

WILLINGNESS OF GENERATION Z TOWARDS FINANCIAL PLANNING

BY

YEE WIL SHEN  
SOO JIN SHEN  
LIM TIONG WEI  
LEE JIN SHENG

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

BACHELOR OF FINANCE (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE  
DEPARTMENT OF FINANCE

SEPTEMBER 2024


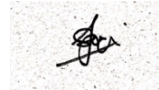

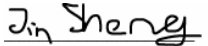
Copyright @ 2024

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

## DECLARATION

We hereby declare that:

- (1) This undergraduate FYP 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 FYP has been submitted in support of any application for any other degree or qualification of this or any university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing FYP
- (4) The word count of this research report is 19578.

Name of Student:	Student ID:	Signature
1. <u>Yee Wil Shen</u>	21ABB05486	
2. <u>Soo Jin Shen</u>	20ABB02100	
3. <u>Lim Tiong Wei</u>	21ABB01780	
4. <u>Lee Jin Sheng</u>	20ABB03792	

Date: 3/9/2024

## ACKNOWLEDGEMENT

We extend our heartfelt gratitude to our esteemed supervisor, Mr. Woo Kok Hoong, for his invaluable guidance and unwavering support throughout our final year research project. We are profoundly thankful to Mr. Woo's generosity in sharing his expertise and navigating us on this journey, a contribution that significantly aided in the successful completion of our research endeavours.

Furthermore, our gratitude extends to the University Tunku Abdul Rahman (UTAR) for providing us with the invaluable opportunity to undertake this research project, allowing us to delve into a subject of great interest to us. Our sincere thanks also go to each participant who willingly participated in our questionnaire survey, enabling us to gather essential data for our study.

Lastly, we would like to express our sincere appreciation to our families and friends for their unwavering support and encouragement. Their backing was pivotal in motivating us to surmount the challenges that arose during this research project.

## DEDICATION

With the deepest sense of gratitude, we dedicate this research endeavor to our supervisor, Mr. Woo Kok Hoong, whose exceptional guidance, and unwavering support have been instrumental in every phase of this project. Her profound expertise and constant encouragement have served as a guiding light, enabling us to overcome obstacles and successfully attain our research objectives.

In addition, we would like to dedicate the research to Ms. Nurul Afidah Binti Mohamad Yusof, our FYP examiner. She has given us a lot of insightful suggestions on how to enhance our research better. As a result, this helps us to create a research that is both more thorough and easy to comprehend.

Furthermore, we wish to extend our heartfelt appreciation to our family and friends for their unwavering support, unwavering encouragement, and unwavering inspiration that have been our pillars of strength throughout this research journey. Their unwavering belief in us has been a driving force that propelled us forward and sustained our motivation in the face of challenge.

## TABLE OF CONTENTS

<b>COPYRIGHT PAGE.....</b>	<b>2</b>
<b>DECLARATION.....</b>	<b>3</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>4</b>
<b>DEDICATION.....</b>	<b>5</b>
<b>TABLE OF CONTENTS.....</b>	<b>6</b>
<b>LIST OF TABLES.....</b>	<b>10</b>
<b>LIST OF FIGURES.....</b>	<b>11</b>
<b>LIST OF ABBEVIATIONS.....</b>	<b>12</b>
<b>LIST OF APPENDICES.....</b>	<b>13</b>
<b>PREFACE.....</b>	<b>14</b>
<b>ABSTRACT.....</b>	<b>15</b>
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>16</b>
1.0 Introduction.....	
1.1 Research Background.....	
1.2 Problem Statement.....	19
1.3 Research Questions.....	25

1.4 Research Objectives.....	
1.5 Research Significant.....	26
1.5.1 Theoretical significance.....	
1.5.2 Practical significance.....	
1.6 Conclusion.....	
<b>CHAPTER 2: LITERATURE REVIEW.....</b>	
2.0 Introduction.....	27
2.1 Review of Literature.....	
2.1.1 Willingness of Financial Planning.....	
2.1.2 Financial Knowledge.....	29
2.1.3 Financial Attitude.....	31
2.1.4 Financial Behavior.....	34
2.1.5 Financial Literacy.....	35
2.2 Theoretical Framework.....	36
2.3 Conceptual Framework.....	40
2.4 Hypotheses Development.....	
2.5 Conclusion.....	43
<b>CHAPTER 3: RESEARCH METHODOLOGY.....</b>	
3.0 Introduction.....	43
3.1 Research Design.....	
3.2 Sampling Design.....	44
3.2.1 Target Population.....	

3.2.2 Sampling Frame and Sampling Area.....	
3.2.3 Sampling Technique.....	
3.2.4 Sampling Size.....	45
3.3 Data Collection.....	46
3.3.1 Primary Data.....	
3.4 Research Instrument.....	
3.4.1 Questionnaire.....	47
3.4.2 Pre-Test.....	
3.4.3 Pilot Test.....	48
3.5 Data Analysis Tool.....	49
3.5.1 Descriptive Analysis.....	
3.5.2 Reliability Test.....	
3.5.3 Pearson Correlation Coefficient Analysis.....	50
3.5.4 Multiple Regression Analysis.....	
3.5.5 Normality Test.....	
<b>CHAPTER 4: DATA ANALYSIS.....</b>	
4.0 Introduction.....	52
4.1 Descriptive Analysis.....	
4.1.1 Demographic Profile.....	
4.1.2 Central Tendencies and Dispersion measurement of constructs.....	57
4.2 Scale Measurement.....	58
4.2.1 Reliability Test.....	
4.3 Preliminary Data Screening.....	



4.3.1 Multicollinearity Test.....	59
4.3.2 Normality Test.....	60
4.4 Inferential Analysis.....	62
4.4.1 Multiple Regression Analysis.....	
4.5 Conclusion.....	65
<b>CHAPTER 5: DISCUSSION ON MAJOR FINDINGS.....</b>	
5.1 Summary of Statistical Analysis.....	66
5.2 Implications of the Study.....	67
5.3 Limitations of Study.....	69
5.4 Recommendations.....	71
5.5 Conclusion.....	
<b>Reference.....</b>	<b>72</b>
<b>Appendices.....</b>	<b>89</b>

### **LIST OF TABLES**

Table 3.1 Cronbach's Alpha Result for Pilot test .....	48
Table 4.1 Central Tendencies Measurement .....	56
Table 4.2 Cronbach's Alpha Reliability Analysis .....	57
Table 4.3 Tolerance Value and Variance Inflation Factor (VIF) .....	58
Table 4.4 Normality Test Result .....	61
Table 4.5 Multiple Regression Analysis .....	62
Table 5.1 Summary of the Statistical findings .....	64

## LIST OF FIGURES

Figure 1.1: Average financial well-being scores .....	20
Figure 1.2: Retirees' Actual Expenses in Retirement Compared with Their Expectations .....	23
Figure 1.3: Percentage of Workers Who Worry About Personal Finances at Work and Impact on Productivity .....	23
Figure 1.4 & 1.5: Kaplan-Meier survival curves for long-term vs short-term planners measured in months from baseline (UK & US sample) .....	24
Figure 2.1: Theory of Planned Behavior (TPB) .....	36
Figure 2.2: Theory of Rational Action (TRA) .....	38
Figure 2.3: Theory of Goal Setting .....	39
Figure 2.4: Conceptual Framework .....	40
Figure 3.1: Sample Size .....	45
Figure 4.1: Gender .....	52
Figure 4.2: Age .....	52

Figure 4.3: Area .....	53
Figure 4.4: Ethnicity .....	53
Figure 4.5: Level of education .....	54
Figure 4.6: Monthly income .....	55
Figure 4.7 Employment .....	55
Figure 4.8 Histogram .....	59
Figure 4.9 Normal Q-Q Plot .....	60

## LIST OF ABBREVIATIONS

TRA	Theory of Rational Action
TPB	Theory of Planned Behaviour
TGS	Theory of Goal setting
FA	Financial Attitude
FB	Financial Behaviour
FK	Financial Knowledge
FL	Financial Literacy
DV	Dependent Variable
IV	Independent Variable
OECD	Organization for Economic Cooperation and Development
EPF	Employee Provident Fund

UTAR

Universiti Tunku Abdul Rahman

VIF

Variance Inflation Factor

## **LIST OF APPENDICES**

Appendix 1.1: Malaysia Population .....	88
Appendix 1.2: Descriptive analysis of Gender .....	88
Appendix 1.3: Descriptive analysis of Age .....	89
Appendix 1.4: Descriptive analysis of Area .....	89
Appendix 1.5: Descriptive analysis of Ethnicity .....	90
Appendix 1.6: Descriptive analysis of Level of Education .....	90
Appendix 1.7: Descriptive analysis of Monthly Income .....	91
Appendix 1.8: Descriptive analysis of Employment .....	91
Appendix 1.9 Reliability Test of Financial Planning .....	92
Appendix 1.10: Reliability Test of Financial Knowledge .....	92
Appendix 1.11 Reliability Test of Financial Attitude .....	93
Appendix 1.12: Reliability Test of Financial Behavior .....	93
Appendix 1.13: Reliability Test of Financial Literacy .....	94
Appendix 1.14: Result of multicollinearity test .....	94
Appendix 1.15: Result of Multiple Linear Regression Analysis .....	95

Appendix 1.16: Descriptive analysis .....	95
---	----

## **PREFACE**

All undergraduate students must complete the Research Project (UBFZ3026) to be awarded a Bachelor of Finance (Hons) degree. "Willingness of Generation Z towards Financial Planning" is the study's subject. Details about the background, literature review, methodology, data analysis, and conclusion will all be examined. This is beneficial to us as students because it allows us to contribute our expertise and interests, come up with new ideas, and better understand the material covered in the course.

With today's financial environment moving rapidly, Generation Z faces quite different opportunities and problems. All financial information is readily available to digital natives, but it is questionable how they use it and how effectively they handle their money to make long-term plans. The goal of the current study is to highlight the critical factors that affect these processes when individuals make financial decisions.

The present study aims to investigate the willingness of Generation Z towards Financial Planning, taking into account the impact of four key factors: financial literacy, financial attitude, financial behavior, and financial knowledge. For educators, politicians, and future

learners who are dedicated to improving the willingness of generation Z towards financial planning, this study can provide some helpful resources.

## **ABSTRACT**

Although Generation Z has never had more access to financial information due to digital transformation, most of them are unable to handle even the most fundamental aspects of money management. The current study looks at four key factors—financial knowledge, financial attitude, financial behavior, and financial literacy to determine the willingness of Generation Z towards financial planning. Questionnaires were sent to 385 members of the Malaysian Gen-Z population, chosen using probability sampling, to gather data for this research. Afterwards, it was determined by multiple linear regression analysis that the willingness of generation Z towards financial planning is significantly influenced by financial knowledge, financial attitude, financial behavior and financial literacy. The final section offers suggestions for creating financial education initiatives that specifically address the needs of Generation Z to raise their level of financial knowledge, financial behavior, financial attitude and financial literacy. In doing so, the study continues to add to the body of knowledge regarding financial planning while also strengthening the case for developing a generation that is more robust and more financially prepared.

## **CHAPTER 1: INTRODUCTION**

### **1.0 Introduction**

In Chapter 1 of the study, the research problem is briefly described before a more in-depth focus is adopted. It begins by defining financial planning and describing its process. The chapter also looks at generation Z of financial planning's willingness. The section of this chapter that addresses the primary issue with financial planning among Generation Z provides a summary of the several distinct variables that are at play. The research objectives then direct the study's course. The chapter emphasizes the significant contributions that this research makes. This chapter is crucial because it lays forth the framework for the next four chapters: Chapter 4, Data Analysis; Chapter 5, Discussion, Conclusion, and Implications; and Chapter 2, Literature Review. The synopsis of the chapter makes connections with the subsequent literature study.

### **1.1 Research Background**

Generation Z, also referred to as "zoomers," is the generation that is succeeding millennials and preceding Generation Alpha. The Gen Z generation includes individuals born from 1997 to 2012. The Gen Z age group encompasses individuals aged 12 to 27 years as of 2024 (Gorynski, 2024). They came of age in the most recent wave of people to come of age in a time of fast technical advancement, intense social change, and global interconnectedness. In contrast to their forebears, Generation Z has been raised in a world where digital technologies are widespread and ever-present, exerting influence over every facet of their existence, including social interactions, education, and communication (Pandya, 2023). Most of them have developed their financial literacy about financial planning on their own due to the accessibility of online tools and materials. In comparison to earlier generations, they have had the chance to learn about budgeting, saving, and investing at a younger age (Graber, 2020). Witnessing the challenges of the 2007–2008 financial crisis throughout their early years has affected the financial understanding of Generation Z. Numerous experienced their parents' struggles with declining funds and unemployment (Nikolaos & Avdoulas, 2021).



According to Utami and Sitanggang (2016), Gen Z is characterized by traits like creativity, technological savvy, confidence, success orientation, friendly attitude, heroic deed, perseverance, and multitasking. They also prioritize their well-being, love variation, require leadership and encouragement, and demonstrate an attraction to thrive in a community. Gen Z has demonstrated a strong interest in investing, particularly in stocks, cryptocurrencies, and mutual funds, thanks to their easy access to investment platforms and apps (Greg, 2023). A significant portion of Gen Z's investment confidence stems from the increased availability of financial resources. Compared to 19% of millennials and 12% of Gen X, 28% of Gen Z said they learned about investing in school (Contino, 2024). In this case, financial education has a major role in optimizing financial planning skills (Sharma et al., 2023). Good financial education aids in the development of sound and long-lasting financial habits in addition to helping people plan and manage their resources (Bado, 2023). Gen Z is better equipped to handle risks and take advantage of financial opportunities when they have an in-depth knowledge of the fundamentals of financial planning. When used properly, technology and financial tools can be optimally utilized to help people reach their financial goals. This skill is particularly crucial when dealing with financial markets and financial instability.

Generation Z prioritized spending on fashionable products in order to stand out in their welcoming environment (Gumulya and Widiastuti, 2013). Azizeh (2022) suggests that Generation Z adheres to the notion of "You only live once," which may be read as simply enjoying the moment without considering the present or future. Gen Z in China embraces both the "Dopamine Economy" for quick satisfaction and "Reverse Consumption" for deliberate spending and saving practices, striking a balance between excess and caution. In the Western world, Gen Z emphasizes financial flexibility by fusing frugal spending with innovative budgeting techniques like "Girl Math" and fashions like "Buy Now Pay Later" (DBS, 2024).

