



THE FINANCIAL SATISFACTION OF PERSONAL RETIREMENT PLANNING
AMONG MALAYSIAN YOUTH EPF CONTRIBUTORS DURING COVID-19
PANDEMIC

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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.
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DEDICATION

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List of Abbreviations

AG or A	Age
AVE	Average Variance Extracted
BNM	Bank Negara Malaysia
DV	Dependent Variable
EPF	Employee Provident Fund
EL	Education Level
FL	Financial Literacy
FSB	Financial Saving Behaviour
FS	Financial Satisfaction of Retirement Planning
IV	Independent Variable
IL	Income Level
MV	Mediator Variable
OPR	Overnight Policy Rate
PLS	Partial Least Square
PLSC	Partial Least Square Correlation
RP	Retirement Planning
SD	Standard Deviation
TPB	Theory of Planned Behaviour

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PREFACE

The title of this research paper is The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic, which is also the main direction of our study. Alongside with the study, this research paper is also the Final Year Research Project within the subjects under Bachelor of Finance (Hons) in Universiti Tunku Abdul Rahman (UTAR). Professional checking and presentation are associated while completing this research project under the guidance of Universiti Tunku Abdul Rahman (UTAR). This research will be contributing to the research field of finance where perception of youth EPF Contributors is important towards the financial satisfaction of personal retirement planning during COVID-19 pandemic.

ABSTRACT

Throughout the research, there would be a total 7 variables to be applied which included 1 dependent variable (DV financial satisfaction of retirement planning), 3 independent variables (IV1 retirement planning, IV2 financial literacy, IV3 financial saving behaviour) and 3 mediator variables (MV1 education level, MV2 income level, MV3 age). The life cycle theory, theory of planned behaviour (TPB), and permanent income theory are well justified to fit with those variables where IV1 retirement planning, IV2 financial literacy, MV3 age are belong to the category of life cycle theory while theory of planned behaviour (TPB) represents by DV financial satisfaction of retirement planning, IV3 financial saving behaviour and MV1 education level. The permanent income theory for MV2 income level. Since mediator variables were constructed in this research, thus, when organising the 12 research objectives and hypothesis developments, the direct effect between IV to DV and indirect effect from IV to MV then DV would run simultaneously in order to verify the occurrence and the absence of mediating effect. This study is held in a primary data online Google Form questionnaire with the targeted respondent's Malaysian youth EPF contributors who are under the age range 15 to 30 years old and staying at one of the states in Malaysia during the COVID-19 pandemic period. A total of 40 questions regarding the investigation of research variables plus 3 fill in the blank qualifications checking questions would be disclosed to eliminate unrelated respondents from the study. To add on, a total of 411 valid questionnaires which included 50 pilot test samples and 361 actual samples have been received and further studied through data analysis. By applying the SmartPLS 3, only 4 out of 12 hypothesis developments showed to be statistically significant while the rest are all statistically insignificant. With the overall result given, it means that during the COVID-19 period the targeted respondent's Malaysian youth EPF contributors were dissatisfied towards satisfaction of retirement planning. All prospective parties such as investors, Malaysian government, Malaysian central bank, Employee Provident Fund (EPF), and future researchers are advised to apply this research outcome for any future usages.

CHAPTER 1: INTRODUCTION

1.0 Introduction

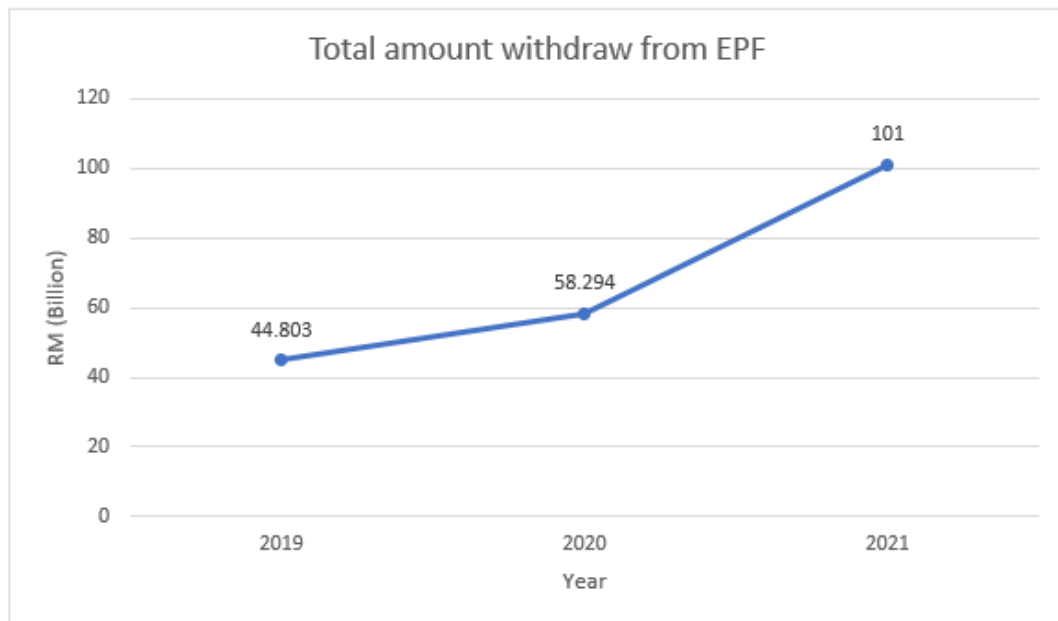
Personal retirement planning is a process of managing funds for retirement. It includes insurance, banking, budgeting, and investments. Personal retirement planning is used to achieve retirement goals, which is long-term financial needs after retirement. Personal retirement planning depends on income and living expenses. Based on these elements, create a plan to manage money well. In order to fully utilise the savings and income, it is important to be financially literate.

In today's age of consumerism and an explosion of knowledge, youth seem to be the most targeted group of professional marketers and large organisations. In Malaysia, the age of youth is defined as those between 15 and 30 years old (Arfa & Esther, 2019). The 41.5% of total population in Malaysia were represented by youth in the year 2005. Personal retirement planning with prudence paves the way for them to a bright and secure future. It not only creates wealth for them, but also avoids debt and wasteful spending, which finally leads to financial soundness. It will enable them to live a magnificent life in retirement. Based on the research of Chai et al. (2019), financial literacy also helps to develop the skills and confidence of youth. This will make them become more aware of financial risks and opportunities. Besides, it can also improve their knowledge of financial markets, products, and concepts, and help them make informed decisions about how to generate and maintain a stable balance between the two for their cash inflows and outflows.

According to Chai et al. (2019), most of the people wish to improve their living standard over time. Some of them desire a comfortable lifestyle which doesn't need to worry about the money they spend. Meanwhile, some desire to upgrade their social status, house or car. A conscious plan is needed in order to make sure all these wishes become reality. There are only a few people who can make their wish come true by luck. Therefore, people should plan for it. Besides, personal retirement planning will also reduce the impact on you in the event of financial disasters. For example, when you are suddenly laid off or taken ill, you might face financial problems due to the insufficient savings to help you through these periods. These things can happen to anyone without any warning.

1.1 Research Background

Figure 1: Total Withdrawal from EPF



Source: From EPF (2019, 2020, 2021)

Employees Provident Fund (EPF) is one of the channels that can do your retirement planning (RP). EPF is the most common channel to start your RP and it's forced by the government. It manages the compulsory saving plan and RP for private sector workers in Malaysia. Which means at least you have the EPF as your RP if you don't have any other RP. The fund in EPF account can only withdraw when the withdrawer reaches the retirement age. In some specific situations, withdrawal can also apply to withdraw the money with valid reason.

In 2019, the Coronavirus pandemic swept the world, and Malaysia was also affected. The global economy is in crisis and people will constantly have to tap their savings due to financial stress. The graph shows the total amount that has been withdrawn from EPF in the past 3 years which is from 2019 to 2021. In 2019, the total amount that has been withdrawn from EPF is RM44.803 billion. Although the amount is slightly decreased

compared with 2018, it still remains the average level. This is because the pandemic hit in the last quarter of 2019 in Malaysia and the economy is only gradually affected.

However, in 2020, the amount that withdraws from the EPF account increased to RM58.294 billion. The increase of around RM13.5 billion in that year due to the pandemic led to a sharp drop in Malaysia's economy. Therefore, the government is giving permission to the EPF account owner to withdraw the money from the EPF account (in a specific amount) in order to solve their financial problem. A lot of people withdraw from their account, not only the people who are facing financial problems, but also the people who aren't facing financial problems. The people who didn't face financial problems withdrew for prevention.

In the year 2021, the aggravation of the epidemic caused the total amount that withdrew from EPF increased to the highest level compared to previous years, which is RM101 billion. It was a very big increase which is around 73%. The continued deterioration of the epidemic has also resulted in no improvement in the economy. This has led to more unemployment and economic hardship. Therefore, when the government gives the permission again, the number of people that withdraw from EPF accounts are more than last year since the economy is getting worse and worse. In 2020 and 2021, a total of RM159.3 billion has been withdrawn from EPF due to the pandemic.

1.2 Research Problem

Based on a the journal by Masran & Hassan, the sample size of their studies is always a limitation that can be improved. The small sample size will increase the margin of error which will reduce the validity of the study (Deziel, 2018). However, the researchers do make sure that the sample size they conducted was appropriate to fulfil the theoretical framework. It is also suggested to have an amount of respondents from rural areas to take part in the questionnaire. With an equal number of respondents from urban and rural areas, the results will not be biased to any of the areas. Multi lingual of the questionnaire is also a suggestion given by Yi et al. (2019), Masran & Hassan (2017) with their experience when conducting research, this will greatly aid the respondents when they are answering the questionnaire, as they are able to answer the questionnaire with the language they are most comfortable about.

Furthermore, the wide array of investment products does work differently on individual profiles. Different people will have different financial ability and financial strength. According to the research, they suggested carrying out research where an individual's intention is targeting specific investment products for retirement purposes.

Research from Zulfaka, Auni & Kassim, Salina (2020), it is observed that external factors such as the economy are not included. It is a factor that will have an extension of affects towards the study. Many of the past researchers do suggest to include it as one of the independent variables (IV) that will have an affection towards RP. Although it will increase the validity and reliability of the study, not all of the respondents will view it as a factor that will affect their RP. At the same time, not all respondents do fully understand the meaning and existence of economy factor, moreover the relation between the economy factor towards the RP,

Besides that, the amount of mediator variables (MV) and IVs selected in past studies is limited. The limited amount of both variables is not able to provide an overall accurate result and bring out the full potential of the study. However, the more variables included, more time is needed in the studies. It is somehow a long term study to include as many variables as possible.

1.3 Research Objective

1.3.1 General Objective

This study aims to identify the significant relationship among financial satisfaction of personal retirement planning (FS) with its determinants. For instance, RP, financial literacy (FL) and FSB are the three IVs that will be mentioned in the following chapters while education level (EL), income level (IL), and age (AG) stand as the MV through RP to its FS.

1.3.2 Specific Objective

- i. To identify the significant relationship between RP and FS.

- ii. To identify the significant relationship between FL and FS..
- iii. To identify the significant relationship between FSB and FS.
- iv. To identify the significant relationship from RP through MV to FS..
- v. To identify the significant relationship from FL through MV to FS.
- vi. To identify the significant relationship from FSB through MV to FS.

1.4 Research Question

- i. Is there a significant relationship between RP and FS?
- ii. Is there a significant relationship between FL and FS?
- iii. Is there a significant relationship between FSB and FS?
- iv. Is there a significant relationship from RP through MV to FS?
- v. Is there a significant relationship from FL through MV to FS?
- vi. Is there a significant relationship from FSB through MV to FS?

1.5 Significance of study

1.5.1 Investors

This research is mainly organised to enhance the motivation and awareness of the public in adopting proactive retirement planning before their lives come to the stage. As the youth EPF contributors is the respondent to be examined through the entire research, hence, researchers do wish that this research can bring some extraordinary impacts to this particular group in order to provide them some extent of better understanding towards their financial circumstance which can apply the valuable findings for their future financial affairs. Although it seems to be far away for youth to retire after life, well prepared and constructed personal retirement planning will provide youth EPF contributors a better

precise pathway when time is coming. Investors known as youth might be given the golden opportunities to appreciate their financial wealth when they react positively towards the findings.

1.5.2 Malaysia Government and Central Bank

Although the main objective of researchers to conduct this study is to identify the financial satisfaction of Malaysian youth EPF contributors in retirement planning which is only limited to the specific Malaysia population. However, the government and the central bank could apply these findings from the research for any further usages or adjustments on adopting fiscal policies and monetary policies after reviewing the vital data needed to be considered before any decision making. For example, fiscal policies and monetary policies that can be applied by both parties. As an assumption, whichever policy will be made by both parties after taking into account the research findings would benefit the third party such as investors to gain financial appreciation on investments. For example, according to the monetary policy overnight policy rate (OPR) implemented by the Bank Negara Malaysia (BNM) during the period 5th November 2019 to 3rd March 2022, the lower the BNM overnight policy rate (OPR) from 3.0% to 1.75% during the COVID-19 enhanced the supply of ringgit in the Malaysia financial market which led to the stimulation of various stock prices. For those investors who had such an idea and took proactive action before the time came, he or she was taking advantage of it.

1.5.3 Employee Provident Fund (EPF)

Employee Provident Fund (EPF) will be the third beneficial party from this study. EPF is suggested to review this research when they are implementing any policies that are related to youth since this research correlates with the objective of EPF which promotes employees to save funds for retirement later especially during any big event such as COVID-19 epidemic. Through this time epidemic, EPF might realise the current financial composition implemented by them did not fully support the members financial condition which lead the members far away from chasing their financial goal. For example, many contributors withdrew their funds during the difficult time to support daily expenses since little or no

income was received as everyone was forced to stay at home. Hence, through the study output EPF might propose some adjustments on recent execution such as introducing extra financial tools or subtracting unnecessary implementations on EPF itself to best fit with objective. For instance, maybe in the future, EPF may adjust the principle on each EPF member account and allow some portion of the total fund to be allocated or expanded into another new sub-account which is known as self-control investment account for those who have sufficient expertise on investing with proof of competency.

1.5.4 Future Researchers

The researchers do suggest future researchers who will be doing the similar sector of study refers to this research findings to have some extent of ideas. Any future researchers who would like to continue the further study of the research are recommended to understand the current coefficients on the paper such as the theories, variables, conceptual framework, and type of analysis to organise an unique benchmark for their research. For instance, future researchers can add in new elements on current findings to extend the study to another stage like will the existence of different psychological and emotional behaviour on oneself affect the satisfaction of retirement planning.

1.6 Conclusion

Throughout this chapter, the researchers have explained the general ideas of conducting the research via introduction, research background, research problems, research objectives, research questions, and significance of study on the financial satisfaction of Malaysian youth on retirement planning during COVID-19. As a short recap for the contents mentioned above, personal financial planning is a process of managing funds as well as savings and investing. It includes budgeting, banking, insurance, mortgages, investments, retirement plans, and tax and estate planning. Personal financial planning is used to achieve personal financial goals whether it's meeting short-term financial needs, saving for a child's education or retirement plans. Based on the recent 3 years data from EPF 2019 to 2021 table, it showed that the total amount of EPF fund withdrawal was increasing from the year 2019 to year 2021 which achieved the highest withdrawal amount of RM101

billion ringgit due to the arrival of COVID-19 that led to financial problem among public. For the research problems a few problems have been listed out from the section such as limited sample size or unequal distributed sample between rural and urban areas might lead to result unideal, the exclusion of macroeconomic factors on research might not provide completed image on the result, the limitation of variables inclusion in one research study where only few variables can be inputted not all or as much as researchers want to due to the complexity issue. Research objectives and research questions did identify the significant relationship among the IVs such as RP, FL, and FSB, mediator variables such as education level, income level, and age through financial satisfaction on retirement planning. For the significance of the study, several parties such as investors, the government, the central bank, and future researchers do suggest to utilise the result for further usages. A short explanation on improvement approaches do illustrate in each party.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, several theories and variables that related to the research topic The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during the COVID-19 Pandemic will be proposed from the previous literature reading. The core theories such as life cycle theory, theory of planned behaviour, permanent income theory would play their role as guidelines to let the researchers identify which dependent variables are most suitable for the study. In the following subchapter, a conceptual framework will be proposed to indicate the relationship between the independent variable, demographic variables and dependent variables. Last but not least, few hypothesis developments will be introduced through the independent variable and dependent variables associated with demographic variables that were suggested in the previous subsection.

2.1 Review of Theories

2.1.1 Life Cycle Theory

There are three theories that will be applied in this research. One of them will be the Life cycle Theory. The application of this theory is to view the points in a person's life cycle at which a person has different views on decision-making based on financial literacy and income level. As a result, this affects the life cycle behaviour of retirement plans, in which lead to the achievement that priors on the supply of consumer demand over varies life cycles that are limited by individuals (Daniel, 1982). Different individual stages have different perspectives on the implementation of retirement plans. In the early stages of their life, individuals tend to be complacent about their retirement plans simply because this phase is far away for them, and their education level and financial knowledge further hampers them. With rising education levels and the increasing recognition of financial literacy brought about by real-life experiences, individuals tend to apply their own retirement plans. Same goes with their age. When you are in a younger age, for example in secondary school, you won't have an idea to do retirement planning even if you have learned the related knowledge in your school. When your age gradually increases, and when you are slowly approaching retirement age, you will feel more and more important about retirement planning. The application of life cycle theory perfectly explains the different perspectives of decision-making at different stages.

2.1.2 Theory of Planned Behaviour (TPB)

The next theory that will be applied in this research is Theory of Planned Behaviour (TPB). This theory is implemented by the former researchers to identify and predict human behaviour which assumes that behaviours are immediately determined by behavioural intentions and under certain circumstances, perceived behavioural control (Ajzen, 1991). The planned behaviour theory claimed that the positive or negative (1) attitude towards actual behaviour which the individual's belief of the outcome to be received and assesses of the results, (2) subjective norms a motivation to achieve that hope for their normative expectations that are shared with the other, and (3) perceived behavioural controls which refer to the existence of things that support or inhibit such behaviour to appear and how strong the support or resistance are the three factors that will be affecting an individual's intention (Ajzen, 1991). TPB has been used in many past empirical studies. According to a past research from Nga, and Yeoh (2018) that identifies the relationships between behavioural factors and retirement planning, and examines the intermediation role of

saving attitude between proposed behavioural factors and retirement planning. It was found that propensity to plan, and future orientation have a significant relationship with retirement planning behaviour while saving attitude mediates these relationships (Nga et al., 2018). However, family education and materialism don't have a direct effect on retirement planning behaviour of individuals (Nga et al., 2018). Another research study by Sharifah, and Zahariah (2021) concluded that financial behaviour is considered as the most influential component to the financial planning of working adults during the COVID-19 pandemic.

According to the study from Arifin (2018) on the influence factors towards financial satisfaction with financial behaviour as an intervening variable on Jakarta area workforce, it stated that financial satisfaction can be explained via the theory of financial behaviour which derived from the theory of planned behaviour (TPB). As TPB is explaining the level of an individual's beliefs on the result they have received due to certain behaviour performed by them, hence it indicates that the individual will decide whether to implement or not to implement an action based on his or her level of confidence (Arifin, 2018). The confidence level will be aligned with the level of an individual's consciousness to behave. Once they have the level of consciousness, they will enrol into the stage of intensity or intention behaviour then at the end they enter the behaviour stage in the form of doing some action (Arifin, 2018). If the planned deed is successful, as a consequence it will get satisfaction from the results of their behaviour which is related to the recent research variables financial satisfaction and financial saving behaviour (Arifin, 2018).

2.1.3 Permanent Income Theory

The earliest Permanent Income Theory, which is from Milton Friedman, stated that "permanent income" is closely related with "permanent consumption". In his research, the outcome can be observed through actual receipts and expenses during a certain period. As for the permanent income theory proposed by Truman Bewley, it is a bit different from Milton Friedman's. Mainly mentioning that the consumer's response on consumer's short term needs, income and also the inflation. However, with recent studies, Permanent Income Theory is actually theoritised based on two assumptions, (1) where consumer or individual will tend to smooth out their marginal consumption overtime, (2) consumer or

individual will accumulate and decumulate their savings or assets to match with the income they are having currently (Aguiar & Hurst, 2016). For example, an individual's mean income is RM2500 and mean expenses of RM2000 per month, he or she will save RM500 monthly. However, if the individual's income decreases to RM2300 due to some external reasons, he or she will have lower expenses and/or save less on that particular month where income is lesser than expected. According to Mark Aguiar and Erik Hurst, the Permanent Income Theory strives that an individual's consumption will be different based on the expected or unexpected income changes.

2.2 Review of Variables

2.2.1 Dependent Variable

2.2.1.1 Financial satisfaction in retirement planning

There are many meanings of financial satisfaction that have been said by former researchers. Financial satisfaction can be defined as an individual's subjective assessment of their financial circumstance as both a “sub-construct” or domain of subjective well-being and life satisfaction (DePianto, 2016) and it is as a paramount element of perceived economic standing (Kalleberg & Marsden, 2015). Financial satisfaction is defined as satisfaction of an individual's current financial condition and it is assumed to be a sub-component of general wellbeing (Murphy, 2016; Gerrans, Speelman, & Campitelli, 2017). A former study from Playnol (2017) on the financial satisfaction over the life course: the influence of assets and liabilities claimed that income is the most influential variable to determine the financial satisfaction where income influences financial satisfaction through the mediator of financial aspiration. After the literature reading from previous research studies, it found that the financial satisfaction and income level are suitable to be included in the current research variables where financial satisfaction can be considered as the dependent variable and income level acts as demographic variable to identify the intermediation relationship between independent variables with dependent variables. Not only that, previous literature normally located retirement planning as motive of conducting the research, however, financial satisfaction of retirement planning might be one of the methods to apply as the dependent variables after the consideration of former research

findings while organising a new extension of study as well as to ensure the recent study is under the right track.

Attitude on behaviour does enhance the beliefs from satisfaction where the attitude will improve the way of thinking about something (Halim and Astuti, 2015). Attitude aligned with the approach of thinking about someone's financial affair is known as financial attitude (Halim and Astuti, 2015). Halim and Astuti (2015) indicated financial attitude as a state of mind, opinions and judgments about finances. If the individual's thoughts on finances are good, then he will have the intention to reflect on it, such as adjusting behaviour to start saving, investing and planning for finance matters to have a better life after (Halim and Astuti, 2015). If an individual treats money as a valuable tool, then the attitude on itself will respond to the individual having a healthy financial life and indirectly it will boost the quality of his or her life and will push up the financial satisfaction as well (Halim and Astuti, 2015). As the findings above stated that attitude can enhance one's satisfaction associated with the way of thinking, attitude or financial attitude seems to be one of the powerful influential factors that are related to current research topics. However, financial attitude would not be included under the new research study variable after the second phase of literature variables discovery due to the time limitation for researchers to add on or amend financial attitude as the extra independent variables under latest study and successfully pass up the task before the deadline submission.

Some studies also said that financial satisfaction might bring an impact to great financial decisions process for well financial literacy. Joo findings (2017) reported that financial literacy is one of individual financial wellness along with financial satisfaction and financial behaviour. Xiao (2019) said that financial behaviour can be defined as human behaviour aligned with financial management which is related to an individual behaviour on managing his or her financial matters. Worthy, Jonkman and Pike (2015) and Xiao et al. (2019) claimed that if there is a positive and proactive response on financial behaviour after the school term thus it will provide an individual with better quality of life and higher financial satisfaction later life. Several findings above indicate financial literacy and financial behaviour are two aspects that can be applied to financial matters research when they are associated with financial satisfaction. As financial literacy and financial saving behaviour are recommended to be applied under any further research thus these two determinants will be added in the research independent variables.

Throughout the literature review on financial satisfaction, current researchers found that financial satisfaction provides the new idea of retirement planning which is still not familiar in the former research idea. The past studies always stop at the retirement planning stage. Therefore, current researchers would like to apply financial satisfaction as the dependent variable once doing the actual research at the coming chapter 1 to chapter 5. As researchers have gone through the review of literature, financial attitude considers as one of the beneficial variables that can be included under the research but due to the limitation of time or due date of submission paper for recent researchers to adjust their concern on variables, hence, recent researchers do recommend any future researchers who will be doing the similar topic might consider financial attitude under their financial matter research in the future.

2.2.2 Independent Variables

2.2.2.1 Retirement Planning

According to Kimiyaghalam, Mansori, Safari and Yap (2017), a retirement plan is a decision that an individual makes to prepare financially for retirement. Retirement plans require individuals to make savings, investments, and spending plans based on income. However, not everyone is ready for retirement planning. Yusof and Sabri (2017) identify demographic factors that have a significant impact on the success of determining retirement savings. There is a suggestion that interventions in retirement plans should begin as early as possible and can be implemented through the provision of repetitive information in media and procedures provided by agencies.

Kepha (2018) studied the financial factors affecting the employee retirement plan in Nakuru, Kenya. The study concluded that financial factors are related to retirement plans. It is recommended to raise awareness of retirement plans by developing plans and policies. This study successfully explores female accounting in different cultural and social contexts, revealing nuances in the relationship between women and retirement savings (Willows & October, 2021). By reconceiving what black South African amaXhosa women's "retirement plans and savings" look like, the study disputed previous definitions and studies. The feminist accounting prevalent in this study underscores the importance of

gender studies in accounting, and it should give a voice to different cultures that were previously suppressed by male accounting patterns.

According to Hoffmann and Plotkina (2020), retirement plans are becoming more demanding. Therefore, informing and teaching consumers how to manage their finances is a pressing policy issue. This urgency is pervasive not only in the United States, but also around the world. For example, in many European countries, pension reforms require consumers to make complex decisions when planning to supplement retirement income, and governments have established public pension platforms to help consumers access information, improve knowledge and advance retirement plans. According to Patel (2017), a significant relationship is concluded between financial planning and income level. People with higher income levels will have surplus in cash flow to do the retirement planning. With the right plan and plenty of savings, retirement can be a great time to pursue hobbies, travel, and relax. Lack of planning, on the other hand, can make people worry about every penny spent and wonder if the money will last a lifetime.

According to Shaharuddin, Sharifah and Zahariah (2021), no significant relationship exists between financial planning and gender. The amount of spending from male and female working adults most likely are the same. Females are not showing a better skill in their financial planning compared to male. Continuously, all independent variables, including financial knowledge, financial behaviours and financial attitudes have a significant impact on personal financial planning by working adults.

In conclusion, most of the researchers found that retirement planning will be affected by plenty of factors. But one of the researchers found that gender will not influence financial planning or retirement planning. In my opinion, financial knowledge is the most significant factor that affects retirement planning. This is because people with any gender, age and income level, will fail to do the retirement planning or their retirement planning will be flawed if they are without financial knowledge.

2.2.2.2 Financial Literacy

The term FL can be known as the competency to identify the effective way to use financial skills such as personal financial planning, investing, budgeting for fulfilling various life

goals (Jason, 2021). A previous research conducted by researchers Chai, Chin, Lee, Lum, and Yeo stated a positive significant relationship between the financial literacy and dependent variable financial planning. Throughout the analysis test the p-value gathered was 0.02 which is lesser than the alpha 0.05 and the demographic variables such as age, gender proved to influence the financial literacy and financial planning. This former research provides recent researchers with the fundamental knowledge on conducting the entire research since it is the most similar research that fits with current research at the same time it is also considered the nearest 2019 literature outcome. The research study from authors Chai, Chin, Lee, Lum, and Yeo was found to have a high similarity with the current research to be conducted, this former research would be utilised in many soft of approaches to enhance the final outcome of the new study such as to select the initial theories and variables as well as conduct the appropriate independent variables along with demographic variables to study the topic. Most of the variables would remain in the recent study such as financial literacy as an independent variable and age under the demographic variable.

Past findings have claimed that financial literacy does foster financial behaviour (Çera, Khan, Mlouk, and Brabenec., 2020; Nadzri & Yaacob, 2020; Yong, Yew, and Wee., 2018). These findings state that individuals who have enough depth in financial literacy are having higher chance to perform sound financial behaviour as compared to those with little or no financial knowledge (Çera, Khan, Mlouk, and Brabenec., 2020; Nadzri & Yaacob, 2020; Yong, Yew, and Wee., 2018). For instance, rational saving, rational budgeting, rational investing and so on. An individual being a financial expert will let him or her have better understanding in financial choices (Mahdzan, Zainudin, Sukor, Zainir, Ahmad., 2019), thus it is encouraging the individual to adopt well-informed financial decisions. Based on the findings mentioned above, the existence of financial literacy was found to have a positive impact on financial matters. Therefore, there would be a high chance this determinant is going to add in the upcoming research as an independent variable.

Another study for private pension funds conducted in Klang Valley showed a positive and significant relationship among retirement planning and financial literacy where financial literacy was found to mediate the relationship between quality of financial advisers and retirement savings behaviour (Nga et al., 2018). This is appropriate evidence to claim that financial literacy is a paramount element in fostering more responsible financial practices.

The truth that Malaysians nowadays have insufficient planning as well as inadequate savings for retirement is therefore symptomatic of weak overall financial practices such as accumulating excessive amounts of debts, overspending as well as low financial knowledge especially among the young (Asian Institute of Finance, 2015; Mahalingam, 2017). In the past study, the quality of financial advisers had been pointed out to have a mediation effect which links retirement saving behaviour and financial literacy to retirement planning. From the another word, quality of financial advisers can be inputted under the independent variable for recent study as well, but the recent researchers do not intend to do so since the question of whether all the targeted respondents will equally having the same opportunity to experience a financial advisor that assists their own financial affairs especially for the targeted respondents Malaysian youth whose aged ranging from 15 to 30 years old. Hence, the quality of financial advisors component was considered as an alternative variable in recent study independent variables if there is no other superior independent variable to support the topic. If there is another variable to utilise it, the quality of financial advisor will be eliminated.

However, a finding from Sabri, Juen, Othman & Rahim (2015) proposed the complexity and indirect effect among the financial literacy and retirement confidence would happen which supports by another statement from Braunstein & Welch (2002) said that introducing any financial literacy training with no strategic planning would not ensure a better financial wellbeing in the future. Asian Institute of Finance (2015) discovered that Malaysia Generation Y has weak financial education as more than 50% of respondents claimed that they were having mean financial literacy while 28% of them saying that they were confident in dealing with their own financial affairs (Tie & Nizam, 2016). This result tells that although the respondents have some extent of financial knowledge, they still do not understand the beneficial effect of retirement planning. A research completed by Bosanac (2016) tells the researchers that the Canada youth who aged around 18 to 33 are not knowledgeable in retirement planning and 40% of Canada youth admitted that they do not want to learn the knowledge on investing due to the feeling of being useless for their future retirement. The finding above said that retirement confidence might not immediately give the output to financial literacy due to the complexity and indirect effect of itself therefore current researchers would not include the retirement confidence to question financial satisfaction under the recent study conceptual framework.

Throughout the literature review on financial literacy by recent researchers, the current researchers fully utilise the previous research conducted by researchers Chai, Chin Lee, Lum, and Yeo (2019) on the perspective of youth in relation with RP in Malaysia as a reference to conduct the study. Some theories and variables in this research found appropriate to be used such as financial literacy as an independent variable, age under demographic variable. The recent researchers found that although the quality of financial advisors can be considered as one of the variables to be included under the recent study, it seems to be of limited effect to a specific group of population as not everyone can deserve for a qualified financial advisors for managing their finance due to some external factor such as income condition. Hence, the quality of financial advisors will be eliminated if there is another best variable to alternate it. Current researchers would not include the retirement confidence inside the latest study too due to the complexity and indirect effect of itself.

2.2.2.3 Financial Saving Behaviour

Based on the study from Hsion and Dambaravdan (2016) that focused on the family saving behaviour as well as personal saving behaviour, the output claimed that the results were significantly positive. It suggested that individuals that have a good financial saving behaviour will have a higher possibility to adopt retirement planning via diversification such as involving a variety of investment instruments like bonds, stocks, short-term investment and so on which allow them to fulfil their financial goal (Hsion et al., 2016). The research did conclude that personal saving behaviour in Taiwan is the core reason affecting financial planning which collected the data through Taiwan Financial Supervisory Commission (FSC). The study wholly consisted of youth respondents (Hsion et al., 2016). This result shows to current researchers that financial saving behaviour might be considered as the independent variable to be included under the study since current research does go through the process of independent variables to demographic variables then estimates the financial satisfaction at the end of study.

Another research conducted by Hong Kong and Shanghai Bank (2013) on Malaysia financial planning concern found the significant relationship between individual financial preparedness and competency to have a good saving behaviour. Malaysia was extremely

poor in retirement planning or financial saving behaviour (HSBC Insurance Holding Limited, 2013). The study declared that Malaysia retirement preparedness is still lacking as compared to other peer countries and due to the unstructured or non well-constructed knowledge on financial matter commonly most of the population would entirely rely on their EPF for retirement after life which could be inadequate because of minor savings during employment time (HSBC Insurance Holding Limited, 2013). In this case, financial preparedness was pointed out as a variable to be considered to put inside the recent research. Current researchers would like to include financial preparedness inside the determinants but due to the lack of time remaining for research completion, researchers are forced to let go of this variable after the second time of reviewing in literature review.

