financial Planning. *International Journal of Multidisciplinary Thought*, *3*(2), 449-461

Molly Andrews. (2015). Contemporary Sociology, 30(5), 472–474. Retrieved from http://www.jstor.org/stable/3089326

Moorthy, M. K., Chelliah, T. D., Sien, C. S., Leong, L. C., Kai, N. Z., Rhu, W. C., & Teng, W. Y. (2013). A Study on the Retirement Planning Behaviour of Working Individuals in Malaysia. *International Journal of Academic Research in Economics and Management Sciences, 1*(2), 14.

Mustafa, A., Yusof, S. K., Silim, A., Adiman, R., Hassan, N. L., Sultan, P., Section, U. (2017). Factors Influencing Retirement Planning Behaviour OF Lecturers in Polytechnics, 1(4), 9–13. https://doi.org/10.26666/rmp.ajtve.2017.4.3

Nejati, F., Ahmadi, M., & Lali, M. (2015). The Impact of Financial Literacy on Retirement Planning and Household Wealth. *Journal of Fundamental and Applied Life Sciences, 5,* 806-815.

Netemeyer, R., & Ryn, M. Van. (1991). The Theory of Planned Behaviour. Retrieved from https://www.researchgate.net/profile/Daryn_Dyer/post/Is_entrepreneurial_intention_a_kind_of_motivation/attachment/59d63a0cc49f478072ea6625/AS%3A273723934871555%401442272279784/download/Theory+of+planned+behaviour.pdf

Nga, K. H., & Yeoh, K. K. (2018). An Exploratory Model On Retirement Savings Behaviour: A Malaysian Study. *International Journal of Business and Society, 19(3), 637-659.*

Niu, G., & Zhou, Y. (2018). Financial literacy and retirement planning: evidence from China. *Applied Economics Letters, 25*(9), 619-623.

Noar, Z. M. (2019). A Study on the Reasons for Retirement: A Focus on Age as a Major Factor, 17(2).

Nunnaly, J. (1978). Psychometric theory. New York: McGraw-Hill.

Nyoro, K. N., & Otieno, O. J. (2016). Predictors of Employee Preparedness for Retirement in Public Institutions within Mombasa County, Kenya, 3(1), 136–145.

Olejnik, I., & Bialowas, S. (2016). Consumers' Attitudes towards Financially Securing Old Age. *International Journal of Trade, Economics and Finance, 7*(4).

Onduko, E. M., Gweyi, M. O., & Nyawira, J. (2015). Analysis of the determinants on Retirement Planning in Kenya: A Survey of registered pension schemes in Nairobi.

Patel, F. (2017). Influence of Income on Retirement Saving Behaviour. *Account and Financial Management Journal, 2*(07), 805-810.

Patel, F., & Acharya, V. (2017). Indian gender differences in Retirement. *Journal of Commonwealth Journal of Commerce& Management Research 4*(3), 8–19.

Payne, S. H. (2014). More Than Money: Understanding Marital Influences on Retirement Savings Rates.

Prast, H. M., & van Soest, A. (2016). Financial literacy and preparation for retirement. *Intereconomics, 51*(3), 113-118.

Pratminingsih, S. A., Lipuringtyas, C., & Rimenta, T. (2013). Factors influencing customer loyalty toward online shopping. *International Journal of Trade, Economics and Finance, 4*(3), 104-110.

Rameli, R. S., & Marimuthu, M. (2018). A Conceptual Review on the Effect of Attitudes towards Retirement on Saving Intentions and Retirement Planning Behaviour. In *SHS Web of Conferences* (Vol. 56, p. 02005). EDP Sciences.

Rengarajan, V., Sankararaman, G., Sundaram, M. K., Rizwan, M. M., & Nibin, S. M. P. (2016). Influence of Demographic Variables on Saving Behaviour of Rural Households – A Study with Reference to Sriperumpudur , Chennai. *Indian Journal of Science and Technology, vol 9*(31).