Financial planning helps to create the anticipated capital by supplying money at different points in time. Financial planning promotes inner harmony and profitably manages funds (Kulkarni et al., 2022). One can conclude that the scope of financial planning is not limited to retirement planning and that early preparation yields better results. The main goal of financial

planning is to use investments, savings, debt management, insurance, taxation, and estate planning to meet financial priorities such as medium- and long-term goals like housing, education, and retirement income, as well as short-term needs like asset protection (Tamplin, 2024). People that are proficient in handling money typically encounter reduced financial stress (Aprilia, 2024). One of the biggest sources of stress in many people's lives is money, which can have an impact on both their physical and mental well-being. People can lessen this stress, feel more assured about their financial future, and enhance their general quality of life by developing sound financial planning abilities (Satria, 2024). Regarding money, Johan et al., (2021) reaffirms that parents are very important in the lives of Generation Z. Individuals who have regular conversations about money matters with their parents or other family members are more knowledgeable and are more likely to succeed when making investments decision down the road.

Post-Covid-19 situation as we emerge from the impacts of the COVID-19 pandemic, the path to full economic recovery remains uncertain, and policymakers and businesses will need to remain vigilant and adaptable in the post-pandemic period. The COVID-19 pandemic has recently had an impact on young Malaysians' financial situation, reducing their savings and income options (Sabri et al., 2023). Like many other countries, the Malaysian economy will undoubtedly be affected by the recent global economic turmoil and rising inflation. The pandemic has disrupted economies around the world, leading to job losses, reduced working hours and rising unemployment. Gen Z entering the job market during this period face greater uncertainty and may need to adjust their financial plans accordingly, such as postponing major purchases or reassessing career ambitions (Nisha,2022).

Moreover, this research is to identify the Gen Z's awareness of the need for and implementation of financial planning. It highlights knowledge gaps and misconceptions among Gen Z individuals regarding financial topics such as budgeting, saving, investing and debt management. For instance, lack of financial education or awareness of managing, saving and investing cash is one of the causes of financial problems. (Sabri et al., 2023b) If they lack awareness of financial literacy, the number of bankruptcy cases in Malaysia continues to rise. Based on bankruptcy, the department said 26% of bankruptcies in Malaysia were among people under the age of 34. (Bankruptcy Statistic 2023, n.d.).

## 1.2 Problem Statement

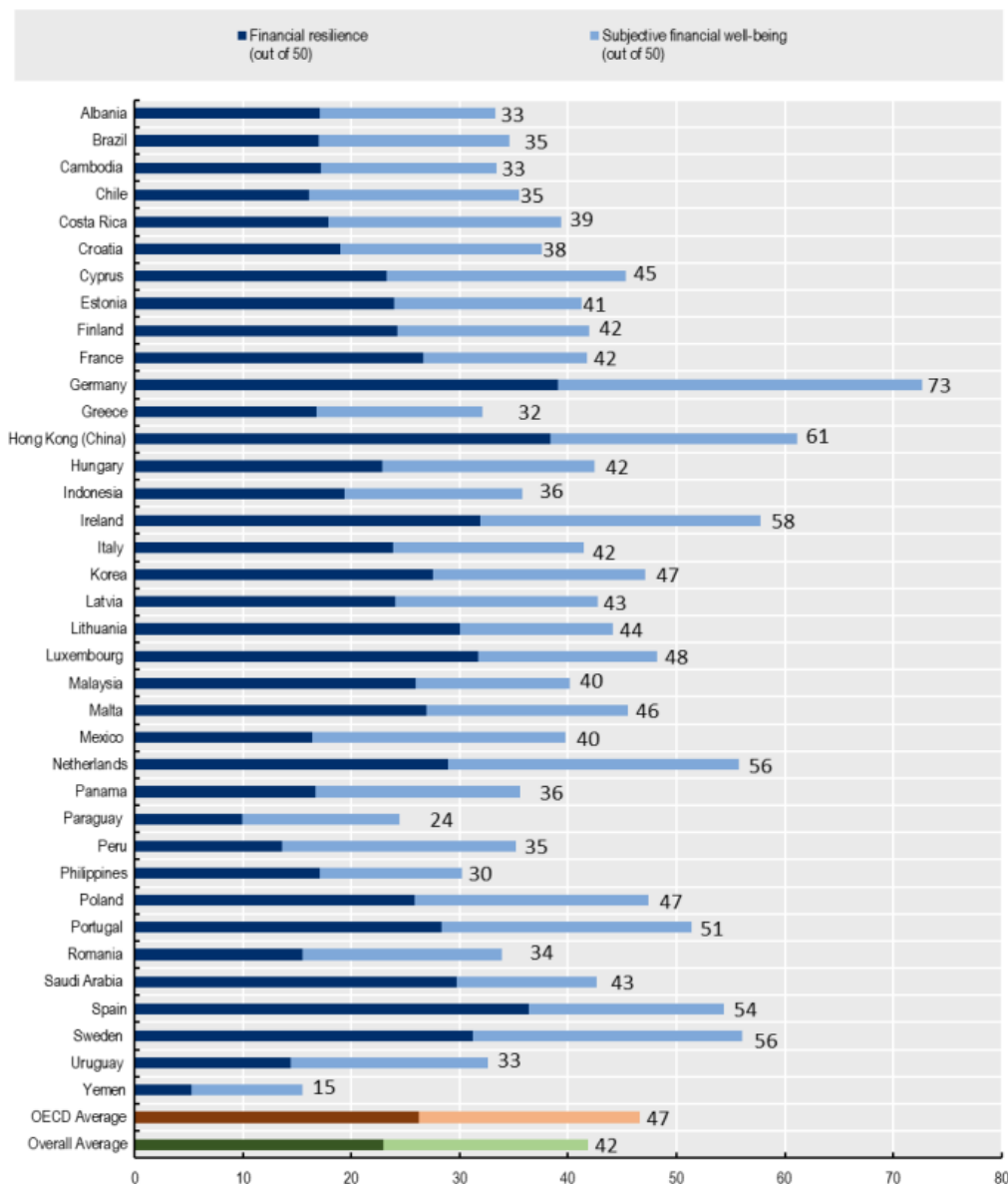
Everyone needs to organize their finances these days, regardless of age or gender (Pereira and Varma, 2018). Individual financial planning and investment are crucial components of everyone's lives, especially in today's society where everything is measured in monetary terms. The active working time of human life is limited in contrast to its overall life span. It implies that individuals will spend a similar duration of time in retirement as they did in their productive working years. To continue producing money and living comfortably, people must save and invest while they are employed (Hani, 2020). A poor financial planning will reduce living standards of a person (Loibl, 2018). Without comprehensive financial planning, people may encounter problems such as lack of emergency funds and retirement funds, increase in mortality rates due to poor healthcare services, difficulty in accumulation of wealth and so on. People may now easily access a variety of financial tools and information thanks to technological advancements, which can aid in making better decisions. But this accessibility also presents new difficulties, such as heightened cybersecurity threats and a concerning assortment of financial opportunities (Chang et al., 2020). Generation Z's biggest obstacle is managing and applying this information to make informed financial decisions. One essential ability is the capacity to precisely analyze, evaluate, and interpret financial data. Without sufficient direction, Generation Z could be exposed to inaccurate or biased information, which could lower the standard of financial decisions (Zao, 2024). Even though financial information is easily accessible online, many Generation Z have trouble locating reliable and pertinent sources. Effective financial planning and management is made more difficult by the incapacity to evaluate the reliability of financial data and distinguish fact from opinion. They are so susceptible to deceptive investment offers and bad financial recommendations. Inadequate retirement funds is another major issue. A lot of Generation Z prioritize meeting immediate necessities over setting aside money for retirement (Kartiko & Yuniarti, 2024).

Gen Z is sometimes referred to as the generation lacking in abilities of financial planning. Despite this is the ideal age to master financial planning skills, they don't recognize its

significance and lack the skills necessary to handle money well (Erlangga & Krisnawati 2020).

According to a study conducted from Everfi (2018), they don't truly have as much financial planning expertise as they think they do. Actually, only half of respondents are able to calculate their net worth, four out of ten have never made or followed a budget, one in four shop to make themselves feel better, only half of respondents are able to reduce their spending when resources are scarce, and a sizable portion of respondents are genuinely unsure of how to calculate the effect of inflation on their savings. In addition to receiving a sizable amount of pocket money from their parents, Gen Z members have access to their personal credit or debit cards. As much as 46% of people have a bank account and credit card before they become adults, according to the research from ASIC (2021). Additionally, roughly 60% of youngsters reported receiving pocket money on a regular basis. This implies that young people lack a complete understanding of the value of money and are more likely to spend big amounts of money carelessly. Social media has a significant effect on Generation Z's purchasing habits as well. They frequently feel pressured to spend more money than they can afford because they want to be elegant and follow the current trends (Jafar et al., 2023). They find it difficult to conserve money and make wise investments because of easy access to internet shopping and a constant barrage of commercials encouraging them to buy things they don't need. This behavior results in poor financial planning and impulsive expenditure. The results of an intriguing and eye-opening survey conducted by Atkinson & Kempson (2014) based on the DTI Survey of Over-Indebtedness were revealed. Of the participants, half of the 18–24 age group acknowledged having an overdraft facility. The outcome for the 20–24 age group was 57%.

Figure 1.1: Average financial well-being scores by OECD, (2023)



The Organization for Economic Cooperation and Development (OECD) published average financial well-being for the year 2023 (Figure 1). Malaysia's financial well-being, with 40 points, is below average. The fact that the score is below average indicates that many people, even members of Generation Z, may find it difficult to manage their finances, which could result in more financial stress and a poorer standard of living.

According to the chief executive officer of the Employee Provident Fund (EPF), only 33% of active members have recorded baseline savings of RM240,000 as of last year, indicating that most Malaysians do not have enough money saved for retirement. There are data shown that

75% of members who had taken out their EPF fund in a lump sum ran out of money within five years. In Malaysia, there were 24.2 million persons of working age, but only 42% had old age protection. Because of this, Malaysia's coverage rate is lower than the 50% global average. The CEO of EPF aims to go above the worldwide average or aim as near as possible to the average rate of 87% set by the Organization for Economic Cooperation and Development (OECD). Because it offers Malaysians social security, this is crucial. (Ahmad Zulqarnain, 2024)

Furthermore, people's lack of emergency funds is difficult to handle unexpected shocks and can have an impact on the whole economy. After the pandemic and following economic disruptions, it is now even more evident that individuals need to save wisely and practice sound money management to protect their financial security. (Demertzis et al, 2020)

In Greenwald, 2017 figure showed that according to three out of ten workers, getting ready for retirement stresses them either emotionally or psychologically. Compared to workers who do not feel worried, these stressed workers have a lower sense of financial security and are much less optimistic that they will have enough money to retire comfortably. Thirty percent of employees report worrying about their personal money at work, making up three out of ten workers. If these employees didn't spend as much time worrying, almost half of them think they would be more productive at work. Besides, the figure shown that 47% of retirees have higher healthcare expenses than their expectation before retired and 37% on other expenses. So there are almost one third persons who have experience higher expenses than expectation after retired. Therefore, people need financial planning not only for their retirement also for the social security that not be harm by those not enough money.

Figure 1.2: Retirees' Actual Expenses in Retirement Compared with Their Expectations (Greenwald, et al., 2017).

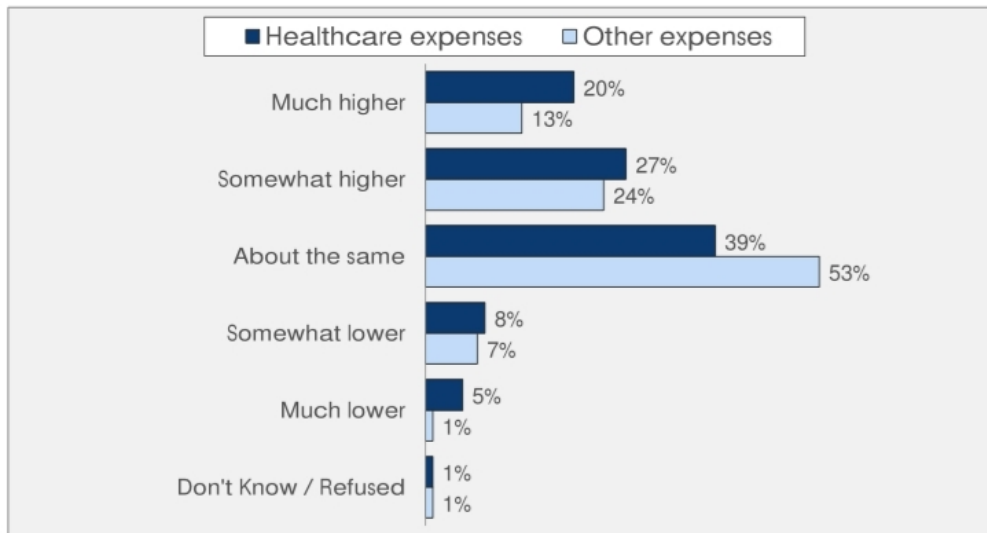
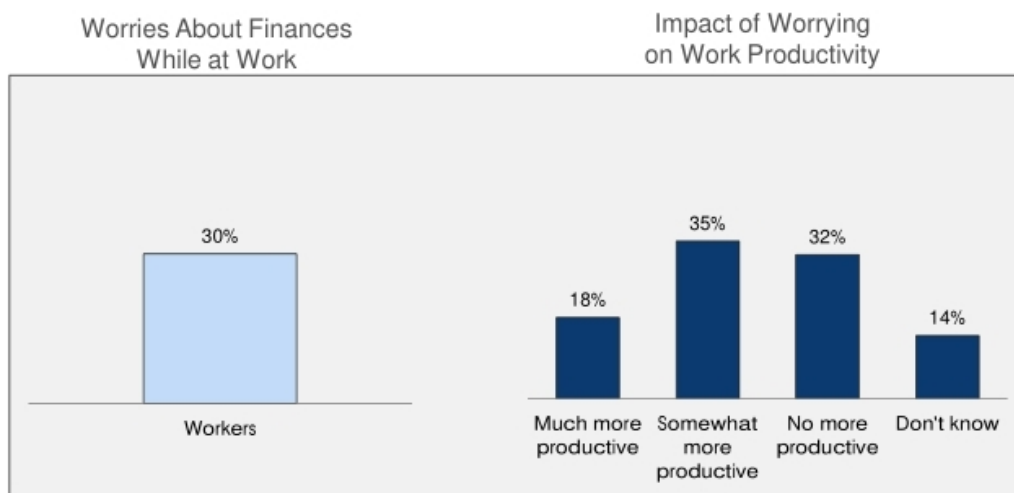


Figure 1.3: Percentage of Workers Who Worry About Personal Finances at Work and Impact on Productivity (Greenwald, et al., 2017).