However, the finding by Social security study group members (2018) claimed that an actual image of financial need against retirement planning was not proven by the ongoing process of investment and saving behaviour. Their research stated that regardless of how large portion respondents used for savings, they would not use it for retirement later. Based on Kimiyaghalam et al. (2017) findings, it indicated inadequate research experiment on confirming that savings behaviour is positively causing a significant effect towards retirement planning. It shows that FL and tendency against the future correlation with RP resulted in a partial intermediation relationship with the involvement of FSB in the finding. These 2 findings are against the previous findings by other researchers where it claimed that financial saving behaviour might not really bring effect to retirement planning regardless of amount saving and hard to confirm the relationship between saving behaviour with retirement planning. It might be arguable on which are the factors that lead financial saving behaviour to be significant at some findings and at the same time insignificant at other studies. Current researchers still would like to go through the process to prove the significant relationship among financial saving behaviour with the financial satisfaction to figure out why it shows insignificance in some studies.

Throughout the financial saving behaviour literature review process, it found that financial saving behaviour can be considered as the independent variable to be included under the study since current study does go through the process of independent variables to mediator variables then estimates the financial satisfaction at the end of study. Another potential variable financial preparedness does stand out to be covered under latest research but due

to the limitation of recent researchers on conducting the research, financial preparedness is not allocated under the current study. There are also some previous researches claiming that saving behaviour may not support the existence of retirement planning. Hence, current researchers should struggle themselves to find out the unideal reasons that led to the insignificant study.

2.2.3 Mediator Variables

2.2.3.1 Education Level

According to Auni and Salina (2020), the education level has a significant impact towards the retirement fund or retirement planning. Same goes as Lu et al. (2021), based on their research, the education level was significantly influencing the retirement planning. This is because without the knowledge, it won't be successful in doing any plan. The retirement planning needs to calculate the income, expenses and so on. Therefore, education attainment is important in retirement planning. The research from Jee (2019) shows that there is a significant relationship between education level and retirement planning. The people who own a higher education level will be more confident in their retirement planning. Confidence is an important element that leads to success in retirement planning. When you are confident, then you will make the right decision other than do what other people say.

A significant relationship is proved to be exist between education level and retirement planning (Muhammad & Hafinaz, 2017). With proper education and information from the government, individuals can still have better retirement plans if they realise the importance of early retirement plans, so they will take further action to ensure they can meet their financial needs after retirement. Mansor et al. (2015), there is a significant relationship between education level and retirement planning. An individual who has a higher education level is more likely to know the importance of financial planning. He will know how to plan in order to get the lifestyle he wants after retirement. People with higher education are indeed more likely to know how to do a good job of financial planning.

Nyoro and Otieno (2016) found that education level significantly influences retirement planning. The people who have a lower education level will have insufficient preparation

for retirement. People with lower education levels might not have a clear understanding on retirement planning, therefore, insufficient preparation will occur. According to Lee & Kuttyzhlova (2016), education level showed a significant relationship between education level and retirement planning. Education level has a significant impact towards retirement planning (Fadila & Alam, 2016). Employees with higher levels of education score higher on average when adapting to retirement. Those who have higher levels of education have higher chances to succeed in their retirement planning since their knowledge is more than those who have a lower education level.

However, Chai et al. (2019) indicated that education level showed an insignificant relationship to retirement planning. In this research, not only did people with higher education want to do retirement planning, but people with lower education also wanted to do retirement planning. In my point of view, some people with lower education also want to do retirement planning but just some of them, most of the people with lower education level will focus on their current condition and less to think about the future. According to Lee et al. (2018), education level will not significantly influence retirement planning. Based on Selvadurai (2018), education level has an insignificant impact towards the retirement planning. The success of retirement planning will not be affected by how high your education level is. I believe that higher education levels will have a higher chance in the success of retirement planning. At least some knowledge that they learn might relate to finance, personal finance or retirement planning, it will be better than without this kind of knowledge.

In conclusion, most of the researchers found that education level is important and it significantly influences retirement planning. There are 3 researchers who found that education level is not important and it insignificantly influences retirement planning. In my opinion, I think that education level is important in retirement planning. This is because those with higher education levels will have more chances to gain the knowledge that is related to personal finance or retirement planning. Therefore, they are more likely to do retirement planning and have a higher chance of success in retirement planning.

2.2.3.2 Income Level

The research of Auni and Salina (2020) show that there is a significant relationship between income level and retirement planning. It is believed that income level appears to be an important determinant. The people with higher income will have extra money to do their retirement planning. Lu et al. (2021) found that income level has a significant impact towards retirement planning. People with higher income levels are more likely to have retirement accounts. It is indeed high incomes mostly accompanied with high expenses. Therefore, they will plan their retirement planning properly in order to cover their higher living cost after retirement. Based on the research of Jee (2019), the income level was significantly influencing the retirement planning. People's confidence level can strengthen their expectations for the future. Meanwhile, income level is one of the elements to increase confidence level. For sure the people with higher income levels will be more confident in their financial planning since they will not worry about the money and plan the best retirement planning that they want.

Chai et al. (2019) found that there is a significant relationship between income level and retirement planning. Same goes as Sze et al. (2021), based on their research, the significant determinant of retirement planning is the variable income level. It fosters a conceptual model of retirement saving behaviour that enables individuals to plan their retirement lives well. People with higher income levels will have additional money to do retirement planning but for those who have lower income levels, they can only focus on their current situation. It's not that they don't think ahead, it's that they have to focus on the present because they also don't have the extra money to plan for the future. According to Shariff & Isah (2019), income level has a significant impact towards retirement planning. Income level seems to be an important determining factor. Respondents with higher income levels are believed to be inclined to save more compared to those with slightly lower incomes. As mentioned above, those with lower income might have to focus on their current financial problems instead of the future. Based on the research of Mansor et al. (2015), income level was significantly influencing retirement planning. People with higher salaries often go into retirement planning because they don't have to deal with financial stress right now and have extra time and money to plan.

Income level is indeed causing a significant effect against the way of retirement planning (Patel, 2017). Same goes as Nyoro and Otieno (2016), they indicated that there is a significant relationship between income level and retirement planning. The people who

have a higher income level will prepare for their retirement. High earners may follow suit because they see other high earners doing retirement plans. And lower earners may see that other lower earners have no retirement plans, so they don't care about retirement plans. Based on Olejnik and Bialowas (2016), retirement planning will be significantly influenced by income level. The retired group mostly agreed that income level is important in retirement planning. The current retirement group may be in a recession when they are still in the labour force. After all, it was also in the 1960s and 1970s. It may be a problem to fill their stomachs, not to mention retirement plans.

However, according to Thakur et al. (2017), there is an insignificant relationship between IL and RP. The analysis showed that most of the respondents regardless of age; income and occupation want to retire in the next 20 years and above. In my point of view, the people with lower income levels have plans to retire but they don't have a proper plan for their retirement. They might not have sufficient money when they retire due to improper retirement planning. Income levels do not fundamentally affect retirement plans, although they are inversely related to retirement plans (Kepha, 2018). Given the inflation rate in our country, what you could buy for RM100 before is really very different from what you can buy for RM100 now. Prices are rising at a rapid rate, and wages are rising at a rate that does not match the rate at which prices are rising. Therefore, I think the income level is actually influencing the retirement planning because the extra money that lower earners own is decreasing.

In conclusion, most of the researchers found that income level will significantly influence retirement planning. There are 2 researchers who found that income level is insignificantly influencing retirement planning. In my opinion, I think that income level is important and it has a significant relationship with retirement planning. This is because the people with higher income of course have time or extra money to plan for their retirement. But for those lower earners, they may be struggling with their current life, let alone planning for retirement.

2.2.3.3 Age

Age is one important independent variable that needs to be included, based on previous research regarding retirement planning. According to the past research by Yi et al. (2019)

Life Cycle Theory is a consumption related model that is meaningful to retirement savings research. Individuals will have the intention to plan their finances which is consumption, earnings and also savings. When people are in the youth stage (age ranging from 20 - 34), they are more attracted to technologies, gadgets and entertainments over retirement savings, so they will tend to spend more rather than saving. While people are in their middle age (ranging from 40s - 50s), people will have the thoughts of retiring early and have a more relaxing life, indeed they will prefer to save their money in their retirement. These statements above will need to be based on the assumption where all individuals prefer to have a stable lifestyle.

Based on the studies provided by Fan, Stebbins, & Kim, (2021), which their study is about the financial hardship and retirement planning behaviours. Through their research, it found out that age shows a positive relationship with the probability of having a retirement account. Furthermore, their analysis about the retirement account ownership resulted in Millennials and Boomers that reported it was challenging to find ends meet were more likely to evaluate retirement needs than those who found no difficulty in doing it. Among GenXers, only those who said they were struggling to make ends meet were considered to count their own retirement needs more. Additionally, Boomers that considered over-indebtedness are closely connected on the chances of estimating their retirement needs. When going through the journal, it found out that it is a recommended study where it included individuals from different generations, and able to look at their different perspectives on retirement planning. However, in this research it will mainly focus on the youth which age around 20 to 34 years old (definition of youth according to the National Youth Development Policy of Malaysia), as the study mainly covers for youth in Malaysia. It is curious to know about the perspective of the youth in Malaysia on retirement planning that leads to financial satisfaction.

Based on the research by Mohd Talib and Abdul Manaf (2017), the results of their study indicates that the financial resources seems to have an influence on a good attitude towards retirement planning, mainly for those in their forties and fifties (middle age group). According to the research, Malaysians reach their peak savings between the ages of 46 and 55. Overall, there is evidence that Malaysians smooth their spending across their lifetimes and tolerate any significant drops in their standard of living which is closely related with the Life Cycle Theory. We can observe that their financial planning approaches are based

on this perspective, and they include spreading consumption across time and across circumstances over the course of an individual's whole life cycle. This study acts as a reference on youth regarding retirement planning, as it may be able to find whether age really affects the amount of savings and retirement planning satisfaction with their current and expected savings.

According to research by Zulfaka and Kassim (2021), age has been shown to have a major impact on financial literacy and retirement planning. It appears that as people become older and gain more financial literacy, they will be more motivated to prepare for their retirement. People's ages will impact their ability to receive more information from their surroundings and this will make them aware of the need for retirement preparation, which is another implication from the Life Cycle Theory. Besides that, age has become an important and consistent predictor in human behaviour when it comes to retirement plans. Pre-retirees and persons in the process of retirement planning are influenced by their age. This will lead to changes in retirement mindset and acknowledgment, as well as increased retiree's confidence in retirement. Moreover, age is also closely related with saving behaviour and retirement planning. This suggests that people in their latter years are more conscious of their saving habits, which might lead to retirement planning. Saving behaviour is a more preferable habit to older people, whose goal is to ease up their retirement plan. After the economic crisis and pandemic, more and more older people realise the importance of savings, which thus leading them to think of having a better retirement in their future life. However, a different approach is seen in this study, in which the effect of retirement planning mindset by the COVID-19 pandemic not only affects older people, younger people will be affected as well. It will further be proven in this study as well on the satisfaction of younger people's retirement planning.

Referring to Zandi et al. (2021), the control variables in their study, which is one if it is age, have a big impact on the probability of having a retirement plan. The results show that younger generation respondents are likely to have a retirement plan rather than those who are older than them. These studies proved that the younger generation do have their own awareness of retirement planning, which is really different from other studies that proved the older generation or individuals in their middle age (40s - 50s) will have stronger retirement planning awareness. With the result of this study, further improvement and the investigation of the financial satisfaction towards retirement planning among youth is

needed. Expectation to look further into financial satisfaction and the relationship between retirement planning is important as well.

2.3 Conceptual Framework

This research insisted on studying the significant relationship between RP, FL, FSB, EL, IL, and A on the financial satisfaction of retirement planning among Malaysian youth EPF contributors during the COVID-19 period.

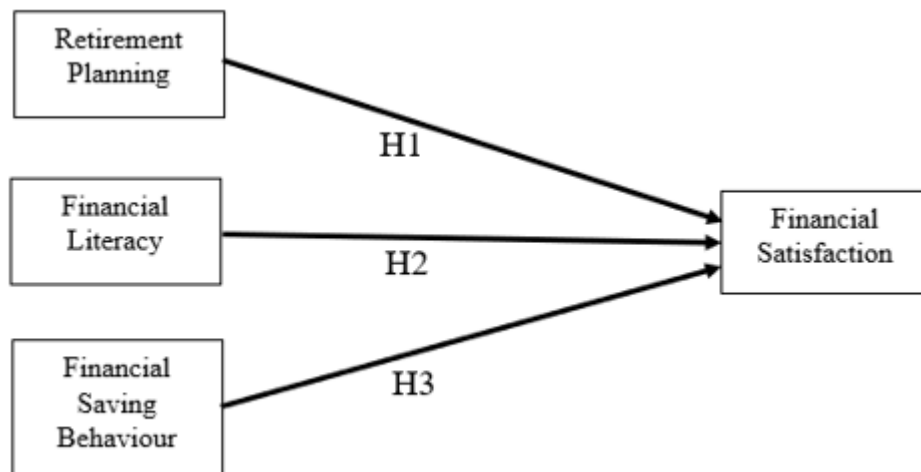


Figure 2: Significant Relationship between IVs and DV

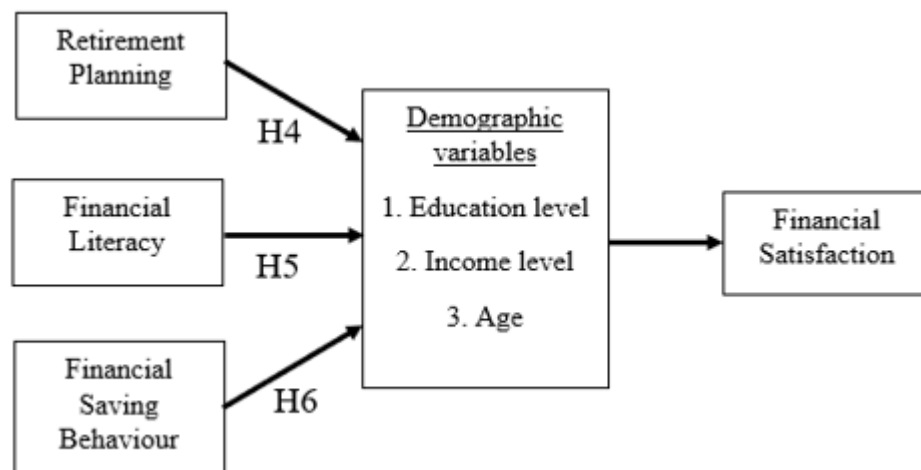


Figure 3: Significant Relationship from IVs through MV to DV

Based on the figure 2 and figure 3 above, there are three independent variables that will be applied through the entire research study which can be known as IV1 retirement planning, IV2 financial literacy, and IV3 financial saving behaviour. These three independent variables will be executed in two totally different processes to identify the effect of demographic variables. Figure 2 indicates the direct effect between independent variables and dependent variables to answer the hypotheses 1 to 3 whereas figure 3 includes the existence of mediator variables to answer the hypotheses 4 to 6 that would be mentioned in the following 2.4 Hypotheses Development subchapter. Broadly speaking, each independent variable will be tested twice to identify the occurrence of mediator variables such as MV1 education level, MV2 income level, and MV3 age to the dependent variable DV financial satisfaction of retirement planning to determine whether there are any changes between with and without the mediator variables to the final outcomes in data analysis chapter. The independent variables of IV1 retirement planning as well as IV2 financial literacy are well explained by the life cycle theory while the theory of planned behaviour (TPB) for IV3 financial saving behaviour. For the three mediator variables, MV1 education level is interpreted through theory of planned behaviour (TPB) whereas MV2 income level by permanent income theory, and MV3 age by life cycle theory. In spite of that, the dependent variable DV financial satisfaction of retirement planning is illustrated by the theory of planned behaviour (TPB) too.

Generally, hypotheses 1 to 3 represent the testing of a significant relationship between its independent variable through the dependent variable financial satisfaction of retirement planning, however, when it comes to hypotheses 4 to 6, it might be a little bit diverse. For instance, hypothesis 4 will be testing the significant relationship starting from independent variable IV1 retirement planning through each of the three mediator variables MV1 education level, MV2 income level, and MV3 age thus to the dependent variable DV financial satisfaction of retirement planning. IV1 Retirement planning is going to test each of the mediator variables via the supportive research instrument questionnaire. In the mediator variables section inside the questionnaire each determinant such as education level will specifically list down at least one question regarding the retirement planning with its dependent variable in order to successfully examine the significant relationship

between retirement planning, mediator variables, and financial satisfaction. It does apply to another two independent variables financial literacy as well as financial saving behaviour when answering hypotheses 5 and 6.

2.4 Hypotheses Development

2.4.1 Significant Relationship between RP and FS

According to Gutierrez and Hershey (2015), retirement planning is a process of financial planning for the after-employment period which requires knowledge and goals that are well established so that strategic action and behaviours will be specifically designed to achieve those goals. Financial satisfaction in terms is the satisfaction gain related to finances. This is greatly supported by statements where promotion and advancement that further leads to greater financial compensation, will mostly have a positive effect on financial satisfaction (Tharp, Seay, Carswell, & MacDonald, 2020). Our study is mainly discussing the relationship between retirement planning and financial satisfaction of retirement planning, as the availability of retirement planning will let Malaysian youth EPF Contributors feel safe and secure, which will have a financial compensation effect when they are in their retirement.

H0: There is no significant relationship between RP and FS.

H1: There is a significant relationship between RP and FS.

2.4.2 Significant Relationship between FL and FS

Financial literacy is proven to have a relationship with retirement planning, as is proven in research such as Mahdzan, Mohd-Any, and Chan (2017) and Xiao and Porto (2017). As there is an increase in financial literacy, it will have a positive impact in retirement planning. However, this study is mainly focusing on the financial satisfaction of retirement planning, in which financial literacy and retirement planning act as independent variables.

H0: There is no significant relationship between FL and FS.

H1: There is a significant relationship between FL and FS.

2.4.3 Significant Relationship between FSB and FS

Related with saving behaviour, studies from Ahmad Zazili et al. (2017) stated that there is a positive strong relationship between the saving behaviour and retirement planning. As well from Abdul Kadir et al. (2020), their studies have proved that saving behaviour has a positive relationship on retirement planning among working individuals in Klang Valley. The personal saving behaviour is a good indicator for a better and secure retirement experience. Besides that, studies from Masran and Hassan (2017) also do recommend the Malaysian government to raise the awareness to Malaysian Gen-Y workers that personal saving behaviour leads to a more successful retirement planning. In this study, the relationship between FSB and FS is a further extension to the relationship between FSB and RP.

H0: There is no significant relationship between FSB and FS.

H1: There is a significant relationship between FSB and FS.

2.4.4 Significant relationship between MVs, RP and FS

Mediator variables also known as demographic variables, which include education level, income level and age. From the research of Yusof and Sabri (2017), the results show that there is a relationship between age and retirement planning. They agree that age is very important and that being young is not conducive to retirement plans. This is because younger people will have less knowledge about retirement planning. According to Kepha (2018), the result shows a relationship between income level and retirement planning.

H0: There is no significant relationship from RP through MV to FS.

H1: There is a significant relationship from retirement planning through mediator factors to financial satisfaction of retirement planning.

2.4.5 Significant relationship between MVs, FL and FS

According to Nyoro and Otieno (2016), the result shows a significant relationship between education level and financial literacy. People with lower education levels will lack financial literacy, therefore might have less retirement preparation time. According to Mansor et al. (2015), EL has a significant relationship with financial literacy. An individual who has a higher education level is more likely to own financial literacy as well. They are more understanding about the importance of financial planning and retirement planning.

H0: There is no significant relationship from FL through MV to FS.

H1: There is a significant relationship from FL through MV to FS.

2.4.6 Significant relationship between MVs, FSB and FS

Based on the research of Lu et al. (2021), there is a significant relationship between income level and financial saving behaviour. This is because people with higher income levels are more likely to have a retirement account. Therefore, people with higher income levels are more likely to own financial savings. According to Fan, Stebbins & Kim (2021), age shows a significant relationship with financial saving behaviour. Elder individuals have a higher probability of owning a retirement account compared to younger individuals. In other words, older individuals understand the importance of saving, therefore they are more likely to have the financial saving behaviour.

H0: There is no significant relationship from FSB through MV to FS.

H1: There is a significant relationship from FSB through MV to FS.

2.5 Conclusion

The retirement planning that further leads to financial satisfaction is the final and main objective of our study. We would like to find out whether the youth EPF contributors in Malaysia are satisfied with their financial satisfaction on retirement planning that is affected by 3 independent variables: retirement planning, financial literacy, and financial saving behaviour and also the demographic variables (income level, education level, age). Previous studies have proven the relationship of retirement planning, financial literacy as well as financial saving behaviour with retirement planning along with the demographic variables. We found out that most of the studies came to a halt on the retirement planning. Therefore, we would want to emphasise that the financial satisfaction of retirement planning will be a key point rather than retirement planning as a new approach which is mediated by the demographic variables.

CHAPTER 3: METHODOLOGY

3.0 Introduction

Chapter 3 will be the methodology that is about the data collection methods, data analysis tools, research design, and sampling design. This is one of the crucial parts where data experiment and analysis happened to represent what it is meant in Chapter 2 in the form of formulas and numbers. Besides that, this chapter will be introducing how research will be carried out to determine the relationship between retirement planning and financial literacy, financial saving behaviour with the help of mediator variables (Education level, income level, and age), and how it affects financial satisfaction of youth in Malaysia.

3.1 Research Design

This is the part where it is included in the overall framework of research methods that are used to consolidate the different parts of a study in a logical way. It also provides the researcher with an idea of choosing the research methods that are suitable for the independent, dependent, and demographic variables. The research design included the elements for the type of research which is mainly survey research, experimental, semi-experimental, and review, it also further includes the sub-type which are descriptive case-study and experimental design.

A recommended research is not to make the least biased data as possible and increase the trust level in the accuracy of the data collection. The essential elements of a good research design included:

1. Accurate propose statement
2. Implementation techniques for the data collecting and research analyzing
3. Methods implied for the analysis of collected details
4. Settings for the research study
5. Measurement of analysis

The elements above will be covered in Chapter 3 which is the research methodology in the next few sub-chapter.

3.1.1 Primary Research

In between primary research and secondary research, we thoroughly think that primary research is more suitable for our research. There is a need to collect the responses and data samples directly from the respondents instead of focusing on the available existing data from past researchers. Besides that, the primary research which is also called as field research is said to be an efficient way to collect content-specific data regarding a particular topic. Those data samples that gathered through primary research are proved to be more accurate and realistic in the research environment.

3.1.2 Quantitative research

A form of systematic, logical kind of investigation on gathered measurable data in the formation of statistical, mathematical techniques is actually quantitative research. It is usually collected through sampling methods such as questionnaires, online surveys and others. Quantitative research is very common in social science and financial research to collect quantitative data for research investigation. After obtaining those data, researchers will then apply mathematical frameworks and theories to refer to their specific quantity based on their research.

3.2 Sampling Design

3.2.1 Sampling Technique

Sampling is a method that allows researchers to infer demographic information from the results of a subset of the population without having to survey each individual. Reducing the number of individuals in a study can reduce costs and workload and may make it easier to obtain high quality information, but this must be balanced with having a large enough sample size and sufficient capacity to detect true associations.

The sampling technique that will be applied in this research will be a simple random sampling design. This sampling technique will be more effective when selecting a tiny fraction from the total population. It will represent the population in a smaller picture. Every element will pass the fair selecting process from the sampling frame by a random program with equal probability (Marko, Paul, Abdel, & Sebastian, 2017). Since the results

that come from a small proportion will be like the population, therefore, simple random sampling will reduce the period of research.

3.2.2 Target Population

Population that the intervention intends to study and draw conclusions from is so-called the target population. The definition of youth in Malaysia is between 15 and 30 years old (Arfa & Esther, 2019). As mentioned in the previous part, the target population in this research will be the youth EPF contributors (15 – 30 years old) from every state in Malaysia. There are 13 states in Malaysia, which are Penang, Pahang, Perlis, Perak, Kedah, Kelantan, Terengganu, Selangor, Negeri Sembilan, Malacca, Johor, Sabah, and Sarawak. The target population is limited to youth who are currently employed and contribute to EPF during the COVID-19. For instance, these three categories of targeted respondents would be classified as the valid respondents: (1) “they are having EPF accounts, but unfortunately they had been laid off from the past until now (contributed to EPF until COVID-19)”, (2) “they are having EPF accounts, but unfortunately they had been laid off from the past and recently have rejoined the workforce (contributed to EPF before and after COVID-19)”, and (3) “they are having EPF accounts and did not affect by the occurrence of COVID-19 (fully contributed towards EPF)”. Besides, this research is not limited to the gender, both male and female will be our target population.

3.2.3 Sample Size

Sample size is a term used to define the number of subjects included in a sample size. Through the sample size, we learned about a group of subjects selected from the general population and were considered representative of the real population of that study. In this research, the sample size will be estimated by using Yamane formula. (year table source)

$$n = \frac{N}{1 + N(e^2)}$$

$$n = \frac{9187000}{1 + 9187000 (0.05^2)}$$

$$n = 400$$

Based on this formula, the confidence level is 95% and p-value is 0.05. The total population among Malaysian youth between 15 to 30 years old is 9187000 people. The data is collected from the Department of Statistics Malaysia Official Portal 2020. As a result, the suggested sample size will be 400 respondents.

3.3 Data Collection Methods

Primary data collection and secondary data collection are the only two ways of data collection methods. Both methods allow researchers to identify the described hypotheses and research questions after the sufficient data have gone through the data analysis process. As current researchers are doing study on the financial satisfaction of personal retirement planning among Malaysian youth EPF contributors during the COVID-19 time frame, hence, recent researchers tend to collect those data through the first method primary data in order to collect the real time statistics derived by researchers themselves since primary data is a more reliable, authentic and objective way of data collection and it has not been amended by human beings thought. Therefore, this method is more effective and meaningful as compared to the secondary data.

By using primary data, the recent researchers will have entire control over the research design, sampling design, and data collection methods such as to conduct a specific primary data that best fit with the current study from the viewpoint of target population, sampling techniques, sample size and so on. For example, types of primary data such as surveys, observations, experiments, questionnaires, and personal interviews.

3.3.1 Research Instrument

As there are many types of primary data such as surveys, observations, experiments, questionnaires, and personal interviews, after the discussion from recent researchers themselves, the questionnaire method will be conducted to collect the primary data from

targeted respondents and due to its efficiency concern on the collection process where huge amounts of statistics to be collected in a short time to ensure the study will not affect the deadline submission of the research or time matter, the current researchers tend to implement the questionnaire through online platform where the questionnaire will be created and shared to targeted respondents via “Google Form” questionnaire through a variety of social media platforms such as Facebook, WhatsApp, Messenger, Microsoft Teams and so on.

3.3.1.1 Questionnaire Design

The questionnaire will be conducted through the online channel “Google Form” questionnaire after the consideration of time concern. In order to maximise the credibility and reliability of its questionnaire, it will be designed by referring to the real world personal financial evaluation form such as insurance company risk assessment form or previous research questionnaires examples. The questionnaire for the topic the financial satisfaction of personal retirement planning among Malaysian youth EPF contributors during the COVID-19 will have a total of 40 questions which included the dependent variable, independent variables, and demographic variables in its questionnaire.

Nevertheless, three questions regarding the targeted respondents' demographic states profile, EPF accounts status and EPF contributions during COVID-19 will be asked before entering the 40 questions to further verify the validity of respondents while at the same time providing its unique feature of research as compared to others which only focused on Malaysian Youth rather than Malaysian Youth EPF contributors. When answering the questionnaire, targeted respondents are required to fill in the blank on which state they are staying during the epidemic, declaring whether they are having EPF accounts and during that period what were their job status such as “they are having EPF accounts, but unfortunately they had been laid off from the past until now (contributed to EPF until COVID-19)”, “they are having EPF accounts, but unfortunately they had been laid off from the past and recently have rejoined the workforce (contributed to EPF before and after COVID-19)” or “they are having EPF accounts and did not affect by the occurrence of COVID-19 (fully contributed towards EPF)”.

For the 40 questions, there will be separated into three sections which include Section A, Section B, and Section C. Section A consists of dependent variables financial satisfaction, Section B stands for IVs such as RP, FL, and FSB, while Section C contains the existence of demographic variables such as education level, income level, age on the involvement of independent variables to answer the hypotheses 4 to 6 mentioned in chapter 2 earlier. Throughout the 40 questions asking from the questionnaire, seven questions are allocated to Section A financial satisfaction, 18 questions for Section B where six questions for retirement planning matter, seven questions on financial literacy, and five questions for financial saving behaviour, 15 questions for Section C where five questions are equally distributed to each demographic variables education level, income level, and age.

3.3.1.2 Questionnaire Construction

For the questionnaire construction, three questions regarding the demographic states profile, EPF account status and job status will require targeted respondents to fill in the blank whereas the other 40 questions on the variable measurements of Sec A, B, and C will be conducted through 5 point Likert Scale. The usage of 5 point Likert Scale digit 1 to 5 will represent as follow:

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

3.3.1.3 Questionnaire Details

At the beginning of the questionnaire collection these three fill in the blank questions allow researchers to have an initial determination whether the respondents who are currently filling the forms would be categorised under its targeted qualifications in order to avoid any non related data as well as to guarantee its eligibility and research validity since the data taken will be used for further data analysis later:

1. Which state are you staying at during the COVID-19 epidemic?

Which state:

2. Do you have an EPF account?

- Yes
- No

3. Based on the previous question, which stage did you belong to during the COVID-19 pandemic?

- You are having an EPF account, but unfortunately you had been laid off from the past until now (Contributed to EPF until COVID-19).
- You are having an EPF account, but unfortunately you had been laid off from the past and recently have rejoined the workforce (Contributed to EPF before and after COVID-19).
- You are having an EPF account and were not affected by the occurrence of COVID-19 (Fully contributed towards EPF).

Once the respondents successfully to be determined as our research targeted respondents thus the following 40 questions which covered three sections from Section A to Section C for our research DV, IVs, and MVs will be applied to identify the research significant relationship as mentioned earlier in specific objectives, research questions, and hypotheses development by using 5 point Likert Scale where digit 1 to digit 5 represent as follow:

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

Section A: Dependent Variable

Financial Satisfaction of Retirement Planning (refer to appendix)

1. Statement FS1
2. Statement FS2
3. Statement FS3
4. Statement FS4
5. Statement FS5
6. Statement FS6
7. Statement FS7

There would be a total of seven questions allocated to this section. The motive of researchers conducting such questions in the questionnaire is to identify the current feeling of each targeted respondents towards the impact to their current lifestyle where it does allow researchers to identify targeted respondents' financial satisfaction on retirement planning during the COVID-19 profile whether they would react similarly or diverse as the occurrence of COVID-19 has affected much more extreme than previous historical time from financial, behaviour, and other matters.

Section B: Independent Variables

IV1: Retirement Planning (refer to appendix)

1. Statement RP1
2. Statement RP2
3. Statement RP3
4. Statement RP4
5. Statement RP5

6. Statement RP6

IV2: Financial Literacy (refer to appendix)

1. Statement FL1

2. Statement FL2

3. Statement FL3

4. Statement FL4

5. Statement FL5

6. Statement FL6

7. Statement FL7

IV3: Financial Saving Behaviour (refer to appendix)

1. Statement FSB1

2. Statement FSB2

3. Statement FSB3

4. Statement FSB4

5. Statement FSB5

Section B is entirely focused on the illustration of independent variables, thus, a total number of 18 questions which can be separated to six questions for retirement planning IV1, seven questions for financial literacy IV2, and five questions for financial saving behaviour IV3 would be asked. As the observation above, all the questions asking inside

each subsection are related with its independent variables in order to answer research findings appropriately.

Section C: Mediator Variables

MV1: Education Level (refer to appendix)

1. Statement EL1
2. Statement EL2
3. Statement EL3
4. Statement EL4
5. Statement EL5

MV2: Income Level (refer to appendix)

1. Statement EL1
2. Statement EL2
3. Statement EL3
4. Statement EL4
5. Statement EL5

MV3: Age (refer to appendix)

1. Statement A1
2. Statement A2
3. Statement A3

4. Statement A4

5. Statement A5

As the research objectives have identified the occurrence of mediator variables towards the effect on financial satisfaction of retirement planning, hence it is necessary for researchers to construct the Section C in order to answer the significant relationship from independent variables to mediator variables then dependent variable which can be known as hypotheses 4 to 6 as disclosed earlier in the previous chapters. Each mediator variable MV1 to MV3 would have a total number of five questions to figure out the final outcome.

3.3.2 Pilot Test

When doing any research, it is necessary to conduct a pilot test as a pre-testing action before any actual data collection process has been executed in order to ensure the ongoing research is under the right track which provides validity as well as any potential amendments to be changed to enhance the research final result. Thus, when researchers tend to organise this study through the data collection from the targeted respondents, researchers had decided to collect 50 pilot test samples to figure out the results at the very initial stage as the actual samples needed to be collected when running the data analysis and findings are at least 400 samples hence, 50 pilot test samples is considered as an appropriate amount of collection in researchers point of view.