Rey-Ares, L., Fernández-López, S., & Vivel-Búa, M. (2015). The determinants of privately saving for retirement: the cases of Portugal and Spain. *European Journal of Applied Business and Management, 1*(1).

Reyers, M., Van Schalkwyk, C. H., & Gouws, D. G. (2015). Rational and behavioural predictors of pre-retirement cash-outs. *Journal of Economic Psychology, 47*, 23-33.

Ricci, O., & Caratelli, M. (2017). Financial literacy, trust and retirement planning. *Journal of Pension Economics & Finance, 16*(1), 43-64.

Ringle, C. M., Wende, S., & Will, A. (2005). SmartPLS 2.0 (Beta). *Hamburg.* Available in http://www. smartpls. de.

Sabri, M. F., & Juen, T. T. (2014). The influence of financial literacy, saving behaviour, and financial management on retirement confidence among women working in the Malaysian public sector. *Asian Social Science, 10(14), 40.*

Sabri, M. F., Juen, T. T., Othman, M. A., & Rahim, H. A. (2015). Financial literacy, financial Management practices, and retirement confidence among Women working in government Agencies: A mediation model. *The Journal of Developing Areas, 49*(6), 405-412.

Security, S., & Group, S. (2018). *Confidence in Retirement*, (January), 1–27.

Sekaran & Bougie (2013). "Edisi 6." Research Methods for Business (2013).

Selvadurai, V. (2018). Financial literacy education and retirement planning of the urban elderly in Malaysia. Retrieved from http://youthrepo.um.edu.my/8596/1/TESIS_VISYALINI_SELVADURAI.pdf

Selvadurai, V., Kenayathulla, H. B., & Siraj, S. (2018). Financial literacy education and retirement planning in Malaysia. *mojem: Malaysian Online Journal of Educational Management, 6*(2), 41-66.

Swatzell, K. E., & Jennings, P. R. (2007). Descriptive research: The nuts and bolts. *Journal of the American Academy of PAs, 20*(7).

Taft, M. K., Hosein, Z. Z., Mehrizi, S. M. T., & Roshan, A. (2013). The relation between financial literacy, financial wellbeing and financial concerns. *International Journal of Business and Management, 8(11), 63.*

Tai, T. L. (2018). Retirement planning in Malaysia: issues and challenges to achieve sustainable lifestyle, 1222–1229.

Talib, N. F. M., & Manaf, H. A. (2017). Attitude towards retirement planning behaviour among employees. *International Journal of Business and Management, 1(1), 12-17.*

Tan, H. K. (2015). Financial planning for post-retirement among Urban Malaysians in Klang Valley/Tan Hoe Kock (Doctoral dissertation, University of Malaya).

Teh, T. L., & Noraina, M. S. (2018). Retirement planning in Malaysia: issues and challenges to achieve sustainable lifestyle. *The Turkish Online Journal of Design, Art and Communication.*

Thakur, S. S., Jain, S. C., & Soni, R. (2017). A study on perception of individuals towards retirement planning. *International Journal of Applied Research, 3*(2), 154-157.

The Coomonwealth (2019) . Malaysia. Retrieved from http://thecommonwealth.org/our-member-countries/malaysia

Tobias, R. D. (1995). An introduction to partial least squares regression. *In Proceedings of the twentieth annual SAS users group international conference* (pp. 1250-1257). Cary: SAS Institute Inc.

Trenow, P., Olchawski, J., Foster, D. L., & Heneghan, M. (2016). Closing the Pension Gap: Understanding Women's Attitudes to Pension Saving.

Tucker, L. R. (1958). An inter-battery method of factor analysis. *Psychometrika, 23*(2), 111-136.

Twyman. S, J. (2014). Behavior analysis in education. The Wiley Blackwell handbook of operant and classical conditioning, 533-558.