Furthermore, there is also research showing that, can be referred to Fig 1.4. and Fig1.5., people prepare for their financial futures typically have lower death rates and better health outcomes, according to the relationship found between financial planning and mortality rates. Longer-term financial planning lowers financial stress, increases financial resilience, and makes it easier to obtain healthcare services and preventative treatments, all of which are probable contributing causes to this link. Furthermore, those who are financially

disadvantaged have a stronger correlation with this connection and may gain more from increased financial resilience. These findings highlight the significance of financial planning in impacting health outcomes and death rates, despite difficulties in demonstrating causation. This highlights the relevance of financial planning for policymakers seeking to reduce health inequities among ageing populations (Gladestone et al, 2023).

Figure 1.4 & 1.5: Kaplan-Meier survival curves for long-term vs short-term planners measured in months from baseline (UK & US sample). (Gladestone et al, 2023).

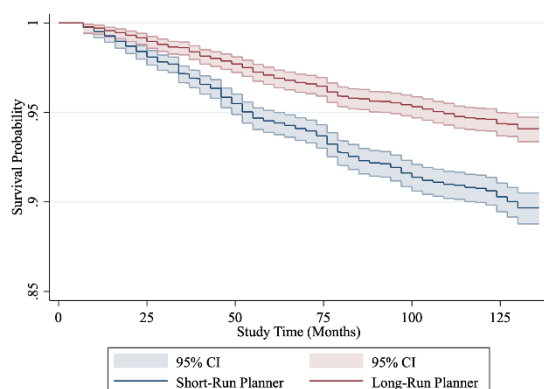


Fig 1. Kaplan-Meier survival curves for long-term vs short-term planners measured in months from baseline (ELSA, UK sample).

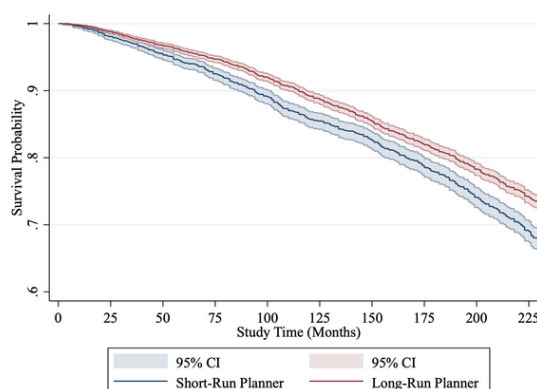


Fig 2. Kaplan-Meier survival curves for long-term vs short-term planners measured in months from baseline (HRS, US sample).

Without financial planning, the poor entrepreneur has challenges due to a combination of factors such as low literacy, a scarcity mindset, and a lack of safety cushion. Where the entrepreneur is left with fewer options and less flexibility. They find it harder to deal with the difficulties of being new and tiny. Their business endeavours are probably more fragile and have greater failure rates. When confronted with outside dangers and disruptive shocks, like the COVID-19-related economic crisis, they become particularly vulnerable. (Morris et al, 2022)

Therefore, it is importance to encourage Gen-Z to have financial planning. The lack of research on the variables that are influencing Generation Z individuals' willingness toward financial planning is the gap in the literature currently available. It is necessary to thoroughly study the factors influencing Gen-Z's intention in financial planning given their distinct financial preferences and behaviours. In order to effectively develop initiatives and policies



that encourage financial literacy, resilience, and well-being among younger people, governments, financial institutions, and other stakeholders must address this research gap.

### **1.3 Research Objectives**

Specific objectives are formulated to achieve our general objectives.

1. To examine whether there is a significant relationship between financial literacy and financial planning among generation Z in Malaysia.
2. To examine whether there is a significant relationship between financial behavior and financial planning among generation Z in Malaysia.
3. To examine whether there is a significant relationship between financial attitude and financial planning among generation Z in Malaysia.
4. To examine whether there is a significant relationship between financial knowledge and financial planning among generation Z in Malaysia.

### **1.4 Research Questions**

The study's goal is to investigate the relationship between financial behaviour intentions among Generation Z persons in order to analyse Generation Z's desire to engage in financial planning and the many factors that influence their intention. In the meanwhile, the particular objectives and goals are:

- I) To examine the impact of financial attitudes (FA) of the willingness of generation Z towards financial planning in Malaysia.
- II) To examine the impact of financial behavior (FB) of the willingness of generation Z towards financial planning in Malaysia.
- III) To examine the impact of financial literacy (FL) of the willingness of generation Z towards financial planning in Malaysia.
- IV) To examine the impact of financial knowledge (FK) of the willingness of generation Z towards financial planning in Malaysia.

## **1.5 Significance of Study**

### **1.5.1 Theoretical significance**

In order to assess Generation Z's readiness to engage in financial planning, this study uses the Theory of Planned Behaviour (TPB) and the Theory of Goal Setting as conceptual frameworks to try and identify the factors that affect their intentions for their financial behaviour. The study will focus on the readiness to engage in financial planning related to financial attitude (FA), financial behaviour (FB), financial knowledge (FK), and financial literacy (FL). The established TPB and TRA frameworks will be combined with financial literacy (FL) to provide a thorough knowledge of Generation Z's propensity for financial planning.

### **1.5.2 Practical Significant**

The practical significance of studying Generation Z's willingness toward financial planning extends across multiple domains, offering actionable insights for financial educators, policymakers, financial institutions, and Generation Z individuals themselves. By intertwining the Theory of Planned Behavior (TPB) and the Theory of Rational Action (TRA) with the constructs of financial behavior (FB), financial attitude (FA), financial knowledge (FK), and financial literacy (FL), this research illuminates the determinants shaping young adults' financial planning intentions. It paves the way for educational policymakers and institutions to integrate crucial financial literacy components into curriculums, tailoring educational programs to better equip Generation Z with essential financial management skills. Financial advisors and institutions gain valuable guidance on developing products and services that cater to the digital preferences of this tech-savvy generation, potentially increasing engagement and satisfaction. Moreover, the findings assist policymakers in crafting policies that bolster financial literacy and protect young consumers, promoting positive financial behaviors and access to vital resources for sound financial management. On a societal level, enhancing the financial literacy and planning capabilities of Generation Z not

only benefits individuals by fostering improved decision-making and security but also contributes to economic stability and growth by nurturing a financially literate populace. The integration of financial literacy with digital platforms can make education more accessible and engaging for Generation Z, underscoring the study's broad impact in shaping strategies that enhance financial behaviors and literacy among young adults, ultimately aiding their financial well-being and the broader economy.

Therefore, in this research we study four determinants which will affect the willingness toward financial planning. It is important we need to study how financial knowledge, and financial literacy will affect willingness towards financial planning. Financial knowledge is about the basic knowledge of financial concepts, and financial literacy is about how a person utilizes his knowledge to reach his financial goal. These two determinants will directly affect a person willingness toward financial planning. Furthermore, financial behavior is about the behavior of a person regarding financials stuffs. A person who has saving behaviour will save more money instead of spend it. That's why it also important to study how it will affect the willingness of a person towards financial planning. Lastly, it is important to study financial attitude, which is how a person feels about money, it can be influenced by education, cultural norms and use experiences. Therefore, it will affect willingness toward financial planning

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

The structure of Chapter 2 is as follows. The overview of previous research on the dependent variable, the willingness of financial planning, occurs in the first section. The second section explains how it relates to the four independent variables of financial knowledge, financial attitude, financial behavior, and financial literacy. Thirdly, there is a discussion of the theoretical frameworks. The conceptual framework for this study is subsequently created.

### **2.1 Review of Literature**

### **2.1.1 Willingness of Financial Planning**

According to the Financial Planning Standard Board (FPSB), financial planning is the organised, integrated management of one's finances to achieve financial objectives. The purpose of family or personal financial planning is to manage finances for the future in an organised, wise, and planned manner in order to attain financial goals as early as possible (Manning, 2023). Listiani (2017) defines financial planning as a person's basic aptitude or capacity to oversee daily financial matters, including budgeting, planning, examining, managing, controlling, searching, and preserving. According to Prihartono & Asandimitra (2018), those who manage their finances well typically can stick to a schedule, are skilled at financial planning, and have prepared for the process by keeping their spending under control to maintain their financial circumstances. According to Amanah et al. (2016), financial planning is the practice of handling money from a habitual and psychological perspective.

A typical association between financial planning and retirement is seen in the elderly population. However, for the younger generation, or Generation Z, who come from different backgrounds, the issue is now critical. To manage short- and medium-term spending, save for retirement, and choose pension plans that suit their needs and lifestyle, Generation Z needs to acquire the necessary knowledge and attitudes (OECD, 2022). A sound financial strategy requires the right information, abilities, attitudes, and behaviors (Agarwal et al., 2015). As the effects of digitization become more prominent, generation Z must also take note of digital goods and services since they offer value and make financial planning easier (Gan et al., 2021).

According to Komaria (2020), income has a major impact on financial planning. In accordance with June and Roy F (2014), individuals possessing greater self-control ought to be more proficient in various undertakings. They can avoid or at least better resist bothersome temptations, avoid putting things off, and make better use of their time as a result. According to a study conducted in 2017 and 2018 at Semarang State University, Irfandi (2020) found that financial behavior and financial planning skills are influenced by self-control. When people can gather information, identify their top priorities, and handle money in a methodical, organized, and wise manner, their intended goals can be achieved (Ate &

Yowi, 2022). Prior to managing funds, understanding one's own financial situation is essential. Understanding the state of the economy will help the financial planning process be more accurate. According to Susanto et al. (2022), financial planning literacy and the anticipation of benefits from the process are the two main elements influencing the implementation of financial planning in Generation Z.

### **2.1.2 Financial knowledge**

Financial knowledge encompasses an individual's comprehension of several financial concepts, principles, and instruments. It includes understanding fundamental economic concepts, investing techniques, budgeting, saving, and basic financial terminology (Pandya, 2022). Financial knowledge will motivate people to prioritize their requirements and set aside money for unanticipated costs (Listiani, 2017). Ahillah (2019) defines financial knowledge as the capacity to handle different aspects of money. Fitriani and Widodo (2020) concluded that a person's aptitude for financial decision-making stems from their basic knowledge and comprehension of finance. The ability of each individual to grasp financial terms and assess the financial environment to lessen the likelihood of running into financial difficulties is referred to as financial knowledge. Financial knowledge necessitates both an awareness of how financial abilities evolve and proficiency with financial instruments like debit cards. (Rahman et al., 2021) define financial knowledge as assessing a person's comprehension, aptitude, and beliefs regarding financial concepts. This includes assessing a person's ability to manage their own finances, which is determined by how accurately they make short-term decisions and plan their finances for the future considering the state of the economy. According to Banthia & Dey (2022), financial knowledge is the degree to which an individual understands numerous personal financial concepts and is related to personal financial planning.

One of the most important requirements for being able to make effective personal financial decisions is undoubtedly having a solid comprehension of financial knowledge (Croy et al., 2010; Hershey et al., 2015). Numerous studies have shown that adulthood's lack of financial knowledge has several detrimental effects. Mien and Thao's (2015) research found a direct link between financial planning and financial knowledge. Poor retirement savings and

investment decisions, for example, have been related to a lack of financial literacy. (Lusardi & Mitchell, 2011). According to Yogasnumurti & Irawati (2021), having a basic understanding of financial knowledge enables people to keep away from frequent financial mistakes including high-interest debt, inadequate savings, and bad investment decisions. People are more inclined to engage in financial planning to prevent unfavourable outcomes when they are aware of the consequences of these errors. Numerous studies show that an individual's level of financial and investment knowledge has a considerable impact on savings habits and financial planning (Croy et al., 2010; Van Rooij et al., 2011). Having a greater level of financial knowledge has a favorable impact on individuals' retirement savings. Those who possess a higher level of financial understanding are more inclined to save for their retirement (Fernández et al., 2010). Targeted financial education programmes considerably increased financial knowledge, on the effects of financial education on young adults to fill up the knowledge gaps and meet the needs of Generation Z may prove to be quite beneficial (Xiao et al., 2014).

High financial knowledge can often breed overconfidence in one's abilities, which might cause one to ignore careful financial planning or take unwarranted risks (Zwaan, 2017). According to Lusardi and Mitchell (2011), people who are overconfident may underestimate risks or exaggerate their financial knowledge, which can result in bad financial decisions. According to the studies, financial knowledge has an inverted U-shaped pattern, peaking in the middle of a person's life cycle and being lowest for younger and older demographics. Tang & Baker (2016) report that the findings indicated no significant relationship between generation Z's financial planning and financial knowledge. This suggests that although they may possess sufficient financial knowledge, issues such as behavioural biases, a lack of drive may prevent them from converting that knowledge into workable financial planning techniques. According to Lusardi and Mitchell (2007), many Americans, both adults and high school students do not possess appropriate financial knowledge. Even if they understand the value of financial knowledge, their actual understanding of the subject is significantly inadequate. High school students perform even worse, scoring lower than average on financial knowledge exams. According to Wiyanto et al. (2019), inadequate financial knowledge contributes to inadequate financial planning, making it essential for people to

have this knowledge in order to prevent financial difficulties. According to Gahago et al., (2021), financial planning is unaffected by financial knowledge.