In order to take into account of time consideration and the research efficiency, the researchers tend to apply the most effective method to collect pilot test data at the shortest period of time by collecting its from the relatives and friends who are categorised under the potential respondents Malaysian workforce youth age between 15 to 30 with EPF account and were staying at one of the Malaysia states during the COVID-19 pandemic. The researchers had completed this process during the last trimester final examination period and it approximately took around 2 weeks to settle it.

From the result discovered of those 50 pilot test samples, researchers realised that some questions inside each section might not perform the same direction in the result of

inferential analysis when running via SmartPLS Bootstrapping Test due to the fraud of researchers in constructing sentences. For example, some sentences were using positive statements while negative statements for others. As a consequence, it affected the significant relationship of the final findings like there were quite a lot of results that had shown insignificant than significant. Thus, researchers would like to make some amendments on it. After the adjustments of all mistaken negative statements to positive form as well as the direction of 5 point Likert Scale due to the changes of negative statements, the result was much better than previously. When researchers found no more mistakes can be adjusted, researchers tended to preserve the adjusted results of 50 pilot test samples to be used for actual data analysis later and at the same time collect at least 350 samples to meet the research actual sample size requirement.

3.4 Proposed Data Analysis

3.4.1 Descriptive Analysis

Descriptive analysis is mainly analysis that arranges, interprets or presents data points in a practical way to let researchers observe the pattern that possibly derived from the data obtained. It is also a preferable analysis method that lightens the burden of researchers as it tends to simplify and summarise the raw data collected in a logical way. The main reason is due to the descriptive statistics that are able to reduce data obtained in a non-complicated way.

3.4.2 Inferential Analysis

Likewise, inferential analysis is a type of analysis used to create inferences that is related to the data obtained, however more deep and detailed information can be obtained as well. For instance, it can be used to deduce what the targeted respondents would assume based on the sample data. Easy to say, this analysis can be applied to determine if an observed difference between groups is reliable or one that occurred by chance in this study. As a result, inferential statistics extrapolate general conditions from data, whereas descriptive statistics are used to merely explain what's going on in the data. Based on this research,

the statistical software, SMART PLS 3.3.9 will be used to identify the statistics being gathered from questionnaire outcome.

3.4.2.1 Partial least square regression (PLS)

PLS is known as an inferential analysis approach that avoids the predictor variables turn to small and uncorrelated elements and presents the least squares regression based on components. PLS can generalise and link the features based on analysis related to the principal element as well as the multiple regression where it is useful to predict DV from huge IV. Multiple least regression can be implemented to various variables. However, if the number of predictors is over large, thus, it probably takes back the sample statistics perfectly, but fails to determine new statistics as expected.

3.4.2.2 Partial least square correlation (PLSC)

PLSC focuses on finding the shared information within two predictors variables where the predictor variables require maximal covariance between each other. This approach is able to deal with huge data sets and sophisticated experimental analysis.

3.4.2.3 Mediation Analysis

Mediation analysis identifies the indirect effect of the significant relationship between DV and IVs which acts as an intermediate to channel both variables. Total effect value such as total direct and total indirect would be analysed by using the SmartPLS 3 “PLS Bootstrapping” test with the two-tails test, confidence interval 95% or significance level 0.05 at the value of T-Statistics less than or more than 1.96 to be considered as significant outcome.

3.5 Conclusion

The methodology as well as the data collection method of this research was discussed throughout this chapter. Based on the content above, the study will be conducted through quantitative research where the simple random sampling design will be used in the research finding and the targeted population is the youth who range from 15 to 30 years old in every state of Malaysia. For this study, questionnaires will be distributed to at least 400 targeted participants to fulfil the minimum data required when calculating via Yamane sample size formula. Researchers do prefer the usage of primary data for data collection since it provides better management on the sampling design matters; perhaps it is a more authentic way of data collection as compared to secondary data. After the consideration of efficiency and time issue, “Google Form” questionnaire will be organised and shared to targeted respondents. The collected data from the questionnaire will be tested by using SMART PLS 3.3.9. The following chapter will start to analyse the data collected with the analysis output interpretation.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In chapter 4, all the raw data that had been generated from targeted respondents regardless of adjusted pilot test sample and other actual data will be processed to the data analysis procedure. A total number of 411 valid data which included 50 adjusted pilot test samples as well as 361 actual data had been received from the research targeted respondents who met the criterion of Malaysian workforce youth age 15 to 30 with EPF accounts and staying at Malaysia during COVID-19 epidemic. As the criterion of targeted respondents for this study requires a lot of qualifications in order to be considered as a valid respondent, hence, researchers had spent almost 1 month after the pilot test testing to accomplish the entire extra 361 data collection. Researchers had sought assistance from university friends who had been joining the internship programme previously to channel the questionnaire to their former companies colleagues to fulfil the targeted respondents requirements. In the following subsections, the entire 411 data will be running through descriptive analysis and inferential analysis to discover the data analysis result. The software SmartPLS would mainly take its role in analysing the outcomes.

4.1 Descriptive Analysis

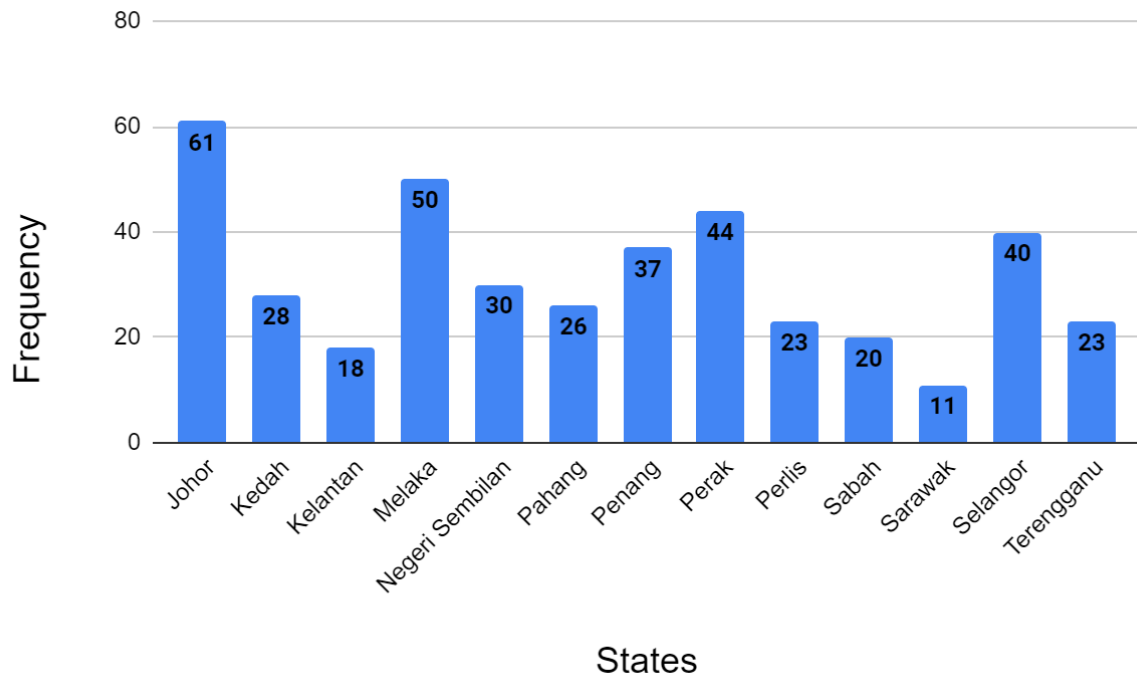
4.1.1 Respondent Demographic Profile

Table 4.1: Targeted Respondents Details

States	Frequency	Valid Percentage	Cumulative Percentage
Johor	61	14.8%	14.8%
Kedah	28	6.8%	21.6%
Kelantan	18	4.4%	26.0%
Melaka	50	12.2%	38.2%
Negeri Sembilan	30	7.3%	45.5%
Pahang	26	6.3%	51.8%
Penang	37	9.0%	60.8%
Perak	44	10.7%	71.5%
Perlis	23	5.6%	77.1%
Sabah	20	4.9%	82.0%
Sarawak	11	2.7%	84.7%
Selangor	40	9.7%	94.4%
Terengganu	23	5.6%	100.0%
Total	411	100.0%	

Source: Constructed from Questionnaire 411 Raw Data

Figure 4: Targeted Respondents Details (Histogram)



Source: Constructed from Questionnaire 411 Raw Data

According to Table 4.1 and Figure 4, both are the data of Respondent Demographic Profile from this research. The survey of “The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic” is distributed to 13 states of Malaysia. Based on the Table and Figure above, we can observe that the states are arranged according to alphabetical order for an easier reference. Johor has the most survey respondents which is 61 Youth EPF Contributors. The amount is followed by Melaka (50 respondents), Perak (44 respondents), Selangor (40 respondents), Penang (37 respondents), Negeri Sembilan (30 respondents), Kedah (28 respondents), Pahang (26 respondents), Perlis and Terengganu (each 23 respondents), Sabah (20 respondents), Kelantan (18 respondents) and Sarawak (11 respondents). In total, there are 411 respondents; 380 from West Malaysia and 31 from East Malaysia.

4.1.2 DV - FS

Table 4.2 Descriptive Statistics for DV - FS

Questions	Mean	SD
Statement FS1	4.058	0.811

Statement FS2	3.891	0.874
Statement FS3	4.049	0.864
Statement FS4	4.073	0.786
Statement FS5	4.017	0.844
Statement FS6	4.024	0.819
Statement FS7	4.032	0.847

Source: Constructed from Questionnaire 411 Raw Data

Table 4.2 shows the Descriptive Statistics for DV which is FS. This is one of the main statistics of our research as this is the DV.

Statement FS4 (Refer to Appendix) has the largest mean value of 4.073, compared with other statements while statement FS2 (Refer to Appendix) shows the lowest mean of 3.891.

As for the Standard deviation (SD), statement FS2 (Refer to Appendix) has a value which is 0.874. Statement FS4 (Refer to Appendix) has the lowest value which is 0.786.

4.1.3 IV - RP

Table 4.3 Descriptive Statistics for IV - RP

Questions	Mean	SD
Statement RP1	3.732	0.826
Statement RP2	4.224	0.707
Statement RP3	4.380	0.743
Statement RP4	4.319	0.797
Statement RP5	4.146	0.803
Statement RP6	4.041	0.852

Source: Constructed from Questionnaire 411 Raw Data

Table 4.3 shows the Descriptive Statistics for IV which is RP. RP is one of the IVs out of three IVs in this research.

Statement RP3 (Refer to Appendix) has the biggest mean value which is 4.380. Conversely, statement R1 (Refer to Appendix) has the lowest mean of 3.732.

As for SD, RP6 (Refer to Appendix) has the highest SD value of 0.852; whereas statement RP2 (Refer to Appendix) has the lowest SD value of 0.707.

4.1.4 IV - FL

Table 4.4 Descriptive Statistics for IV - FL

Questions	Mean	SD
Statement FL1	3.781	0.811
Statement FL2	4.175	0.703
Statement FL3	4.399	0.752
Statement FL4	4.248	0.790
Statement FL5	4.197	0.772
Statement FL6	4.129	0.758
Statement FL7	4.168	0.737

Source: Constructed from Questionnaire 411 Raw Data

Table 4.4 indicates the Descriptive Statistics for IV which is FL. FL is one of the IVs, which have 7 related statements in the questionnaire for research purposes.

Highest mean value is statement FL3 (Refer to Appendix) which is 4.399. Lowest mean value is statement FL1 (Refer to Appendix), which is only 3.781.

Highest SD value is 0.811 which is statement FL1 (Refer to Appendix). The lowest SD is 0.703 which is statement FL2 (Refer to Appendix).

4.1.5 IV - FSB

Table 4.5 Descriptive Statistics for IV - FSB

Questions	Mean	SD
Statement FSB1	3.922	0.801

Statement FSB2	4.328	0.702
Statement FSB3	4.426	0.732
Statement FSB4	4.307	0.757
Statement FSB5	4.217	0.786

Source: Constructed from Questionnaire 411 Raw Data

Table 4.5 indicates the Descriptive Statistics for IV which is FSB. FSB is the last IV, which has 5 related statements in the questionnaire for research purposes.

According to table 4.5, the highest mean value is 4.426 by the statement FSB3 (Refer to Appendix). The lowest mean value is 3.922 by the statement FSB1 (Refer to Appendix).

The highest SD value is 0.801 by statement FSB1 (Refer to Appendix). The lowest value of 0.702 is according to statement FSB2 (Refer to Appendix).

4.1.6 MV - EL

Table 4.6 Descriptive Statistics for MV - EL

Questions	Mean	SD
Statement EL1	4.017	0.815
Statement EL2	4.341	0.702
Statement EL3	4.423	0.755
Statement EL4	4.333	0.731
Statement EL5	4.292	0.723

Source: Constructed from Questionnaire 411 Raw Data

Table 4.6 shows the Descriptive Statistics for MV which is EL. EL is one of the three MVs in this research.

Statement EL3 (Refer to Appendix) has the biggest mean value of 4.423, whereas statement EL1 (Refer to Appendix) has the lowest mean value of 4.017.

Statement EL1 (Refer to Appendix) has the highest SD value of 0.815 according to the table 4.6. The lowest SD value is only 0.702 by statement EL2 (Refer to Appendix).

4.1.7 MV - IL

Table 4.7 Descriptive Statistics for MV - IL

Questions	Mean	SD
Statement IL1	4.041	0.790
Statement IL2	4.367	0.672
Statement IL3	4.482	0.674
Statement IL4	4.389	0.690
Statement IL5	4.331	0.696

Source: Constructed from Questionnaire 411 Raw Data

Table 4.7 shows the Descriptive Statistics for MV which is IL. There are 5 statements related to IL in the questionnaire for research purposes.

Based on table 4.7, the highest mean is 4.482 whereas the lowest is 4.041. The highest mean value is followed by statement IL3 (Refer to Appendix), whereas the lowest mean value is followed by statement IL1 (Refer to Appendix).

Based on table 4.7, the highest SD value is 0.790 where the lowest value is 0.672. The highest SD value is followed by statement IL1 (Refer to Appendix), whereas the lowest SD value is followed by statement IL2 (Refer to Appendix).

4.1.8 MV - AG

Table 4.8 Descriptive Statistics for MV - AG

Questions	Mean	SD
Statement AG1	4.080	0.774
Statement AG2	4.436	0.641
Statement AG3	4.533	0.659
Statement AG4	4.311	0.771
Statement AG5	3.976	0.834

Source: Constructed from Questionnaire 411 Raw Data

The Descriptive Statistics for MV which is AG is presented by table 4.8. AG is the last MV associated with 5 related statements in the questionnaire for research purposes.

The highest mean value in table 4.8 is according to statement A3 (Refer to Appendix) which is 4.533. On the other hand, the lowest mean value in table 4.8 is according to statement AG1 (Refer to Appendix) which is 3.976.

Besides that, the highest SD value in table 4.8 is according to statement AG5 (Refer to Appendix) which is 0.834. Conversely, the lowest SD value in table 4.8 is according to statement AG2 (Refer to Appendix) which is 0.641.

4.2 Inferential Analysis

4.2.1 Target Endogenous Variable Variance

Table 4.9: R Square Finding PLS-SEM for DV and MVs

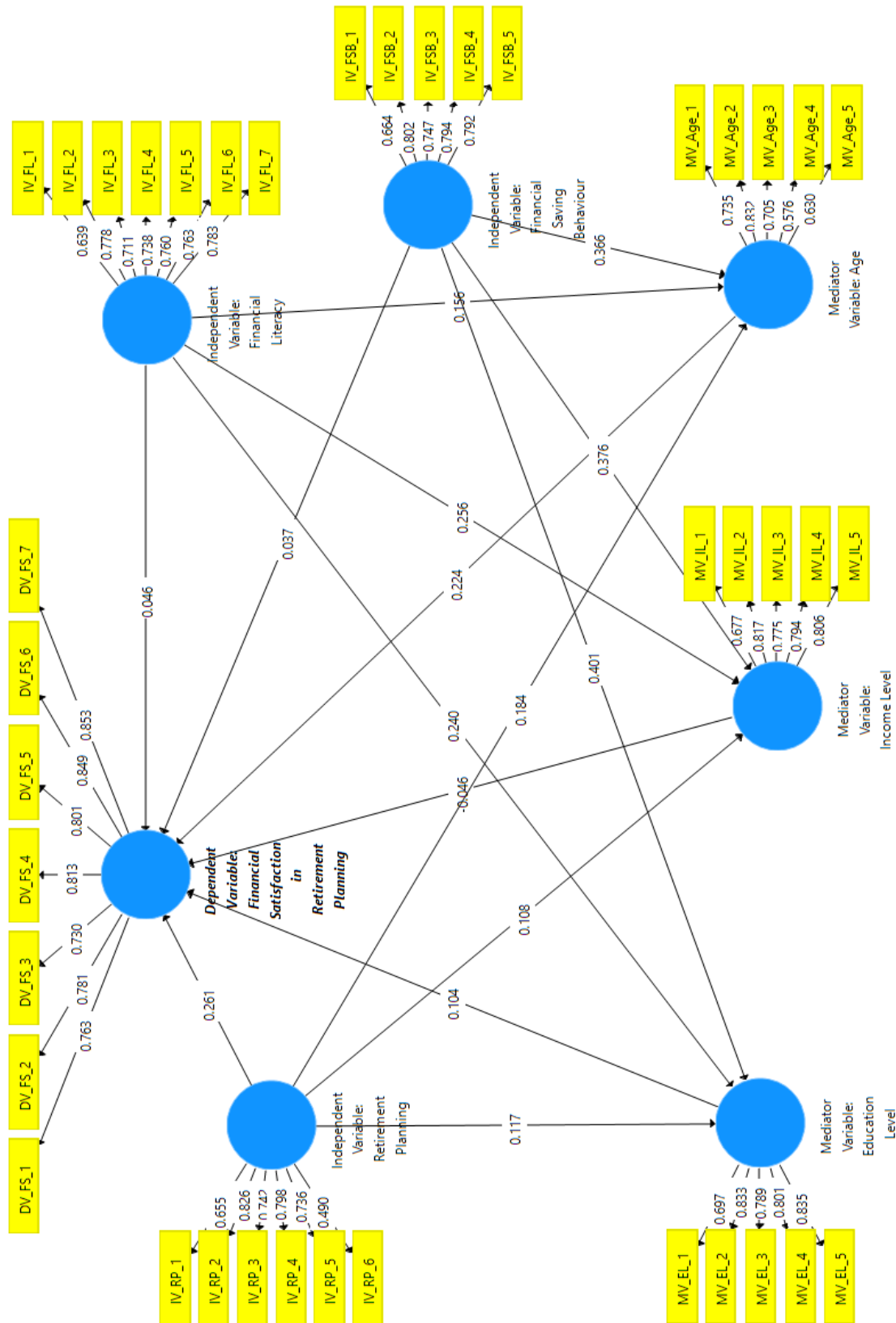
Variable:	R Square:
Dependent Variable: FS	0.292
Mediator Variable: EL	0.490
Mediator Variable: IL	0.464
Mediator Variable: AG	0.418

Source: Constructed from Questionnaire 411 Raw Data

Table 4.9 above indicates the outcome of the coefficient of determination as known as R square for dependent variable: financial satisfaction of retirement planning, mediator variables: education level, income level and age by using software SmartPLS 3. As stated above, the R square value for financial satisfaction of retirement planning is 0.292 which means that those independent variables (retirement planning, financial literacy, and financial saving behaviour) clarify 29.2% of variance in financial satisfaction. Not only that, the dependent variable financial satisfaction of retirement planning can be interpreted by 49% (R square = 0.490) of variance in mediator variable education level, 46.4% (R square = 0.464) of variance in mediator variable income level, and 41.8% (R square = 0.418) of variance in mediator variable age.

4.2.2 Inner Model Path Coefficient Sized and Significance

Figure 5: Finding of PLS-SEM



Source: Constructed from Questionnaire 411 Raw Data

According to the outputs from figure 5, the independent variable (IV) financial saving behaviour (0.401) shows the highest denomination on mediator variable (MV) education level towards those three independent variables where IV financial literacy (0.240) and IV retirement planning (0.117). Besides, the outcome does show that IV financial saving behaviour holds the largest denomination too from three independent variables to MV income level. For instance, IV financial saving behaviour (0.376), IV financial literacy (0.256), and IV retirement planning (0.108). Not only that, when it comes to the relationship from three independent variables to MV age, IV financial saving behaviour (0.366) does result as the strongest effect among others two independent variables where IV retirement planning (0.184) and IV financial literacy (0.156). The result further illustrates that MV age is showing the greatest effect when all three mediator variables connect through to the dependent variable financial satisfaction of retirement planning. Broadly speaking, the result inside this inner model path shows to be more than 0.1 value where the hypothesised path relationship of the model can be clarified as statistically significant if the value is more than 0.1.

4.2.3 Reliability and Validity Test

The tests were implemented through SmartPLS 3 to identify the reliability and validity of each variable in this research where education level, income level, and age play their roles as mediator variables that would channel or provide an indirect effect from independent variables: RP, FL, and FSB to dependent variable: FS.

4.2.3.1 Reliability Test – Indicator Reliability

Table 4.10: The Outer Model Loading Findings

	DV: FS	IV1: RP	IV2: FL	IV3: FSB	MV1: EL	MV2: IL	MV3: AG
1	0.763						
2	0.781						
3	0.730						
4	0.813						

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5	0.801						
6	0.849						
7	0.853						
1		0.655*					
2		0.826					
3		0.742					
4		0.798					
5		0.736					
6		0.490*					
1			0.639*				
2			0.778				
3			0.711				
4			0.738				
5			0.760				
6			0.763				
7			0.783				
1				0.664*			
2				0.802			
3				0.747			
4				0.794			
5				0.792			
1					0.697*		
2					0.833		
3					0.789		
4					0.801		
5					0.835		
1						0.677*	
2						0.817	

3						0.775	
4						0.794	
5						0.806	
1							0.735
2							0.832
3							0.705
4							0.576*
5							0.630*

Source: Constructed from Questionnaire 411 Raw Data

Table 4.10 indicates the outer model loading result for the research. From the overall point of view, the result still can be considered as valid although there are a total of 8 questions which did not show a strong validity towards the outcome which include IV1 Retirement Planning question 1 (0.655) and question 6 (0.490), IV2 Financial Literacy question 1 (0.639), IV3 Financial Saving Behaviour question 1 (0.664), MV1 Education level question 1 (0.697), MV2 Income Level question 1 (0.677), MV3 Age question 4 (0.576) and question 5 (0.630) when the it was running at confidence interval 95% or significance level 0.05 with two-tails test. Based on the statement from Henseler, Ringle, & Sarstedt (2012), the outer loading value of 0.7 or higher is categorised as highly satisfactory, while 0.5 is still considered as an acceptable range. This means that most of the questions are acceptable since all the questions are above the value of 0.5 except IV1 Retirement Planning question 6 (0.490). According to another research from Hulland (1999), it clearly mentioned that an outer loading value of 0.4 or above can be considered as valid if it is an exploratory research only where the research question has not investigated depth previously. As researchers were conducting all the questions based on the previous research samples or authorised risk measurement form from insurance companies, thus, it can be said that the IV1 Retirement Planning question 6 (0.490) is invalid in the outer model loading and should be removed from the research.

4.2.3.2 Reliability Test – Internal Consistency Reliability Finding

Table 4.11: Cronbach's Alpha

Variable:	No. of Questions	Cronbach's Alpha	Result of Reliability
DV: FS	7	0.905	Good
IV1: RP	6	0.803	Good
IV2: FL	7	0.861	Good
IV3: FSB	5	0.817	Good
MV1: EL	5	0.850	Good
MV2: IL	5	0.833	Good
MV3: AG	5	0.735	Good

Source: Constructed from Questionnaire 411 Raw Data

Table 4.11 shows Cronbach's Alpha result via SmartPLS 3 when the confidence interval equals 95% or significance level 0.05 with two-tails test. This test is used to identify the reliability in the organisational sciences and social sectors (Cronbach, 1951). Generally, Cronbach's Alpha value with 0.7 and above is known as acceptable reliability coefficient (Cronbach, 1951). As in table 4.11 above all the dependent variable, independent variables, and mediator variables are reliable at values more than 0.7 respectively. Among the variables, the dependent variable financial satisfaction of retirement planning tends to have the highest value (0.905) which is followed by IV2 financial literacy (0.861) and MV1 education level (0.850) whereas MV3 Age holds the lowest Cronbach's Alpha value (0.735).

Table 4.12: Composite Reliability

Variable:	No. of Questions	Composite Reliability	Result of Reliability
DV: FS	7	0.925	Good
IV1: RP	6	0.861	Good
IV2: FL	7	0.894	Good
IV3: FSB	5	0.873	Good
MV1: EL	5	0.894	Good
MV2: IL	5	0.883	Good

MV3: AG	5	0.826	Good
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Source: Constructed from Questionnaire 411 Raw Data

Table 4.12 indicates the composite reliability outcome from the research data when the confidence interval equals 95% or significance level 0.05 with two-tails test. According to the statement from Bagozzi and Yi (1988), composite reliability can be applied as an alternative option to replace Cronbach's alpha if Cronbach does not perform reliably. If the value of composite reliability is above the value of 0.6, thus, it would be reliable (Bagozzi and Yi, 1988). According to the result stated in table 4.12 above, it is easy to say that the entire composite reliability for each variable is reliable or held since all the figures exceed 0.6. Among the variables, the DV financial satisfaction of retirement planning does show the largest figure (0.925) followed by IV2 financial literacy and MV1 education level both with the value of 0.894 while MV3 Age holds the lowest value among them (0.826).

4.2.3.3 Validity Test – Convergent Validity

Table 4.13: Average Variance Extracted (AVE)

Variable:	No. of Questions	Average Variance Extracted (AVE)	Result of Reliability
DV: FS	7	0.639	Good
IV1: RP	6	0.514	Good
IV2: FL	7	0.548	Good
IV3: FSB	5	0.580	Good
MV1: EL	5	0.628	Good
MV2: IL	5	0.602	Good
MV3: AG	5	0.491*	Bad

Source: Constructed from Questionnaire 411 Raw Data

The table 4.13 interprets the result of average variance extracted (AVE) from the research 411 raw data when the confidence interval equals 95% or significance level 0.05 with two-tails test. AVE normally applies to identify the degree of variance captured by a construct related to the degree of variance from measurement error (David, 2016). AVE may be used

for both convergent and divergent validity (David, 2016). According to the statement from Chin (1998), AVE should be larger than value 0.5 in order to be considered as an accepted range to indicate the convergent validity of a particular construct. In this case, all the variables AVE tend to be considered as valid since all the figures are more than 0.5 except the MV3 age (0.491) this means that MV3 age does not have convergent validity and failed construct reliability. However, based on the finding from Fornell & Larcker (1981), if the AVE is less than 0.5 (MV3 age: 0.491), but composite reliability is higher than 0.6, then the convergent validity of the construct is still adequate. Hence, in this research MV3 age (0.491) is still acceptable by convergent validity since its composite reliability is 0.826 in table 4.12.

4.2.3.4 Validity Test – Discriminant Validity

Table 4.14: Fornell-Larcker Result

Variable:	DV: FS	IV2: FL	IV3: FSB	IV1: RP	MV3: AG	MV1: EL	MV2: IL
DV: FS	0.800						
IV2: FL	0.446	0.740*					
IV3: FSB	0.432	0.761	0.762				
IV1: RP	0.484	0.786	0.704	0.717*			
MV3: AG	0.460	0.578	0.614	0.564	0.701*		
MV1: EL	0.440	0.638	0.666	0.589	0.738	0.792	
MV2: IL	0.416	0.626	0.646	0.573	0.795	0.788	0.766

Source: Constructed from Questionnaire 411 Raw Data

The table 4.14 shows the Fornell-Larcker result from the research when the confidence interval equals 95% or significance level 0.05 with two-tails test. The Fornell-Lacker test is mainly used to prevent the occurrence of multicollinearity issues when the latent variable is involved in the research. In order to verify whether the test is acceptable, it is required to identify whether the top value of each scale is having the highest value among their row and column. Among the 7 variables above, there are 4 variables DV financial satisfaction (0.800), IV3 financial saving behaviour (0.762), MV1 education level (0.792), and MV2 income level (0.766) are having the highest among their personal row and column. However, for the remaining 3 variables, IV2 FL (0.740), IV1 RP (0.717), and MV3 AG

(0.701) although they are not the highest in their personal row and column but all hold the second or third highest on themselves. Thus, the outcome is acceptable.

Table 4.15: Heterotrait-Monotrait Ratio (HTMT)

Variable:	DV: FS	IV2: FL	IV3: FSB	IV1: RP	MV3: AG	MV1: EL	MV2: IL
DV: FS							
IV2: FL	0.504						
IV3: FSB	0.501	0.906*					
IV1: RP	0.571	0.942*	0.864				
MV3: AG	0.567	0.723	0.786	0.738			
MV1: EL	0.503	0.743	0.796	0.712	0.931*		
MV2: IL	0.477	0.738	0.780	0.696	1.009*	0.936*	

Source: Constructed from Questionnaire 411 Raw Data

Table 4.15 represents HTMT findings from the research data when the confidence interval equals 95% or significance level 0.05 with two-tails test. The HTMT is applied to detect the discriminant validity problem. According to the previous study conducted by Henseler et al. (2015), they suggested that a threshold value of 0.90 if the path model includes constructs that are conceptually very similar (e.g., affective satisfaction, cognitive satisfaction, and loyalty); that is, an HTMT value above 0.90 depicts a lack of discriminant validity. However, when the constructs in the path model are conceptually more distinct, researchers should consider 0.85 as threshold for HTMT (Henseler et al. 2015). In this research threshold value of 0.9 was applied. Throughout the entire result the financial literacy-financial saving behaviour (0.906), financial literacy-retirement planning (0.942), age-education level (0.931), age-income level (1.009), and education level-income level (0.936) tend to appear the issue of multicollinearity between the latent variable.

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 (Total Direct)

Variable:	Direct Effect	T Statistic (1.96)	P Value (P < 0.05)	Result of Significance
IV1: RP -> DV: FS	0.309	4.524	0.000	Significant
IV2: FL -> DV: FS	0.094	1.242*	0.214*	Insignificant
IV3: FSB -> DV: FS	0.143	1.956*	0.051*	Insignificant

Source: Constructed from Questionnaire 411 Raw Data

Table 4.17: Bootstrapping (Total Indirect)

Variable:	Indirect Effect	T Statistic	P Value (P < 0.05)	Result of Significance
IV1: RP -> DV: FS	0.048	2.215	0.027	Significant
IV2: FL -> DV: FS	0.048	1.726*	0.084*	Insignificant
IV3: FSB -> DV: FS	0.106	3.041	0.002	Significant

Source: Constructed from Questionnaire 411 Raw Data

Bootstrapping was running via SmartPLS 3 by using the number of 5000 sets of different combinations for the purpose of knowing data normality where two-tails and 0.05 significance value or confidence interval 95% were applied. Table 4.16 and 4.17 represent the direct effect and indirect effect of the result are not partial mediation where both outcomes show insignificant in particular effects. This can clarify that the independent variables have insignificant effect towards the dependent variable financial satisfaction of retirement planning after the inclusion of mediator variables. For instance, the insignificant pairs in total direct are IV2 financial literacy to DV financial satisfaction (T-test: 1.242, P: 0.214), and IV3 financial saving behaviour to DV financial satisfaction (T-test: 1.956, P: 0.051) whereas for the total indirect only one pair which is IV2 financial literacy to DV financial satisfaction (T-test: 1.726, P: 0.084).

4.2.4.2 Bootstrapping Analysis – Outer Loading

Table 4.18: Bootstrapping (Outer Loading)

	DV: FS	IV1: RP	IV2: FL	IV3: FSB	MV1: EL	MV2: IL	MV3: AG
1	32.981						
2	32.381						
3	27.168						
4	42.090						
5	37.248						
6	56.474						
7	52.306						
1		23.335					
2		38.908					
3		29.641					
4		34.637					
5		26.005					
6		11.039					
1			21.990				
2			32.969				
3			25.212				
4			28.348				
5			33.639				
6			35.143				
7			36.757				
1				24.313			
2				36.214			
3				23.659			
4				39.219			
5				39.567			
1					24.972		

2					47.268		
3					35.028		
4					35.444		
5					48.975		
1						25.147	
2						47.627	
3						31.140	
4						34.318	
5						37.536	
1							29.499
2							46.605
3							21.205
4							12.362
5							19.799

Source: Constructed from Questionnaire 411 Raw Data

Table 4.18 explains the Bootstrapping outer loading output from SmartPLS 3. The outcomes indicate the entire research is significant since Bootstrapping outer loading is using its result of T-Statistics more than 1.96 as the significance level equal to 0.05 or confidence interval 95% with two-tails test. As an observation through table 4.18, all the figures for each variable question exceed or more than 1.96 in their T-Statistics. Therefore, significance is held.