West, P. W. (2016). Simple random sampling of individual items in the absence of a sampling frame that lists the individuals. *New Zealand Journal of Forestry Science, 46*(1), 15.

Xiao, J. J., Chen, C., & Sun, L. (2015). Age differences in consumer financial capability. *International Journal of Consumer Studies, 39*(4), 387-395.

Yong, Y. C., Yong, G. H., Kuan, V. W. Y., Too, S. B., & Ng, C. H. (2013). Personal financial literacy among tertiary level youth (Doctoral dissertation, UTAR).

Young, J. H. (2013). Financial literacy: age and experience as the determinants. *Washington Bus Res J, 3*(1), 35-45.

Yusof, R., & Sabri, M. F. (2017) Determinants of Retirement Savings.

Zabri, S. M., Ahmad, K., & Lian, A. A. L. H. (2016). The awareness of private retirement scheme and the retirement planning practices among private sector employees in Malaysia. *International Journal of Economics and Financial Issues, 6*(6S), 120-124.

Zaihan, N., & Noar, M. (2017). The Awareness of Retirement Planning: A Case with International Islamic University Malaysia Employees, 07(02), 18–23.

Zainon, R., Rahman, S. A., Nur, S., Azmi, S., Saniah, F., Zabidi, M., Samsudin, S. N. (2017). Editorial board concept, design & printing the Journal of Business Innovation (*ISSN: 0128-3189)*

Zazili, A. S. A., Ghazali, M. F. B., Bakar, N. T. B. A., Ayob, M. B., & Samad, I. H. B. A. (2017). Retirement planning: Young professionals in private sector. In *SHS Web of Conferences* (Vol. 36, p. 00024). EDP Sciences.

Appendices

Appendix 1: Survey Questionnaire

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE

UNDERGRADUATE FINAL YEAR PROJECT [FYP]

BACHELOR OF FINANCE (HONS)

Perception of Youth on the Retirement Planning in Malaysia

Survey Questionnaire

Introduction

We are undergraduate finance course students from University Tunku Abdul Rahman (UTAR). We are conducting a study on Perception of Youth on the Retirement Planning in Malaysia. Please help us by filling up the questionnaire. Thank you very much!

Confidentiality

The information provided will only be analysed for academic purpose. Rest assured that the answers provided to this survey questionnaire will be treated with the utmost confidentially.

Participation

Your participation in this research is completely voluntary. There is no right or wrong answer for any statements in this questionnaire. This survey questionnaire consists of three sections. Please answer **ALL** questions in all section. This survey will take you approximately 5-10 minutes to complete.

Thank you for filling up this survey-questionnaire and your kind cooperation and participation in this study.

Best Regards,

Chai Wen Yi	yi_914@hotmail.com
Chin Siew Thoong	siew_thoong@hotmail.com
Lee Swee Li	lilee_2902@hotmail.com
Lum Seng Kit	bryanlum85@yahoo.com
Yeo Teng Hui	johnyth25@gmail.com

Which states are you come from?

The questions above are to refer the States of the respondents. Please provide the choose the current places you are by placing a (✓) in the bracket provided to represent your answer.

	Selangor
	Penang
	Johor
	Sabah
	Perak
	Kedah
	Melaka
	Pahang
	Kelantan
	Terengganu
	Negeri Sembilan
	Perlis
	Sarawak

Section A: DEPENDENT VARIABLE

RETIREMENT PLANNING

Please tick (✓) in the space as provided.