Mien & Thao (2015) examined the willingness of financial planning with financial knowledge using Cronbach's alpha, exploratory factor analysis, and confirmatory factor analysis, and they found a positive relationship. The findings are consistent with a study conducted by Yogasnumurti & Irawati (2021), which found a positive relationship between the two factors. In addition, Zwaan's (2017) study examines the impact of financial planning and financial knowledge. information gathered from respondents who were older than 20. Since there is no relationship between the variable and the research, the outcome is like the findings of Lusardi and Mitchell (2007) study. The literature revealed contradictory findings about the impact of financial knowledge on financial planning willingness. The differences in more than two countries could be the source of this. Furthermore, it could also be related to the respondents' varying features, particularly regarding their level of education.

### **2.1.3 Financial attitude**

A person's general approach and emotional orientation towards money matters is referred to as their financial mindset. It includes a person's perspective on finances as well as their emotions and actions around spending, investing, saving, and budgeting. Financial attitudes encompass beliefs, viewpoints, and assessments regarding financial matters (Arifin, 2018). Financial attitude was defined by Rai et al. (2019) consider an individual's inclination towards financial difficulties, proficiency with future planning, and ability to accumulate savings. Positive attitudes towards financial planning among Generation Z increase the likelihood of appropriate financial acts, such as goal-setting and routine financial reviews (Khalisharani & Sabri, 2022). Financial attitude can also be categorized as judgments, states of thinking, or viewpoints (Pankow, 2012). An attitude can induce emotional biases, which can create internal deviations from logical decision-making. Financial issues and dissatisfaction can be caused by inadequate financial planning and an unfavourable financial attitude (Qamar et al. ,2016). Individual responses in the form of declarations about money and future financial behaviour are known as financial attitudes (Potrich et al., 2016). A negative financial attitude may manifest as fear, avoidance, or a lack of trust in one's abilities

to manage money problems, whereas a good attitude entails optimism, proactive financial planning, and confidence in reaching financial goals (Pandya, 2022).

Baek et al., (2019) stated the positive behavioral changes towards financial planning are attributed to changes in financial attitudes. Vincent et al. (2021) state that Generation Z places a high priority on financial independence and security. They also indicate prudence when it comes to debt and a preference for saving money over spending it, both of which are signs of a proactive approach to financial planning. Their appetite for using online resources to efficiently manage their finances and their strong comfort level with technology also influence their financial attitudes. According to Bhushan & Medury (2016), cultivating positive financial attitudes should be the main goal to create an intergenerational financial culture among generation Z.

According to Patel et al. (2017), there is generally a positive attitude among Gen Z and millennials towards financial planning, but there is comparatively less awareness and attitude towards financial planning and estate planning. Since they grew up in an optimistic time that placed a strong emphasis on success and innovation, Generation Z may have an overly optimistic outlook on their financial future and assume favourable outcomes with little effort. This could be the result of their perceived lack of a positive financial attitude or the need for careful financial planning (Gaidhani et al., 2019). The study conducted by Nisa & Haryono (2022) failed to demonstrate the significant effect of financial attitude on financial planning in Indonesia.

By using a structural model and a collinearity test, Mustafa (2023) demonstrated that financial attitude has a significant positive impact on financial planning. The outcome matches the research conducted by Abekan (2024). A financial attitude will assist individuals, particularly Generation Z, become conscious of their current financial circumstances, which is crucial when making retirement plans. According to Gunawan's (2020) multilinear regression analysis, a significant portion of Generation Z has been influenced by social media information regarding financial planning and attitude.

#### **2.1.4 Financial behavior**



Financial behavior encompasses the various financial decisions and activities that people make, including investment selections, saving patterns, spending habits, and general financial control. Goal setting, risk tolerance, and values are all reflected in it as an apparent representation of one's financial views (Pandya, 2022). Future financial decisions are influenced by spending, purchasing attitudes, and financial budgeting (Tang & Baker, 2016). Developing a financial behaviour is also influenced by a saving attitude (Henager & Cude, 2016). Budgeting, investing, saving, financial planning, and future preparedness are all examples of financial behavior indicators. People's financial behavior is reflected in both their positive and negative activities (Heinonen, 2018). Good money management techniques include budgeting, setting up emergency funds, controlling financing, and creating long-term goals like estate planning, retirement plans, and risk management using insurance. On the other hand, poor financial behavior includes being an impulse buyer, relying on employer-sponsored pension plans, and avoiding money conversations. Herdjiono et al. (2018) state that there are three components to financial behavior: saving and investing, managing cash flow, and spending. Masdupi et al. (2020) use an individual's investment management as a proxy for financial behavior (individual financial management behavior). Each person must comprehend the responsibilities associated with the investment decisions they make in order to exhibit more responsible financial conduct while maintaining investments or executing financial planning decisions.

The majority of Generation Z demonstrates a positive financial behaviour for saving due to increased living expenses and witnessing economic uncertainty. This inclination to save can increase their readiness to participate in financial planning to guarantee that their savings are used as efficiently as possible (Marheni et al., 2024). Weinbrenner (2023) stated that gen Z who exhibit sound investment behaviours are more likely to plan for financial security and to maximise returns on their investments. They are also more willing to investigate investment options. According to Pamikatsih et al., 2022, Gen Z is also capable of wisely allocating their income to their daily needs to reach their financial objectives and enjoy the best rewards. These test results are consistent with study by Reviandani (2019), which explains the relationship between financial behavior and income levels.

According to Mandell and Linda's (2009) findings, those who completed the financial planning course did not perceive themselves as having better financial behaviour or being more savings-oriented than those who had not. Comparable were the findings of Tang and Baker's (2016) analysis, which showed that financial data is a key but insufficient motivator of prudent financial planning. According to Mitchell (2019), Generation Z are often conservative with their money, favouring experiences over tangible belongings and looking for the best deal. A portion of Generation Z can develop excessive spending habits because of social media and commercial culture. Since they could put short-term gain ahead of long-term financial objectives, this behaviour may decrease their willingness to participate in financial planning (Erwin et al., 2023).

According to Khawar & Sarwar's (2021) reliability analysis, one-way ANOVA, independent t test, and mediation analysis, there is a positive relationship between financial behaviour and financial planning. The partial least squares structural equation model result from Marheni et al. (2024) indicates that financial behaviour has a positive impact on financial planning. A positive relationship between financial behaviour and financial planning is demonstrated by the Pearson Coefficient analysis result from Sudha et al., (2022). This suggests that prudent financial behaviour will keep up with changes in financial knowledge, gain more experience with digital financial payment transactions, and confidently navigate technical challenges.

#### **2.1.4 Financial literacy (FL)**

As stated by Sanderson (2013), financial literacy refers to an individual's capacity to utilize their knowledge and abilities to make wise financial choices and successfully handle their financial resources. Financial literacy should rise among adolescents, and school-based financial education initiatives should be implemented. Kumar et al. (2022) defined financial literacy as the ability to handle one's finances to maximize one's well-being and serves as a gauge of one's comprehension of personal financial planning based on the utilization of available knowledge. Financial literacy was operationalized by utilizing fundamental questions on financial understanding pertaining to inflation, interest calculations, risk and

return, diversification, and market functioning. Highly intelligent individuals exhibit a high level of financial literacy (Hanson & Olson, 2018; Miller, 2001). Cost-effective financial decision creation can be facilitated by financial literacy (Sabri and Juen 2014). Because they typically accumulate assets for pension preparation, individuals, especially gen Z with higher levels of education are more likely to understand the fundamentals of financial planning and to make better pension plans. Thus, those with a strong background in finance will know how to appropriately plan for retirement, which influences the success of appropriate saving tactics.

According to Rosdiana (2020), a number of factors influence financial literacy, including inspiration, return on investment, and social context. According to Coşkun et al. (2016), financial literacy aids in the improvement of consumer decision-making, especially investing decisions. When making investing selections, an investor needs to take returns, risks, and market conditions into account. An investor should review a comprehensive financial literacy index before making any investment decisions (Van et al., 2011) According to Putri and Rasyid (2021), financial literacy in Generation Z is influenced by parental socioeconomic status and demographic characteristics. Rahmah et al. (2021) found in another study that the financial literacy of Generation Z is influenced by factors such as gender, parental income, educational background, and majors in vocational schools. Afgani et al. (2021) report that the rise in digital currency innovations and technology breakthroughs has contributed to a rise in Generation Z's stock market engagement in recent years.

Most nations in the globe, including Malaysia, believe that young people have inadequate levels of financial literacy (Garg & Singh, 2018). According to research by Lusardi and Mitchell (2011), Americans who can accurately respond to questions about financial literacy are far more likely to make retirement plans. Moreover, Arrondel et al. (2014) discover a positive correlation between financial literacy and the inclination to make long-term financial plans, especially for retirement. There's a relationship between political participation and financial literacy that may be indicative of divergent opinions on the function of the welfare state and personal accountability.

Harahap et al., (2022) has shown contradictory results on the relationship between financial literacy and retirement planning in Indonesia and Malaysia. According to Widyakto et al. (2022), lifestyle factors and financial literacy have no impact on financial planning. Eka and Fetrik (2021) discovered that the financial planning of Bank Panin KCU Plaza Pasifik employees in Indonesia is unaffected by their level of financial literacy. According to Purnama & Simarmata (2021), financial planning is unaffected by financial literacy.

According to Khawar & Sarwar's (2021) reliability analysis, one-way ANOVA, independent t test, and mediation analysis, there is a positive relationship between financial literacy and financial planning. The partial least squares structural equation model result from Marheni et al. (2024) indicates that financial literacy has a positive impact on financial planning. The outcome agrees with the OLS estimates from Arrondel et al. (2014), demonstrating that those who possess greater financial literacy are more likely to be actively involved in creating a detailed financial plan for the remainder of their lives. It may then be possible to effectively encourage people to prepare ahead and think financially by enacting policies that support financial literacy. Fitriah (2021) concluded that financial literacy has a positive and significant impact on financial planning after conducting tests for validity, reliability, normality, and multicollinearity.

## **2.2 Theoretical framework**

These theories can explain the relationship between Financial Planning and its independent variables which are financial attitude, behavior, knowledge and literacy. The theories include the Theory of Planned Behavior and The Theory of Rational Action.

### **Theory of Planned Behavior**

Figure 2.1: Theory of Planned Behavior (TPB)

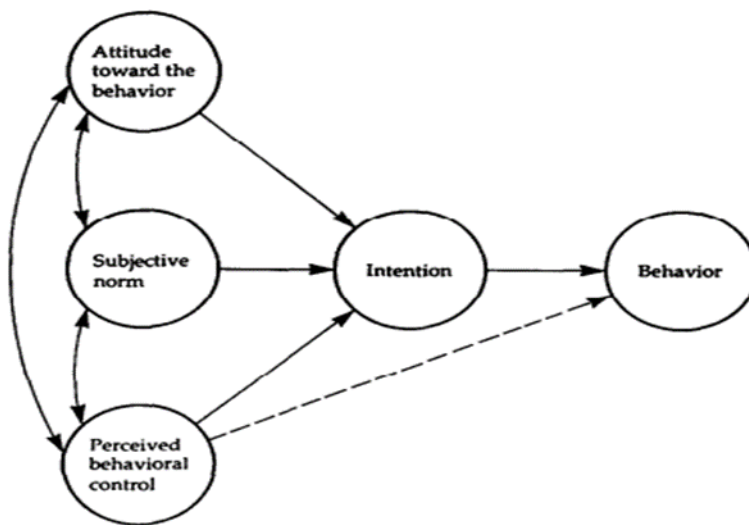


FIG. 1. Theory of planned behavior.

The Theory of Planned Behavior (TPB) regards intention as the most important predictor of behavior. It contends that cognitive engagement behaviors are positively evaluated and influenced by attitudes. The theory measures undergraduates' financial willingness. It comprises attitudes towards spending, perceived ability to spend, and normative effects on spending. The TPB has also been used to research the financial behaviours of college students involving cash, credit, and saving management, providing vital insights into how young adults shape their financial behaviours depending on their aims, attitudes, social norms, and perceived control (Shim et al., 2009). This is because many students say they have no control over their financial situation. Furthermore, A study conducted by Arofa et al. in 2018 revealed that financial literacy shows a significant and positive influence on individuals' financial behavior. Students that possess higher degrees of financial literacy demonstrate exemplary financial behavior.

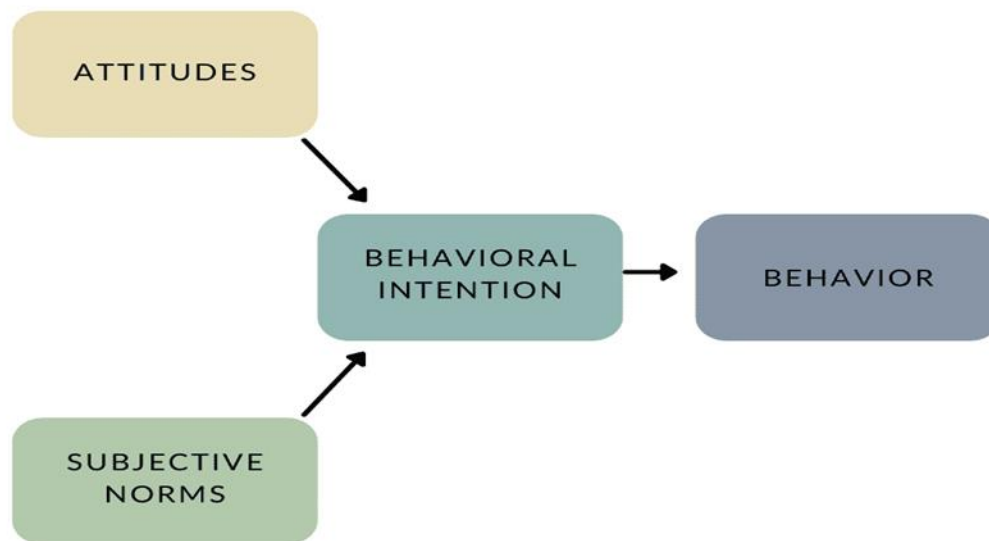
The theory of planned behaviour (TPB) is commonly used in the study of household financial behaviour. Over the years, scholars have used and expanded on this idea to acquire insights into certain financial behaviours and their antecedents. This theory aids in understanding and predicting a variety of financial decisions and behaviours, such as investment choices, debt management, mortgage utilisation, cash, saving, and credit management. In another study on individual debt behaviour, Xiao and Wu (2008) extended the TPB model and revealed that customer satisfaction influenced both behavioural intention and actual behaviour, emphasising the importance of client happiness in determining financial behaviours.