4.2.4.3 Bootstrapping Analysis

Table 4.19: Bootstrapping (Mediating Latent Variable)

Channel:	T-Statistics (1.96)	P Value (P < 0.05)	Result of Significance
IV2: FL -> MV1: EL -> DV: FS	1.195*	0.232*	Insignificant
IV3: FSB -> MV1: EL -> DV: FS	1.299*	0.194*	Insignificant
IV1: RP -> MV1: EL -> DV: FS	0.938*	0.348*	Insignificant

IV3: FSB -> MV2: IL -> DV: FS	0.543*	0.587*	Insignificant
IV1: RP -> MV2: IL -> DV: FS	0.452*	0.651*	Insignificant
IV2: FL -> MV2: IL -> DV: FS	0.550*	0.583*	Insignificant
IV3: FSB -> MV3: AG -> DV: FS	2.618	0.009	Significant
IV2: FL -> MV3: AG -> DV: FS	1.757*	0.079*	Insignificant
IV1: RP -> MV3: AG -> DV: FS	2.109	0.035	Significant

Source: Constructed from Questionnaire 411 Raw Data

Table 4.19 explains the Bootstrapping mediation latent variables result when the confidence interval equals 95% or significance level 0.05 with two-tails test. The mediating latent variables show that the mediator variables MV1 education level, MV2 income level, and MV3 age act as an intermediate to channel those independent variables IV1 retirement planning, IV2 financial literacy, and IV3 financial saving behaviour to dependent variable financial satisfaction of retirement planning. According to the output above, the T-Statistics (P-Value) IV2 financial literacy, and IV3 financial saving behaviour, and IV1 retirement planning through MV1 education level are 1.195 (0.232), 1.299 (0.194), and 0.938 (0.348) while the T-Statistics (P-Value) IV3 FSB, IV1 RP, and IV2 FL through MV2 IL are 0.543 (0.587), 0.452 (0.651), and 0.550 (0.583). For the IV3 financial saving behaviour, IV2 financial literacy, and IV1 retirement planning through MV3 age are 2.618 (0.009), 1.757 (0.079), and 2.109 (0.035). As the observation above, there are only two mediating latent variables where IV3 financial saving behaviour through MV3 Age and IV1 retirement planning through MV3 age are significant in the final outcome of the research findings, the rest are all insignificant for this test.

4.3 Conclusion

To sum up, the entire chapter 4 has explained the illustration of the research descriptive and inferential analysis by using the software SmartPLS 3. In descriptive analysis, the respondent demographic profile has been discussed where all the 411 data collected by the researchers from targeted respondents were considered valid collection since all the targeted respondents have fully fulfilled the criterion of the requirements, thus then researchers would distribute the survey to the respondents. The 411 data covered all the respondents from each state in Malaysia. Not only that, the mean and standard deviation

for each question under each particular variable inside the questionnaire did have a further explanation in subchapter 4.1.2 to 4.1.8.

For the inferential analysis, researchers did apply 2 SmartPLS 3 built-in tests to gather the required result to explain current research, these 2 built-in tests are PLS algorithm and PLS Bootstrapping. Throughout the entire result, it can be concluded that the recent study is quite insignificant from the overall point of view since there are a lot of result showed to be insignificant although researchers successfully find some other supporting statements from previous findings or the founders of the tests to support the results, but rationally to say with the supportive quotes from the particular authors the results now are tend to be least significant, if all those statements have been removed then it would probably remain as insignificant at all time. Researchers do struggle to find out why the results are totally different from the previous researchers' outcomes as most of the researches conducted were statistically significant. As the observation of current researchers, current research that in the progress is investigating the topic under the COVID-19 epidemic period, however, the available sources that found by recent researchers that cited through the literature review in chapter 2 all are under normal economic condition with the absence of COVID-19 epidemic since there are lack of COVID-19 related information when researchers were doing the literature review that related to the topic. Thus, it led to the totally different result where insignificant occurred at the end or only least significant to be said. All these would be discussed further in the upcoming part in chapter 5.

CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATION

5.0 Introduction

In chapter 5, the overall conclusion of the findings would be drawn out to have a better understanding of the entire idea towards the topic. The major analysis findings that found in chapter 4 would bring it to this chapter and connect its result of significance with previous literature review studies in order to figure out whether there is any linkage between the analysis outcomes and former researchers outputs. Researchers will interpret the research implications, research limitations as well as research recommendations at the end of the discussion.

5.1 Discussion on Key Findings

Table 5.1 Summary of result

Test	Hypothesis	Hypothesis supported	Result ($T > 1.96$ & $P < 0.05$)
1.RP and FS	H₁: There is a significant relationship between RP and FS	H₁ is supported	T statistics 2.215 > 1.96 P value 0.027 < 0.05
2.FL and FS	H₁: There is a significant relationship between FL and FS	H₁ is not supported*	T statistics 1.726 < 1.96 P value 0.084 > 0.05
3.FSB and FS	H₁: There is a significant relationship between FSB and FS	H₁ is supported	T statistics 3.041 > 1.96 P value 0.002 < 0.05

4a. Significant relationship between mediator (EL), RP and FS	H1: There is a significant relationship from RP through mediator variable (EL) to FS	H₁ is not supported*	<p>T statistics</p> <p>0.938<1.96</p> <p>P value</p> <p>0.348>0.05</p>
4b. Significant relationship between mediator (IL), RP and FS	H1: There is a significant relationship from RP through mediator variable (IL) to FS	H₁ is not supported*	<p>T statistics</p> <p>0.452<1.96</p> <p>P value</p> <p>0.651>0.05</p>
4c. Significant relationship between mediator (A), RP and FS	H1: There is a significant relationship from RP through mediator variable (A) to FS	H₁ is supported	<p>T statistics</p> <p>2.109>1.96</p> <p>P value</p> <p>0.035<0.05</p>

5a. Significant relationship between mediator (EL), FL and FS	H ₁ : There is a significant relationship from FL through mediator variable (EL) to FS	H₁ is not supported*	T statistics 1.195 <1.96 P value 0.232 >0.05
5b. Significant relationship between mediator (IL), FL and FS	H ₁ : There is a significant relationship from FL through mediator variable (IL) to FS	H₁ is not supported*	T statistics 0.550 <1.96 P value 0.583 >0.05
5c. Significant relationship between mediator (A), FL and FS	H ₁ : There is a significant relationship from FL through mediator variable (A) to FS	H₁ is not supported*	T statistics 1.757 <1.96 P value 0.079 >0.05
6a. Significant relationship between mediator (EL), FSB and FS	H ₁ : There is a significant relationship from FSB through mediator variable (EL) to FS	H₁ is not supported*	T statistics 1.299 <1.96 P value 0.194 >0.05

6b. Significant relationship between mediator (IL), FSB and FS	H ₁ : There is a significant relationship from FSB through mediator variable (IL) to FS	H₁ is not supported*	<p>T statistics</p> <p>0.543<1.96</p> <p>P value</p> <p>0.587>0.05</p>
6c. Significant relationship between mediator (A), FSB and FS	H ₁ : There is a significant relationship from FSB through mediator variable (A) to FS	H₁ is supported	<p>T statistics</p> <p>2.618>1.96</p> <p>P value</p> <p>0.009<0.05</p>

Source: Constructed from Questionnaire 411 Raw Data

5.1.1 RP and FS

A significant relationship between retirement planning and financial satisfaction of retirement planning shown in table 5.1 (T: 2.215>1.96 & P: 0.027<0.05). According to Elder & Rudolph (1999), The results show that there is a significant relationship between retirement planning and financial satisfaction of retirement planning. Even when income, wealth, marital status, and health are included as explanatory variables, consideration of retirement and participation in planning meetings has a significant positive impact on satisfaction. According to Yeung & Zhou (2017), the result shows a significant relationship between retirement planning and financial satisfaction of retirement planning. Well-being in retirement is reflected in levels of physical well-being, life satisfaction and psychological well-being as well as the absence of psychological distress. Retirees are less resilient to retirement when they show a decline in physical functioning, life satisfaction and psychological well-being and an increase in psychological distress at all three assessment points.

5.1.2 FL and FS

The result in table 5.1 shows a significant relationship between FL and FS ($T: 1.726 < 1.96$ & $P: 0.084 > 0.05$). Based on the study of Tan & Singaravelloo (2019), the results show that there is no significant relationship between financial literacy and financial satisfaction of retirement planning among Malaysian government officers. Individuals with or without financial literacy will be satisfied if their retirement fund is more and enough to use for the rest of their life. Otherwise, they will not be satisfied if the retirement fund is not enough for the rest of their life. Therefore, financial satisfaction of retirement planning is based on the individual, but not financial literacy. According to Aluodi, Njuguna & Omboi (2017), their study shows a significant relationship between FL and FS. After controlling for gender, those with low financial literacy scores were likely to be as confident about retirement as those with high scores. Similar results were obtained when a more subjective measure of retirement preparedness savings was used. It can therefore be concluded that financial satisfaction of retirement planning is not influenced by an employee's level of financial literacy, but by their income level.

5.1.3 FSB and FS

Based on the result in table 5.1, there is a significant relationship between financial saving behaviour and financial satisfaction of retirement planning ($T: 3.041 > 1.96$ & $P: 0.002 < 0.05$). According to Hsion and Dambaravdan (2016), the financial saving behaviour has a significant relationship with financial satisfaction of retirement planning. Individuals with saving behaviour will be satisfied with their retirement planning. This is because individuals with saving behaviour will be more likely to do saving or investing. For example, investment of property, bond, stock etc. Therefore, the savings from their retirement planning is surely enough for them to retire. Based on the research of Rameli & Marimuthu (2018), the results show that there is a significant relationship between financial saving behaviour and financial satisfaction of retirement planning. Individuals with a high level of awareness and forethought of their saving behaviour are responsible for the financial decisions made in their retirement plans. As a result, retirement plans with a high level of awareness of saving behaviour approach retirement with a high level of

wealth. The greater the awareness of saving behaviour, the greater the likelihood of developing retirement planning habits.

5.1.4 RP -> MVs - FS

The result in table 5.1 shows that the mediator variable which is education level will not significantly influence retirement planning and financial satisfaction of retirement planning ($T: 0.938 < 1.96$ & $P: 0.348 > 0.05$). According to Chai et al. (2019), education level will not influence the retirement planning, Even the individual with low education level will want to do the retirement. They may follow others to their retirement since there are a lot of financial institutions nowadays. Therefore, they will be satisfied with their retirement planning.

The result in table 5.1 shows that, the mediator variable, income level will not significantly influence the retirement planning and financial satisfaction of retirement planning ($T: 0.452 < 1.96$ & $P: 0.651 > 0.05$). According to Thakur et al. (2017), income level will not influence retirement planning. The analysis shows that most of the respondents regardless of age, income and occupation want to have their retirement in the next 20 years and above. Every individual with a different income level can do their retirement planning with different costs based on their living lifestyle. Therefore, individuals with different income levels will be satisfied with their retirement planning.

The result in table 5.1 shows that, the mediator variable, age will significantly influence the retirement planning and financial satisfaction of retirement planning ($T: 2.109 > 1.96$ & $P: 0.035 < 0.05$). According to Toll, Turpin and Scourtoudis (2007), the study shows that age will influence the retirement planning and financial satisfaction of retirement planning. The study was conducted among 2,366 federal public servants in Canada, but it is worth noting that young people are not considering retirement mainly because they are either just entering the public service or are busy building their careers, so retirement is not an option that is their main concern for the time being. Therefore, when they are going closer to the retirement age, they will not be satisfied with their retirement plan, since they must pay more for their late retirement planning and their savings for retirement planning may not be enough.

5.1.5 FL -> MVs - FS

The result in table 5.1 shows that, the mediator variable, education level will not significantly impact the financial literacy and financial satisfaction of retirement planning ($T: 1.195 < 1.96$ & $P: 0.232 > 0.05$). From the past study done by the researchers, it shows that education level will significantly impact the financial literacy and financial satisfaction of retirement planning. It was different from the result of this study. This is because during the pandemic, people are not encouraged to leave the house. Therefore, in this era of developed Internet information. There is a lot of material to learn the knowledge of retirement planning. Individuals with lower education levels can also learn financial literacy on the internet. They will be satisfied with their retirement planning since they have FL.

The result in table 5.1 shows that, the mediator variable, income level will not significantly affect the financial literacy and financial satisfaction of retirement planning ($T: 0.55 < 1.96$ & $P: .583 > 0.05$). There is a lack of past study to support the result of this research, which is that income level will not significantly affect the financial literacy and financial satisfaction of retirement planning. The result of this research is different from past studies because the research progressed during Covid-19 pandemic and most of the respondents with different income levels are not satisfied with their retirement planning.

The result in table 5.1 shows that the mediator variable, age will not significantly affect the FL and FS ($T: 1.757 < 1.96$ & $P: 0.079 > 0.05$). There is no past study to support the result that age will not significantly affect the financial literacy and financial satisfaction of retirement planning. The insignificant outcome for this study is because nowadays, more and more young people know the importance of investing, so they are also preparing for their retirement plans. Especially during this epidemic, the hot topic of most people is investment. Therefore, both young and old will be exposed to investment. So not only the elderly will focus on retirement planning, but even the young will start planning for their retirement. Even young people without financial knowledge can learn financial knowledge from friends or the Internet. Investing their retirement plan in an early stage will make it easier to retire.

5.1.6 FSB - MVs - FS

The result in table 5.1 shows that, the mediator variable, education level will not significantly influence the financial saving behaviour and financial satisfaction of retirement planning (T-statistic $1.299 < 1.96$ & P-value $0.194 > 0.05$). According to Kassim, Tamsir, Azim, Mohamed and Nordin (2018), the results show that education level will not significantly influence the financial saving behaviour and financial satisfaction of retirement planning. Individuals with any education level will have the saving behaviour and it is not the right for individuals with higher education level. Individuals will do their retirement planning with their own saving behaviour; therefore, they will be satisfied since the retirement planning is going by their own way.

The result in table 5.1 shows that, the mediator variable, income level will not significantly affect the financial saving behaviour and financial satisfaction of retirement planning (T: $0.543 < 1.96$ & P: $0.583 > 0.05$). According to Thakur et al. (2017), income level will not significantly affect the financial saving behaviour and financial satisfaction of retirement planning. Based on the study, individuals with any income level want to retire in the next 20 years and above, this must be achieved by saving. Although their savings amount for retirement might be different, they will still be satisfied because the retirement planning is based on their ability.

The result in table 5.1 shows that, the mediator variable, age will significantly influence the financial saving behaviour and financial satisfaction of retirement planning (T: $2.618 > 1.96$ & P: $0.009 < 0.05$). According to Zulfaka and Kassim (2021), the results show that age will significantly influence the financial saving behaviour and financial satisfaction of retirement planning. As the people become older and gain more financial literacy, they will be more likely to own a saving behaviour, especially for their retirement. They might not be satisfied with their retirement planning because they do it late instead of planning it when young. Therefore, the cost of retirement planning will be high in cost.

5.2 Research Implication of Study

Based on the table 5.1 above, it showed that among the 12 hypothesis developments organised that related to previous chapter 2 hypothesis developments, only a total of 4 out of 12 hypotheses are statistically significant. However, the rest are all considered statistically insignificant. Throughout the 4 statistically significant hypotheses, 2

hypotheses belong to the direct channel between independent variable to dependent variable financial satisfaction of retirement planning. These 2 hypotheses are IV1 retirement planning as well as IV3 financial saving behaviour respectively. The other two hypotheses that are related to the mediation of mediator variable from independent variable to dependent variable are both located to MV3 age as (4c) significant relationship between mediator age, retirement planning and financial satisfaction of retirement planning, and (6c) significant relationship between mediator age, financial saving behaviour to financial satisfaction of retirement planning. All these illustrations mean that the targeted respondents were not satisfied with their financial condition especially in retirement planning purposely for the period of COVID-19.

5.2.1 Investors

As the research outcome mentioned the targeted respondents Malaysian youth EPF contributors were dissatisfied with the financial circumstance, thus, investor such as youth should aware of this particular issue since the unexpected events such as COVID-19 epidemic lockdown implementations, sudden lay off by the company without prior notice, and any global economic crises might happen anytime, anywhere during today reality without giving the investor adequate time for the preparation purposes. Investors should always take proactive action especially to be ready for these types of events. For instance, investors are advised to subscribe to any investment plan that best fits with their personal preferences or spending a portion of every monthly salary for the investing purposes. If investors are worried that their personal expertise would lead to a loss situation, investors should find someone who can handle the risk properly such as a mutual fund manager. By doing so, if an event similar as COVID-19 happens once again in the future, investors will have the buffer period to survive from the event based on the investor's investment size or amount in the mutual fund as compared to those who have zero or no preparation for the alert. Throughout the result shown, it clearly clarifies that most of the Malaysian youth EPF contributors were not well prepared to confront the sudden shock emergency during this time, thus it is hoped that this result could more or less provide some inspiration on how to deal with the future obstacles.

5.2.2 Malaysian Government and Central Bank

As most of the results showed statistically insignificant, the Malaysian Government and Central Bank are recommended to alert on this research since it provides a totally different version of answer as compared to others who conducted the similar study at normal economic condition. In order to motivate Malaysian youth EPF contributors to stay away from being dissatisfied towards their financial affairs, these parties should organise multiple stages of plans that would be used for the similar future events. For example, Malaysian Government is suggested to create a national post-mortem team that mainly focus on the defect of implementation during this epidemic like what factors resulted them responded slowly to the condition, any unnecessary regulations that previously implemented did not really bring advantages to the public especially Malaysian youth EPF contributors who age between 15 to 30 that can be considered as the fresh employees that enter the workforce, and any actions can be improved and so on, whereas for the Bank Negara Malaysia (BNM), BNM can provide free seminars through online to the public especially targeting the participants to Malaysian youth range of people perhaps BNM can also incorporate with The Credit Counselling and Debt Management Agency (AKPK) to provide personal one to one assistance for those who is needed especially those people who has been or almost default via online consultation in their financial status that requires financial restructuring. At this point, Malaysian youth EPF contributors would have a channel to inquiry for the doubts facing and how to deal with it.

5.2.3 Employee Provident Fund (EPF)

EPF can apply this research outcome to readjust the current implementations. After the exploration from the past COVID-19 EPF accounts extreme executions by the public on the fund withdrawal as stated in Chapter 1.1 Research Background EPF Withdrawal Amount from year 2019 to 2021, EPF now would realise any unexpected incident happens at a very rapid wave normally would lead the public life which includes the research targeted respondents financial circumstances to be worsened due to the lack of expertise where it clearly links to the result of insignificant shown in current research. Therefore, EPF is strongly advised to introduce new initiatives at current and future to avoid the public panic actions happening once again. For instance, on the past 13th September 2021, EPF

has introduced 2 new initiatives that are purposely targeting employers to ease the cash flow management during the epidemic and simultaneously allowing them to undertake statutory obligation (EPF, 2021). These 2 initiatives are exemption on late payment charges, and employer pay for reduction initiative (e-PaR) (EPF, 2021). Similarly, EPF is advised to design initiatives that are mainly for the Malaysian youth EPF contributors only which are not limited to during the extremely hard period, but before any unfavourable event occurs to have a preparation time for EPF to investigate the most appropriate method to be conducted.

5.2.4 Future Researchers

For the future researchers who would like to conduct the similar research on the same topic of financial satisfaction of retirement planning and purposely for the COVID-19 period, recent researchers tend to advise future researchers not to select the financial satisfaction as the main focus since based on the result analysed in this study, the targeted respondents some way not satisfied towards their financial condition where the outcome of the variables in chapter 4 showed insignificant are the best evidences to prove the statement. This result can be defined as targeted respondents' lack of fiscal status which led to the peak of the withdrawal in EPF funds to support COVID-19 daily expenses. As a result, it would harm the future investment gains where it requires double, triple or even more time of spending in order to earn the same compounded return due to the compounded effect in investment. Future researchers are strongly recommended to adjust the topic from financial satisfaction to “financial dissatisfaction” thus it might provide a much more significant result for the entire research plus adding the validity and reliability of itself if the future researchers would like to remain the study at the COVID-19 period. Future researchers can consider other independent variables to replace the current variables inside this study based on the preferences after going through the literature review too.

5.3 Limitation of Study

5.3.1 Internal validity

After using the data analysing software SmartPLS 3, summary of data analysis in this research is mostly insignificant. The main reason is due to the statements constructed in

the questionnaire. All of the statements (40 statements in total) in the questionnaire are written into conditional sentences with affirmative form, which according to our research title (Financial satisfaction of personal retirement planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic). The conditional affirmative sentences have the tendency of directing some of the respondents to a situated condition, which is not that recommended for future researchers when constructing the questionnaire. Thus, when the respondents disagree with the statement, the results shown will be insignificant (P-value smaller than 0.05).

Some of the respondents do reflect on us that they need more time when filling in the questionnaire. Most of the reason is that their feedback is on the language of the questionnaire. The respondents indicate that it will be easier for them to answer when the questionnaire is available in the language they are familiar with, such as Chinese, Malay and Tamil language. Aside from the language of the questionnaire, we do found out that respondents with professional qualification will have a better understanding when filling in the questionnaire. With this case happened, we do found out that our questionnaire is more suitable to be filled by professionals. Besides that, due to the definition of youth in Malaysia, the age range that is defined is 15-30 years old. However, Malaysian youth that aged between 15-22 are still studying (secondary school, pre-university, tertiary education). The studying age varies differently, which also prove that they do not have the financial ability as well (exclude those who have jobs).

The number of mediators and independent variables do play an important role in the research. With the independent variables of (financial literacy, financial saving behaviour, retirement planning) and mediator variables of (education level, income level and age), the results of the study may only be limited and presented based on the listed variables. In order to have a more diverse research, more variables need to be included to generate a more diverse scenario and environment. Therefore, the limited numbers of both independent and mediator variables is hard to represent the overall opinion of Malaysia Youth EPF Contributors towards financial satisfaction of personal retirement planning during COVID-19 pandemic.

5.3.2 External validity

Limitation of this research mainly comes from questionnaire and data analysis. Respondents that filled in the questionnaire are mostly Malaysian Youth EPF Contributors that work in the main cities in the 13 states of Malaysia. There is only a small number of respondents that are from the rural areas of Malaysia. One of the big reasons is due to the higher job opportunities in cities, put aside on the differences in salaries. As mentioned above, respondents of this research are from 13 states of Malaysia, which is only a total of 411 respondents estimated by the Yamane formula. Due to the nature of small sample size, outcomes of study may be hard to study as it negatively affects the confidence level of a study. Possibility of type II error may increasingly occur, where the null hypothesis will be accepted incorrectly and the research results will not have a bigger difference.

5.4 Recommendation

In order to have a more significant research results, future researchers can change the title of research which is “The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic” to “The Financial Dissatisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic”. A slight modification on the research title will have a different research direction which will provide a different research result as well. In the near future, researchers can also compare the result between “financial satisfaction” and “financial dissatisfaction” for a more concrete research result. It is also recommended that the statement constructed in the questionnaire should be neutral and should let the respondents have a unbiased situation when answering it.

As indicated in “5.3 Limitation of study”, multilingual questionnaires tend to be more convenient for respondents to fill in the questionnaire. In a bigger point of view, it does increase the efficiency of answering the questionnaire which benefits the researcher as well. A more detailed description can be added in the questionnaire where respondents are able to refer when answering the questionnaire. Apart from the description, the suitable answering age for the questionnaire should also be mentioned, although the questionnaire is distributed to the suitable respondents. Most importantly, the questionnaire set by researchers should be easily understood by any respondents, despite of any differences in background. The degree of understanding towards the questionnaire will affect the decision making of respondents when answering the questionnaire.

Future researchers could input independent variables like inflation, interest rate to create a more detailed and specific economic environment for the study to increase the reliability and veracity of the study result. The reason behind is that a different economic environment will let the respondents think and react differently, which will provide a different result.

Finally, it is strongly recommended that future researchers increase the number of the research sample size. Large sample size may be more effective in capturing small changes in the research result in comparison with small sample size. Furthermore, a large sample size is able to include more areas which may have a more diverse result as different states will have different lifestyles, especially the price of goods and services. As an example, the price of goods and services in Kuala Lumpur is higher in comparison with the price of goods and services in Kuala Terengganu.

5.5 Conclusion

According to the data analysis that researchers have gone through above, there is a significant relationship between the direct effect from IV1 retirement planning and IV3 financial saving behaviour to DV financial satisfaction of retirement planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic where fulfilled the same results with former researchers' findings in several researches. For instance, Yeung & Zhou (2017) study shows a significant relationship between retirement planning and financial satisfaction of retirement planning. Well-being in retirement is reflected in levels of physical well-being, life satisfaction and psychological well-being as well as the absence of psychological distress. Retirees are less resilient to retirement when they show a decline in physical functioning, life satisfaction and psychological well-being and an increase in psychological distress at all three assessment points. For financial saving behaviour supporting explanation, Rameli & Marimuthu (2018) study claimed a significant relationship between financial saving behaviour and financial satisfaction of retirement planning. Individuals with a high level of awareness and forethought of their saving behaviour are responsible for the financial decisions made in their retirement plans. Thus, retirement plans with a high level of awareness of saving behaviour approach retirement with a high level of wealth as the greater the awareness of saving behaviour, the greater the likelihood of developing retirement planning habits.

However, IV2 financial literacy is proved to be not significant to the DV financial satisfaction of retirement planning. Aluodi, Njuguna & Omboi (2017) study stated a significant relationship between FL and FS. After controlling for gender, those with low financial literacy scores were likely to be as confident about retirement as those with high scores. Similar results were obtained when a more subjective measure of retirement preparedness savings was used. It can therefore be concluded that financial satisfaction of retirement planning is not influenced by an employee's level of financial literacy, but by their income level. As for the mediator variables, only MV3 age is having a significant relationship on IV1 retirement planning and IV3 financial saving behaviour to the DV financial satisfaction of retirement planning. Both MV1 education level and MV2 income level are not significant against the financial satisfaction of retirement planning when mediator variables were involved in the tests.

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APPENDICES

Appendix 1: Survey Questionnaire



**UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF
BUSINESS AND FINANCE UNDERGRADUATE FINAL
YEAR PROJECT [FYP] BACHELOR OF FINANCE
(HONS)**

**The Financial Satisfaction of Personal Retirement
Planning among Malaysian Youth during the COVID-
19 Pandemic**

Survey Questionnaire

Introduction

We are a group of undergraduate finance course students from University Tunku Abdul Rahman (UTAR) who are currently conducting a research study on the topic The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth during the COVID-19 Pandemic. Please help us by filling up the questionnaire. Thank you very much.

Confidentiality

The information provided in this questionnaire will only be analyzed and collected for fully academic usage. Rest assured that the answers provided to this survey questionnaire will be treated with the utmost confidentiality. Details of confidentiality will be explaining further in the **Personal Data Protection Statement (PDPA)**.

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 sections. 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,

Ngo Yu Xun

Domchang1234@gmail.com

Pong Yi Xiang

Xiangloveying1@gmail.com

Saw Min Zher

Stanleymzsaw@gmail.com

PERSONAL DATA PROTECTION STATEMENT

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage, and retention of personal information.

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to: -
 - For assessment of any application to UTAR
 - For processing any benefits and services
 - For communication purposes
 - For advertorial and news
 - For general administration and record purposes
 - For enhancing the value of education
 - For educational and related purposes consequential to UTAR
 - For the purpose of our corporate governance
 - For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan
2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.
3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.
4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form, you hereby authorize and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.
2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.
3. You may access and update your personal data by writing to us at _____.

Acknowledgment of Notice

[] I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

[] I disagree, my personal data will not be processed.

.....

Name:

Date:

Which state are you staying at during the COVID-19 epidemic?

Which state:	
--------------	--

Do you have an EPF account?

	Yes
	No

Based on the previous question, which stage did you belong to during the COVID-19 pandemic?

	You are having an EPF account, but unfortunately you had been laid off from the past until now (Contributed to EPF until COVID-19).
	You are having an EPF account, but unfortunately you had been laid off from the past and recently have rejoined the workforce (Contributed to EPF before and after COVID-19).
	You are having an EPF account and were not affected by the occurrence of COVID-19 (Fully contributed towards EPF).

Section A: DEPENDENT VARIABLE

FINANCIAL SATISFACTION

In this section, we would like to understand your financial satisfaction of retirement planning. For each statement, please circle the number that indicate your degree of agreement.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

FS1	Currently, I am satisfied with my ability to meet my financial obligations.	1	2	3	4	5
FS2	Currently, I am satisfied with the income in my current job or career provides me.	1	2	3	4	5
FS3	Currently, I am satisfied with my spending habits.	1	2	3	4	5
FS4	Currently, I am satisfied with the level of debt I carry.	1	2	3	4	5
FS5	Currently, I am satisfied with my current investment choices.	1	2	3	4	5
FS6	Currently, I am satisfied that I am on track to build a sufficient retirement nest egg for the future.	1	2	3	4	5

FS7	Currently, I am satisfied with my ability to communicate about my financial matters.	1	2	3	4	5
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Section B: INDEPENDENT VARIABLES

RETIREMENT PLANNING

In this section, we would like to identify your retirement planning management during the COVID-19. For each statement, please circle the number that indicates your degree of agreement.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

RP1	During the COVID-19, I would be more concerned about protecting my assets than about growth to meet my financial satisfaction of retirement planning.	1	2	3	4	5
RP2	During the COVID-19, I would prefer the ease of mutual funds to the uncertainty of trying to pick winning stocks to satisfy my financial satisfaction of retirement planning.	1	2	3	4	5
RP3	During the COVID-19, I would like predictability and routine in my daily financial matters to meet my financial satisfaction of retirement planning.	1	2	3	4	5
RP4	During the COVID-19, I would prefer predictable, steady returns on my investments, even if the return is low to satisfy my financial satisfaction of retirement planning.	1	2	3	4	5

RP5	During the COVID-19, I would do personal bookkeeping and financial record management to meet my financial satisfaction of retirement planning.	1	2	3	4	5
RP6	During the COVID-19, I would be less optimistic about my financial future when doing financial planning to meet my financial satisfaction of retirement planning.	1	2	3	4	5

FINANCIAL LITERACY

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

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

FL1	During the COVID-19, I would do budgeting for my own purpose to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FL2	During the COVID-19, I would record my daily expenses to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FL3	During the COVID-19, I would compare the price of goods before I purchase it to meet my financial	1	2	3	4	5

	satisfaction of retirement planning.					
FL4	During the COVID-19, I would attend financial seminars to improve my financial literacy to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FL5	During the COVID-19, I would avoid maxing out the limit of my ATM card to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FL6	During the COVID-19, I would like to utilise my financial literacy to invest in financial instruments to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FL7	During the COVID-19, I would try to identify the total amount of funds that I require to prepare for retirement to meet my financial satisfaction of retirement planning.	1	2	3	4	5

FINANCIAL SAVING BEHAVIOUR

In this section, we would like to know what your motive is in saving 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

FSB1	During the COVID-19, I would open a savings account to save money to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FSB2	During the COVID-19, I would not waste my money on buying expensive or unnecessary goods to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FSB3	During the COVID-19, I would save money for my future emergency fund to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FSB4	During the COVID-19, I would save money to do some investments to meet my financial satisfaction of retirement planning.	1	2	3	4	5
FSB5	During the COVID-19, I would save the money first before any expenses to meet my financial satisfaction of retirement planning.	1	2	3	4	5

Section C: MEDIATOR VARIABLES

EDUCATION LEVEL

In this section, we would like to know about your education 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

EL1	During the COVID-19, Malaysian youth who have higher education level will normally consider having better management in their retirement planning to meet their financial satisfaction of retirement planning.	1	2	3	4	5
EL2	During the COVID-19, Malaysian youth who have higher education level tend to have higher skill in financial literacy to meet their financial satisfaction of retirement planning.	1	2	3	4	5
EL3	During the COVID-19, higher educated Malaysian youth would not be misled by any unverified financial information to ensure their financial satisfaction of retirement planning is being secured.	1	2	3	4	5
EL4	During the COVID-19, Malaysian youth who are highly educated will have a	1	2	3	4	5

	comprehensive savings plan to ensure their financial satisfaction of retirement planning is being secured.					
EL5	During the COVID-19, higher educated Malaysian youth would contribute more portion of income for retirement savings to ensure their financial satisfaction of retirement planning is being secured.	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
IL1	During the COVID-19, Malaysian youth with higher income would increase their skill in retirement planning management to ensure their financial satisfaction of retirement planning is being secured.	1	2	3	4	5
IL2	During the COVID-19, higher income Malaysian youth would have greater chance of participation in financial literacy	1	2	3	4	5

	to meet their financial satisfaction of retirement planning.					
IL3	During the COVID-19, Malaysian youth with the growth of income would contribute higher portion of income for their retirement savings to meet their financial satisfaction of retirement planning.	1	2	3	4	5
IL4	During the COVID-19, as income bracket increased, Malaysian youth would seek for various sources of income to increase their retirement savings as well as to meet their financial satisfaction of retirement planning.	1	2	3	4	5
IL5	During the COVID-19, along with the growth of income, Malaysian youth would ensure their savings is sufficient to cover expenses incurred in retirement life to meet their financial satisfaction of retirement planning.	1	2	3	4	5