1. Do you think retirement planning is important?

( ) Yes ( ) No

2. Do you think retirement planning is still far from you?

( ) Yes ( ) No

3. Do you think retirement planning is complicated?

( ) Yes ( ) No

4. Do you think retirement planning should be started earlier?

( ) Yes ( ) No

5. Do you think retirement planning able to benefit in your future retirement life?

( ) Yes ( ) No

Section B: INDEPENDENT VARIABLES

FINANCIAL LITERACY

In this section, we would like to know about your financial literacy. For each statement, please circle the number that indicate your degree of agreement.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

1.	I will do budgeting for my own financial	1	2	3	4	5
2.	I will record my daily expenses.	1	2	3	4	5
3.	I will compare the price of goods before I buy	1	2	3	4	5
4.	I will attend financial seminar to improve my financial knowledge.	1	2	3	4	5
5.	I will avoid maxing out the limit of my ATM card.	1	2	3	4	5
6.	As long as retirement concerned, I would like to invest.	1	2	3	4	5
7.	I tried to figure out the amount that I need to prepare for retirement.	1	2	3	4	5

SAVINGS BEHAVIOUR

In this section, we would like to know about what your purpose is to save money. For each statement, please circle the number that indicate your degree of agreement.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1.	I will open a savings account to save money.	1	2	3	4	5
2.	I will not waste money on buying expensive things.	1	2	3	4	5
3.	I will save money for my future emergency fund.	1	2	3	4	5
4.	I will save money to do some investments.	1	2	3	4	5
5.	I will do a planning for vacation; however, I will save money.	1	2	3	4	5

INCOME LEVEL

In this section, we would like to know about your income level. For each statement, please circle the number that indicate your degree of agreement.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

	Questions	1	2	3	4	5
1.	Retirement is important, I would like to take a part of income to do investment.	1	2	3	4	5
2.	I will save a part of income for retirement.	1	2	3	4	5
3.	Income level will affect and important for my retirement planning.	1	2	3	4	5
4.	My current income level is sustainable for my future retirement.	1	2	3	4	5
5.	If I have high salary, I would plan for retirement planning. (Kamal et al, 2016)	1	2	3	4	5
6.	Employee who had low salary, they prefer debt purchasing rather than retirement planning.	1	2	3	4	5

Section C: MEDIATOR VARIABLES

AGE

In this section, we would like to have better understanding on the perception of you towards the statement mentioned in below. For each statement, please circle the number that indicate your degree of agreement.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1.	Along with the growth of age, increased level of financial literacy will encourage retirement planning.	1	2	3	4	5
2.	As age bracket increased, contribution for retirement planning from income will increase also.	1	2	3	4	5
3.	When close to retirement age, people tend to increase their sources of income to retire comfortably.	1	2	3	4	5
4.	30's and 40's holds the perception that their savings in EPF is sufficient for their retirement.	1	2	3	4	5
5.	30's and 40's retirement planning only rely on EPF savings.	1	2	3	4	5

GENDER

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1.	Male are known as more financial literacy which may result more in retirement planning.	1	2	3	4	5
2.	Male have more interest in financial literacy to do their retirement planning.	1	2	3	4	5
3.	Male are more willing contribute higher portion of income for their retirement planning.	1	2	3	4	5
4.	Male will seek for various sources of income to increase their retirement savings.	1	2	3	4	5
5.	Male will ensure their savings is sufficient for to cover expenses incurred in retirement life.	1	2	3	4	5

EDUCATION LEVEL

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1.	People who have higher education level tend to have more financial literacy to have better plan for their retirement.	1	2	3	4	5
2.	Higher educated people will not be misleading of financial information for their retirement planning.	1	2	3	4	5
3.	People who are highly educated will have comprehensive savings plan for retirement.	1	2	3	4	5
4.	Educated people tend to use their income wisely for their retirement planning.	1	2	3	4	5
5.	Educated people will contribute more portion of income for retirement planning.	1	2	3	4	5

Appendix 2: Result of State of Respondents

States	Frequency	Percentage
Selangor	47	15.10%
Penang	29	9.30%
Johor	34	10.90%
Sabah	20	6.40%
Perak	30	9.60%
Kedah	25	8.00%
Melaka	15	4.80%
Pahang	27	8.70%
Kelantan	16	5.10%
Terengganu	14	4.50%
Negeri Sembilan	19	6.10%
Perlis	21	6.80%
Sarawak	14	4.50%
Total	**311**	**100%**