Furthermore, the theory of planned behavior emphasises the impact of attitudes on behavioral performance, whereas consumer socialization theory emphasises the impact of parents on their children's financial behaviour. According to developmental theory, abilities such as comprehending and managing funds improve over time (King, 2009). Kamis et al. (2021) discovered a positive link between financial management expertise and spending behavior among university students. It raises financial awareness, which is a step towards personal responsibility and increasing quality of life. As a result, students with a better understanding of financial management can make more informed financial decisions.

### **Theory of Rational Action (TRA)**

The Theory of Rational Activity (TRA) explains human behavior as a result of rational decision-making based on attitudes towards the behavior and perceived social pressures, which together shape an individual's intentions to act. It is most commonly used to predict how people will behave based on their pre-existing attitudes and behavioral intentions. Martin Fishbein and Lcek Ajzn (1967) created the notion of reasoned action theory, which aims to analyze the relationship between attitudes and behaviors whenever consumers make a purchase. Ajzen and Fishbein (1980) proposed the theory of reasoned action, which aims to explain how consumers lead to specific purchase behaviors and is based on the fundamental assumption that individuals behave consciously and consider all available information. An individual's behaviour is influenced not only by his or her own beliefs or perceptions, but also by the opinions or perceptions of those around or related to him. Due to my research is discussed about the factors of willingness toward financial planning, TRA is one of the theories that can be implemented to investigate how factors of behavior influencing Gen-Z in Malaysia.

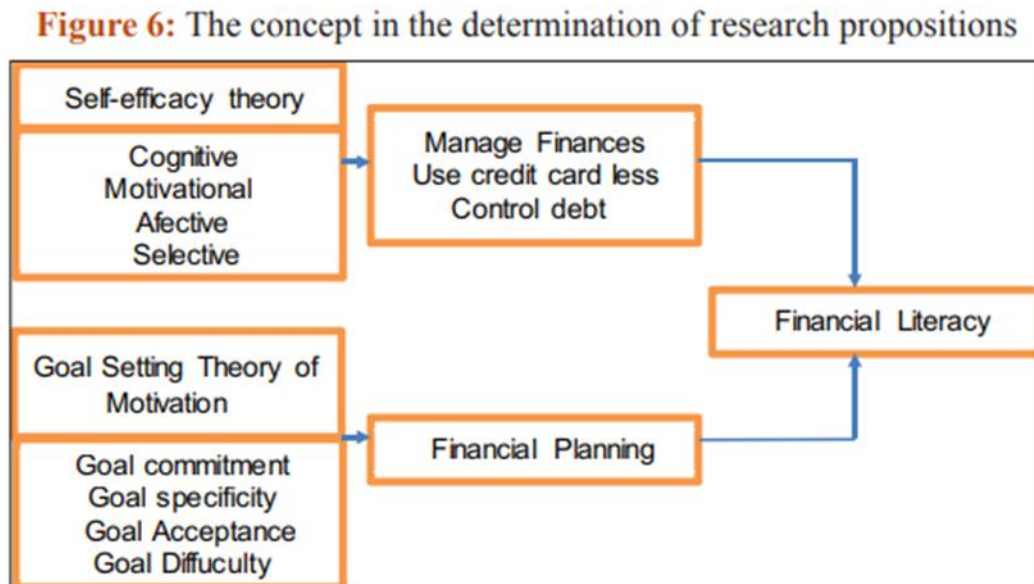
Figure 2.2: Theory of Rational Action (TRA)



Self-efficacy theory predicts financial literacy through motivational constructs such as managing finances, reducing credit card use, and controlling debt. Self-efficacy is a conviction in one's ability to successfully complete tasks by focussing on opportunities and taking action to achieve results. According to Wood and Bandura (1989), individuals with high self-efficacy tend to be more conscientious, have less doubts, and seek new challenges. Individuals with high self-efficacy believe they can handle and organise their finances properly and effectively. Confidence motivates people to perform to their full potential. While goal setting is a process for establishing a goal, in this case, financial planning.

Goal setting theory predicts financial literacy through goal commitment and specificity (see Figure 6). Setting goals has a significant impact on an individual's performance in preparing financial targets. According to Jack et al. (2004), individual financial planning is a method of managing an individual's money in order to achieve personal economic pleasure. This planning method can help people get control of their financial situation. Each individual and family has unique financial planning needs and aspirations. Financial planning involves deliberate methods to achieve optimal results. Individual financial planning allows us to understand how each financial decision we make affects different areas of our overall financial condition. Every financial decision made must examine its impact on the overall financial state, including the objective; these considerations encompass both short-term and long-term.

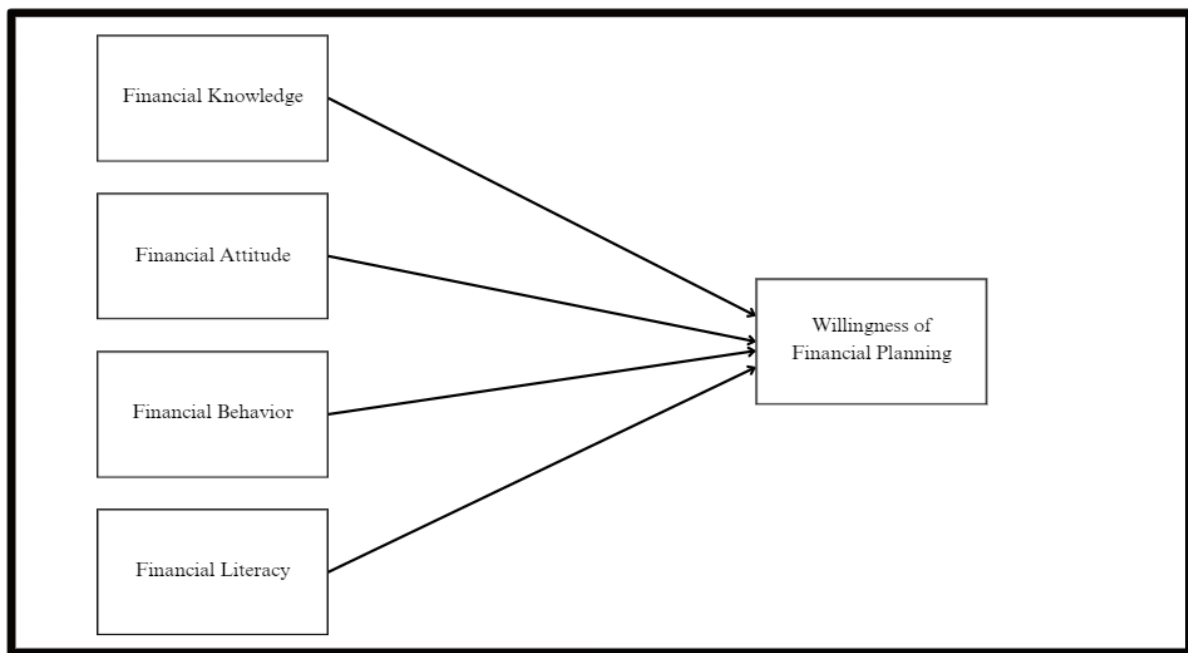
Figure 2.3: Theory of Goal setting.



## 2.3 Conceptual framework

Figure 2.4: Conceptual Framework (Proposed model for the current research)





Based on a current literature study, we identified several aspects that might influence Gen-Z's financial planning. Figure 2.4 shows that the conceptual framework of the research where four variables are financial attitude, financial behavior, financial knowledge and financial literacy are interrelated.

## **2.4 Hypothesis Development**

### **2.4.1 Financial Knowledge of the Willingness of Generation Z towards Financial Planning**

An individual's understanding of various financial concepts, principles, and tools is referred to as financial knowledge. It includes being aware of basic financial terminology, investing strategies, budgeting, saving, and basic economic ideas. (Pandya, 2022). The results of the study showed a significant relationship between generation Z's financial planning and financial literacy. Joo and Grable (2004) found a direct correlation between financial

satisfaction and self-assessed financial knowledge. The primary cause is that Gen Z wants to become financially independent and is worried about their finances (Falahati and Sabri, 2015). They want to learn more about finance. Financial concepts such as budgeting, investing, and money management are all understood by Generation Z. A person with a great deal of financial knowledge is able to make sound financial judgements, plan ahead for their future finances, and handle a variety of financial situations. The first hypothesis developed for the study is:

H1: There is a significant relationship between financial knowledge and the willingness of Generation-Z towards financial planning.

#### **2.4.2 Financial Attitude of the Willingness of Generation Z towards Financial Planning**

According to the finding of Adiputra et al. (2021), they found that financial attitude significantly influences financial behavior. Proper planning of daily financial expenses reflects a positive financial attitude, which fosters responsible and well-planned financial behaviour. Thus, a good financial attitude is crucial in developing sound financial behaviour. Research of Jordan and Nuringsih (2023) also shows a significant positive influence of financial attitudes on Generation Z's financial behaviour in Jakarta at a 5% significance level. These findings guide government policy revisions to enhance financial knowledge and advise financial institutions to support Gen-Z's welfare sustainability. The study of Van Deventer et al. (2014) also proves that African students in South Africa generally hold a positive attitude towards personal financial planning, especially in estate and investment planning. They consider estate planning to be the most critical, followed by investment and insurance planning. These students place a high priority on having a will and adequate life insurance, and they carefully assess investment options. However, they tend to be less enthusiastic about the financial planning process itself, often opting not to seek expert assistance in implementing their plans. Therefore, the second hypothesis developed for this study is:

H2: There is a significant relationship between financial attitude and the willingness of generation Z towards financial planning.

### **2.4.3 Financial Behavior of the Willingness of Generation Z towards Financial Planning**

Furthermore, it has been discovered that the willingness of generation Z towards financial planning is highly influenced by their financial behaviour. According to Ahmisuhaitiet al. (2017), financial behaviour is the methodical administration of well-organized funds. This management has objectives that must be met and are carried out consistently and in detail. As a result, Generation Z who practice sound financial habits will use their earnings more wisely. They improved their ability to create a budget, save money, invest, and pay all of their payments on schedule which improve their financial behaviour (Rahmayanti, et al., 2019). Therefore, the third hypothesis developed for this study is:

H3: There is a significant relationship between financial behaviour and the willingness of generation Z towards financial planning.

### **2.4.4 Financial Literacy of the Willingness of Generation Z towards Financial Planning**

The ability to comprehend financial circumstances, guidelines, and standards to make wise financial judgments is referred to as financial literacy (Coskuner, 2017). According to Navickas et al. (2014), there is a strong correlation between financial literacy and financial planning among generation Z. Insufficient financial literacy makes it difficult for them to manage their finances and leads to unnecessary or impulsive purchases, which reduces savings and investment. Effective money management abilities are more common among those who have acquired financial education Bhargava et al., (2017). A sound understanding of finance can aid in smart financial planning. According to research findings by Napitupulu et al. (2021), financial literacy plays a part and influences how someone manages their financial assets. Thus, the fourth hypothesis developed for this study is:

H4: There is a significant relationship between financial literacy and the willingness of generation Z towards financial planning.

## **2.5 Conclusion**

This chapter provides a review of the literature on the dependent variable (willingness of generation Z towards financial planning) and the independent variables (financial knowledge, financial attitude, financial behavior, and financial literacy). Furthermore, a description is provided of the theoretical frameworks implemented in earlier research. Additionally, the study's conceptual framework and hypotheses are developed.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.0 Introduction**

To ensure that people make well-informed decisions regarding investing, saving, and money management, financial planning is a vital part of personal finance management. Knowing how Gen-Z feel and behave when it comes to financial planning is crucial as the financial landscape changes more. The research design and methodology used to examine Generation Z's (Gen-Z) willingness towards financial planning are explained in this research methodology.

### **3.1 Research Design**

Considering the nature of the research challenge, a quantitative research study is suggested. This approach facilitates the systematic collection and analysis of numerical data to better understand Generation Z's financial planning qualities, attitudes, and behaviors. It emphasizes financial knowledge, financial literacy, financial behavior, and financial attitude. With the use of quantitative research methodologies, variables can be precisely measured and quantified, facilitating a thorough analysis of the topic. Researchers can collect information on Gen-Z's willingness for financial planning activities and examine the connections between their

financial literacy, behaviour, attitude, and knowledge by using quantitative methods like surveys and questionnaires. The benefit of statistical analysis is provided by quantitative research, which also delivers insightful information on the variables affecting Gen-Z's financial decision-making.

## **3.2 Sampling Design**

### **3.2.1 Target Population**

The target population for this research is Generation Z in Malaysia. It refers to the population group born between 1997 and 2012. This study involved conducting a survey on people belonging to Generation Z, specifically those aged between 12 and 27.

### **3.2.2 Sampling Frame and Sampling Area**

A sampling frame is a comprehensive enumeration of all the individual elements or units that make up the population, and it serves as the basis for selecting a sample (Stasny, 2001). Non-sampling methods typically involve collecting data using existing data sources, which may not accurately represent the entire population. Thus, the probability sampling approach is used in research to pick samples from a population in a non-random manner since it involves all states of respondents in Malaysia. (Acharya, Prakash, Sacena, & Nigam, 2013).

### **3.2.3 Sampling Technique**

The process of selecting sample members is known as the sampling technique. This study uses probability sampling where the methods of probability sampling involve random selection, where every person in the population is given an equal opportunity of selection. Some common types of these methods include random sampling, systematic sampling, stratified sampling, and cluster sampling (Berndt, 2020). Cluster sampling involves dividing the population into geographic clusters, randomly selecting some, and including all the members of those groups; it is efficient but less accurate and requires a larger sample size (M. M. Rahman et al., 2022). Malaysia has a high proportion of youths and cannot give an equal

chance to every respondent (Sharma, 2017). Therefore, the present study will be based on cluster sampling for the purpose of approaching the respondents.