AGE

In this section, we would like to have a 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
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Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
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A1	During the COVID-19, along with the growth of age in Malaysian youth, increased knowledge in retirement planning would lead to financial satisfaction of retirement planning.	1	2	3	4	5
A2	During the COVID-19, the increment of age for Malaysian youth would enhance their level of financial literacy to meet their financial satisfaction of retirement planning.	1	2	3	4	5
A3	During the COVID-19, the increment of age for Malaysian youth tend to increase their sources of financial savings to retire comfortably as well as to ensure their financial satisfaction of retirement planning is being secured.	1	2	3	4	5
A4	During the COVID-19, Malaysian youth who age between 15's to 30's holds the perception that their savings in EPF is insufficient for their retirement which along with financial satisfaction of retirement planning.	1	2	3	4	5
A5	During the COVID-19, Malaysian youth who age between 15's to 30's their retirement planning mostly only rely on EPF savings to meet their financial satisfaction of retirement planning.	1	2	3	4	5

Appendix 2: Targeted Respondent Demographic Profile

States	Frequency	Valid Percentage	Cumulative Percentage
Johor	61	14.8%	14.8%
Kedah	28	6.8%	21.6%
Kelantan	18	4.4%	26.0%
Melaka	50	12.2%	38.2%
Negeri Sembilan	30	7.3%	45.5%
Pahang	26	6.3%	51.8%
Penang	37	9.0%	60.8%
Perak	44	10.7%	71.5%
Perlis	23	5.6%	77.1%
Sabah	20	4.9%	82.0%
Sarawak	11	2.7%	84.7%
Selangor	40	9.7%	94.4%
Terengganu	23	5.6%	100.0%
Total	411	100.0%	

Appendix 3.1: Result of Target Variable Variance

Variable:	R Square:
Dependent Variable: Financial Satisfaction of Retirement Planning	0.292
Mediator Variable: Education Level	0.490
Mediator Variable: Income Level	0.464
Mediator Variable: Age	0.418

Appendix 3.2: Result of Outer Loadings

	DV: FS	IV1: RP	IV2: FL	IV3: FSB	MV1: EL	MV2: IL	MV3: AG
1	0.763						
2	0.781						
3	0.730						
4	0.813						
5	0.801						
6	0.849						
7	0.853						
1		0.655*					
2		0.826					
3		0.742					
4		0.798					
5		0.736					
6		0.490*					
1			0.639*				
2			0.778				
3			0.711				
4			0.738				
5			0.760				
6			0.763				
7			0.783				
1				0.664*			
2				0.802			
3				0.747			

4				0.794			
5				0.792			
1					0.697*		
2					0.833		
3					0.789		
4					0.801		
5					0.835		
1						0.677*	
2						0.817	
3						0.775	
4						0.794	
5						0.806	
1							0.735
2							0.832
3							0.705
4							0.576*
5							0.630*

Appendix 3.3: Result of Cronbach's Alpha

Variable:	No. of Questions	Cronbach's Alpha	Result of Reliability
DV: FS	7	0.905	Good
IV1: RP	6	0.803	Good
IV2: FL	7	0.861	Good
IV3: FSB	5	0.817	Good
MV1: EL	5	0.850	Good
MV2: IL	5	0.833	Good
MV3: AG	5	0.735	Good

Appendix 3.4: Result of Composite Reliability

Variable:	No. of Questions	Composite Reliability	Result of Reliability
DV: FS	7	0.925	Good
IV1: RP	6	0.861	Good
IV2: FL	7	0.894	Good
IV3: FSB	5	0.873	Good
MV1: EL	5	0.894	Good
MV2: IL	5	0.883	Good
MV3: AG	5	0.826	Good

Appendix 3.5: Result of Average Variance Extracted (AVE)

Variable:	No. of Questions	Average Variance Extracted (AVE)	Result of Reliability
DV: FS	7	0.639	Good
IV1: RP	6	0.514	Good
IV2: FL	7	0.548	Good
IV3: FSB	5	0.580	Good
MV1: EL	5	0.628	Good
MV2: IL	5	0.602	Good
MV3: AG	5	0.491*	Bad

Appendix 3.6: Result of Fornell-Larcker Result

Variable:	DV: FS	IV2: FL	IV3: FSB	IV1: RP	MV3: AG	MV1: EL	MV2: IL
DV: FS	0.800						
IV2: FL	0.446	0.740*					
IV3: FSB	0.432	0.761	0.762				

IV1: RP	0.484	0.786	0.704	0.717*			
MV3: AG	0.460	0.578	0.614	0.564	0.701*		
MV1: EL	0.440	0.638	0.666	0.589	0.738	0.792	
MV2: IL	0.416	0.626	0.646	0.573	0.795	0.788	0.766

Appendix 3.7: Result of Heterotrait-Monotrait Ratio (HTMT)

Variable:	DV: FS	IV2: FL	IV3: FSB	IV1: RP	MV3: AG	MV1: EL	MV2: IL
DV: FS							
IV2: FL	0.504						
IV3: FSB	0.501	0.906*					
IV1: RP	0.571	0.942*	0.864				
MV3: AG	0.567	0.723	0.786	0.738			
MV1: EL	0.503	0.743	0.796	0.712	0.931*		
MV2: IL	0.477	0.738	0.780	0.696	1.009*	0.936*	

Appendix 3.8: Result of Bootstrapping (Total Direct)

Variable:	Direct Effect	T Statistic (1.96)	P Value (P < 0.05)	Result of Significance
IV1: RP -> DV: FS	0.309	4.524	0.000	Significant
IV2: FL -> DV: FS	0.094	1.242*	0.214*	Insignificant
IV3: FSB -> DV: FS	0.143	1.956*	0.051*	Insignificant

Appendix 3.9: Result of Bootstrapping (Total Indirect)

Variable:	Indirect Effect	T Statistic	P Value (P < 0.05)	Result of Significance
IV1: RP -> DV: FS	0.048	2.215	0.027	Significant
IV2: FL -> DV: FS	0.048	1.726*	0.084*	Insignificant

IV3: FSB -> DV: FS	0.106	3.041	0.002	Significant
----------------------------------	--------------	--------------	--------------	--------------------

Appendix 3.10: Result of Bootstrapping (Outer Loading)

	DV: FS	IV1: RP	IV2: FL	IV3: FSB	MV1: EL	MV2: IL	MV3: AG
1	32.981						
2	32.381						
3	27.168						
4	42.090						
5	37.248						
6	56.474						
7	52.306						
1		23.335					
2		38.908					
3		29.641					
4		34.637					
5		26.005					
6		11.039					
1			21.990				
2			32.969				
3			25.212				
4			28.348				
5			33.639				
6			35.143				
7			36.757				
1				24.313			
2				36.214			
3				23.659			

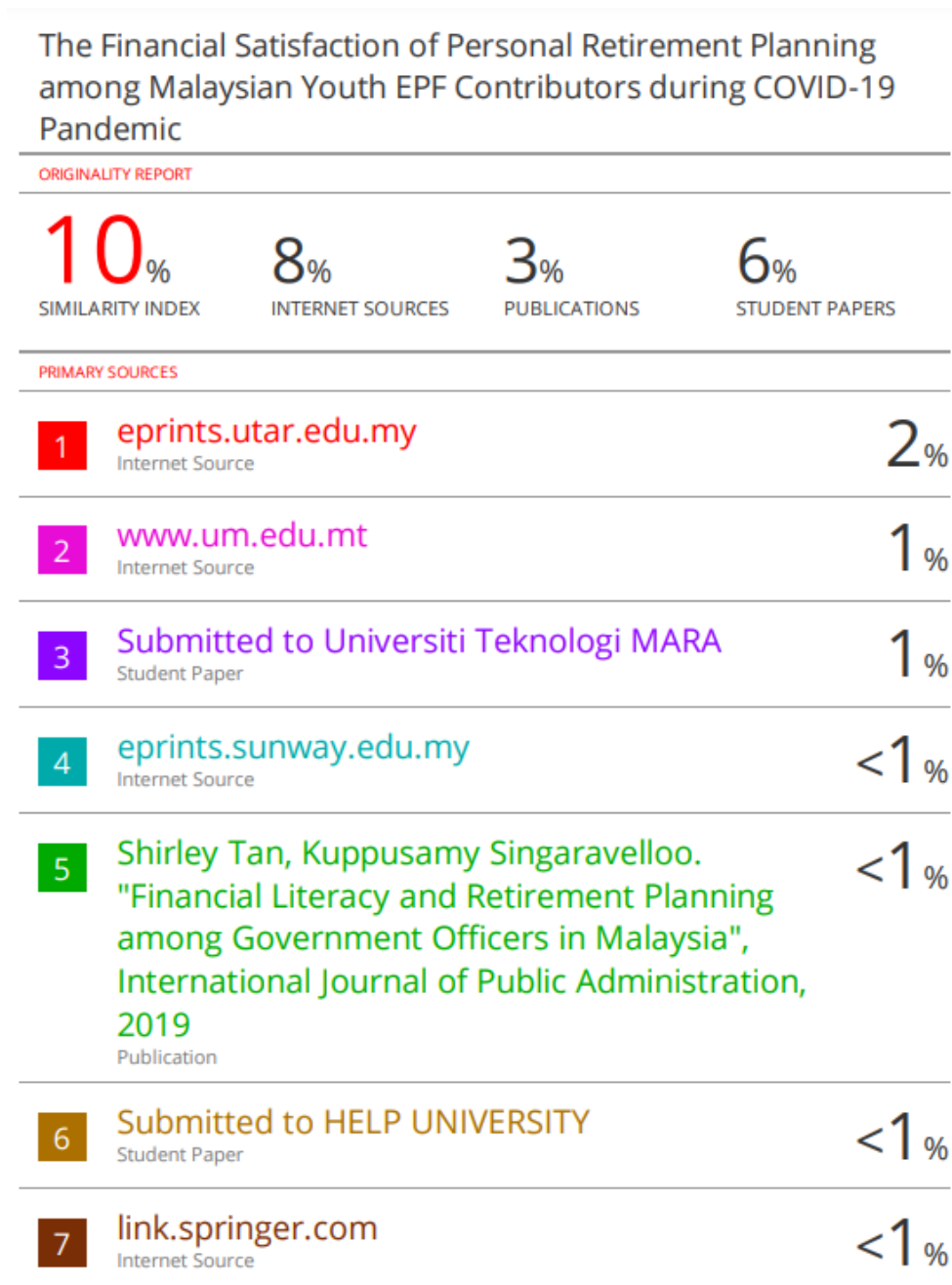
4				39.219			
5				39.567			
1					24.972		
2					47.268		
3					35.028		
4					35.444		
5					48.975		
1						25.147	
2						47.627	
3						31.140	
4						34.318	
5						37.536	
1							29.499
2							46.605
3							21.205
4							12.362
5							19.799

Appendix 3.12: Result of Bootstrapping (Mediating Latent Variable)

Channel:	T-Statistics (1.96)	P Value (P < 0.05)	Result of Significance
IV2: FL -> MV1: EL -> DV: FS	1.195*	0.232*	Insignificant
IV3: FSB -> MV1: EL -> DV: FS	1.299*	0.194*	Insignificant
IV1: RP -> MV1: EL -> DV: FS	0.938*	0.348*	Insignificant
IV3: FSB -> MV2: IL -> DV: FS	0.543*	0.587*	Insignificant
IV1: RP -> MV2: IL -> DV: FS	0.452*	0.651*	Insignificant
IV2: FL -> MV2: IL -> DV: FS	0.550*	0.583*	Insignificant
IV3: FSB -> MV3: AG -> DV: FS	2.618	0.009	Significant

IV2: FL -> MV3: AG -> DV: FS	1.757*	0.079*	Insignificant
IV1: RP -> MV3: AG -> DV: FS	2.109	0.035	Significant

Appendix 4: Result of Turnitin Report



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FACULTY OF BUSINESS AND FINANCE

UNIVERSITI TUNKU ABDUL RAHMAN

Date: 1st september 2022

SUBMISSION OF FINAL YEAR PROJECT /DISSERTATION/THESIS

It is hereby certified that Ngo Yu Xun (*Student Name*) (ID No: 19ABB05710) has completed this final year project entitled “The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic” under the supervision of Puan Noor Azizah Bt Shaari (*Name of the Supervisor*) from the Department of Finance, Faculty of Business and Finance.

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

Yours truly,

Ngo Yu Xun
(*Student Name*)

*Delete whichever not applicable

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FACULTY OF BUSINESS AND FINANCE

UNIVERSITI TUNKU ABDUL RAHMAN

Date: 1st september 2022

SUBMISSION OF FINAL YEAR PROJECT /DISSERTATION/THESIS

It is hereby certified that Pong Yi Xiang (*Student Name*) (ID No: 17ABB04588) has completed this final year project entitled “The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic” under the supervision of Puan Noor Azizah Bt Shaari (*Name of the Supervisor*) from the Department of Finance, Faculty of Business and Finance.

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

Yours truly,

Pong Yi Xiang
(*Student Name*)

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FACULTY OF BUSINESS AND FINANCE

UNIVERSITI TUNKU ABDUL RAHMAN

Date: 1st september 2022

SUBMISSION OF FINAL YEAR PROJECT /DISSERTATION/THESIS

It is hereby certified that Saw Min Zher (*Student Name*) (ID No: 17ABB04351) has completed this final year project entitled “The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic” under the supervision of Puan Noor Azizah Bt Shaari (*Name of the Supervisor*) from the Department of Finance, Faculty of Business and Finance.

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Saw Min Zher
(*Student Name*)

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(APPENDIX F)

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FACULTY OF BUSINESS AND FINANCE

Full Name(s) of Candidate(s)	Ngo Yu Xun; Pong Yi Xiang; Saw Min Zher
ID Number(s)	19ABB05710; 17ABB04588; 17ABB04351
Programme / Course	UBFZ3026 Research Project
Title of Final Year Project	The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic.

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Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.

Signature of Supervisor

Name : Puan Noor Azizah Bt Shaari

Date : 1st September 2022

The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic

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The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic

by 22FN04J NGO YU XUN

Submission date: 24-Aug-2022 09:45PM (UTC+0800)

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1.0 Introduction

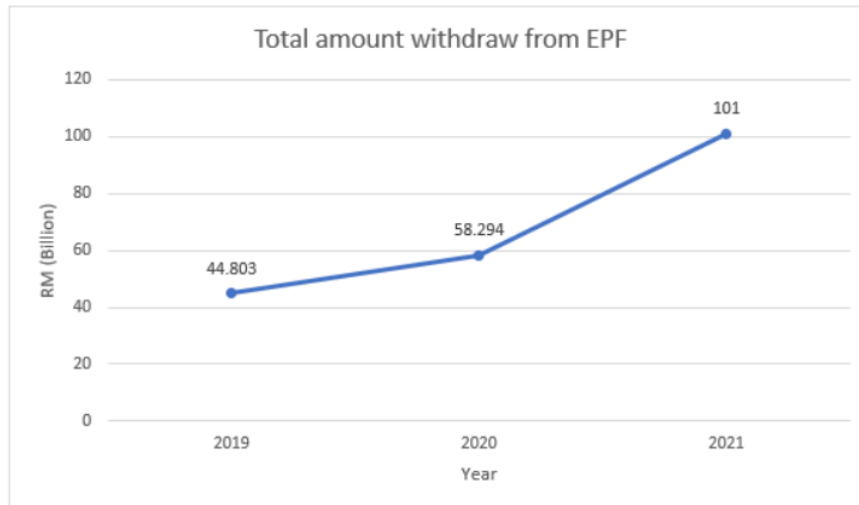
Personal retirement planning is a process of managing funds for retirement. It includes insurance, banking, budgeting, and investments. Personal retirement planning is used to achieve retirement goals, which is long-term financial needs after retirement. Personal retirement planning depends on income and living expenses. Based on these elements, create a plan to manage money well. In order to fully utilise the savings and income, it is important to be financially literate.

In today's age of consumerism and an explosion of knowledge, youth seem to be the most targeted group of professional marketers and large organisations. In Malaysia, the age of youth is defined as those between 15 and 30 years old (Arfa & Esther, 2019). The 41.5% of total population in Malaysia were represented by youth in the year 2005. Personal retirement planning with prudence paves the way for them to a bright and secure future. It not only creates wealth for them, but also avoids debt and wasteful spending, which finally leads to financial soundness. It will enable them to live a magnificent life in retirement. Based on the research of Chai et al. (2019), financial literacy also helps to develop the skills and confidence of youth. This will make them become more aware of financial risks and opportunities. Besides, it can also improve their knowledge of financial markets, products, and concepts, and help them make informed decisions about how to generate and maintain a stable balance between the two for their cash inflows and outflows.

According to Chai et al. (2019), most of the people wish to improve their living standard over time. Some of them desire a comfortable lifestyle which doesn't need to worry about the money they spend. Meanwhile, some desire to upgrade their social status, house or car. A conscious plan is needed in order to make sure all these wishes become reality. There are only a few people who can make their wish come true by luck. Therefore, people should plan for it. Besides, personal retirement planning will also reduce the impact on you in the event of financial disasters. For example, when you are suddenly laid off or taken ill, you might face financial problems due to the insufficient savings to help you through these periods. These things can happen to anyone without any warning.

1.1 Research Background

Figure 1: Total Withdrawal from EPF



Source: From EPF (2019, 2020, 2021)

Employees Provident Fund (EPF) is one of the channels that can do your retirement planning (RP). EPF is the most common channel to start your RP and it's forced by the government. It manages the compulsory saving plan and RP for private sector workers in Malaysia. Which means at least you have the EPF as your RP if you don't have any other RP. The fund in EPF account can only withdraw when the withdrawer reaches the retirement age. In some specific situations, withdrawal can also apply to withdraw the money with valid reason.

In 2019, the Coronavirus pandemic swept the world, and Malaysia was also affected. The global economy is in crisis and people will constantly have to tap their savings due to financial stress. The graph shows the total amount that has been withdrawn from EPF in the past 3 years which is from 2019 to 2021. In 2019, the total amount that has been withdrawn from EPF is RM44.803 billion. Although the amount is slightly decreased compared with 2018, it still remains the average level. This is because the pandemic hit in the last quarter of 2019 in Malaysia and the economy is only gradually affected.

However, in 2020, the amount that withdraws from the EPF account increased to RM58.294 billion. The increase of around RM13.5 billion in that year due to the pandemic led to a sharp drop in Malaysia's economy. Therefore, the government is giving permission to the EPF account owner to withdraw the money from the EPF account (in a specific amount) in order to solve their financial problem. A lot of people withdraw from their account, not only the people who are facing financial problems, but also the people who aren't facing financial problems. The people who didn't face financial problems withdrew for prevention.

In the year 2021, the aggravation of the epidemic caused the total amount that withdrew from EPF increased to the highest level compared to previous years, which is RM101 billion. It was a very big increase which is around 73%. The continued deterioration of the epidemic has also resulted in no improvement in the economy. This has led to more unemployment and economic hardship. Therefore, when the government gives the permission again, the number of people that withdraw from EPF accounts are more than last year since the economy is getting worse and worse. In 2020 and 2021, a total of RM159.3 billion has been withdrawn from EPF due to the pandemic.

1.2 Research Problem

Based on a the journal by Masran & Hassan, the sample size of their studies is always a limitation that can be improved. The small sample size will increase the margin of error which will reduce the validity of the study (Deziel, 2018). However, the researchers do make sure that the sample size they conducted was appropriate to fulfil the theoretical framework. It is also suggested to have an amount of respondents from rural areas to take part in the questionnaire. With an equal number of respondents from urban and rural areas, the results will not be biased to any of the areas. Multi lingual of the questionnaire is also a suggestion given by Yi et al. (2019), Masran & Hassan (2017) with their experience when conducting research, this will greatly aid the respondents when they are answering the questionnaire, as they are able to answer the questionnaire with the language they are most comfortable about.

Furthermore, the wide array of investment products do work differently on individual profiles. Different people will have different financial ability and financial strength. According to , they suggested carrying out research where an individual's intention is targeting specific investment products for retirement purposes.

Research from Zulfaka, Auni & Kassim, Salina (2020), it is observed that external factors such as the economy are not included. It is a factor that will have an extension of affects towards the study. Many of the past researchers do suggest to include it as one of the independent variables (IV) that will have an affection towards RP. Although it will increase the validity and reliability of the study, not all of the respondents will view it as a factor that will affect their RP. At the same time, not all respondents do fully understand the meaning and existence of economy factor, moreover the relation between the economy factor towards the RP,

Besides that, the amount of mediator variables (MV) and IVs selected in past studies is limited. The limited amount of both variables is not able to provide an overall accurate result and bring out the full potential of the study. However, the more variables included, more time is needed in the studies. It is somehow a long term study to include as many variables as possible.

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1.3 Research Objective

1.3.1 General Objective

This study aims to identify the significant relationship among financial satisfaction of personal retirement planning (FS) with its determinants. For instance, RP, financial literacy (FL) and FSB are the three IVs that will be mentioned in the following chapters while education level (EL), income level (IL), and age (AG) stand as the MV through RP to its FS.

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1.3.2 Specific Objective

- i. To identify the significant relationship between RP and FS.
- ii. To identify the significant relationship between FL and FS..
- iii. To identify the significant relationship between FSB and FS.
- iv. To identify the significant relationship from RP through MV to FS..
- v. To identify the significant relationship from FL through MV to FS.
- vi. To identify the significant relationship from FSB through MV to FS.

1

1.4 Research Question

i. Is there a significant relationship between RP and FS?

ii. Is there a significant relationship between FL and FS?

3

iii. Is there a significant relationship between FSB and FS?

iv. Is there a significant relationship from RP through MV to FS?

v. Is there a significant relationship from FL through MV to FS?

vi. Is there a significant relationship from FSB through MV to FS?

1.5 Significance of study

1.5.1 Investors

This research is mainly organised to enhance the motivation and awareness of the public in adopting proactive retirement planning before their lives come to the stage. As the youth EPF contributors is the respondent to be examined through the entire research, hence, researchers do wish that this research can bring some extraordinary impacts to this particular group in order to provide them some extent of better understanding towards their financial circumstance which can apply the valuable findings for their future financial affairs. Although it seems to be far away for youth to retire after life, well prepared and constructed personal retirement planning will provide youth EPF contributors a better precise pathway when time is coming. Investors known as youth might be given the golden opportunities to appreciate their financial wealth when they react positively towards the findings.

1.5.2 Malaysia Government and Central Bank

Although the main objective of researchers to conduct this study is to identify the financial satisfaction of Malaysian youth EPF contributors in retirement planning which is only limited

to the specific Malaysia population. However, the government and the central bank could apply these findings from the research for any further usages or adjustments on adopting fiscal policies and monetary policies after reviewing the vital data needed to be considered before any decision making. For example, fiscal policies and monetary policies that can be applied by both parties. As an assumption, whichever policy will be made by both parties after taking into account the research findings would benefit the third party such as investors to gain financial appreciation on investments. For example, according to the monetary policy overnight policy rate (OPR) implemented by the Bank Negara Malaysia (BNM) during the period 5th November 2019 to 3rd March 2022, the lower the BNM overnight policy rate (OPR) from 3.0% to 1.75% during the COVID-19 enhanced the supply of ringgit in the Malaysia financial market which led to the stimulation of various stock prices. For those investors who had such an idea and took proactive action before the time came, he or she was taking advantage of it.

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1.5.3 Employee Provident Fund (EPF)

Employee Provident Fund (EPF) will be the third beneficial party from this study. EPF is suggested to review this research when they are implementing any policies that are related to youth since this research correlates with the objective of EPF which promotes employees to save funds for retirement later especially during any big event such as COVID-19 epidemic. Through this time epidemic, EPF might realise the current financial composition implemented by them did not fully support the members financial condition which lead the members far away from chasing their financial goal. For example, many contributors withdrew their funds during the difficult time to support daily expenses since little or no income was received as everyone was forced to stay at home. Hence, through the study output EPF might propose some adjustments on recent execution such as introducing extra financial tools or subtracting unnecessary implementations on EPF itself to best fit with objective. For instance, maybe in the future, EPF may adjust the principle on each EPF member account and allow some portion of the total fund to be allocated or expanded into another new sub-account which is known as self-control investment account for those who have sufficient expertise on investing with proof of competency.

1.5.4 Future Researchers

The researchers do suggest future researchers who will be doing the similar sector of study refers to this research findings to have some extent of ideas. Any future researchers who would like to continue the further study of the research are recommended to understand the current coefficients on the paper such as the theories, variables, conceptual framework, and type of analysis to organise an unique benchmark for their research. For instance, future researchers can add in new elements on current findings to extend the study to another stage like will the existence of different psychological and emotional behaviour on oneself affect the satisfaction of retirement planning.

1.6 Conclusion

Throughout this chapter, the researchers have explained the general ideas of conducting the research via introduction, research background, research problems, research objectives, research questions, and significance of study on the financial satisfaction of Malaysian youth on retirement planning during COVID-19. As a short recap for the contents mentioned above, personal financial planning is a process of managing funds as well as savings and investing. It includes budgeting, banking, insurance, mortgages, investments, retirement plans, and tax and estate planning. Personal financial planning is used to achieve personal financial goals whether it's meeting short-term financial needs, saving for a child's education or retirement plans. Based on the recent 3 years data from EPF 2019 to 2021 table, it showed that the total amount of EPF fund withdrawal was increasing from the year 2019 to year 2021 which achieved the highest withdrawal amount of RM101 billion ringgit due to the arrival of COVID-19 that led to financial problem among public. For the research problems a few problems have been listed out from the section such as limited sample size or unequal distributed sample between rural and urban areas might lead to result unideal, the exclusion of macroeconomic factors on research might not provide completed image on the result, the limitation of variables inclusion in one research study where only few variables can be inputted not all or as much as researchers want to due to the complexity issue. Research objectives and research questions did identify the significant relationship among the IVs such as RP, FL, and FSB, mediator variables such as education level, income level, and age through financial satisfaction on retirement planning. For the significance of the study, several parties such as investors, the government, the central bank, and future researchers do suggest to utilise the result for further usages. A short explanation on improvement approaches do illustrate in each party.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, several theories and variables that related to the research topic The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during the COVID-19 Pandemic will be proposed from the previous literature reading. The core theories such as life cycle theory, theory of planned behaviour, permanent income theory would play their role as guidelines to let the researchers identify which dependent variables are most suitable for the study. In the following subchapter, a conceptual framework will be proposed to indicate the relationship between the independent variable, demographic variables and dependent variables. Last but not least, few hypothesis developments will be introduced through the independent variable and dependent variables associated with demographic variables that were suggested in the previous subsection.

2.1 Review of Theories

2.1.1 Life Cycle Theory

There are three theories that will be applied in this research. One of them will be the Life cycle Theory. The application of this theory is to view the points in a person's life cycle at which a person has different views on decision-making based on financial literacy and income level. As a result, this affects the life cycle behaviour of retirement plans, in which lead to the achievement that priors on the supply of consumer demand over varies life cycles that is limited by individuals (Daniel, 1982). Different individual stages have different perspectives on the implementation of retirement plans. In the early stages of their life, individuals tend to be complacent about their retirement plans simply because this phase is far away for them, and their education level and financial knowledge further hampers them. With rising education levels and the increasing recognition of financial literacy brought about by real-life experiences, individuals tend to apply their own retirement plans. Same goes with their age. When you are in a younger age, for example in secondary school, you won't have an idea to do retirement planning even if you have learned the related knowledge in your school. When

your age gradually increases, and when you are slowly approaching retirement age, you will feel more and more important about retirement planning. The application of life cycle theory perfectly explains the different perspectives of decision-making at different stages.

2.1.2 Theory of Planned Behaviour (TPB)

The next theory that will be applied in this research is Theory of Planned Behaviour (TPB). This theory is implemented by the former researchers to identify and predict human behaviour which assumes that behaviours are immediately determined by behavioural intentions and under certain circumstances, perceived behavioural control (Ajzen, 1991). The planned behaviour theory claimed that the positive or negative (1) attitude towards actual behaviour which the individual's belief of the outcome to be received and assesses of the results, (2) subjective norms a motivation to achieve that hope for their normative expectations that are shared with the other, and (3) perceived behavioural controls which refer to the existence of things that support or inhibit such behaviour to appear and how strong the support or resistance are the three factors that will be affecting an individual's intention (Ajzen, 1991). TPB has been used in many past empirical studies. According to a past research from Nga, and Yeoh (2018) that identifies the relationships between behavioural factors and retirement planning, and examines the intermediation role of saving attitude between proposed behavioural factors and retirement planning. It was found that propensity to plan, and future orientation have a significant relationship with retirement planning behaviour while saving attitude mediates these relationships (Nga et al., 2018). However, family education and materialism don't have a direct effect on retirement planning behaviour of individuals (Nga et al., 2018). Another research study by Sharifah, and Zahariah (2021) concluded that financial behaviour is considered as the most influential component to the financial planning of working adults during the COVID-19 pandemic.

According to the study from Arifin (2018) on the influence factors towards financial satisfaction with financial behaviour as an intervening variable on Jakarta area workforce, it stated that financial satisfaction can be explained via the theory of financial behaviour which derived from the theory of planned behaviour (TPB). As TPB is explaining the level of an individual's beliefs on the result they have received due to certain behaviour performed by them, hence it indicates that the individual will decide whether to implement or not to

implement an action based on his or her level of confidence (Arifin, 2018). The confidence level will be aligned with the level of an individual's consciousness to behave. Once they have the level of consciousness, they will enrol into the stage of intensity or intention behaviour then at the end they enter the behaviour stage in the form of doing some action (Arifin, 2018). If the planned deed is successful, as a consequence it will get satisfaction from the results of their behaviour which is related to the recent research variables financial satisfaction and financial saving behaviour (Arifin, 2018).

2.1.3 Permanent Income Theory

The earliest Permanent Income Theory, which is from Milton Friedman, stated that “permanent income” is closely related with “permanent consumption”. In his research, the outcome can be observed through actual receipts and expenses during a certain period. As for the permanent income theory proposed by Truman Bewley, it is a bit different from Milton Friedman's. Mainly mentioning that the consumer's response on consumer's short term needs, income and also the inflation. However, with recent studies, Permanent Income Theory is actually theoritised based on two assumptions, (1) where consumer or individual will tend to smooth out their marginal consumption overtime, (2) consumer or individual will accumulate and decumulate their savings or assets to match with the income they having currently (Aguiar & Hurst, 2016). For example, an individual's mean income is RM2500 and mean expenses of RM2000 per month, he or she will save RM500 monthly. However, if the individual's income decreases to RM2300 due to some external reasons, he or she will have lower expenses and/or save less on that particular month where income is lesser than expected. According to Mark Aguiar and Erik Hurst, the Permanent Income Theory strives that an individual's consumption will be different based on the expected or unexpected income changes.

2.2 Review of Variables

2.2.1 Dependent Variable

2.2.1.1 Financial satisfaction in retirement planning

There are many meanings of financial satisfaction that have been said by former researchers. Financial satisfaction can be defined as an individual's subjective assessment of their financial circumstance as both a "sub-construct" or domain of subjective well-being and life satisfaction (DePianto, 2016) and it is as a paramount element of perceived economic standing (Kalleberg & Marsden, 2015). Financial satisfaction is defined as satisfaction of an individual's current financial condition and it is assumed to be a sub-component of general wellbeing (Murphy, 2016; Gerrans, Speelman, & Campitelli, 2017). A former study from Playnol (2017) on the financial satisfaction over the life course: the influence of assets and liabilities claimed that income is the most influential variable to determine the financial satisfaction where income influences financial satisfaction through the mediator of financial aspiration. After the literature reading from previous research studies, it found that the financial satisfaction and income level are suitable to be included in the current research variables where financial satisfaction can be considered as the dependent variable and income level acts as demographic variable to identify the intermediation relationship between independent variables with dependent variables. Not only that, previous literature normally located retirement planning as motive of conducting the research, however, financial satisfaction of retirement planning might be one of the methods to apply as the dependent variables after the consideration of former research findings while organising a new extension of study as well as to ensure the recent study is under the right track.

Attitude on behaviour does enhance the beliefs from satisfaction where the attitude will improve the way of thinking about something (Halim and Astuti, 2015). Attitude aligned with the approach of thinking about someone's financial affair is known as financial attitude (Halim and Astuti, 2015). Halim and Astuti (2015) indicated financial attitude as a state of mind, opinions and judgments about finances. If the individual's thoughts on finances are good, then he will have the intention to reflect on it, such as adjusting behaviour to start saving, investing and planning for finance matters to have a better life after (Halim and Astuti, 2015). If an individual treats money as a valuable tool, then the attitude on itself will respond to the individual having a healthy financial life and indirectly it will boost the quality of his or her life and will push up the financial satisfaction as well (Halim and Astuti, 2015). As the findings above stated that attitude can enhance one's satisfaction associated with the way of thinking, attitude or financial attitude seems to be one of the powerful influential factors that are related to current research topics. However, financial attitude would not be included under the new research study variable after the second phase of literature variables discovery due to the time

limitation for researchers to add on or amend financial attitude as the extra independent variables under latest study and successfully pass up the task before the deadline submission.