Appendix 3. 1: Result of Target Variable Variance

	R Square	R Square Adjusted
DV:Retirement Planning	0.589	0.581
M1:Age	0.495	0.490
M2:Gender	0.959	0.958
M3:Education level	0.073	0.064

Appendix 3. 2: Result of Outer Loadings

	DV:Retirement Planning	IV1:Savings Behavior	IV2:Financial Literacy	IV3:Income Level	M1:Age	M2:Gender	M3:Education level
A1	0.760						
A2	0.764						
A3	0.835						
A4	0.771						
A5	0.729						
B1a		0.713					
B1b		0.799					
B1c		0.724					
B1d		0.792					
B1e		0.706					
B2a			0.834				
B2b			0.593				
B2c			0.767				
B2d			0.763				
B2e			0.677				
B2f			0.736				
B2g			0.751				
B3a				0.697			
B3b				0.755			
B3c				0.834			
B3d				0.759			
B3e				0.861			
B3f				0.767			
C1a					0.861		
C1b					0.865		
C1c					0.814		
C1d					0.881		
C1e					-0.161		
C2a						0.863	
C2b						0.568	
C2c						0.784	
C2d						0.770	

C2e						0.760	
C3a							0.775
C3b							0.657
C3c							0.789
C3d							0.775
C3e							0.809

Appendix 3. 3: Result of Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
DV:Retirement Planning	0.831	0.838	0.881	0.597
IV1:Savings Behavior	0.802	0.804	0.864	0.560
IV2:Financial Literacy	0.857	0.866	0.891	0.540
IV3:Income Level	0.882	0.914	0.903	0.610
M1:Age	0.745	0.874	0.839	0.591
M2:Gender	0.806	0.825	0.867	0.570
M3:Education level	0.829	0.852	0.874	0.582

Appendix 3. 4: Result of Fornell-Larcker

	DV:Retirement Planning	IV1:Savings Behavior	IV2:Financial Literacy	IV3:Income Level	M1:Age	M2:Gender	M3:Education level
DV:Retirement Planning	0.772						
IV1:Savings Behavior	0.676	0.748					
IV2:Financial Literacy	0.686	0.826	0.735				
IV3:Income Level	0.407	0.669	0.693	0.781			
M1:Age	0.645	0.642	0.666	0.379	0.769		
M2:Gender	0.717	0.842	0.967	0.592	0.639	0.755	
M3:Education level	0.005	-0.156	-0.082	-0.227	0.049	-0.051	0.763

Appendix 3. 5: Result of Hetoretrait-Monotrait Ratio (HTMT)

	DV:Retirement Planning	IV1:Savings Behavior	IV2:Financial Literacy	IV3:Income Level	M1:Age	M2:Gender	M3:Education level
DV:Retirement Planning							
IV1:Savings Behavior	0.819						
IV2:Financial Literacy	0.783	0.976					
IV3:Income Level	0.448	0.719	0.730				
M1:Age	0.827	0.831	0.834	0.422			
M2:Gender	0.855	1.036	1.150	0.608	0.822		
M3:Education level	0.161	0.255	0.280	0.234	0.239	0.278	

Appendix 3. 6: Result of Total Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
IV1:Savings Behavior -> DV:Retirement Planning	0.409	0.397	0.087	4.697	0.000
IV2:Financial Literacy -> DV:Retirement Planning	0.491	0.505	0.082	5.998	0.000
IV3:Income Level -> DV:Retirement Planning	-0.206	-0.218	0.063	3.276	0.001

Appendix 3. 7: Result of Total Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
IV1:Savings Behavior -> DV:Retirement Planning	0.261	0.257	0.092	2.840	0.005
IV2:Financial Literacy -> DV:Retirement Planning	0.905	0.926	0.295	3.069	0.002
IV3:Income Level -> DV:Retirement Planning	-0.224	-0.229	0.071	3.142	0.002