### 3.2.4 Sampling Size

Generation Z, comprising 29% of Malaysia's population of 32.6 million individuals, amounts to a total of 9,454,000 persons (Tjiptono et al., 2020). According to Worldometer (2024), the Malaysian population is currently at 34,590,423, the study's sample size consists of 385 individuals from Generation Z in Malaysia.

Figure 3.1: Sample Size

$$\begin{aligned}
 \text{Sample size} &= \frac{[(Z\text{-score})^2 \times StdDev(1-StdDev)]}{(\text{margin of error})^2} \\
 &= \frac{[(1.96)^2 \times 0.5(1-0.5)]}{(0.05)^2} \\
 &= 384.16 \approx 385 \text{ Generation Z individuals}
 \end{aligned}$$

For relevant analysis with an acceptable margin of error, a sample size of at least 385 is required. However, considering the potential for diminishing returns and unusable responses, sample sizes between 390 and 450 are preferred. This strategy is in line with the principle of ensuring the informational value of the study relative to its goals and the costs of data collection, highlighting the importance of a well-justified sample size. Hence, aiming for 450 samples in this study will guarantee a robust statistical evaluation, aligning with contemporary research practices on sample size justification (Lakens, 2022).

### 3.3 Data Collection

Data collecting is an important step in any research activity. Therefore, how accurate the data provides will determine how the results turn out. Primary and secondary sources of information are the two categories of data sources (Odrynska, 2023). The former is chosen in this investigation to collect the data necessary to meet the study's goal.

### **3.3.1 Primary data**

Primary data refers to information acquired directly from sources for a specific study purpose. Primary data, as opposed to secondary data, which has previously been acquired and made available for a different purpose, is unprocessed and raw, bringing new insights that are directly relevant to the study issue under consideration. Researchers can acquire specific and specialized knowledge by using this kind of data, which is collected using a variety of techniques such as questionnaires, surveys, and government documents (Stewart, 2024). Questionnaires related to this study topic are distributed to target respondents to obtain primary data. Morrison (2019) claims that since the questionnaire is written and gives respondents multiple choice answers for each topic, it is a more reliable method. The questionnaire for the study includes several inquiries about the willingness of generation Z toward financial planning. The questionnaire was utilized in this study because it provides a rapid, easy, and economical means to collect large amounts of data from interviews in a significant sample size. (Cleave, 2023). It was applied to research financial planning aspects in studies by (Pandya, 2022) and (Renaldo et al., 2020).

### **3.4 Research Instruments**

The research instrument used in this study was a structured questionnaire survey as the primary data collection tool. It is intended to capture several characteristics of financial literacy, financial knowledge, financial behavior, and attitude. The questionnaire has both multiple-choice questions and 5-point Likert scale questions, allowing participants to express how strongly they agree or disagree with specific statements connected to each element. (Joshi et al., 2015). For example, participants are asked to score their knowledge of various investment options, level of familiarity with financial markets, viewpoints on investing and saving, and behaviors associated with making financial decisions. Furthermore, there are also a part of demographic information in questionnaires to capture information such as gender, race, age, level of education and so on. Using a thorough questionnaire, the study intends to evaluate the relationships between financial knowledge, attitude, behavior, literacy, and

financial planning among young adults as well as to provide comprehensive insight into the variables influencing Gen-Z's willingness towards financial planning.

#### **3.4.1 Questionnaire**

The questionnaire was utilized as the major data collection tool for undergraduate students at UTAR Kampar. The questionnaire is the favored choice of tool that those who engage in research use (Roopa, 2012). This approach provides researchers with a cost-effective and accessible way to gain comprehensive insights from a wide and diverse population, resulting in efficient data collection.

The survey consists of three sections, each containing closed-ended questions. The questionnaire will consist of three sections which are dependent variables, independent factors, and demographic data. The demographic part will gather data on the respondents' geographical location, gender, age, ethnicity, level of education, monthly income level, and employment status. Section A has 7 demographic questions, while Sections B and C encompass 25 questions on independent and dependent variables. With this information, the researcher will have a deeper understanding of the study's findings and be able to examine the possible connections between demographic features and Generation Z's tendency to take part in financial planning. The IVs and DVs will be assessed via a 5-point Likert scale, with responses spanning from 1 to 5. A score of 1 corresponds to the response "Strongly Disagree," while a score of 5 corresponds to the response "Strongly Agree."

#### **3.4.2 Pre-Test**

Prior to distribution to undergraduate students at UTAR Kampar Campus, the questionnaire was evaluated by two Universiti Tunku Abdul Rahman instructors.

#### **3.4.3 Pilot Test**

Upon concluding a preliminary test, a subsequent pilot study was conducted, aligning with Browne's recommendations (Whitehead et al., 2016) to use a sample of 30 participants for better representation. This decision to expand the pilot to 30 individuals was based on



achieving a more representative sample. Participants were selected through the sampling strategies detailed in Section 3.2.2.

Table 3.1

*Cronbach's Alpha Result for Pilot test.*

		Cronbach's alpha	N of item	Results of Reliability	Sources
Independent Variable (VI)	FK	0.932	5	Good	(Atkinson & Messy, 2012)
	FA	0.725	5	Good	(Lim & Cordova, 2024)
	FB	0.719	5	Good	(Atkinson & Messy, 2012)
	FL	0.919	5	Good	(Lim & Cordova, 2024)
Dependent Variable (DV)	WFP	0.864	5	Good	

Our initial phase involves a pilot study with 30 Gen-Z individuals aged 18-26, possessing knowledge of and experience with financial planning, to gauge our research methodology's effectiveness. Data will be collected through a Google Form questionnaire, designed to be completed within 10 minutes. Reliability of the collected data will be verified using Cronbach's alpha, a method recommended by Schrepp (2020). Despite Cronbach Alpha values being slightly below the optimal range, Lakens (2022) interprets these results as indicative of high reliability in our findings.

Assessing dependability is crucial, and Cronbach's alpha will be used for this purpose (Schrepp, 2020). According to Table 3.1, the Cronbach Alpha values range from 0.719 to 0.932, which is lower than the ideal range. However, this indicates that the data collected, and the findings obtained are highly reliable. Thus, the collected data and result have high reliability (Lakens, 2022). The outcomes of the reliability analysis carried out in our research are reported in the Appendix.

### **3.5 Data Analysis**

In this study, we used quantitative research approaches. It alludes to a collection of methods, ideas, and presumptions used to analyze digital models to research social, emotional, and economic processes (Hawa et al., n.d.). Academics can use quantitative data to do simple assessments, summarize data, highlight links between data, or compare aggregated data. Before analysis the dataset, we have distributed the survey form to the gen-z population. The questionnaire item from Morrison (2019). Thematic analysis of open-ended survey responses was utilized to identify recurring themes and insights (Braun & Clarke, 2006). The data was analyzed using statistical software SPSS.

#### **3.5.1 Descriptive Analysis**

Descriptive analysis is one of the most traditional forms of analysis data, It entails organising, summarising, and presenting data in an understandable manner to gain insight into its properties and patterns. (Mishra et al., 2019). The descriptive analysis uses measurements of central tendency (mean/median/mode) and dispersion (range/variance/standard deviation) to effectively analyse data. (Verma, 2012)

#### **3.5.2 Reliability Test**

Reliability testing is a statistical method for determining the consistency and stability of measurements or scores produced from a research instrument or evaluation tool. Cronbach's alpha is used to assess the internal reliability of scale instruments. (Amirrudin et al., 2021)

The poor reliability that lower than 0.6 consider not strongly correlated. Values between 0.8 to 1 indicate high internal consistency (Daud et al., 2018).

### **3.5.3 Pearson Correlation Coefficient Analysis**

Pearson correlation coefficient analysis is a typical method for examining correlations between variables and determining their strength and direction. When the two variable is valid, the value will be larger than -1 and smaller than 1 likely at significant level 0.05. Furthermore, it is expected to be concluded whether there is investigate multicollinearity by running the Pearson correlation Coefficient ( $r$ ) test.

### **3.5.4 Multiple Regression Analysis**

Multiple regression analysis investigates the link between a dependent variable and two or more independent variables. Chi-Square test consist to test financial attitude(IV<sub>1</sub>),financial literacy(IV<sub>2</sub>),financial behavior (IV<sub>3</sub>),financial knowledge (IV<sub>4</sub>) and financial planning (DV). The relationship between financial literacy (IV<sub>4</sub>) and financial planning (DV). Regression analysis is utilized to determine which variables, including Financial attitude (IV<sub>1</sub>), Financial literacy (IV<sub>2</sub>), financial Behavior (IV<sub>3</sub>), financial knowledge (IV<sub>4</sub>) and, forecast or influence financial planning (DV).

Y=Financial Planning

X<sub>1</sub>=Financial Attitude

X<sub>2</sub>=Financial Literacy

X<sub>3</sub>=Financial Behavior

X<sub>4</sub>=Financial Knowledge

Regression Constant(Intercept)

Regression Beta Coefficient

e = error

### **3.5.5 Normality Test**

Before proceeding with any additional statistical analysis, normality test is necessary for researchers to determine the presence of a normal distribution in a dataset. The primary statistical measures employed to analyse the characteristics of distributional fluctuations are skewness and kurtosis. As a result, this investigation implemented both skewness and kurtosis as metrics to assess deviations from the standard distribution. According to Ghasemi and Zahediasi (2012), the assumption that data follows a normal distribution is particularly important in parametric tests such as regression analyses

## CHAPTER 4: DATA ANALYSIS

### 4.0 Introduction

Chapter 4 shows a summary of the information gathered, including descriptive statistics, scale measurement, preliminary data screening and inferential analysis. SPSS is used to perform each of these analyses.

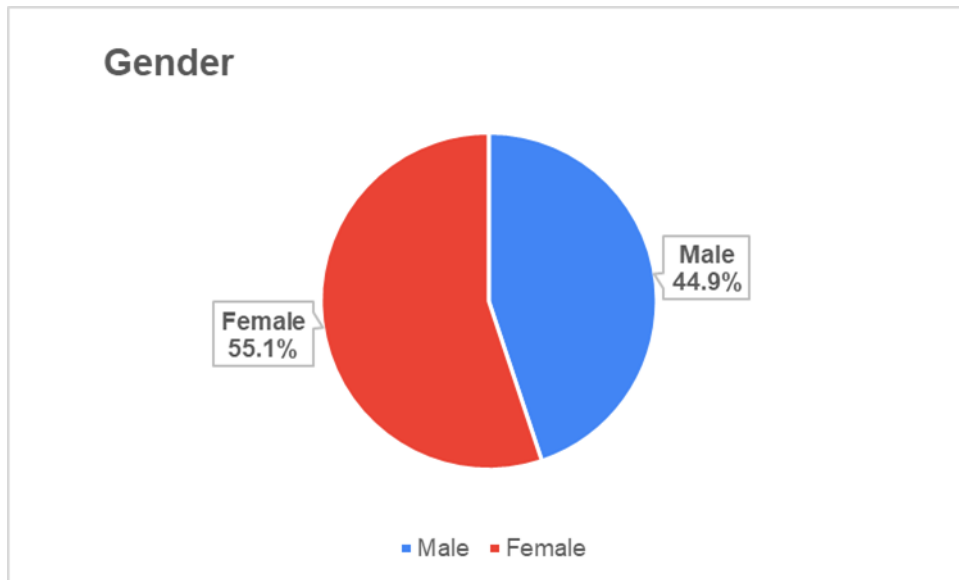
### 4.1 Descriptive analysis

#### 4.1.1 Demographic Profile

Total amount of **407 surveys** were distributed to respondent, of which **381 were deemed trustworthy**, while there were **26** excluded during the initial screening process. All the components of the computation were reviewed using the **SPSS software**.

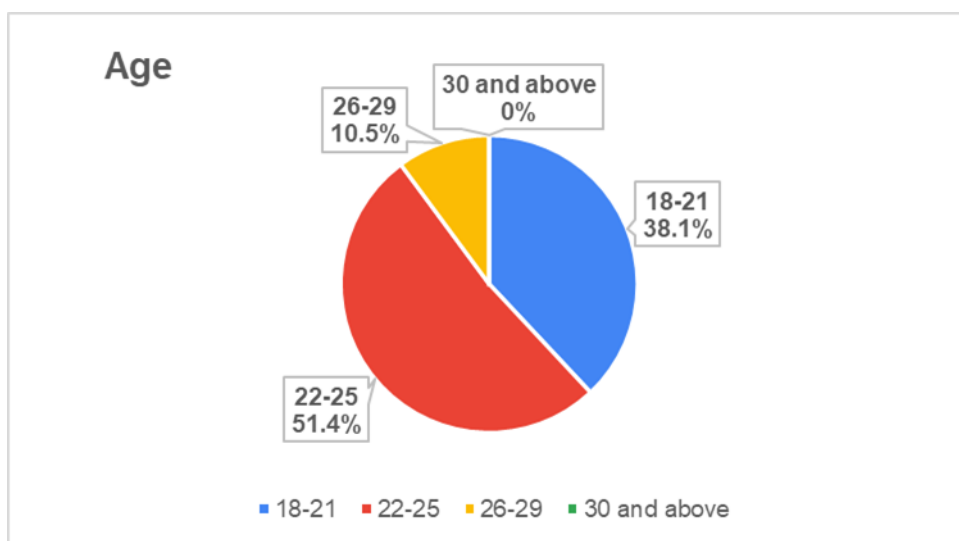
Regarding gender, **figure 4.1** shows most of the respondents are female with **210 (55.1%)**, followed by **male 171 (44.9%)**. Based on figure 4.2, the study shows that the age ground ranges **89.5%** from **18 to 26 years old** as our target respondents mainly focus on **Generation Z**. We also consider difference age categories such as **26 to 29, 30 or above** to help us screen appropriate respondent.