Some studies also said that financial satisfaction might bring an impact to great financial decisions process for well financial literacy. Joo findings (2017) reported that financial literacy is one of individual financial wellness along with financial satisfaction and financial behaviour. Xiao (2019) said that financial behaviour can be defined as human behaviour aligned with financial management which is related to an individual behaviour on managing his or her financial matters. Worthy, Jonkman and Pike (2015) and Xiao et al. (2019) claimed that if there is a positive and proactive response on financial behaviour after the school term thus it will provide an individual with better quality of life and higher financial satisfaction later life. Several findings above indicate financial literacy and financial behaviour are two aspects that can be applied to financial matters research when they are associated with financial satisfaction. As financial literacy and financial saving behaviour are recommended to be applied under any further research thus these two determinants will be added in the research independent variables.

Throughout the literature review on financial satisfaction, current researchers found that financial satisfaction provides the new idea of retirement planning which is still not familiar in the former research idea. The past studies always stop at the retirement planning stage. Therefore, current researchers would like to apply financial satisfaction as the dependent variable once doing the actual research at the coming chapter 1 to chapter 5. As researchers have gone through the review of literature, financial attitude considers as one of the beneficial variables that can be included under the research but due to the limitation of time or due date of submission paper for recent researchers to adjust their concern on variables, hence, recent researchers do recommend any future researchers who will be doing the similar topic might consider financial attitude under their financial matter research in the future.

2.2.2 Independent Variables

2.2.2.1 Retirement Planning

According to Kimiyaghalam, Mansori, Safari and Yap (2017), a retirement plan is a decision that an individual makes to prepare financially for retirement. Retirement plans require

individuals to make savings, investments, and spending plans based on income. However, not everyone is ready for retirement planning. Yusof and Sabri (2017) identify demographic factors that have a significant impact on the success of determining retirement savings. There is a suggestion that interventions in retirement plans should begin as early as possible and can be implemented through the provision of repetitive information in media and procedures provided by agencies.

Kepha (2018) studied the financial factors affecting the employee retirement plan in Nakuru, Kenya. The study concluded that financial factors are related to retirement plans. It is recommended to raise awareness of retirement plans by developing plans and policies. This study successfully explores female accounting in different cultural and social contexts, revealing nuances in the relationship between women and retirement savings (Willows & October, 2021). By reconceiving what black South African amaXhosa women's "retirement plans and savings" look like, the study disputed previous definitions and studies. The feminist accounting prevalent in this study underscores the importance of gender studies in accounting, and it should give a voice to different cultures that were previously suppressed by male accounting patterns.

According to Hoffmann and Plotkina (2020), retirement plans are becoming more demanding. Therefore, informing and teaching consumers how to manage their finances is a pressing policy issue. This urgency is pervasive not only in the United States, but also around the world. For example, in many European countries, pension reforms require consumers to make complex decisions when planning to supplement retirement income, and governments have established public pension platforms to help consumers access information, improve knowledge and advance retirement plans. According to Patel (2017), a significant relationship is concluded between financial planning and income level. People with higher income levels will have surplus in cash flow to do the retirement planning. With the right plan and plenty of savings, retirement can be a great time to pursue hobbies, travel, and relax. Lack of planning, on the other hand, can make people worry about every penny spent and wonder if the money will last a lifetime.

According to Shaharuddin, Sharifah and Zahariah (2021), no significant relationship exists between financial planning and gender. The amount of spending from male and female working adults most likely are the same. Females are not showing a better skill in their financial planning compared to male. Continuously, all independent variables, including financial

knowledge, financial behaviours and financial attitudes have a significant impact on personal financial planning by working adults.

In conclusion, most of the researchers found that retirement planning will be affected by plenty of factors. But one of the researchers found that gender will not influence financial planning or retirement planning. In my opinion, financial knowledge is the most significant factor that affects retirement planning. This is because people with any gender, age and income level, will fail to do the retirement planning or their retirement planning will be flawed if they are without financial knowledge.

2.2.2.2 Financial Literacy

The term FL can be known as the competency to identify the effective way to use financial skills such as personal financial planning, investing, budgeting for fulfilling various life goals (Jason, 2021). A previous research conducted by researchers Chai, Chin, Lee, Lum, and Yeo stated a positive significant relationship between the financial literacy and dependent variable financial planning. Throughout the analysis test the p-value gathered was 0.02 which is lesser than the alpha 0.05 and the demographic variables such as age, gender proved to influence the financial literacy and financial planning. This former research provides recent researchers with the fundamental knowledge on conducting the entire research since it is the most similar research that fits with current research at the same time it is also considered the nearest 2019 literature outcome. The research study from authors Chai, Chin, Lee, Lum, and Yeo was found to have a high similarity with the current research to be conducted, this former research would be utilised in many sort of approaches to enhance the final outcome of the new study such as to select the initial theories and variables as well as conduct the appropriate independent variables along with demographic variables to study the topic. Most of the variables would remain in the recent study such as financial literacy as an independent variable and age under the demographic variable.

Past findings have claimed that financial literacy does foster financial behaviour (Çera, Khan, Mlouk, and Brabenec., 2020; Nadzri & Yaacob, 2020; Yong, Yew, and Wee., 2018). These findings state that individuals who have enough depth in financial literacy are having higher chance to perform sound financial behaviour as compared to those with little or no financial knowledge (Çera, Khan, Mlouk, and Brabenec., 2020; Nadzri & Yaacob, 2020; Yong, Yew,

and Wee., 2018). For instance, rational saving, rational budgeting, rational investing and so on. An individual being a financial expert will let him or her have better understanding in financial choices (Mahdzan, Zainudin, Sukor, Zainir, Ahmad., 2019), thus it is encouraging the individual to adopt well-informed financial decisions. Based on the findings mentioned above, the existence of financial literacy was found to have a positive impact on financial matters. Therefore, there would be a high chance this determinant is going to add in the upcoming research as an independent variable.

Another study for private pension funds conducted in Klang Valley showed a positive and significant relationship among retirement planning and financial literacy where financial literacy was found to mediate the relationship between quality of financial advisers and retirement savings behaviour (Nga et al., 2018). This is appropriate evidence to claim that financial literacy is a paramount element in fostering more responsible financial practices. The truth that Malaysians nowadays have insufficient planning as well as inadequate savings for retirement is therefore symptomatic of weak overall financial practices such as accumulating excessive amounts of debts, overspending as well as low financial knowledge especially among the young (Asian Institute of Finance, 2015; Mahalingam, 2017). In the past study, the quality of financial advisers had been pointed out to have a mediation effect which links retirement saving behaviour and financial literacy to retirement planning. From the another word, quality of financial advisers can be inputted under the independent variable for recent study as well, but the recent researchers do not intend to do so since the question of whether all the targeted respondents will equally having the same opportunity to experience a financial advisor that assists their own financial affairs especially for the targeted respondents Malaysian youth whose aged ranging from 15 to 30 years old. Hence, the quality of financial advisors component was considered as an alternative variable in recent study independent variables if there is no other superior independent variable to support the topic. If there is another variable to utilise it, the quality of financial advisor will be eliminated.

However, a finding from Sabri, Juen, Othman & Rahim (2015) proposed the complexity and indirect effect among the financial literacy and retirement confidence would happen which supports by another statement from Braunstein & Welch (2002) said that introducing any financial literacy training with no strategic planning would not ensure a better financial wellbeing in the future. Asian Institute of Finance (2015) discovered that Malaysia Generation Y has weak financial education as more than 50% of respondents claimed that they were having

mean financial literacy while 28% of them saying that they were confident in dealing with their own financial affairs (Tie & Nizam, 2016). This result tells that although the respondents have some extent of financial knowledge, they still do not understand the beneficial effect of retirement planning. A research completed by Bosanac (2016) tells the researchers that the Canada youth who aged around 18 to 33 are not knowledgeable in retirement planning and 40% of Canada youth admitted that they do not want to learn the knowledge on investing due to the feeling of being useless for their future retirement. The finding above said that retirement confidence might not immediately give the output to financial literacy due to the complexity and indirect effect of itself therefore current researchers would not include the retirement confidence to question financial satisfaction under the recent study conceptual framework.

Throughout the literature review on financial literacy by recent researchers, the current researchers fully utilise the previous research conducted by researchers Chai, Chin Lee, Lum, and Yeo (2019) on the perspective of youth in relation with RP in Malaysia as a reference to conduct the study. Some theories and variables in this research found appropriate to be used such as financial literacy as an independent variable, age under demographic variable. The recent researchers found that although the quality of financial advisors can be considered as one of the variables to be included under the recent study, it seems to be of limited effect to a specific group of population as not everyone can deserve for a qualified financial advisors for managing their finance due to some external factor such as income condition. Hence, the quality of financial advisors will be eliminated if there is another best variable to alternate it. Current researchers would not include the retirement confidence inside the latest study too due to the complexity and indirect effect of itself.

2.2.2.3 Financial Saving Behaviour

Based on the study from Hsion and Dambaravdan (2016) that focused on the family saving behaviour as well as personal saving behaviour, the output claimed that the results were significantly positive. It suggested that individuals that have a good financial saving behaviour will have a higher possibility to adopt retirement planning via diversification such as involving a variety of investment instruments like bonds, stocks, short-term investment and so on which allow them to fulfil their financial goal (Hsion et al., 2016). The research did conclude that personal saving behaviour in Taiwan is the core reason affecting financial planning which

collected the data through Taiwan Financial Supervisory Commission (FSC). The study wholly consisted of youth respondents (Hsion et al., 2016). This result shows to current researchers that financial saving behaviour might be considered as the independent variable to be included under the study since current research does go through the process of independent variables to demographic variables then estimates the financial satisfaction at the end of study.

Another research conducted by Hong Kong and Shanghai Bank (2013) on Malaysia financial planning concern found the significant relationship between individual financial preparedness and competency to have a good saving behaviour. Malaysia was extremely poor in retirement planning or financial saving behaviour (HSBC Insurance Holding Limited, 2013). The study declared that Malaysia retirement preparedness is still lacking as compared to other peer countries and due to the unstructured or non well-constructed knowledge on financial matter commonly most of the population would entirely rely on their EPF for retirement after life which could be inadequate because of minor savings during employment time (HSBC Insurance Holding Limited, 2013). In this case, financial preparedness was pointed out as a variable to be considered to put inside the recent research. Current researchers would like to include financial preparedness inside the determinants but due to the lack of time remaining for research completion, researchers are forced to let go of this variable after the second time of reviewing in literature review.

However, the finding by Social security study group members (2018) claimed that an actual image of financial need against retirement planning was not proven by the ongoing process of investment and saving behaviour. Their research stated that regardless of how large portion respondents used for savings, they would not use it for retirement later. Based on Kimiyaghalam et al. (2017) findings, it indicated inadequate research experiment on confirming that savings behaviour is positively causing a significant effect towards retirement planning. It shows that FL and tendency against the future correlation with RP resulted in a partial intermediation relationship with the involvement of FSB in the finding. These 2 findings are against the previous findings by other researchers where it claimed that financial saving behaviour might not really bring effect to retirement planning regardless of amount saving and hard to confirm the relationship between saving behaviour with retirement planning. It might be arguable on which are the factors that lead financial saving behaviour to be significant at some findings and at the same time insignificant at other studies. Current researchers still would like to go through the process to prove the significant relationship among financial saving

behaviour with the financial satisfaction to figure out why it shows insignificance in some studies.

Throughout the financial saving behaviour literature review process, it found that financial saving behaviour can be considered as the independent variable to be included under the study since current study does go through the process of independent variables to mediator variables then estimates the financial satisfaction at the end of study. Another potential variable financial preparedness does stand out to be covered under latest research but due to the limitation of recent researchers on conducting the research, financial preparedness is not allocated under the current study. There are also some previous researches claiming that saving behaviour may not support the existence of retirement planning. Hence, current researchers should struggle themselves to find out the unideal reasons that led to the insignificant study.

2.2.3 Demographic Variables

2.2.3.1 Education Level

According to Auni and Salina (2020), the education level has a significant impact towards the retirement fund or retirement planning. Same goes as Lu et al. (2021), based on their research, the education level was significantly influencing the retirement planning. This is because without the knowledge, it won't be successful in doing any plan. The retirement planning needs to calculate the income, expenses and so on. Therefore, education attainment is important in retirement planning. The research from Jee (2019) shows that there is a significant relationship between education level and retirement planning. The people who own a higher education level will be more confident in their retirement planning. Confidence is an important element that leads to success in retirement planning. When you are confident, then you will make the right decision other than do what other people say.

A significant relationship is proved to be exist between education level and retirement planning (Muhammad & Hafinaz, 2017). With proper education and information from the government, individuals can still have better retirement plans if they realise the importance of early retirement plans, so they will take further action to ensure they can meet their financial needs after retirement. Mansor et al. (2015), there is a significant relationship between education level and retirement planning. An individual who has a higher education level is more likely to know

the importance of financial planning. He will know how to plan in order to get the lifestyle he wants after retirement. People with higher education are indeed more likely to know how to do a good job of financial planning.

Nyoro and Otieno (2016) found that education level significantly influences retirement planning. The people who have a lower education level will have insufficient preparation for retirement. People with lower education levels might not have a clear understanding on retirement planning, therefore, insufficient preparation will occur. According to Lee & Kuttyzhlova (2016), education level showed a significant relationship between education level and retirement planning. Education level has a significant impact towards retirement planning (Fadila & Alam, 2016). Employees with higher levels of education score higher on average when adapting to retirement. Those who have higher levels of education have higher chances to succeed in their retirement planning since their knowledge is more than those who have a lower education level.

However, Chai et al. (2019) indicated that education level showed an insignificant relationship to retirement planning. In this research, not only did people with higher education want to do retirement planning, but people with lower education also wanted to do retirement planning. In my point of view, some people with lower education also want to do retirement planning but just some of them, most of the people with lower education level will focus on their current condition and less to think about the future. According to Lee et al. (2018), education level will not significantly influence retirement planning. Based on Selvadurai (2018), education level has an insignificant impact towards the retirement planning. The success of retirement planning will not be affected by how high your education level is. I believe that higher education levels will have a higher chance in the success of retirement planning. At least some knowledge that they learn might relate to finance, personal finance or retirement planning, it will be better than without this kind of knowledge.

In conclusion, most of the researchers found that education level is important and it significantly influences retirement planning. There are 3 researchers who found that education level is not important and it insignificantly influences retirement planning. In my opinion, I think that education level is important in retirement planning. This is because those with higher education levels will have more chances to gain the knowledge that is related to personal finance or retirement planning. Therefore, they are more likely to do retirement planning and have a higher chance of success in retirement planning.

2.2.3.2 Income Level

The research of Auni and Salina (2020) show that there is a significant relationship between income level and retirement planning. It is believed that income level appears to be an important determinant. The people with higher income will have extra money to do their retirement planning. Lu et al. (2021) found that income level has a significant impact towards retirement planning. People with higher income levels are more likely to have retirement accounts. It is indeed high incomes mostly accompanied with high expenses. Therefore, they will plan their retirement planning properly in order to cover their higher living cost after retirement. Based on the research of Jee (2019), the income level was significantly influencing the retirement planning. People's confidence level can strengthen their expectations for the future. Meanwhile, income level is one of the elements to increase confidence level. For sure the people with higher income levels will be more confident in their financial planning since they will not worry about the money and plan the best retirement planning that they want.

Chai et al. (2019) found that there is a significant relationship between income level and retirement planning. Same goes as Sze et al. (2021), based on their research, the significant determinant of retirement planning is the variable income level. It fosters a conceptual model of retirement saving behaviour that enables individuals to plan their retirement lives well. People with higher income levels will have additional money to do retirement planning but for those who have lower income levels, they can only focus on their current situation. It's not that they don't think ahead, it's that they have to focus on the present because they also don't have the extra money to plan for the future. According to Shariff & Isah (2019), income level has a significant impact towards retirement planning. Income level seems to be an important determining factor. Respondents with higher income levels are believed to be inclined to save more compared to those with slightly lower incomes. As mentioned above, those with lower income might have to focus on their current financial problems instead of the future. Based on the research of Mansor et al. (2015), income level was significantly influencing retirement planning. People with higher salaries often go into retirement planning because they don't have to deal with financial stress right now and have extra time and money to plan.

Income level is indeed causing a significant effect against the way of retirement planning (Patel, 2017). Same goes as Nyoro and Otieno (2016), they indicated that there is a significant

relationship between income level and retirement planning. The people who have a higher income level will prepare for their retirement. High earners may follow suit because they see other high earners doing retirement plans. And lower earners may see that other lower earners have no retirement plans, so they don't care about retirement plans. Based on Olejnik and Bialowas (2016), retirement planning will be significantly influenced by income level. The retired group mostly agreed that income level is important in retirement planning. The current retirement group may be in a recession when they are still in the labour force. After all, it was also in the 1960s and 1970s. It may be a problem to fill their stomachs, not to mention retirement plans.

However, according to Thakur et al. (2017), there is an insignificant relationship between IL and RP. The analysis showed that most of the respondents regardless of age; income and occupation want to retire in the next 20 years and above. In my point of view, the people with lower income levels have plans to retire but they don't have a proper plan for their retirement. They might not have sufficient money when they retire due to improper retirement planning. Income levels do not fundamentally affect retirement plans, although they are inversely related to retirement plans (Kepha, 2018). Given the inflation rate in our country, what you could buy for RM100 before is really very different from what you can buy for RM100 now. Prices are rising at a rapid rate, and wages are rising at a rate that does not match the rate at which prices are rising. Therefore, I think the income level is actually influencing the retirement planning because the extra money that lower earners own is decreasing.

In conclusion, most of the researchers found that income level will significantly influence retirement planning. There are 2 researchers who found that income level is insignificantly influencing retirement planning. In my opinion, I think that income level is important and it has a significant relationship with retirement planning. This is because the people with higher income of course have time or extra money to plan for their retirement. But for those lower earners, they may be struggling with their current life, let alone planning for retirement.

2.2.3.3 Age

Age is one important independent variable that needs to be included, based on previous research regarding retirement planning. According to the past research by Yi et al. (2019) Life Cycle Theory is a consumption related model that is meaningful to retirement savings research.

Individuals will have the intention to plan their finances which is consumption, earnings and also savings. When people are in the youth stage (age ranging from 20 - 34), they are more attracted to technologies, gadgets and entertainments over retirement savings, so they will tend to spend more rather than saving. While people are in their middle age (ranging from 40s - 50s), people will have the thoughts of retiring early and have a more relaxing life, indeed they will prefer to save their money in their retirement. These statements above will need to be based on the assumption where all individuals prefer to have a stable lifestyle.

Based on the studies provided by Fan, Stebbins, & Kim, (2021), which their study is about the financial hardship and retirement planning behaviours. Through their research, it found out that age shows a positive relationship with the probability of having a retirement account. Furthermore, their analysis about the retirement account ownership resulted in Millennials and Boomers that reported it was challenging to find ends meet were more likely to evaluate retirement needs than those who found no difficulty in doing it. Among GenXers, only those who said they were struggling to make ends meet were considered to count their own retirement needs more. Additionally, Boomers that considered over-indebtedness are closely connected on the chances of estimating their retirement needs. When going through the journal, it found out that it is a recommended study where it included individuals from different generations, and able to look at their different perspectives on retirement planning. However, in this research it will mainly focus on the youth which age around 20 to 34 years old (definition of youth according to the National Youth Development Policy of Malaysia), as the study mainly covers for youth in Malaysia. It is curious to know about the perspective of the youth in Malaysia on retirement planning that leads to financial satisfaction.

Based on the research by Mohd Talib and Abdul Manaf (2017), the results of their study indicates that the financial resources seems to have an influence on a good attitude towards retirement planning, mainly for those in their forties and fifties (middle age group). According to the research, Malaysians reach their peak savings between the ages of 46 and 55. Overall, there is evidence that Malaysians smooth their spending across their lifetimes and tolerate any significant drops in their standard of living which is closely related with the Life Cycle Theory. We can observe that their financial planning approaches are based on this perspective, and they include spreading consumption across time and across circumstances over the course of an individual's whole life cycle. This study acts as a reference on youth regarding retirement

planning, as it may be able to find whether age really affects the amount of savings and retirement planning satisfaction with their current and expected savings.

According to research by Zulfaka and Kassim (2021), age has been shown to have a major impact on financial literacy and retirement planning. It appears that as people become older and gain more financial literacy, they will be more motivated to prepare for their retirement. People's ages will impact their ability to receive more information from their surroundings and this will make them aware of the need for retirement preparation, which is another implication from the Life Cycle Theory. Besides that, age has become an important and consistent predictor in human behaviour when it comes to retirement plans. Pre-retirees and persons in the process of retirement planning are influenced by their age. This will lead to changes in retirement mindset and acknowledgment, as well as increased retiree's confidence in retirement. Moreover, age is also closely related with saving behaviour and retirement planning. This suggests that people in their latter years are more conscious of their saving habits, which might lead to retirement planning. Saving behaviour is a more preferable habit to older people, whose goal is to ease up their retirement plan. After the economic crisis and pandemic, more and more older people realise the importance of savings, which thus leading them to think of having a better retirement in their future life. However, a different approach is seen in this study, in which the effect of retirement planning mindset by the COVID-19 pandemic not only affects older people, younger people will be affected as well. It will further be proven in this study as well on the satisfaction of younger people's retirement planning.

Referring to Zandi et al. (2021), the control variables in their study, which is one if it is age, have a big impact on the probability of having a retirement plan. The results show that younger generation respondents are likely to have a retirement plan rather than those who are older than them. These studies proved that the younger generation do have their own awareness of retirement planning, which is really different from other studies that proved the older generation or individuals in their middle age (40s - 50s) will have stronger retirement planning awareness. With the result of this study, further improvement and the investigation of the financial satisfaction towards retirement planning among youth is needed. Expectation to look further into financial satisfaction and the relationship between retirement planning is important as well.

2.3 Conceptual Framework

This research insisted on studying the significant relationship between RP, FL, FSB, EL, IL, and A on the financial satisfaction of retirement planning among Malaysian youth EPF contributors during the COVID-19 period.

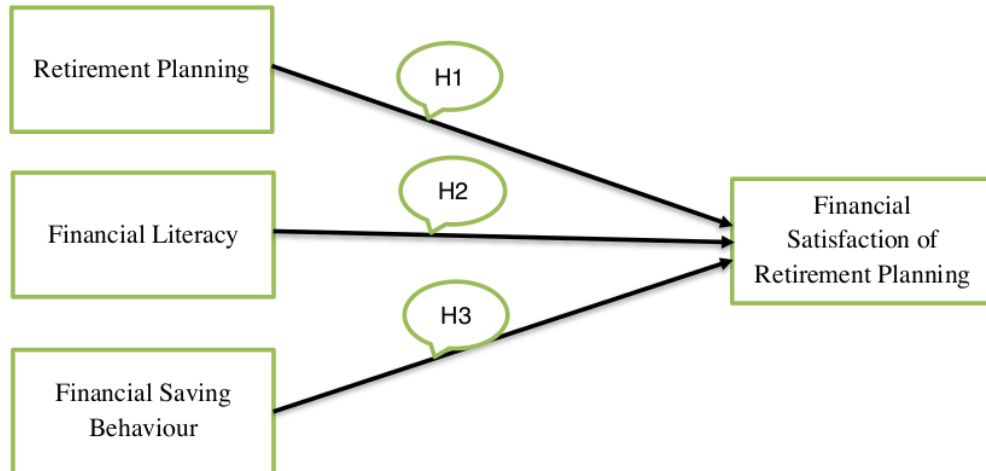


Figure 2: Significant Relationship between IVs and DV

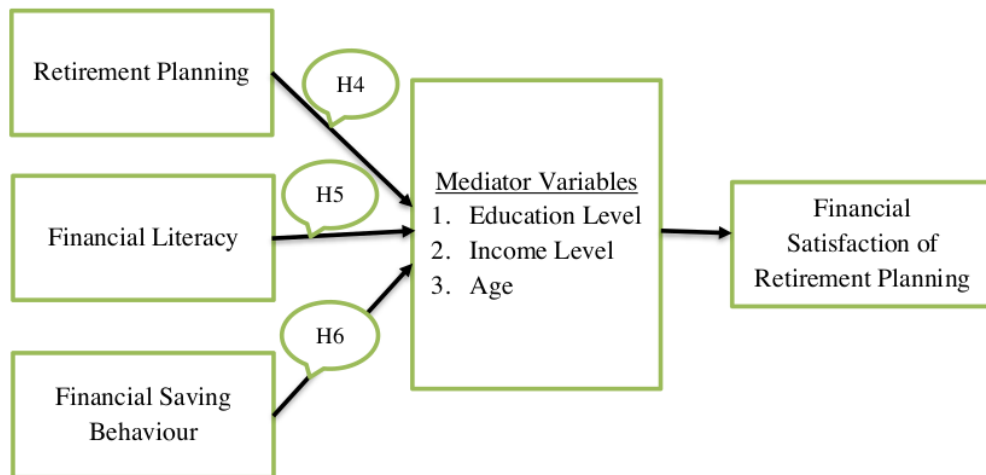


Figure 3: Significant Relationship from IVs through MV to DV

Based on the figure 2 and figure 3 above, there are three independent variables that will be applied through the entire research study which can be known as IV1 retirement planning, IV2 financial literacy, and IV3 financial saving behaviour. These three independent variables will be executed in two totally different processes to identify the effect of demographic variables. Figure 2 indicates the direct effect between independent variables and dependent variables to answer the hypotheses 1 to 3 whereas figure 3 includes the existence of mediator variables to answer the hypotheses 4 to 6 that would be mentioned in the following 2.4 Hypotheses Development subchapter. Broadly speaking, each independent variable will be tested twice to identify the occurrence of mediator variables such as MV1 education level, MV2 income level, and MV3 age to the dependent variable DV financial satisfaction of retirement planning to determine whether there are any changes between with and without the mediator variables to the final outcomes in data analysis chapter. The independent variables of IV1 retirement planning as well as IV2 financial literacy are well explained by the life cycle theory while the theory of planned behaviour (TPB) for IV3 financial saving behaviour. For the three mediator variables, MV1 education level is interpreted through theory of planned behaviour (TPB) whereas MV2 income level by permanent income theory, and MV3 age by life cycle theory. In spite of that, the dependent variable DV financial satisfaction of retirement planning is illustrated by the theory of planned behaviour (TPB) too.

Generally, hypotheses 1 to 3 represent the testing of a significant relationship between its independent variable through the dependent variable financial satisfaction of retirement planning, however, when it comes to hypotheses 4 to 6, it might be a little bit diverse. For instance, hypothesis 4 will be testing the significant relationship starting from independent variable IV1 retirement planning through each of the three mediator variables MV1 education level, MV2 income level, and MV3 age thus to the dependent variable DV financial satisfaction of retirement planning. IV1 Retirement planning is going to test each of the mediator variables via the supportive research instrument questionnaire. In the mediator variables section inside the questionnaire each determinant such as education level will specifically list down at least one question regarding the retirement planning with its dependent variable in order to successfully examine the significant relationship between retirement planning, mediator variables, and financial satisfaction. It does apply to another two independent variables financial literacy as well as financial saving behaviour when answering hypotheses 5 and 6.

2.4 Hypotheses Development

2.4.1 RP and FS

According to Gutierrez and Hershey (2015), retirement planning is a process of financial planning for the after-employment period which requires knowledge and goals that are well established so that strategic action and behaviours will be specifically designed to achieve those goals. Financial satisfaction in terms is the satisfaction gain related to finances. This is greatly supported by statements where promotion and advancement that further leads to greater financial compensation, will mostly have a positive effect on financial satisfaction (Tharp, Seay, Carswell, & MacDonald, 2020). Our study is mainly discussing the relationship between retirement planning and financial satisfaction of retirement planning, as the availability of retirement planning will let Malaysian youth EPF Contributors feel safe and secure, which will have a financial compensation effect when they are in their retirement.

H0: There is no significant relationship between RP and FS.

H1: There is a significant relationship between RP and FS.

2.4.2 FL and FS

Financial literacy is proven to have a relationship with retirement planning, as is proven in research such as Mahdzan, Mohd-Any, and Chan (2017) and Xiao and Porto (2017). As there is an increase in financial literacy, it will have a positive impact in retirement planning. However, this study is mainly focusing on the financial satisfaction of retirement planning, in which financial literacy and retirement planning act as independent variables.

H0: There is no significant relationship between FL and FS.

H1: There is a significant relationship between FL and FS.

2.4.3 FSB and FS

Related with saving behaviour, studies from Ahmad Zazili et al. (2017) stated that there is a positive strong relationship between the saving behaviour and retirement planning. As well from Abdul Kadir et al. (2020), their studies have proved that saving behaviour has a positive relationship on retirement planning among working individuals in Klang Valley. The personal

saving behaviour is a good indicator for a better and secure retirement experience. Besides that, studies from Masran and Hassan (2017) also do recommend the Malaysian government to raise the awareness to Malaysian Gen-Y workers that personal saving behaviour leads to a more successful retirement planning. In this study, the relationship between FSB and FS is a further extension to the relationship between FSB and RP.

H0: There is no significant relationship between FSB and FS.

H1: There is a significant relationship between FSB and FS.

2.4.4 Significant relationship between MVs, RP and FS

Mediator variables also known as demographic variables, which include education level, income level and age. From the research of Yusof and Sabri (2017), the results show that there is a relationship between age and retirement planning. They agree that age is very important and that being young is not conducive to retirement plans. This is because younger people will have less knowledge about retirement planning. According to Kepha (2018), the result shows a relationship between income level and retirement planning.

H0: There is no significant relationship from RP through MV to FS.

H1: There is a significant relationship from retirement planning through mediator factors to financial satisfaction of retirement planning.

2.4.5 Significant relationship between MVs, FL and FS

According to Nyoro and Otieno (2016), the result shows a significant relationship between education level and financial literacy. People with lower education levels will lack financial literacy, therefore might have less retirement preparation time. According to Mansor et al. (2015), EL has a significant relationship with financial literacy. An individual who has a higher education level is more likely to own financial literacy as well. They are more understanding about the importance of financial planning and retirement planning.

H0: There is no significant relationship from FL through MV to FS.

H1: There is a significant relationship from FL through MV to FS.

2.4.6 Significant relationship between MVs, FSB and FS

Based on the research of Lu et al. (2021), there is a significant relationship between income level and financial saving behaviour. This is because people with higher income levels are more likely to have a retirement account. Therefore, people with higher income levels are more likely to own financial savings. According to Fan, Stebbins & Kim (2021), age shows a significant relationship with financial saving behaviour. Elder individuals have a higher probability of owning a retirement account compared to younger individuals. In other words, older individuals understand the importance of saving, therefore they are more likely to have the financial saving behaviour.

H0: There is no significant relationship from FSB through MV to FS.

H1: There is a significant relationship from FSB through MV to FS.

2.5 Conclusion

The retirement planning that further leads to financial satisfaction is the final and main objective of our study. We would like to find out whether the youth EPF contributors in Malaysia are satisfied with their financial satisfaction on retirement planning that is affected by 3 independent variables: retirement planning, financial literacy, and financial saving behaviour and also the demographic variables (income level, education level, age). Previous studies have proven the relationship of retirement planning, financial literacy as well as financial saving behaviour with retirement planning along with the demographic variables. We found out that most of the studies came to a halt on the retirement planning. Therefore, we would want to emphasise that the financial satisfaction of retirement planning will be a key point rather than retirement planning as a new approach which is mediated by the demographic variables.

CHAPTER 3: METHODOLOGY

3.0 Introduction

Chapter 3 will be the methodology that is about the data collection methods, data analysis tools, research design, and sampling design. This is one of the crucial parts where data experiment and analysis happened to represent what it is meant in Chapter 2 in the form of formulas and numbers. Besides that, this chapter will be introducing how research will be carried out to determine the relationship between retirement planning and financial literacy, financial saving

behaviour with the help of mediator variables (Education level, income level, and age), and how it affects financial satisfaction of youth in Malaysia.

3.1 Research Design

This is the part where it is included in the overall framework of research methods that are used to consolidate the different parts of a study in a logical way. It also provides the researcher with an idea of choosing the research methods that are suitable for the independent, dependent, and demographic variables. The research design included the elements for the type of research which is mainly survey research, experimental, semi-experimental, and review, it also further includes the sub-type which are descriptive case-study and experimental design.

A recommended research is not to make the least biased data as possible and increase the trust level in the accuracy of the data collection. The essential elements of a good research design included:

1. Accurate propose statement
2. Implementation techniques for the data collecting and research analyzing
3. Methods implied for the analysis of collected details
4. Settings for the research study
5. Measurement of analysis

The elements above will be covered in Chapter 3 which is the research methodology in the next few sub-chapter.

3.1.1 Primary Research

In between primary research and secondary research, we thoroughly think that primary research is more suitable for our research. There is a need to collect the responses and data samples directly from the respondents instead of focusing on the available existing data from past researchers. Besides that, the primary research which is also called as field research is said to be an efficient way to collect content-specific data regarding a particular topic. Those data

samples that gathered through primary research are proved to be more accurate and realistic in the research environment.