Appendix 3. 8: Result of Bootstrapping Outer Loading

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
A1 <- DV:Retirement Planning	0.760	0.754	0.043	17.702	0.000
A2 <- DV:Retirement Planning	0.764	0.762	0.031	24.493	0.000
A3 <- DV:Retirement Planning	0.835	0.831	0.028	29.449	0.000
A4 <- DV:Retirement Planning	0.771	0.767	0.034	22.948	0.000
A5 <- DV:Retirement Planning	0.729	0.721	0.045	16.266	0.000
B1a <- IV1:Savings Behavior	0.713	0.708	0.043	16.690	0.000
B1b <- IV1:Savings Behavior	0.799	0.797	0.028	28.655	0.000
B1c <- IV1:Savings Behavior	0.724	0.716	0.044	16.483	0.000
B1d <- IV1:Savings Behavior	0.792	0.793	0.020	39.467	0.000
B1e <- IV1:Savings Behavior	0.706	0.708	0.029	24.306	0.000
B2a <- IV2:Financial Literacy	0.834	0.835	0.014	58.077	0.000
B2b <- IV2:Financial Literacy	0.593	0.590	0.053	11.140	0.000
B2c <- IV2:Financial Literacy	0.767	0.765	0.025	30.477	0.000
B2d <- IV2:Financial Literacy	0.763	0.760	0.024	31.220	0.000
B2e <- IV2:Financial Literacy	0.677	0.674	0.047	14.282	0.000
B2f <- IV2:Financial Literacy	0.736	0.732	0.037	19.707	0.000
B2g <- IV2:Financial Literacy	0.751	0.750	0.025	30.399	0.000
B3a <- IV3:Income Level	0.697	0.686	0.057	12.162	0.000

B3b <- IV3:Income Level	0.755	0.746	0.046	16.418	0.000
B3c <- IV3:Income Level	0.834	0.832	0.016	52.753	0.000
B3d <- IV3:Income Level	0.759	0.755	0.034	22.611	0.000
B3e <- IV3:Income Level	0.861	0.861	0.014	60.244	0.000
B3f <- IV3:Income Level	0.767	0.766	0.026	29.081	0.000
C1a <- M1:Age	0.861	0.860	0.016	53.288	0.000
C1b <- M1:Age	0.865	0.863	0.021	40.743	0.000
C1c <- M1:Age	0.814	0.813	0.023	35.591	0.000
C1d <- M1:Age	0.881	0.878	0.017	51.287	0.000
C1e <- M1:Age	-0.161	-0.164	0.085	1.891	0.059
C2a <- M2:Gender	0.863	0.863	0.013	64.325	0.000
C2b <- M2:Gender	0.568	0.565	0.063	9.044	0.000
C2c <- M2:Gender	0.784	0.781	0.026	30.127	0.000
C2d <- M2:Gender	0.770	0.767	0.020	39.434	0.000
C2e <- M2:Gender	0.760	0.756	0.038	19.963	0.000
C3a <- M3:Education level	0.775	0.767	0.071	10.993	0.000
C3b <- M3:Education level	0.657	0.647	0.114	5.752	0.000
C3c <- M3:Education level	0.789	0.776	0.059	13.401	0.000
C3d <- M3:Education level	0.775	0.751	0.089	8.661	0.000
C3e <- M3:Education level	0.809	0.796	0.049	16.596	0.000