Figure 4.1: Gender



Source: Developed for the study

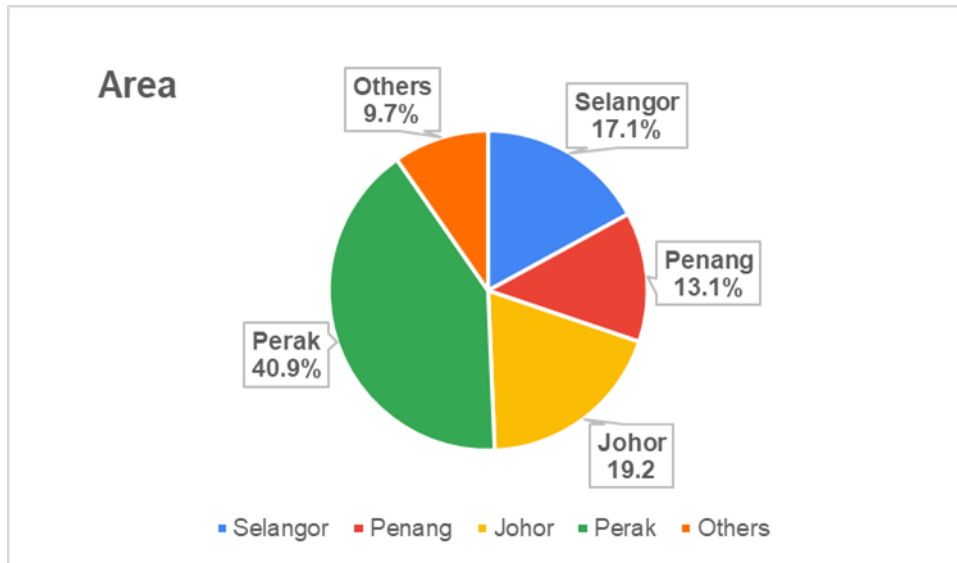
Figure 4.2: Age



Source: Developed for the study

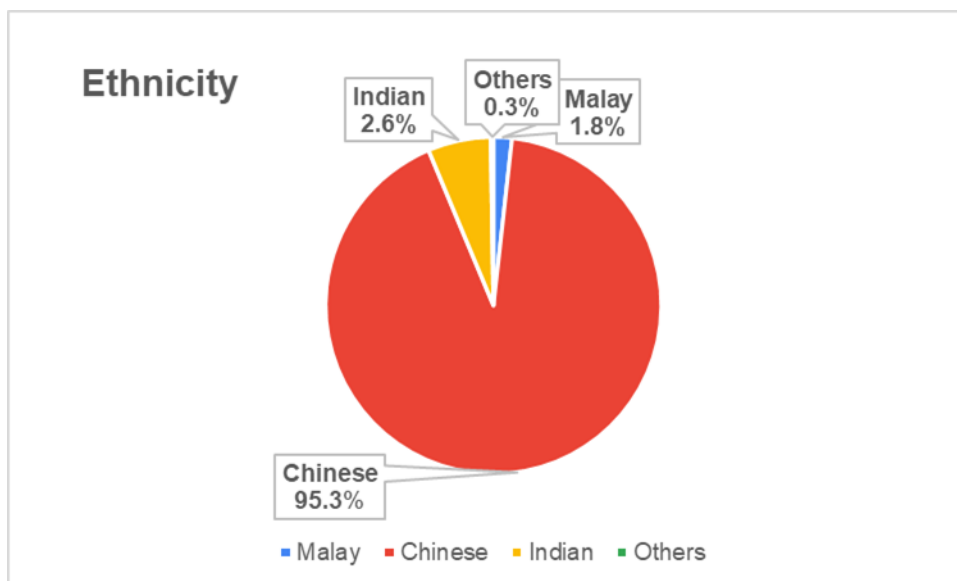
Besides, we have collected respondents from different areas. According to **figure 4.3**, **65 (17.1%)** of the respondents are from **Selangor**, **50 (13.1%)** of the respondents are from **Penang**, **73 (19.2%)** of the respondents are from **Johor**, **156 (40.9%)** of the respondents are from **Perak** and **37 (9.7%)** of the respondents are from other area. **Figure 4.4** presents the data collected on respondents' ethnicity, which include 7 Malay, 363 Chinese, 10 Indians and 1 other ethnicity.

Figure 4.3: Area



Source: Developed for the study

Figure 4.4: Ethnicity

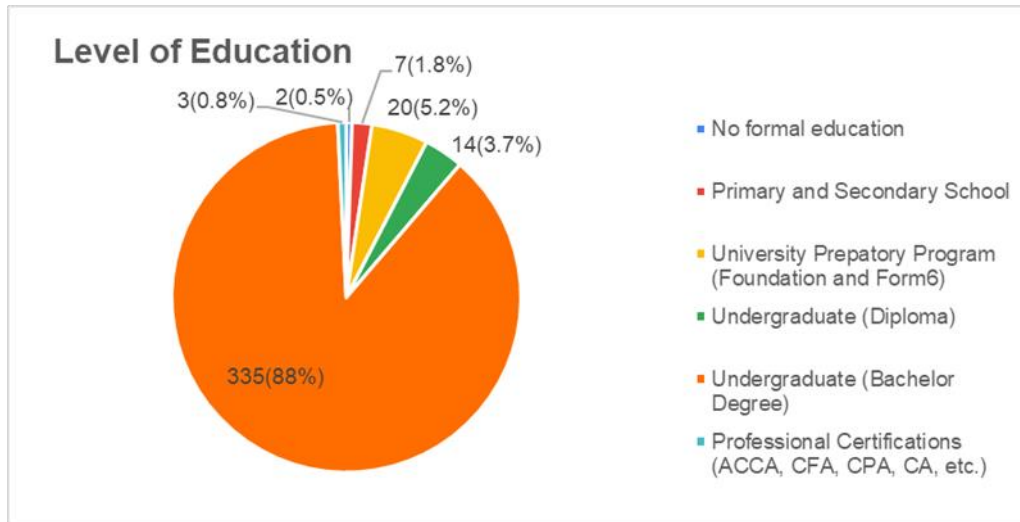


Source: Developed for the study

Furthermore, **figure 4.5** shows the respondents with the highest pursuit or attained education level are illustrated. The highest frequency is **bachelor's degree** which has **335 (87.9%) respondents**, while the second highest frequency is **Foundation and Form 6 Programme** with **20 (5.2%) respondents**. **Undergraduate (Diploma)** are the third highest frequency with **14 (3.7%) respondents** while **primary and secondary school** are the fourth highest frequency with **7 (1.8%) respondents**. The lowest frequency is **no formal education** with **2**

**(0.5%) respondents** while **professional certification** is the second lowest frequency with **3 (0.8%) respondents**.

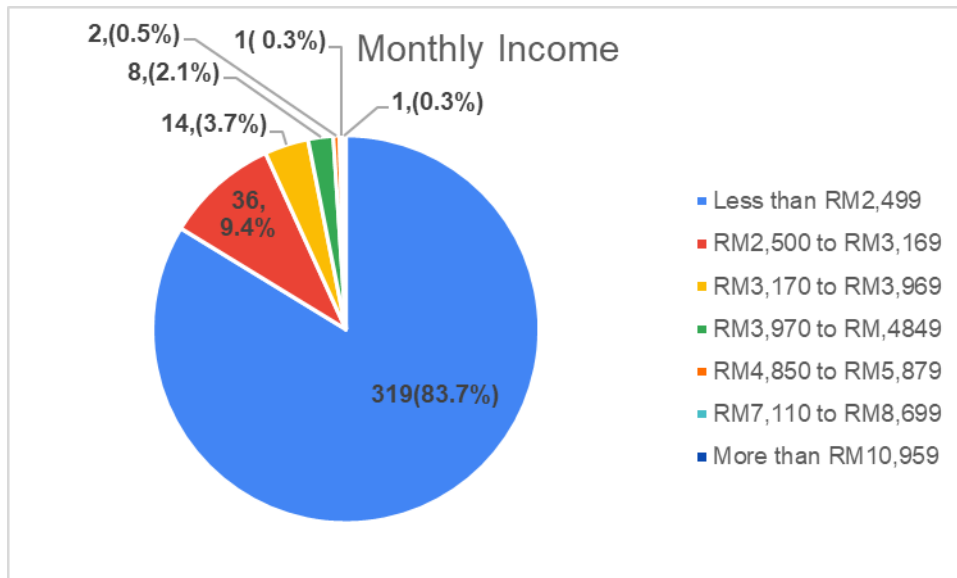
Figure 4.5: Level of education



Source: Developed for the study

In terms of monthly income, **figure 4.6** indicate that the greatest percentage accounting for **83.7%** with **319 respondents**, is **income less than RM2,499** while **income between RM2,500 to RM3,169** are the second highest percentage accounting for **9.4%** with **36 respondents**. The lowest percentage comprising only **0.3%** with **1 respondent** each income is between **RM7,110 to RM8,699** and **more than RM10,959**.

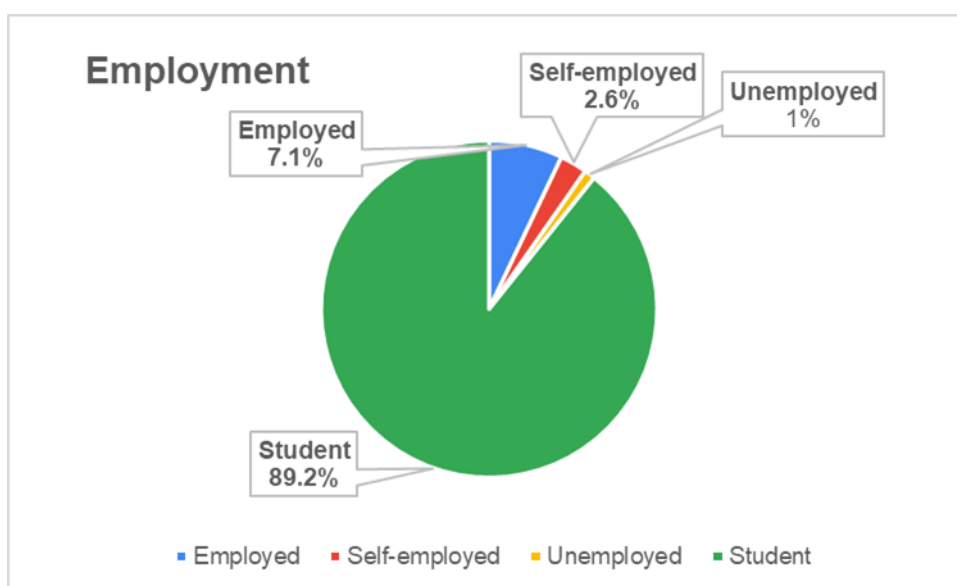
Figure 4.6: Monthly income



Source: Developed for the study

Moreover, **figure 4.7** shows that there's **27 employees**, **10 self-employed** individuals, **4 unemployed** individuals and **340 students**. The **unemployed** group had the lowest percentage with only **1% of the respondents** while the **self-employed** group has the second lowest percentage with **2.6% of the respondents**. **Students** accounted for **89.2%** of the participants, which is the biggest number followed by **employed** individuals with **7.1% of the respondents**.

Figure 4.7 Employment



Source: Developed for the study



#### 4.1.2 Central Tendencies and Dispersion Measurement of Constructs

The independent and dependent variables are examined. The mean, which is the metrics of central tendency, while the standard deviation which is the measures of dispersion, are addressed in the study.

Table 4.1

##### *Central Tendencies Measurement*

Type of the variable	Name of the variable	Sample size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
Dependent variable	Willingness of Generation Z towards financial planning	381	4.7417	0.29463	1	4
Independent variable 1	Financial knowledge	381	4.7150	0.30317	3	1
Independent variable 2	Financial attitude	381	4.7034	0.29076	5	5
Independent variable 3	Financial behaviour	381	4.7102	0.30070	4	2
Independent variable 4	Financial literacy	381	4.7328	0.29527	2	3

The willingness of financial planning, the dependent variable, has the greatest mean of 4.7417 with the second smallest standard deviation of 0.29463. Financial literacy ranks as the second-biggest mean which is 4.7328 with standard deviation of 0.29527. After that, financial knowledge carries the third largest mean value of 4.7150 with the largest standard deviation of 0.3317. With a mean of 4.7102, financial conduct ranks fourth, but its standard deviation, at 0.30070, is the greatest. Finally, the financial attitude contains the smallest mean and standard deviation, at 4.7034 and 0.29076, respectively.

## 4.2 Scale Measurement

### 4.2.1 Reliability Test

Table 4.2

*Cronbach's Alpha Reliability Analysis*

No .	Type of the variable	Name of the variable	No. Of Items	Cronbach's Alpha	Reliability Test
1	Dependent variable	Willingness of Generation Z towards financial planning	5	0.887	Excellent
2	Independent variable	Financial knowledge	5	0.883	Excellent
3	Independent variable	Financial attitude	5	0.82	Excellent
4	Independent variable	Financial behaviour	5	0.825	Excellent
5	Independent variable	Financial literacy	5	0.908	Excellent

Table 4.2 shows the Cronbach's alpha for all variables. The independent variables in the table, which comprised financial knowledge (0.883), financial attitude (0.82), financial behaviour (0.825), and financial literacy (0.908), have good and great reliability due to their significant Cronbach's alpha values over 0.80. Good reliability results are shown by dependent variable, with a Cronbach's alpha of 0.887. In summary, the dependent variable's and independent variables' Cronbach's alpha both exhibit values over 0.70, indicating strong reliability for every scales. Everything is therefore kept in the study.

## 4.3 Preliminary Data Screening

To guarantee the validity of the study's findings, preliminary data analysis is executed before inferential analysis is carried out. A multicollinearity test and a normality test were performed as the first two data analysis.

#### 4.3.1 Multicollinearity Test

Multicollinearity is the term for the existence of a correlation among independent variables in a model of regression. The results are unreliable if a model has this issue since it results in a high error term (Frost, 2023). This study uses two methods to find the multicollinearity problem: the variance inflation factor (VIF) and tolerance value. The tolerance indicates how much the independent variable and all other remaining independent variable overlap, whereas the VIF indicates how much the independent variable's standard error is raised because of its correlation with the other independent variable in the model. Watson (2020) states that if the tolerance value is below 0.1 and the VIF is larger than 10, there is a significant multicollinearity issue.