3.1.2 Quantitative research

A form of systematic, logical kind of investigation on gathered measurable data in the formation of statistical, mathematical techniques is actually quantitative research. It is usually collected through sampling methods such as questionnaires, online surveys and others. Quantitative research is very common in social science and financial research to collect quantitative data for research investigation. After obtaining those data, researchers will then apply mathematical frameworks and theories to refer to their specific quantity based on their research.

3.2 Sampling Design

3.2.1 Sampling Technique

Sampling is a method that allows researchers to infer demographic information from the results of a subset of the population without having to survey each individual. Reducing the number of individuals in a study can reduce costs and workload and may make it easier to obtain high quality information, but this must be balanced with having a large enough sample size and sufficient capacity to detect true associations.

The sampling technique that will be applied in this research will be a simple random sampling design. This sampling technique will be more effective when selecting a tiny fraction from the total population. It will represent the population in a smaller picture. Every element will pass the fair selecting process from the sampling frame by a random program with equal probability (Marko, Paul, Abdel, & Sebastian, 2017). Since the results that come from a small proportion will be like the population, therefore, simple random sampling will reduce the period of research.

3.2.2 Target Population

Population that the intervention intends to study and draw conclusions from is so-called the target population. The definition of youth in Malaysia is between 15 and 30 years old (Arfa & Esther, 2019). As mentioned in the previous part, the target population in this research will be the youth EPF contributors (15 – 30 years old) from every state in Malaysia. There are 13 states in Malaysia, which are Penang, Pahang, Perlis, Perak, Kedah, Kelantan, Terengganu, Selangor, Negeri Sembilan, Malacca, Johor, Sabah, and Sarawak. The target population is limited to youth who are currently employed and contribute to EPF during the COVID-19. For instance, these three categories of targeted respondents would be classified as the valid respondents: (1) “they are having EPF accounts, but unfortunately they had been laid off from the past until now (contributed to EPF until COVID-19)”, (2) “they are having EPF accounts, but unfortunately they had been laid off from the past and recently have rejoined the workforce (contributed to EPF before and after COVID-19)”, and (3) “they are having EPF accounts and did not affect by the occurrence of COVID-19 (fully contributed towards EPF)”. Besides, this research is not limited to the gender, both male and female will be our target population.

14 3.2.3 Sample Size

Sample size is a term used to define the number of subjects included in a sample size. Through the sample size, we learned about a group of subjects selected from the general population and were considered representative of the real population of that study. In this research, the sample size will be estimated by using Yamane formula. (year table source)

$$n = \frac{N}{1 + N(e^2)}$$

$$n = \frac{9187000}{1 + 9187000(0.05^2)}$$

$$n = 400$$

Based on this formula, the confidence level is 95% and p-value is 0.05. The total population among Malaysian youth between 15 to 30 years old is 9187000 people. The data is collected from the Department of Statistics Malaysia Official Portal 2020. As a result, the suggested sample size will be 400 respondents.

3.3 Data Collection Methods

Primary data collection and secondary data collection are the only two ways of data collection methods. Both methods allow researchers to identify the described hypotheses and research questions after the sufficient data have gone through the data analysis process. As current researchers are doing study on the financial satisfaction of personal retirement planning among Malaysian youth EPF contributors during the COVID-19 time frame, hence, recent researchers tend to collect those data through the first method primary data in order to collect the real time statistics derived by researchers themselves since primary data is a more reliable, authentic and objective way of data collection and it has not been amended by human beings thought. Therefore, this method is more effective and meaningful as compared to the secondary data.

By using primary data, the recent researchers will have entire control over the research design, sampling design, and data collection methods such as to conduct a specific primary data that best fit with the current study from the viewpoint of target population, sampling techniques, sample size and so on. For example, types of primary data such as surveys, observations, experiments, questionnaires, and personal interviews.

3.3.1 Research Instrument

As there are many types of primary data such as surveys, observations, experiments, questionnaires, and personal interviews, after the discussion from recent researchers themselves, the questionnaire method will be conducted to collect the primary data from targeted respondents and due to its efficiency concern on the collection process where huge amounts of statistics to be collected in a short time to ensure the study will not affect the deadline submission of the research or time matter, the current researchers tend to implement the questionnaire through online platform where the questionnaire will be created and shared to targeted respondents via “Google Form” questionnaire through a variety of social media platforms such as Facebook, WhatsApp, Messenger, Microsoft Teams and so on.

3.3.1.1 Questionnaire Design

The questionnaire will be conducted through the online channel “Google Form” questionnaire after the consideration of time concern. In order to maximise the credibility and reliability of its questionnaire, it will be designed by referring to the real world personal financial evaluation form such as insurance company risk assessment form or previous research questionnaires examples. The questionnaire for the topic the financial satisfaction of personal retirement planning among Malaysian youth EPF contributors during the COVID-19 will have a total of 40 questions which included the dependent variable, independent variables, and demographic variables in its questionnaire.

Nevertheless, three questions regarding the targeted respondents' demographic states profile, EPF accounts status and EPF contributions during COVID-19 will be asked before entering the 40 questions to further verify the validity of respondents while at the same time providing its unique feature of research as compared to others which only focused on Malaysian Youth rather than Malaysian Youth EPF contributors. When answering the questionnaire, targeted respondents are required to fill in the blank on which state they are staying during the epidemic, declaring whether they are having EPF accounts and during that period what were their job status such as “they are having EPF accounts, but unfortunately they had been laid off from the past until now (contributed to EPF until COVID-19)”, “they are having EPF accounts, but unfortunately they had been laid off from the past and recently have rejoined the workforce (contributed to EPF before and after COVID-19)” or “they are having EPF accounts and did not affect by the occurrence of COVID-19 (fully contributed towards EPF)”.

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For the 40 questions, there will be separated into three sections which include Section A, Section B, and Section C. Section A consists of dependent variables financial satisfaction, Section B stands for IVs such as RP, FL, and FSB, while Section C contains the existence of demographic variables such as education level, income level, age on the involvement of independent variables to answer the hypotheses 4 to 6 mentioned in chapter 2 earlier. Throughout the 40 questions asking from the questionnaire, seven questions are allocated to Section A financial satisfaction, 18 questions for Section B where six questions for retirement planning matter, seven questions on financial literacy, and five questions for financial saving behaviour, 15 questions for Section C where five questions are equally distributed to each demographic variables education level, income level, and age.

3.3.1.2 Questionnaire Construction

For the questionnaire construction, three questions regarding the demographic states profile, EPF account status and job status will require targeted respondents to fill in the blank whereas the other 40 questions on the variable measurements of Sec A, B, and C will be conducted through 5 point Likert Scale. The usage of 5 point Likert Scale digit 1 to 5 will represent as follow:

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

3.3.1.3 Questionnaire Details

At the beginning of the questionnaire collection these three fill in the blank questions allow researchers to have an initial determination whether the respondents who are currently filling the forms would be categorised under its targeted qualifications in order to avoid any non related data as well as to guarantee its eligibility and research validity since the data taken will be used for further data analysis later:

1. Which state are you staying at during the COVID-19 epidemic?

Which state:

2. Do you have an EPF account?

- Yes
- No

3. Based on the previous question, which stage did you belong to during the COVID-19 pandemic?

- You are having an EPF account, but unfortunately you had been laid off from the past until now (Contributed to EPF until COVID-19).

- You are having an EPF account, but unfortunately you had been laid off from the past and recently have rejoined the workforce (Contributed to EPF before and after COVID-19).
- You are having an EPF account and were not affected by the occurrence of COVID-19 (Fully contributed towards EPF).

Once the respondents successfully to be determined as our research targeted respondents thus the following 40 questions which covered three sections from Section A to Section C for our research DV, IVs, and MVs will be applied to identify the research significant relationship as mentioned earlier in specific objectives, research questions, and hypotheses development by using 5 point Likert Scale where digit 1 to digit 5 represent as follow:

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

Section A: Dependent Variable

Financial Satisfaction of Retirement Planning (refer to appendix)

1. Statement FS1
2. Statement FS2
3. Statement FS3
4. Statement FS4
5. Statement FS5
6. Statement FS6
7. Statement FS7

There would be a total of seven questions allocated to this section. The motive of researchers conducting such questions in the questionnaire is to identify the current feeling of each targeted respondents towards the impact to their current lifestyle where it does allow researchers to identify targeted respondents' financial satisfaction on retirement planning during the COVID-19 profile whether they would react similarly or diverse as the occurrence of COVID-19 has affected much more extreme than previous historical time from financial, behaviour, and other matters.

Section B: Independent Variables

IV1: Retirement Planning (refer to appendix)

1. Statement RP1
2. Statement RP2
3. Statement RP3
4. Statement RP4
5. Statement RP5
6. Statement RP6

IV2: Financial Literacy (refer to appendix)

1. Statement FL1
2. Statement FL2
3. Statement FL3
4. Statement FL4
5. Statement FL5

6. Statement FL6

7. Statement FL7

IV3: Financial Saving Behaviour (refer to appendix)

1. Statement FSB1

2. Statement FSB2

3. Statement FSB3

4. Statement FSB4

5. Statement FSB5

Section B is entirely focused on the illustration of independent variables, thus, a total number of 18 questions which can be separated to six questions for retirement planning IV1, seven questions for financial literacy IV2, and five questions for financial saving behaviour IV3 would be asked. As the observation above, all the questions asking inside each subsection are related with its independent variables in order to answer research findings appropriately.

Section C: Mediator Variables

MV1: Education Level (refer to appendix)

1. Statement EL1

2. Statement EL2

3. Statement EL3

4. Statement EL4

5. Statement EL5

MV2: Income Level (refer to appendix)

1. Statement EL1
2. Statement EL2
3. Statement EL3
4. Statement EL4
5. Statement EL5

MV3: Age (refer to appendix)

1. Statement A1
2. Statement A2
3. Statement A3
4. Statement A4
5. Statement A5

As the research objectives have identified the occurrence of mediator variables towards the effect on financial satisfaction of retirement planning, hence it is necessary for researchers to construct the Section C in order to answer the significant relationship from independent variables to mediator variables then dependent variable which can be known as hypotheses 4 to 6 as disclosed earlier in the previous chapters. Each mediator variable MV1 to MV3 would have a total number of five questions to figure out the final outcome.

3.3.2 Pilot Test

When doing any research, it is necessary to conduct a pilot test as a pre-testing action before any actual data collection process has been executed in order to ensure the ongoing research is under the right track which provides validity as well as any potential amendments to be changed to enhance the research final result. Thus, when researchers tend to organise this study through the data collection from the targeted respondents, researchers had decided to collect 50 pilot test samples to figure out the results at the very initial stage as the actual samples needed to be collected when running the data analysis and findings are at least 400 samples hence, 50 pilot test samples is considered as an appropriate amount of collection in researchers point of view.

In order to take into account of time consideration and the research efficiency, the researchers tend to apply the most effective method to collect pilot test data at the shortest period of time by collecting its from the relatives and friends who are categorised under the potential respondents Malaysian workforce youth age between 15 to 30 with EPF account and were staying at one of the Malaysia states during the COVID-19 pandemic. The researchers had completed this process during the last trimester final examination period and it approximately took around 2 weeks to settle it.

From the result discovered of those 50 pilot test samples, researchers realised that some questions inside each section might not perform the same direction in the result of inferential analysis when running via SmartPLS Bootstrapping Test due to the fraud of researchers in constructing sentences. For example, some sentences were using positive statements while negative statements for others. As a consequence, it affected the significant relationship of the final findings like there were quite a lot of results that had shown insignificant than significant. Thus, researchers would like to make some amendments on it. After the adjustments of all mistaken negative statements to positive form as well as the direction of 5 point Likert Scale due to the changes of negative statements, the result was much better than previously. When researchers found no more mistakes can be adjusted, researchers tended to preserve the adjusted results of 50 pilot test samples to be used for actual data analysis later and at the same time collect at least 350 samples to meet the research actual sample size requirement.

3.4 Proposed Data Analysis

3.4.1 Descriptive Analysis

Descriptive analysis is mainly analysis that arranges, interprets or presents data points in a practical way to let researchers observe the pattern that possibly derived from the data obtained. It is also a preferable analysis method that lightens the burden of researchers as it tends to simplify and summarise the raw data collected in a logical way. The main reason is due to the descriptive statistics that are able to reduce data obtained in a non-complicated way.

3.4.2 Inferential Analysis

Likewise, inferential analysis is a type of analysis used to create inferences that is related to the data obtained, however more deep and detailed information can be obtained as well. For instance, it can be used to deduce what the targeted respondents would assume based on the sample data. Easy to say, this analysis can be applied to determine if an observed difference between groups is reliable or one that occurred by chance in this study. As a result, inferential statistics extrapolate general conditions from data, whereas descriptive statistics are used to merely explain what's going on in the data. Based on this research, the statistical software, SMART PLS 3.3.9 will be used to identify the statistics being gathered from questionnaire outcome.

3.4.2.1 Partial least square regression (PLS)

PLS is known as an inferential analysis approach that avoids the predictor variables turn to small and uncorrelated elements and presents the least squares regression based on components. PLS can generalise and link the features based on analysis related to the principal element as well as the multiple regression where it is useful to predict DV from huge IV. Multiple least regression can be implemented to various variables. However, if the number of predictors is over large, thus, it probably takes back the sample statistics perfectly, but fails to determine new statistics as expected.

3.4.2.2 Partial least square correlation (PLSC)

PLSC focuses on finding the shared information within two predictors variables where the predictor variables require maximal covariance between each other. This approach is able to deal with huge data sets and sophisticated experimental analysis.

3.4.2.3 Mediation Analysis

Mediation analysis identifies the indirect effect of the significant relationship between DV and IVs which acts as an intermediate to channel both variables. Total effect value such as total direct and total indirect would be analysed by using the SmartPLS 3 “PLS Bootstrapping” test with the two-tails test, confidence interval 95% or significance level 0.05 at the value of T-Statistics less than or more than 1.96 to be considered as significant outcome.

3.5 Conclusion

The methodology as well as the data collection method of this research was discussed throughout this chapter. Based on the content above, the study will be conducted through quantitative research where the simple random sampling design will be used in the research finding and the targeted population is the youth who range from 15 to 30 years old in every state of Malaysia. For this study, questionnaires will be distributed to at least 400 targeted participants to fulfil the minimum data required when calculating via Yamane sample size formula. Researchers do prefer the usage of primary data for data collection since it provides better management on the sampling design matters; perhaps it is a more authentic way of data collection as compared to secondary data. After the consideration of efficiency and time issue, “Google Form” questionnaire will be organised and shared to targeted respondents. The collected data from the questionnaire will be tested by using SMART PLS 3.3.9. The following chapter will start to analyse the data collected with the analysis output interpretation.

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CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In chapter 4, all the raw data that had been generated from targeted respondents regardless of adjusted pilot test sample and other actual data will be processed to the data analysis procedure. A total number of 411 valid data which included 50 adjusted pilot test samples as well as 361

actual data had been received from the research targeted respondents who met the criterion of Malaysian workforce youth age 15 to 30 with EPF accounts and staying at Malaysia during COVID-19 epidemic. As the criterion of targeted respondents for this study requires a lot of qualifications in order to be considered as a valid respondent, hence, researchers had spent almost 1 month after the pilot test testing to accomplish the entire extra 361 data collection. Researchers had sought assistance from university friends who had been joining the internship programme previously to channel the questionnaire to their former companies colleagues to fulfil the targeted respondents requirements. In the following subsections, the entire 411 data will be running through descriptive analysis and inferential analysis to discover the data analysis result. The software SmartPLS would mainly take its role in analysing the outcomes.

4.1 Descriptive Analysis

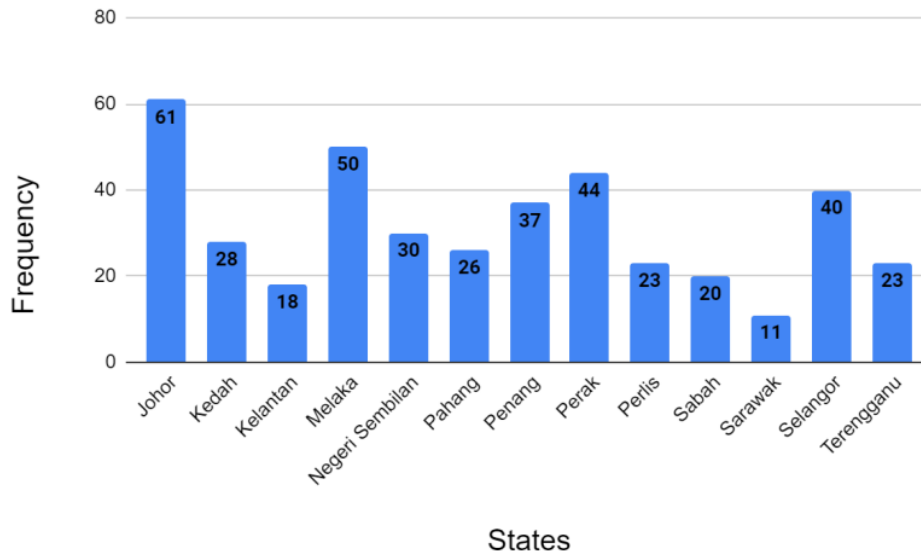
4.1.1 Respondent Demographic Profile

Table 4.1: Targeted Respondents Details

States	Frequency	Valid Percentage	Cumulative Percentage
Johor	61	14.8%	14.8%
Kedah	28	6.8%	21.6%
Kelantan	18	4.4%	26.0%
Melaka	50	12.2%	38.2%
Negeri Sembilan	30	7.3%	45.5%
Pahang	26	6.3%	51.8%
Penang	37	9.0%	60.8%
Perak	44	10.7%	71.5%
Perlis	23	5.6%	77.1%
Sabah	20	4.9%	82.0%
Sarawak	11	2.7%	84.7%
Selangor	40	9.7%	94.4%
Terengganu	23	5.6%	100.0%
Total	411	100.0%	

Source: Constructed from Questionnaire 411 Raw Data

Figure 4: Targeted Respondents Details (Histogram)



Source: Constructed from Questionnaire 411 Raw Data

According to Table 4.1 and Figure 4, both are the data of Respondent Demographic Profile from this research. The survey of “The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic” is distributed to 13 states of Malaysia. Based on the Table and Figure above, we can observe that the states are arranged according to alphabetical order for an easier reference. Johor has the most survey respondents which is 61 Youth EPF Contributors. The amount is followed by Melaka (50 respondents), Perak (44 respondents), Selangor (40 respondents), Penang (37 respondents), Negeri Sembilan (30 respondents), Kedah (28 respondents), Pahang (26 respondents), Perlis and Terengganu (each 23 respondents), Sabah (20 respondents), Kelantan (18 respondents) and Sarawak (11 respondents). In total, there are 411 respondents; 380 from West Malaysia and 31 from East Malaysia.

4.1.2 DV - FS

Table 4.2 Descriptive Statistics for DV - FS

Questions	Mean	SD
Statement FS1	4.058	0.811
Statement FS2	3.891	0.874
Statement FS3	4.049	0.864
Statement FS4	4.073	0.786
Statement FS5	4.017	0.844
Statement FS6	4.024	0.819
Statement FS7	4.032	0.847

Source: Constructed from Questionnaire 411 Raw Data

Table 4.2 shows the Descriptive Statistics for DV which is FS. This is one of the main statistics of our research as this is the DV.

Statement FS4 (Refer to Appendix) has the largest mean value of 4.073, compared with other statements while statement FS2 (Refer to Appendix) shows the lowest mean of 3.891.

As for the Standard deviation (SD), statement FS2 (Refer to Appendix) has a value which is 0.874. Statement FS4 (Refer to Appendix) has the lowest value which is 0.786.

4.1.3 IV - RP

Table 4.3 Descriptive Statistics for IV - RP

Questions	Mean	SD
Statement RP1	3.732	0.826
Statement RP2	4.224	0.707
Statement RP3	4.380	0.743
Statement RP4	4.319	0.797
Statement RP5	4.146	0.803
Statement RP6	4.041	0.852

Source: Constructed from Questionnaire 411 Raw Data

Table 4.3 shows the Descriptive Statistics for IV which is RP. RP is one of the IVs out of three IVs in this research.

Statement RP3 (Refer to Appendix) has the biggest mean value which is 4.380. Conversely, statement R1 (Refer to Appendix) has the lowest mean of 3.732.

As for SD, RP6 (Refer to Appendix) has the highest SD value of 0.852; whereas statement RP2 (Refer to Appendix) has the lowest SD value of 0.707.

4.1.4 IV - FL

Table 4.4 Descriptive Statistics for IV - FL

Questions	Mean	SD
Statement FL1	3.781	0.811
Statement FL2	4.175	0.703
Statement FL3	4.399	0.752
Statement FL4	4.248	0.790
Statement FL5	4.197	0.772
Statement FL6	4.129	0.758
Statement FL7	4.168	0.737

Source: Constructed from Questionnaire 411 Raw Data

Table 4.4 indicates the Descriptive Statistics for IV which is FL. FL is one of the IVs, which have 7 related statements in the questionnaire for research purposes.

Highest mean value is statement FL3 (Refer to Appendix) which is 4.399. Lowest mean value is statement FL1 (Refer to Appendix), which is only 3.781.

Highest SD value is 0.811 which is statement FL1 (Refer to Appendix). The lowest SD is 0.703 which is statement FL2 (Refer to Appendix).

4.1.5 IV - FSB

Table 4.5 Descriptive Statistics for IV - FSB

Questions	Mean	SD
Statement FSB1	3.922	0.801
Statement FSB2	4.328	0.702
Statement FSB3	4.426	0.732
Statement FSB4	4.307	0.757
Statement FSB5	4.217	0.786

Source: Constructed from Questionnaire 411 Raw Data

Table 4.5 indicates the Descriptive Statistics for IV which is FSB. FSB is the last IV, which has 5 related statements in the questionnaire for research purposes.

According to table 4.5, the highest mean value is 4.426 by the statement FSB3 (Refer to Appendix). The lowest mean value is 3.922 by the statement FSB1 (Refer to Appendix).

The highest SD value is 0.801 by statement FSB1 (Refer to Appendix). The lowest value of 0.702 is according to statement FSB2 (Refer to Appendix).

4.1.6 MV - EL

Table 4.6 Descriptive Statistics for MV - EL

Questions	Mean	SD
Statement EL1	4.017	0.815
Statement EL2	4.341	0.702
Statement EL3	4.423	0.755
Statement EL4	4.333	0.731
Statement EL5	4.292	0.723

Source: Constructed from Questionnaire 411 Raw Data

Table 4.6 shows the Descriptive Statistics for MV which is EL. EL is one of the three MVs in this research.

Statement EL3 (Refer to Appendix) has the biggest mean value of 4.423, whereas statement EL1 (Refer to Appendix) has the lowest mean value of 4.017.

Statement EL1 (Refer to Appendix) has the highest SD value of 0.815 according to the table 4.6. The lowest SD value is only 0.702 by statement EL2 (Refer to Appendix).

1 4.1.7 MV - IL

Table 4.7 Descriptive Statistics for MV - IL

Questions	Mean	SD
Statement IL1	4.041	0.790
Statement IL2	4.367	0.672
Statement IL3	4.482	0.674
Statement IL4	4.389	0.690
Statement IL5	4.331	0.696

Source: Constructed from Questionnaire 411 Raw Data

Table 4.7 shows the Descriptive Statistics for MV which is IL. There are 5 statements related to IL in the questionnaire for research purposes.

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Based on table 4.7, the highest mean is 4.482 whereas the lowest is 4.041. The highest mean value is followed by statement IL3 (Refer to Appendix), whereas the lowest mean value is followed by statement IL1 (Refer to Appendix).

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Based on table 4.7, the highest SD value is 0.790 where the lowest value is 0.672. The highest SD value is followed by statement IL1 (Refer to Appendix), whereas the lowest SD value is followed by statement IL2 (Refer to Appendix).

4.1.8 MV - AG

Table 4.8 Descriptive Statistics for MV - AG

Questions	Mean	SD
Statement A1	4.080	0.774
Statement A2	4.436	0.641
Statement A3	4.533	0.659

Statement A4	4.311	0.771
Statement A5	3.976	0.834

Source: Constructed from Questionnaire 411 Raw Data

The Descriptive Statistics for MV which is A is presented by table 4.8. A is the last MV associated with 5 related statements in the questionnaire for research purposes.

The highest mean value in table 4.8 is according to statement A3 (Refer to Appendix) which is 4.533. On the other hand, the lowest mean value in table 4.8 is according to statement A1 (Refer to Appendix) which is 3.976.

Besides that, the highest SD value in table 4.8 is according to statement A5 (Refer to Appendix) which is 0.834. Conversely, the lowest SD value in table 4.8 is according to statement A2 (Refer to Appendix) which is 0.641.

4.2 Inferential Analysis

4.2.1 Target Endogenous Variable Variance

Table 4.9: R Square Finding PLS-SEM for DV and MVs

Variable:	R Square:
Dependent Variable: FS	0.292
Mediator Variable: EL	0.490
Mediator Variable: IL	0.464
Mediator Variable: AG	0.418

Source: Constructed from Questionnaire 411 Raw Data

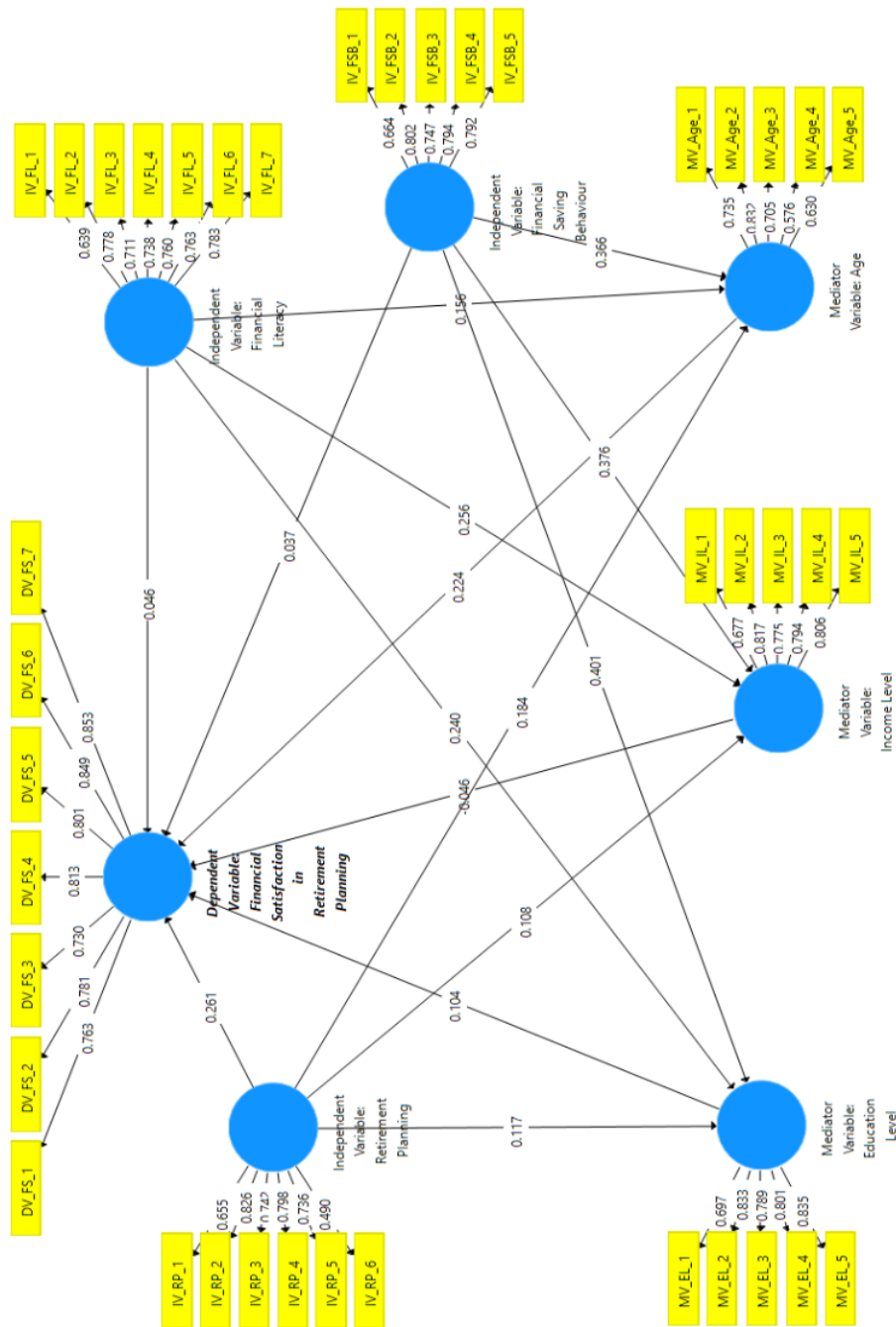
Table 4.9 above indicates the outcome of the coefficient of determination as known as R square for dependent variable: financial satisfaction of retirement planning, mediator variables: education level, income level and age by using software SmartPLS 3. As stated above, the R square value for financial satisfaction of retirement planning is 0.292 which means that those independent variables (education level, income level, and age) clarify 29.2% of variance in financial satisfaction. Not only that, the dependent variable financial satisfaction of retirement planning can be interpreted by 49% (R square = 0.490) of variance in mediator variable

education level, 46.4% ($R^2 = 0.464$) of variance in mediator variable income level, and 41.8% ($R^2 = 0.418$) of variance in mediator variable age.

1

4.2.2 Inner Model Path Coefficient Sized and Significance

Figure 5: Finding of PLS-SEM



Source: Constructed from Questionnaire 411 Raw Data

According to the outputs from figure 5, the independent variable (IV) financial saving behaviour (0.401) shows the highest denomination on mediator variable (MV) education level towards those three independent variables where IV financial literacy (0.240) and IV retirement planning (0.117). Besides, the outcome does show that IV financial saving behaviour holds the largest denomination too from three independent variables to MV income level. For instance, IV financial saving behaviour (0.376), IV financial literacy (0.256), and IV retirement planning (0.108). Not only that, when it comes to the relationship from three independent variables to MV age, IV financial saving behaviour (0.366) does result as the strongest effect among others two independent variables where IV retirement planning (0.184) and IV financial literacy (0.156). The result further illustrates that MV age is showing the greatest effect when all three mediator variables connect through to the dependent variable financial satisfaction of retirement planning. Broadly speaking, the result inside this inner model path shows to be more than 0.1 value where the hypothesised path relationship of the model can be clarified as statistically significant if the value is more than 0.1.

4.2.3 Reliability and Validity Test

The tests were implemented through SmartPLS 3 to identify the reliability and validity of each variable in this research where education level, income level, and age play their roles as mediator variables that would channel or provide an indirect effect from independent variables: RP, FL, and FSB to dependent variable: FS.

¹ 4.2.3.1 Reliability Test – Indicator Reliability

Table 4.10: The Outer Model Loading Findings

	DV: FS	IV1: RP	IV2: FL	IV3: FSB	MV1: EL	MV2: IL	MV3: AG
1	0.763						
2	0.781						
3	0.730						
4	0.813						
5	0.801						
6	0.849						
7	0.853						

1		0.655*					
2		0.826					
3		0.742					
4		0.798					
5		0.736					
6		0.490*					
1			0.639*				
2			0.778				
3			0.711				
4			0.738				
5			0.760				
6			0.763				
7			0.783				
1				0.664*			
2				0.802			
3				0.747			
4				0.794			
5				0.792			
1					0.697*		
2					0.833		
3					0.789		
4					0.801		
5					0.835		
1						0.677*	
2						0.817	
3						0.775	
4						0.794	
5						0.806	

1							0.735
2							0.832
3							0.705
4							0.576*
5							0.630*

Source: Constructed from Questionnaire 411 Raw Data

Table 4.10 indicates the outer model loading result for the research. From the overall point of view, the result still can be considered as valid although there are a total of 8 questions which did not show a strong validity towards the outcome which include IV1 Retirement Planning question 1 (0.655) and question 6 (0.490), IV2 Financial Literacy question 1 (0.639), IV3 Financial Saving Behaviour question 1 (0.664), MV1 Education level question 1 (0.697), MV2 Income Level question 1 (0.677), MV3 Age question 4 (0.576) and question 5 (0.630) when the it was running at confidence interval 95% or significance level 0.05 with two-tails test. Based on the statement from Henseler, Ringle, & Sarstedt (2012), the outer loading value of 0.7 or higher is categorised as highly satisfactory, while 0.5 is still considered as an acceptable range. This means that most of the questions are acceptable since all the questions are above the value of 0.5 except IV1 Retirement Planning question 6 (0.490). According to another research from Hulland (1999), it clearly mentioned that an outer loading value of 0.4 or above can be considered as valid if it is an exploratory research only where the research question has not investigated depth previously. As researchers were conducting all the questions based on the previous research samples or authorised risk measurement form from insurance companies, thus, it can be said that the IV1 Retirement Planning question 6 (0.490) is invalid in the outer model loading and should be removed from the research.