Appendix 3. 9: Result of Specific Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
IV1:Savings Behavior -> M1:Age -> DV:Retirement Planning	0.115	0.115	0.044	2.608	0.009
IV2:Financial Literacy -> M1:Age -> DV:Retirement Planning	0.169	0.166	0.035	4.842	0.000
IV3:Income Level -> M1:Age -> DV:Retirement Planning	-0.072	-0.072	0.022	3.334	0.001
IV1:Savings Behavior -> M2:Gender -> DV:Retirement Planning	0.150	0.147	0.053	2.827	0.005
IV2:Financial Literacy -> M2:Gender -> DV:Retirement Planning	0.730	0.754	0.293	2.491	0.013
IV3:Income Level -> M2:Gender -> DV:Retirement Planning	-0.146	-0.150	0.063	2.304	0.022
IV1:Savings Behavior -> M3:Education level -> DV:Retirement Planning	-0.004	-0.005	0.007	0.606	0.545
IV2:Financial Literacy -> M3:Education level -> DV:Retirement Planning	0.006	0.007	0.009	0.684	0.494
IV3:Income Level -> M3:Education level -> DV:Retirement Planning	-0.007	-0.007	0.009	0.743	0.458

Appendix 4. 1: Result of Turnitin Report

Perception of Youth on the Retirement Planning in Malaysia

ORIGINALITY REPORT

10%	2%	2%	9%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universiti Teknologi MARA Student Paper	1%
2	eprints.utar.edu.my Internet Source	1%
3	Submitted to Multimedia University Student Paper	1%
4	Submitted to HELP UNIVERSITY Student Paper	1%
5	Submitted to TAR University College Student Paper	<1%
6	Submitted to Asia Pacific University College of Technology and Innovation (UCTI) Student Paper	<1%
7	Submitted to Anglia Ruskin University Student Paper	<1%
8	Submitted to Northcentral Student Paper	<1%
9	Yun Doo Lee, M. Kabir Hassan, Shari	

	Lawrence. "Retirement preparation of men and women in their positive savings periods", Journal of Economic Studies, 2018 Publication	<1%
10	Submitted to Universitas Negeri Jakarta Student Paper	<1%
11	media.neliti.com Internet Source	<1%
12	Submitted to Quest International University Perak Student Paper	<1%
13	Submitted to Taylor's Education Group Student Paper	<1%
14	Submitted to International Islamic University Malaysia Student Paper	<1%
15	Submitted to Segi University College Student Paper	<1%
16	Submitted to Universiti Malaysia Kelantan Student Paper	<1%
17	Submitted to Universiti Tenaga Nasional Student Paper	<1%
18	Submitted to University of Sydney Student Paper	<1%
	Submitted to CSU, San Francisco State	

19	University Student Paper	<1%
20	Fitri Mansor, Mohd, Chor Choon Hong, Noor Hidayah Abu, and Mohd Shahidan Shaari. "Demographic Factors Associated with Retirement Planning: A Study of Employees in Malaysian Health Sectors", Asian Social Science, 2015. Publication	<1%
21	Submitted to Heriot-Watt University Student Paper	<1%
22	link.springer.com Internet Source	<1%
23	Submitted to 67523 Student Paper	<1%
24	Submitted to Symbiosis International University Student Paper	<1%
25	Submitted to University of Strathclyde Student Paper	<1%
26	Submitted to Napier University Student Paper	<1%
27	Submitted to Swiss Management Center Student Paper	<1%
28	Submitted to MCAST Student Paper	<1%

29	SHIZUKA SEKITA. "Financial literacy and retirement planning in Japan", Journal of Pension Economics and Finance, 2011 Publication	<1%
30	ORNELLA RICCI, MASSIMO CARATELLI. "Financial literacy, trust and retirement planning", Journal of Pension Economics and Finance, 2015 Publication	<1%
31	Submitted to iGroup Student Paper	<1%
32	Submitted to University of Lancaster Student Paper	<1%
33	Submitted to Postgraduate Institute of Management Student Paper	<1%
34	Submitted to Mount Kenya University Student Paper	<1%
35	Submitted to University of Mauritius Student Paper	<1%
36	KEE-LEE CHOU, KAR-MING YU, WAI-SUM CHAN, ALFRED M. WU, ALEX Y. F. ZHU, VIVIAN W. Q. LOU. "Perceived retirement savings adequacy in Hong Kong: an interdisciplinary financial planning model",	<1%

	Ageing and Society, 2014 Publication	
37	Submitted to McNeese State University Student Paper	<1 %
38	Submitted to Sunway Education Group Student Paper	<1 %
39	Lucía Rey-Ares, Sara Fernández-López, Milagros Vivel-Búa. "The Influence of Social Models on Retirement Savings: Evidence for European Countries", Social Indicators Research, 2016 Publication	<1 %
40	researchbank.rmit.edu.au Internet Source	<1 %
41	www.researchgate.net Internet Source	<1 %
42	"International Handbook of Financial Literacy", Springer Nature, 2016 Publication	<1 %
43	eprints.nottingham.ac.uk Internet Source	<1 %
44	ecommons.usask.ca Internet Source	<1 %
45	Submitted to Universiti Teknologi Malaysia Student Paper	<1 %

46	NATALIA GARABATO MOURE. "Financial literacy and retirement planning in chile", Journal of Pension Economics and Finance, 2015 Publication	<1%
47	ls13-www.cs.tu-dortmund.de Internet Source	<1%
48	Mahmoudzadeh, M., M. Alborzi, S. Ghazinoori, and S. Khalili Shavarini. "Evaluating Efficiency of Collective Learning in Innovation Networks: Simulation based Experiments in SKIN", Indian Journal of Science and Technology, 2015. Publication	<1%
49	Submitted to University of Hong Kong Student Paper	<1%
50	www.sciedupress.com Internet Source	<1%
51	Submitted to Mansoura University Student Paper	<1%
52	Submitted to Laureate Education Inc. Student Paper	<1%
53	Submitted to Nasarawa State University Student Paper	<1%
54	Submitted to Universiti Malaysia Perlis Student Paper	<1%
	JOHAN ALMENBERG, JENNY SÄVE-	

55	SÖDERBERGH. "Financial literacy and retirement planning in Sweden", Journal of Pension Economics and Finance, 2011 Publication	<1%
56	www.maharashtracollege.org Internet Source	<1%
57	Submitted to University of South Africa Student Paper	<1%
58	Submitted to University of Huddersfield Student Paper	<1%
59	Submitted to University of Hull Student Paper	<1%
60	Submitted to Management & Science University Student Paper	<1%
61	Submitted to University of Wales central institutions Student Paper	<1%
62	Yin Jing, Ding Jingzhi, Ju Songdong, Xu Jie, Hui Kai. "An empirical study of the relationship between logistics network level and logistics effect", 2010 7th International Conference on Service Systems and Service Management, 2010 Publication	<1%
63	Submitted to Bolton Institute of Higher	<1%

	Education Student Paper	
64	Submitted to University of Northampton Student Paper	<1%
65	Submitted to Universiti Putra Malaysia Student Paper	<1%
66	Submitted to Midlands State University Student Paper	<1%
67	Submitted to University of Leeds Student Paper	<1%
68	Submitted to University of Northumbria at Newcastle Student Paper	<1%
69	academic.oup.com Internet Source	<1%
70	Submitted to Montana State University, Bozeman Student Paper	<1%
71	LEORA KLAPPER, GEORGIOS A. PANOS. "Financial literacy and retirement planning: the Russian case", Journal of Pension Economics and Finance, 2011 Publication	<1%
72	Submitted to Universiti Malaysia Sabah Student Paper	<1%

73	George Apostolakis, Gert Van Dijk. "Retirement concerns and planning of cooperative members: a study in the Dutch healthcare sector", Business Economics, 2018 Publication	<1%
74	Submitted to University of Central England in Birmingham Student Paper	<1%
75	Submitted to University of Stellenbosch, South Africa Student Paper	<1%

Exclude quotes	Off	Exclude matches	< 8 words
Exclude bibliography	Off		