4.2.3.2 Reliability Test – Internal Consistency Reliability Finding

Table 4.11: Cronbach's Alpha

Variable:	No. of Questions	Cronbach's Alpha	Result of Reliability
DV: FS	7	0.905	Good
IV1: RP	6	0.803	Good
IV2: FL	7	0.861	Good

IV3: FSB	5	0.817	Good
MV1: EL	5	0.850	Good
MV2: IL	5	0.833	Good
MV3: AG	5	0.735	Good

Source: Constructed from Questionnaire 411 Raw Data

Table 4.11 shows Cronbach's Alpha result via SmartPLS 3 when the confidence interval equals 95% or significance level 0.05 with two-tails test. This test is used to identify the reliability in the organisational sciences and social sectors (Cronbach, 1951). Generally, Cronbach's Alpha value with 0.7 and above is known as acceptable reliability coefficient (Cronbach, 1951). As in table 4.11 above all the dependent variable, independent variables, and mediator variables are reliable at values more than 0.7 respectively. Among the variables, the dependent variable financial satisfaction of retirement planning tends to have the highest value (0.905) which is followed by IV2 financial literacy (0.861) and MV1 education level (0.850) whereas MV3 Age holds the lowest Cronbach's Alpha value (0.735).

Table 4.12: Composite Reliability

Variable:	No. of Questions	Composite Reliability	Result of Reliability
DV: FS	7	0.925	Good
IV1: RP	6	0.861	Good
IV2: FL	7	0.894	Good
IV3: FSB	5	0.873	Good
MV1: EL	5	0.894	Good
MV2: IL	5	0.883	Good
MV3: AG	5	0.826	Good

Source: Constructed from Questionnaire 411 Raw Data

Table 4.12 indicates the composite reliability outcome from the research data when the confidence interval equals 95% or significance level 0.05 with two-tails test. According to the statement from Bagozzi and Yi (1988), composite reliability can be applied as an alternative

option to replace Cronbach's alpha if Cronbach does not perform reliably. If the value of composite reliability is above the value of 0.6, thus, it would be reliable (Bagozzi and Yi, 1988). According to the result stated in table 4.12 above, it is easy to say that the entire composite reliability for each variable is reliable or held since all the figures exceed 0.6. Among the variables, the DV financial satisfaction of retirement planning does show the largest figure (0.925) followed by IV2 financial literacy and MV1 education level both with the value of 0.894 while MV3 Age holds the lowest value among them (0.826).

4.2.3.3 Validity Test – Convergent Validity

Table 4.13: Average Variance Extracted (AVE)

Variable:	No. of Questions	Average Variance Extracted (AVE)	Result of Reliability
DV: FS	7	0.639	Good
IV1: RP	6	0.514	Good
IV2: FL	7	0.548	Good
IV3: FSB	5	0.580	Good
MV1: EL	5	0.628	Good
MV2: IL	5	0.602	Good
MV3: AG	5	0.491*	Bad

Source: Constructed from Questionnaire 411 Raw Data

The table 4.13 interprets the result of average variance extracted (AVE) from the research 411 raw data when the confidence interval equals 95% or significance level 0.05 with two-tails test. AVE normally applies to identify the degree of variance captured by a construct related to the degree of variance from measurement error (David, 2016). AVE may be used for both convergent and divergent validity (David, 2016). According to the statement from Chin (1998), AVE should be larger than value 0.5 in order to be considered as an accepted range to indicate the convergent validity of a particular construct. In this case, all the variables AVE tend to be considered as valid since all the figures are more than 0.5 except the MV3 age (0.491) this means that MV3 age does not have convergent validity and failed construct reliability. However, based on the finding from Fornell & Larcker (1981), if the AVE is less than 0.5 (MV3 age: 0.491), but composite reliability is higher than 0.6, then the convergent validity of

the construct is still adequate. Hence, in this research MV3 age (0.491) is still acceptable by convergent validity since its composite reliability is 0.826 in table 4.12.

4.2.3.4 Validity Test – Discriminant Validity

Table 4.14: Fornell-Larcker Result

Variable:	DV: FS	IV2: FL	IV3: FSB	IV1: RP	MV3: AG	MV1: EL	MV2: IL
DV: FS	0.800						
IV2: FL	0.446	0.740*					
IV3: FSB	0.432	0.761	0.762				
IV1: RP	0.484	0.786	0.704	0.717*			
MV3: AG	0.460	0.578	0.614	0.564	0.701*		
MV1: EL	0.440	0.638	0.666	0.589	0.738	0.792	
MV2: IL	0.416	0.626	0.646	0.573	0.795	0.788	0.766

Source: Constructed from Questionnaire 411 Raw Data

The table 4.14 shows the Fornell-Larcker result from the research when the confidence interval equals 95% or significance level 0.05 with two-tails test. The Fornell-Lacker test is mainly used to prevent the occurrence of multicollinearity issues when the latent variable is involved in the research. In order to verify whether the test is acceptable, it is required to identify whether the top value of each scale is having the highest value among their row and column. Among the 7 variables above, there are 4 variables DV financial satisfaction (0.800), IV3 financial saving behaviour (0.762), MV1 education level (0.792), and MV2 income level (0.766) are having the highest among their personal row and column. However, for the remaining 3 variables, IV2 FL (0.740), IV1 RP (0.717), and MV3 AG (0.701) although they are not the highest in their personal row and column but all hold the second or third highest on themselves. Thus, the outcome is acceptable.

Table 4.15: Heterotrait-Monotrait Ratio (HTMT)

Variable:	DV: FS	IV2: FL	IV3: FSB	IV1: RP	MV3: AG	MV1: EL	MV2: IL
DV: FS							
IV2: FL	0.504						

IV3: FSB	0.501	0.906*					
IV1: RP	0.571	0.942*	0.864				
MV3: AG	0.567	0.723	0.786	0.738			
MV1: EL	0.503	0.743	0.796	0.712	0.931*		
MV2: IL	0.477	0.738	0.780	0.696	1.009*	0.936*	

Source: Constructed from Questionnaire 411 Raw Data

Table 4.15 represents HTMT findings from the research data when the confidence interval equals 95% or significance level 0.05 with two-tails test. The HTMT is applied to detect the discriminant validity problem. According to the previous study conducted by Henseler et al. (2015), they suggested that a threshold value of 0.90 if the path model includes constructs that are conceptually very similar (e.g., affective satisfaction, cognitive satisfaction, and loyalty); that is, an HTMT value above 0.90 depicts a lack of discriminant validity. However, when the constructs in the path model are conceptually more distinct, researchers should consider 0.85 as threshold for HTMT (Henseler et al. 2015). In this research threshold value of 0.9 was applied. Throughout the entire result the financial literacy-financial saving behaviour (0.906), financial literacy-retirement planning (0.942), age-education level (0.931), age-income level (1.009), and education level-income level (0.936) tend to appear the issue of multicollinearity between the latent variable.

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 (Total Direct)

Variable:	Direct Effect	T Statistic (1.96)	P Value (P < 0.05)	Result of Significance
IV1: RP -> DV: FS	0.309	4.524	0.000	Significant
IV2: FL -> DV: FS	0.094	1.242*	0.214*	Insignificant
IV3: FSB -> DV: FS	0.143	1.956*	0.051*	Insignificant

Source: Constructed from Questionnaire 411 Raw Data

Table 4.17: Bootstrapping (Total Indirect)

Variable:	Indirect Effect	T Statistic	P Value (P < 0.05)	Result of Significance
IV1: RP -> DV: FS	0.048	2.215	0.027	Significant
IV2: FL -> DV: FS	0.048	1.726*	0.084*	Insignificant
IV3: FSB -> DV: FS	0.106	3.041	0.002	Significant

Source: Constructed from Questionnaire 411 Raw Data

Bootstrapping was running via SmartPLS 3 by using the number of 5000 sets of different combinations for the purpose of knowing data normality where two-tails and 0.05 significance value or confidence interval 95% were applied. Table 4.16 and 4.17 represent the direct effect and indirect effect of the result are not partial mediation where both outcomes show insignificant in particular effects. This can clarify that the independent variables have insignificant effect towards the dependent variable financial satisfaction of retirement planning after the inclusion of mediator variables. For instance, the insignificant pairs in total direct are IV2 financial literacy to DV financial satisfaction (T-test: 1.242, P: 0.214), and IV3 financial saving behaviour to DV financial satisfaction (T-test: 1.956, P: 0.051) whereas for the total indirect only one pair which is IV2 financial literacy to DV financial satisfaction (T-test: 1.726, P: 0.084).

4.2.4.2 Bootstrapping Analysis – Outer Loading

Table 4.18: Bootstrapping (Outer Loading)

	DV: FS	IV1: RP	IV2: FL	IV3: FSB	MV1: EL	MV2: IL	MV3: AG
1	32.981						
2	32.381						
3	27.168						
4	42.090						
5	37.248						

6	56.474						
7	52.306						
1		23.335					
2		38.908					
3		29.641					
4		34.637					
5		26.005					
6		11.039					
1			21.990				
2			32.969				
3			25.212				
4			28.348				
5			33.639				
6			35.143				
7			36.757				
1				24.313			
2				36.214			
3				23.659			
4				39.219			
5				39.567			
1					24.972		
2					47.268		
3					35.028		
4					35.444		
5					48.975		
1						25.147	
2						47.627	
3						31.140	

4						34.318	
5						37.536	
1							29.499
2							46.605
3							21.205
4							12.362
5							19.799

Source: Constructed from Questionnaire 411 Raw Data

Table 4.18 explains the Bootstrapping outer loading output from SmartPLS 3. The outcomes indicate the entire research is significant since Bootstrapping outer loading is using its result of T-Statistics more than 1.96 as the significance level equal to 0.05 or confidence interval 95% with two-tails test. As an observation through table 4.18, all the figures for each variable question exceed or more than 1.96 in their T-Statistics. Therefore, significance is held.

4.2.4.3 Bootstrapping Analysis

Table 4.19: Bootstrapping (Mediating Latent Variable)

Channel:	T-Statistics (1.96)	P Value (P < 0.05)	Result of Significance
IV2: FL -> MV1: EL -> DV: FS	1.195*	0.232*	Insignificant
IV3: FSB -> MV1: EL -> DV: FS	1.299*	0.194*	Insignificant
IV1: RP -> MV1: EL -> DV: FS	0.938*	0.348*	Insignificant
IV3: FSB -> MV2: IL -> DV: FS	0.543*	0.587*	Insignificant
IV1: RP -> MV2: IL -> DV: FS	0.452*	0.651*	Insignificant
IV2: FL -> MV2: IL -> DV: FS	0.550*	0.583*	Insignificant
IV3: FSB -> MV3: A -> DV: FS	2.618	0.009	Significant
IV2: FL -> MV3: A -> DV: FS	1.757*	0.079*	Insignificant
IV1: RP -> MV3: A -> DV: FS	2.109	0.035	Significant

Source: Constructed from Questionnaire 411 Raw Data

Table 4.19 explains the Bootstrapping mediation latent variables result when the confidence interval equals 95% or significance level 0.05 with two-tails test. The mediating latent variables show that the mediator variables MV1 education level, MV2 income level, and MV3 age act as an intermediate to channel those independent variables IV1 retirement planning, IV2 financial literacy, and IV3 financial saving behaviour to dependent variable financial satisfaction of retirement planning. According to the output above, the T-Statistics (P-Value) IV2 financial literacy, and IV3 financial saving behaviour, and IV1 retirement planning through MV1 education level are 1.195 (0.232), 1.299 (0.194), and 0.938 (0.348) while the T-Statistics (P-Value) IV3 FSB, IV1 RP, and IV2 FL through MV2 IL are 0.543 (0.587), 0.452 (0.651), and 0.550 (0.583). For the IV3 financial saving behaviour, IV2 financial literacy, and IV1 retirement planning through MV3 age are 2.618 (0.009), 1.757 (0.079), and 2.109 (0.035). As the observation above, there are only two mediating latent variables where IV3 financial saving behaviour through MV3 Age and IV1 retirement planning through MV3 age are significant in the final outcome of the research findings, the rest are all insignificant for this test.

4.3 Conclusion

To sum up, the entire chapter 4 has explained the illustration of the research descriptive and inferential analysis by using the software SmartPLS 3. In descriptive analysis, the respondent demographic profile has been discussed where all the 411 data collected by the researchers from targeted respondents were considered valid collection since all the targeted respondents have fully fulfilled the criterion of the requirements, thus then researchers would distribute the survey to the respondents. The 411 data covered all the respondents from each state in Malaysia. Not only that, the mean and standard deviation for each question under each particular variable inside the questionnaire did have a further explanation in subchapter 4.1.2 to 4.1.8.

For the inferential analysis, researchers did apply 2 SmartPLS 3 built-in tests to gather the required result to explain current research, these 2 built-in tests are PLS algorithm and PLS Bootstrapping. Throughout the entire result, it can be concluded that the recent study is quite insignificant from the overall point of view since there are a lot of result showed to be insignificant although researchers successfully find some other supporting statements from previous findings or the founders of the tests to support the results, but rationally to say with the supportive quotes from the particular authors the results now are tend to be least significant,

if all those statements have been removed then it would probably remain as insignificant at all time. Researchers do struggle to find out why the results are totally different from the previous researchers' outcomes as most of the researches conducted were statistically significant. As the observation of current researchers, current research that in the progress is investigating the topic under the COVID-19 epidemic period, however, the available sources that found by recent researchers that cited through the literature review in chapter 2 all are under normal economic condition with the absence of COVID-19 epidemic since there are lack of COVID-19 related information when researchers were doing the literature review that related to the topic. Thus, it led to the totally different result where insignificant occurred at the end or only least significant to be said. All these would be discussed further in the upcoming part in chapter 5.

CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATION

5.0 Introduction

In chapter 5, the overall conclusion of the findings would be drawn out to have a better understanding of the entire idea towards the topic. The major analysis findings that found in chapter 4 would bring it to this chapter and connect its result of significance with previous literature review studies in order to figure out whether there is any linkage between the analysis outcomes and former researchers outputs. Researchers will interpret the research implications, research limitations as well as research recommendations at the end of the discussion.

5.1 Discussion on Key Findings

Table 5.1 Summary of result

Test	Hypothesis	Hypothesis supported	Result ($T > 1.96$ & $P < 0.05$)
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1.RP and FS	¹ H ₁ : There is a significant relationship between RP and FS	¹ H ₁ is supported	T statistics 2.215>1.96 P value 0.027<0.05
2.FL and FS	¹ H ₁ : There is a significant relationship between FL and FS	¹ H ₁ is not supported*	T statistics 1.726<1.96 P value 0.084>0.05
3.FSB and FS	¹ H ₁ : There is a significant relationship between FSB and FS	¹ H ₁ is supported	T statistics 3.041>1.96 P value 0.002<0.05
4a. Significant relationship between mediator (EL), RP and FS	H ₁ : There is a significant relationship from RP through mediator variable (EL) to FS	¹ H ₁ is not supported*	T statistics 0.938<1.96 P value 0.348>0.05

4b. Significant relationship between mediator (IL), RP and FS	H ₁ : There is a significant relationship from RP through mediator variable (IL) to FS	¹ H ₁ is not supported*	T statistics 0.452<1.96 P value 0.651>0.05
4c. Significant relationship between mediator (A), RP and FS	H ₁ : There is a significant relationship from RP through mediator variable (A) to FS	¹ H ₁ is supported	T statistics 2.109>1.96 P value 0.035<0.05
5a. Significant relationship between mediator (EL), FL and FS	H ₁ : There is a significant relationship from FL through mediator variable (EL) to FS	¹ H ₁ is not supported*	T statistics 1.195<1.96 P value 0.232>0.05
5b. Significant relationship between mediator (IL), FL and FS	H ₁ : There is a significant relationship from FL through mediator variable (IL) to FS	¹ H ₁ is not supported*	T statistics 0.550<1.96 P value 0.583>0.05

5c. Significant relationship between mediator (A), FL and FS	H ₁ : There is a significant relationship from FL through mediator variable (A) to FS	¹ H ₁ is not supported*	T statistics 1.757 < 1.96 P value 0.079 > 0.05
6a. Significant relationship between mediator (EL), FSB and FS	H ₁ : There is a significant relationship from FSB through mediator variable (EL) to FS	¹ H ₁ is not supported*	T statistics 1.299 < 1.96 P value 0.194 > 0.05
6b. Significant relationship between mediator (IL), FSB and FS	H ₁ : There is a significant relationship from FSB through mediator variable (IL) to FS	¹ H ₁ is not supported*	T statistics 0.543 < 1.96 P value 0.587 > 0.05

6c.	Significant relationship between mediator (A), FSB and FS	H ₁ : There is a significant relationship from FSB through mediator variable (A) to FS	H ₁ is supported	T statistics 2.618>1.96 P value 0.009<0.05
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Source: Constructed from Questionnaire 411 Raw Data

5.1.1 RP and FS

A significant relationship between retirement planning and financial satisfaction of retirement planning shown in table 5.1 (T: 2.215>1.96 & P: 0.027<0.05). According to Elder & Rudolph (1999), The results show that there is a significant relationship between retirement planning and financial satisfaction of retirement planning. Even when income, wealth, marital status, and health are included as explanatory variables, consideration of retirement and participation in planning meetings has a significant positive impact on satisfaction. According to Yeung & Zhou (2017), the result shows a significant relationship between retirement planning and financial satisfaction of retirement planning. Well-being in retirement is reflected in levels of physical well-being, life satisfaction and psychological well-being as well as the absence of psychological distress. Retirees are less resilient to retirement when they show a decline in physical functioning, life satisfaction and psychological well-being and an increase in psychological distress at all three assessment points.

5.1.2 FL and FS

The result in table 5.1 shows a significant relationship between FL and FS (T: 1.726<1.96 & P: 0.084>0.05). Based on the study of Tan & Singaravelloo (2019), the results show that there is no significant relationship between financial literacy and financial satisfaction of retirement planning among Malaysian government officers. Individuals with or without financial literacy will be satisfied if their retirement fund is more and enough to use for the rest of their life. Otherwise, they will not be satisfied if the retirement fund is not enough for the rest of their

life. Therefore, financial satisfaction of retirement planning is based on the individual, but not financial literacy. According to Aluodi, Njuguna & Omboi (2017), their study shows a significant relationship between FL and FS. After controlling for gender, those with low financial literacy scores were likely to be as confident about retirement as those with high scores. Similar results were obtained when a more subjective measure of retirement preparedness savings was used. It can therefore be concluded that financial satisfaction of retirement planning is not influenced by an employee's level of financial literacy, but by their income level.

5.1.3 FSB and FS

Based on the result in table 5.1, there is a significant relationship between financial saving behaviour and financial satisfaction of retirement planning ($T: 3.041 > 1.96$ & $P: 0.002 < 0.05$). According to Hsion and Dambaravdan (2016), the financial saving behaviour has a significant relationship with financial satisfaction of retirement planning. Individuals with saving behaviour will be satisfied with their retirement planning. This is because individuals with saving behaviour will be more likely to do saving or investing. For example, investment of property, bond, stock etc. Therefore, the savings from their retirement planning is surely enough for them to retire. Based on the research of Rameli & Marimuthu (2018), the results show that there is a significant relationship between financial saving behaviour and financial satisfaction of retirement planning. Individuals with a high level of awareness and forethought of their saving behaviour are responsible for the financial decisions made in their retirement plans. As a result, retirement plans with a high level of awareness of saving behaviour approach retirement with a high level of wealth. The greater the awareness of saving behaviour, the greater the likelihood of developing retirement planning habits.

5.1.4 RP -> MVs - FS

The result in table 5.1 shows that the mediator variable which is education level will not significantly influence retirement planning and financial satisfaction of retirement planning ($T: 0.938 < 1.96$ & $P: 0.348 > 0.05$). According to Chai et al. (2019), education level will not influence the retirement planning, Even the individual with low education level will want to do

the retirement. They may follow others to their retirement since there are a lot of financial institutions nowadays. Therefore, they will be satisfied with their retirement planning.

The result in table 5.1 shows that, the mediator variable, income level will not significantly influence the retirement planning and financial satisfaction of retirement planning (T: $0.452 < 1.96$ & P: $0.651 > 0.05$). According to Thakur et al. (2017), income level will not influence retirement planning. The analysis shows that most of the respondents regardless of age, income and occupation want to have their retirement in the next 20 years and above. Every individual with a different income level can do their retirement planning with different costs based on their living lifestyle. Therefore, individuals with different income levels will be satisfied with their retirement planning.

The result in table 5.1 shows that, the mediator variable, age will significantly influence the retirement planning and financial satisfaction of retirement planning (T: $2.109 > 1.96$ & P: $0.035 < 0.05$). According to Toll, Turpin and Scourtoudis (2007), the study shows that age will influence the retirement planning and financial satisfaction of retirement planning. The study was conducted among 2,366 federal public servants in Canada, but it is worth noting that young people are not considering retirement mainly because they are either just entering the public service or are busy building their careers, so retirement is not an option that is their main concern for the time being. Therefore, when they are going closer to the retirement age, they will not be satisfied with their retirement plan, since they must pay more for their late retirement planning and their savings for retirement planning may not be enough.

5.1.5 FL -> MVs - FS

The result in table 5.1 shows that, the mediator variable, education level will not significantly impact the financial literacy and financial satisfaction of retirement planning (T: $1.195 < 1.96$ & P: $0.232 > 0.05$). From the past study done by the researchers, it shows that education level will significantly impact the financial literacy and financial satisfaction of retirement planning. It was different from the result of this study. This is because during the pandemic, people are not encouraged to leave the house. Therefore, in this era of developed Internet information. There is a lot of material to learn the knowledge of retirement planning. Individuals with lower education levels can also learn financial literacy on the internet. They will be satisfied with their retirement planning since they have FL.

The result in table 5.1 shows that, the mediator variable, income level will not significantly affect the financial literacy and financial satisfaction of retirement planning ($T: 0.55 < 1.96$ & $P: .583 > 0.05$). There is a lack of past study to support the result of this research, which is that income level will not significantly affect the financial literacy and financial satisfaction of retirement planning. The result of this research is different from past studies because the research progressed during Covid-19 pandemic and most of the respondents with different income levels are not satisfied with their retirement planning.

The result in table 5.1 shows that the mediator variable, age will not significantly affect the FL and FS ($T: 1.757 < 1.96$ & $P: 0.079 > 0.05$). There is no past study to support the result that age will not significantly affect the financial literacy and financial satisfaction of retirement planning. The insignificant outcome for this study is because nowadays, more and more young people know the importance of investing, so they are also preparing for their retirement plans. Especially during this epidemic, the hot topic of most people is investment. Therefore, both young and old will be exposed to investment. So not only the elderly will focus on retirement planning, but even the young will start planning for their retirement. Even young people without financial knowledge can learn financial knowledge from friends or the Internet. Investing their retirement plan in an early stage will make it easier to retire.

5.1.6 FSB - MVs - FS

The result in table 5.1 shows that, the mediator variable, education level will not significantly influence the financial saving behaviour and financial satisfaction of retirement planning ($T\text{-statistic } 1.299 < 1.96$ & $P\text{-value } 0.194 > 0.05$). According to Kassim, Tamsir, Azim, Mohamed and Nordin (2018), the results show that education level will not significantly influence the financial saving behaviour and financial satisfaction of retirement planning. Individuals with any education level will have the saving behaviour and it is not the right for individuals with higher education level. Individuals will do their retirement planning with their own saving behaviour; therefore, they will be satisfied since the retirement planning is going by their own way.

The result in table 5.1 shows that, the mediator variable, income level will not significantly affect the financial saving behaviour and financial satisfaction of retirement planning ($T: 0.543 < 1.96$ & $P: 0.583 > 0.05$). According to Thakur et al. (2017), income level will not

significantly affect the financial saving behaviour and financial satisfaction of retirement planning. Based on the study, individuals with any income level want to retire in the next 20 years and above, this must be achieved by saving. Although their savings amount for retirement might be different, they will still be satisfied because the retirement planning is based on their ability.

The result in table 5.1 shows that, the mediator variable, age will significantly influence the financial saving behaviour and financial satisfaction of retirement planning (T: 2.618>1.96 & P: 0.009<0.05). According to Zulfaka and Kassim (2021), the results show that age will significantly influence the financial saving behaviour and financial satisfaction of retirement planning. As the people become older and gain more financial literacy, they will be more likely to own a saving behaviour, especially for their retirement. They might not be satisfied with their retirement planning because they do it late instead of planning it when young. Therefore, the cost of retirement planning will be high in cost.

5.2 Research Implication of Study

Based on the table 5.1 above, it showed that among the 12 hypothesis developments organised that related to previous chapter 2 hypothesis developments, only a total of 4 out of 12 hypotheses are statistically significant. However, the rest are all considered statistically insignificant. Throughout the 4 statistically significant hypotheses, 2 hypotheses belong to the direct channel between independent variable to dependent variable financial satisfaction of retirement planning. These 2 hypotheses are IV1 retirement planning as well as IV3 financial saving behaviour respectively. The other two hypotheses that are related to the mediation of mediator variable from independent variable to dependent variable are both located to MV3 age as (4c) significant relationship between mediator age, retirement planning and financial satisfaction of retirement planning, and (6c) significant relationship between mediator age, financial saving behaviour to financial satisfaction of retirement planning. All these illustrations mean that the targeted respondents were not satisfied with their financial condition especially in retirement planning purposely for the period of COVID-19.

5.2.1 Investors

As the research outcome mentioned the targeted respondents Malaysian youth EPF contributors were dissatisfied with the financial circumstance, thus, investor such as youth should aware of this particular issue since the unexpected events such as COVID-19 epidemic lockdown implementations, sudden lay off by the company without pre-notice, and any global economic crises might happen anytime, anywhere during today reality without giving the investor adequate time for the preparation purposes. Investors should always take proactive action especially to be ready for these types of events. For instance, investors are advised to subscribe to any investment plan that best fits with their personal preferences or spending a portion of every monthly salary for the investing purposes. If investors are worried that their personal expertise would lead to a loss situation, investors should find someone who can handle the risk properly such as a mutual fund manager. By doing so, if an event similar as COVID-19 happens once again in the future, investors will have the buffer period to survive from the event based on the investor's investment size or amount in the mutual fund as compared to those who have zero or no preparation for the alert. Throughout the result shown, it clearly clarifies that most of the Malaysian youth EPF contributors were not well prepared to confront the sudden shock emergency during this time, thus it is hoped that this result could more or less provide some inspiration on how to deal with the future obstacles.

5.2.2 Malaysian Government and Central Bank

As most of the results showed statistically insignificant, the Malaysian Government and Central Bank are recommended to alert on this research since it provides a totally different version of answer as compared to others who conducted the similar study at normal economic condition. In order to motivate Malaysian youth EPF contributors to stay away from being dissatisfied towards their financial affairs, these parties should organise multiple stages of plans that would be used for the similar future events. For example, Malaysian Government is suggested to create a national post-mortem team that mainly focus on the defect of implementation during this epidemic like what factors resulted them responded slowly to the condition, any unnecessary regulations that previously implemented did not really bring advantages to the public especially Malaysian youth EPF contributors who age between 15 to 30 that can be considered as the fresh employees that enter the workforce, and any actions can be improved and so on, whereas for the Bank Negara Malaysia (BNM), BNM can provide free seminars through online to the public especially targeting the participants to Malaysian youth range of

people perhaps BNM can also incorporate with The Credit Counselling and Debt Management Agency (AKPK) to provide personal one to one assistance for those who is needed especially those people who has been or almost default via online consultation in their financial status that requires financial restructuring. At this point, Malaysian youth EPF contributors would have a channel to inquiry for the doubts facing and how to deal with it.

5.2.3 Employee Provident Fund (EPF)

EPF can apply this research outcome to readjust the current implementations. After the exploration from the past COVID-19 EPF accounts extreme executions by the public on the fund withdrawal as stated in Chapter 1.1 Research Background EPF Withdrawal Amount from year 2019 to 2021, EPF now would realise any unexpected incident happens at a very rapid wave normally would lead the public life which includes the research targeted respondents financial circumstances to be worsened due to the lack of expertise where it clearly links to the result of insignificant shown in current research. Therefore, EPF is strongly advised to introduce new initiatives at current and future to avoid the public panic actions happening once again. For instance, on the past 13th September 2021, EPF has introduced 2 new initiatives that are purposely targeting employers to ease the cash flow management during the epidemic and simultaneously allowing them to undertake statutory obligation (EPF, 2021). These 2 initiatives are exemption on late payment charges, and employer pay for reduction initiative (e-PaR) (EPF, 2021). Similarly, EPF is advised to design initiatives that are mainly for the Malaysian youth EPF contributors only which are not limited to during the extremely hard period, but before any unfavourable event occurs to have a preparation time for EPF to investigate the most appropriate method to be conducted.

5.2.4 Future Researchers

For the future researchers who would like to conduct the similar research on the same topic of financial satisfaction of retirement planning and purposely for the COVID-19 period, recent researchers tend to advise future researchers to not select the financial satisfaction as the main focus since based on the result analysed in this study, the targeted respondents some way not satisfied towards their financial condition where the outcome of the variables in chapter 4

showed insignificant are the best evidences to prove the statement. This result can be defined as targeted respondents' lack of fiscal status which led to the peak of the withdrawal in EPF funds to support COVID-19 daily expenses. As a result, it would harm the future investment gains where it requires double, triple or even more time of spending in order to earn the same compounded return due to the compounded effect in investment. Future researchers are strongly recommended to adjust the topic from financial satisfaction to “financial satisfaction” thus it might provide a much more significant result for the entire research plus adding the validity and reliability of itself if the future researchers would like to remain the study at the COVID-19 period. Future researchers can consider other independent variables to replace the current variables inside this study based on the preferences after going through the literature review too.

5.3 Limitation of Study

5.3.1 Internal validity

After using the data analysing software SmartPLS 3, summary of data analysis in this research is mostly insignificant. The main reason is due to the statements constructed in the questionnaire. All of the statements (40 statements in total) in the questionnaire are written into conditional sentences with affirmative form, which according to our research title (Financial satisfaction of personal retirement planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic). Thus, when the respondents disagree with the statement, the results shown will be insignificant (P-value smaller than 0.05).

Some of the respondents do reflect on us that they need more time when filling in the questionnaire. Most of the reason is that their feedback is on the language of the questionnaire. The respondents indicate that it will be easier for them to answer when the questionnaire is available in the language they are familiar with, such as Chinese, Malay and Tamil language.

The number of mediators and independent variables do ⁶¹play an important role in the research. With ⁵the independent variables ⁵of (financial literacy, financial saving behaviour, retirement planning) and mediator variables of (education level, income level and age), the results of the study may only be limited and presented based on the listed variables. In order to have a more diverse research, more variables need to be included to generate a more diverse scenario and environment. Therefore, the limited numbers of both independent and mediator variables is

hard to represent the overall opinion of Malaysia Youth EPF Contributors towards financial satisfaction of personal retirement planning during COVID-19 pandemic.

5.3.2 External validity

Limitation of this research mainly comes from questionnaire and data analysis. Respondents that filled in the questionnaire are mostly Malaysian Youth EPF Contributors that work in the main cities in the 13 states of Malaysia. There is only a small number of respondents that are from the rural areas of Malaysia. One of the big reasons is due to the higher job opportunities in cities, put aside on the differences in salaries. As mentioned above, respondents of this research are from 13 states of Malaysia, which is only a total of 411 respondents estimated by the Yamane formula. Due to the nature of small sample size, outcomes of study may be hard to study as it negatively affects the confidence level of a study. Possibility of type II error may increasingly occur, where the null hypothesis will be accepted incorrectly and the research results will not have a bigger difference.

5.4 Recommendation

In order to have a more significant research results, future researchers can change the title of research which is “The Financial Satisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic” to “The Financial Dissatisfaction of Personal Retirement Planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic”. A slight modification on the research title will have a different research direction which will provide a different research result as well. In the near future, researchers can also compare the result between “financial satisfaction” and “financial dissatisfaction” for a more concrete research result.

As indicated in “5.3 Limitation of study”, multilingual questionnaires tend to be more convenient for respondents to fill in the questionnaire. In a bigger point of view, it does increase the efficiency of answering the questionnaire which benefits the researcher as well. A more detailed description can be added in the questionnaire where respondents are able to refer when answering the questionnaire. Most importantly, the questionnaire set by researchers should be easily understood by respondents, as the degree of understanding towards the questionnaire will affect the decision making of respondents when answering the questionnaire.

Future researchers could input independent variables like inflation, interest rate to create a more detailed and specific economic environment for the study to increase the reliability and veracity of the study result. The reason behind is that a different economic environment will let the respondents think and react differently, which will provide a different result.

Finally, it is strongly recommended that future researchers increase the number of the research sample size. Large sample size may be more effective in capturing small changes in the research result in comparison with small sample size. Furthermore, a large sample size is able to include more areas which may have a more diverse result as different states will have different lifestyles, especially the price of goods and services. As an example, the price of goods and services in Kuala Lumpur is higher in comparison with the price of goods and services in Kuala Terengganu.

5.5 Conclusion

According to the data analysis above, there is a significant relationship between retirement planning and financial saving behaviour to financial satisfaction of retirement planning among Malaysian Youth EPF Contributors during COVID-19 Pandemic. However, independent variables such as financial literacy are proved to be not significant to the financial satisfaction of retirement planning. As for the mediator variable of (education level, income level and age), only age is having a significant relationship on retirement planning and financial saving behaviour to the financial satisfaction of retirement planning. Both education level and income level are not significant against the financial satisfaction of retirement planning.

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