Table 4.3

*Tolerance Value and Variance Inflation Factor (VIF)*

Independent variables	Collinearity statistics	
	Tolerance value	VIF
Financial knowledge	0.295	3.391
Financial attitude	0.273	4.220
Financial behaviour	0.308	3.247
Financial literacy	0.313	3.192

Every independent variable's variance inflation factor value falls lower than 10, as seen in Table 4.3. Furthermore, tolerance levels are higher than 0.1. So, there isn't a problem with

multicollinearity among the independent variables is apparent. Thus, there's no need to eliminate any of these variables.

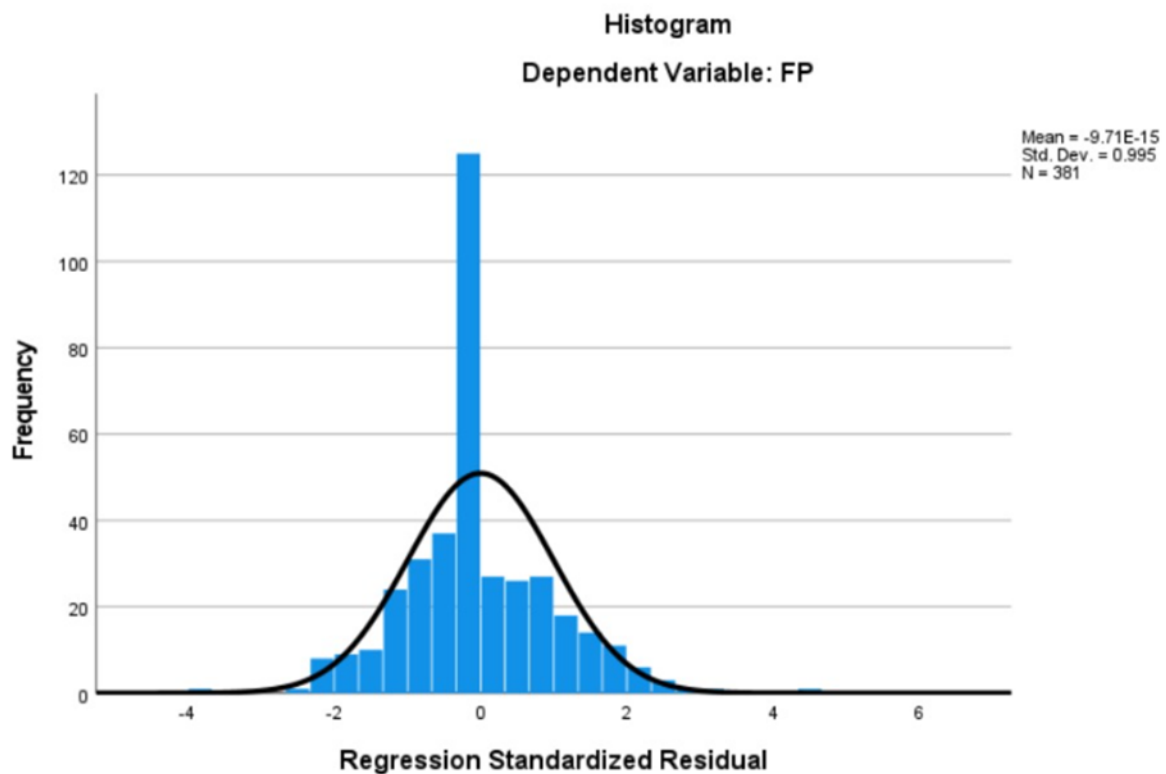
### 4.3.2 Normality Test

Following the multicollinearity test, normality tests are performed to determine whether the outcomes are normal. This study employs three techniques to assess the normality of the data: a histogram, a normal Q-Q plot, and the values of skewness and kurtosis.

Figure 4.8

*Histogram*

Charts

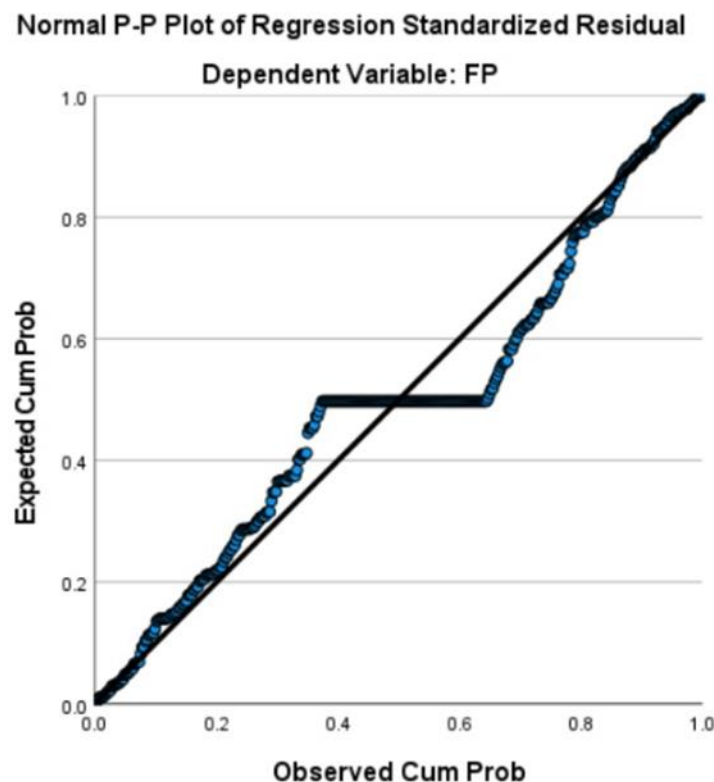


In addition, a histogram is used to confirm whether the data complies with the normality assumption. Figure 4.1 shows the histogram constructed from the information of the

dependent variable, which is the willingness of financial planning. This histogram's distribution plot is positioned on a normal distribution curve. The distribution of sizes is found to conform to the standard bell curve pattern for all normal distributions. The data's frequency is greatest below 0 and decreases as it approaches both extremes. It is therefore considered to be symmetric with fat tails. The data is therefore thought to be regularly distributed.

Figure 4.9

*Normal Q-Q Plot*



Thirdly, a type of standard statistical plot called a quantile-quantile plot, or normal Q-Q plot, is employed to assess if a set of data might have come from an assumed distribution. If the data are consistently distributed, every single point in a Q-Q plot will be situated on an uninterrupted diagonal line. However, if the plot's points significantly deviate from a straight diagonal line, the probability that the collection of data will correspond to a normal distribution decline (Bobbitt, 2021). Figure 4.2 shows that the data are closer together on the

left and right than they would be in a typical situation. The data is thus found to have a normal distribution with a narrow tail.

Table 4.4

*Normality Test Result*

<b>Variable</b>	<b>Skewness</b>	<b>Kurtosis</b>
Dependent variable: Willingness of financial planning	-0.788	-0.628
Independent variable 1: Financial knowledge	-0.655	-0.612
Independent variable 2: Financial attitude	-0.699	-0.482
Independent variable 3: Financial behaviour	-0.928	0.070
Independent variable 4: Financial literacy	-0.670	-0.487

To determine whether the data are normal, the skewness and kurtosis are first looked at. If the skewness value is less than two and the kurtosis value is less than 4, the data is deemed normal when the sample size is more than 300. (Mishra et al., 2019). Table 4.4 indicates that every skewness value is less than 2. The greatest skewness score is -0.655 for financial knowledge, while the lowest value is -0.928 for financial behaviour. Additionally, all kurtosis values are found to be smaller than 4. The financial knowledge has the lowest kurtosis value which is -0.612 and the financial behaviour has the greatest value with 0.0070. All the variables' data are regarded as regularly distributed since their skewness and kurtosis values are less than two and four, respectively.

## **4.4 Inferential Analysis**

### **4.4.1 Multiple Regression Analysis**

Table 4.5

*Multiple Regression Analysis*

	<b>Unstandardize d Coefficient Beta</b>	<b>Coefficient Std. Error</b>	<b>Standardized Coefficient Beta</b>	<b>T-statistics</b>	<b>P-value</b>
(Constant)	0.519	0.18		2.886	0.004
FK	0.407	0.043	0.419	9.584	0.001
FA	0.255	0.048	0.252	5.312	0.001
FB	0.085	0.049	0.086	1.733	0.084
FL	0.149	0.050	0.149	2.958	0.003
R-squared					0.605
Adjusted R-squared					0.600
F-test					143.781
P-value					0.001

The willingness of financial planning is our dependent variable, and four independent variables included financial literacy (FL), financial behaviour (FB), financial attitude (FA), and financial knowledge (FK). Table 4.5's results show that financial knowledge, financial attitude, financial behaviour, and financial behaviour are significant at t-statistics of 9.584, 5.312, 1.733, and 2.958, respectively, considering p-values for each of the above t-statistics significantly under 0.10.

At 99% confidence level, the first independent variable which is financial knowledge is significant. This is explained by its p-value, which is 0.001, bellowing the 0.01 significance level. This conclusion is consistent with the findings of Yogasnumurti & Irawati (2021), Xiao et al. (2014), and Mien & Thao (2015). The results support the assumption made by the research, which states that financial knowledge and a willingness of financial planning are highly associated. Additionally, the unstandardized regression coefficient remains significant at 0.407, meaning that, ceteris paribus, a unit increase in financial knowledge causes an 0.407-unit rise in generation Z's willingness to engage in financial planning.

Moreover, financial attitude, the second independent variable in the study, has been demonstrated to be statistically significant at a 99% confidence level. The reason is that its 0.001 p-value is less significant than the 0.01 significant level. The outcome is compatible with the result, according to Potrich et al. (2016), Khalisharani & Sabri (2022), and Bhushan & Medury (2016). Thus, it demonstrates that generation Z's willingness to engage in financial planning is strongly correlated with their financial attitude. The 0.255 unstandardized regression coefficient, meaning that, a unit increase in financial attitude increases the willingness of generation Z towards financial planning by 0.255 units, *ceteris paribus*.

At a 90% confidence level, financial behaviour, the third independent variable shows significance. The significance level of 0.1 is exceeded by its p-value of 0.084. The findings are consistent to research carried out by Pamikatsih et al. (2022), Reviandani (2019), and Weinbrenner (2023). It is clear from that financial behaviour significantly influences financial planning. Furthermore, 0.084 of the unstandardized regression coefficients reveal that generation Z becomes 0.135 units more inclined to engage in financial planning for every unit increase in financial behaviour, *ceteris paribus*.

The study's last independent variable, financial literacy, also exhibits a high degree of significance with 99% confidence. The p-value of 0.003 exceeds the significance level of 0.01. The results of this research are in line with the result of Arrondel et al. (2014) and Afgani et al. (2021). They declare that since generation Z wants to achieve their financial objectives, financial literacy strongly influences willingness of financial planning. Additionally, 0.149 of unstandardized regression coefficient, shows that for every unit gain in financial literacy, willingness of generation Z towards financial planning increases by 0.2149 units, assuming all other variables stay unchanged.

Furthermore, as per Taylor's (2023) findings, R-squared, is a parameter of statistics that expresses the percentage point by which adjustments in the independent variables impact the dependent variable. The combined variance of financial knowledge, financial attitude, financial behavior, and financial literacy accounts for 60.5% of the variation in willingness of generation Z towards financial planning, according to the 0.605 R-squared result. The



remaining 39.5% of the diversity in willingness of generation Z towards financial planning can be attributed to other pertinent situations.

Subsequently, the R-squared adjusted is 0.600. This indicates that, after taking the degree of freedom into account, combined variance in financial knowledge, financial attitude, financial behaviour, and financial literacy accounts for 60% of the range in generation Z towards financial planning.

Furthermore, the regression model is statistically significant at the 99% confidence level. There's 0.001 of the f-test's p-value, which is less than the significance level of 0.01. The 143.781 of F-statistic becomes significant as a result. Consequently, this explanation successfully illustrates the relationship among the four independent variables which included financial knowledge, financial attitude, financial behaviour, and financial literacy and our dependent variable, which is generation Z towards financial planning.

#### **4.5 Conclusion**

Data analysis is carried out using SPSS Statistics. It is helpful for summarizing and analysing the information that was collected from the respondents. It is discovered that the questionnaire's scales are reliable. Furthermore, this study does not have a non-normality or multicollinearity issue. In summary, the results of the multiple regression analysis show a strong relationship among the willingness of generation Z towards financial planning and four of the independent variables which are financial knowledge, financial attitude, financial behaviour and financial knowledge.

## **CHAPTER 5 CONCLUSION AND IMPLICATIONS**

### **5.1 Summary of Statistical Analysis**

Table 5.1

Summary of the Statistical findings

Independent Variables	P-value	T-statistics	Result
Financial Knowledge	0.001	9.584	Significant
Financial Attitude	0.001	5.312	Significant
Financial Behaviour	0.084	1.733	Significant
Financial Literacy	0.003	2.958	Significant

### **Financial Attitude and Financial Planning**

The study's findings demonstrated a strong correlation between financial mindset and financial planning with regard to Generation Z. The findings of this investigation are consistent with those of Hassan et al. According to a Malaysian study, financial views and retirement planning have a good relationship (Mustafa et al., 2023). This is due to the reason that financial attitudes reflect personal aspirations, which serve as a crucial guide when making plans later. Financial management attitude is an important form of enhancing personal savings willingness and sustainable financial planning (Mohidin, R).

### **Financial Knowledge and Financial Planning**

The study's conclusion demonstrated the strong correlation between generation Z's financial planning and financial knowledge. Joo and Grable (2004) observed that self-assessed financial knowledge had a direct relationship with financial contentment. The main reason is Gen Z is concerned about their finances and wants to increase financial knowledge to achieve financial freedom (Falahati and Sabri, 2015). Money management, investing, and budgeting are all financial principles that Generation Z understands. A person who possesses extensive financial knowledge can effectively comprehend and evaluate financial decisions, strategically prepare for their financial future, and adeptly navigate diverse financial circumstances.

### **Financial literacy and Financial planning**

The result in our study showed that financial literacy is positively related with propensity toward financial planning. The result is similar with Arrondel et al (2013), which stated that financial literacy positively and highly significantly correlated with propensity toward financial planning. This is because they understand more financial concepts and are able to utilize their knowledge for financial planning. Furthermore, Yong et al (2021) showed that financial literacy has a significant and weak positive relationship with financial planning. This result align with our result as individuals have financial knowledge to make more effective financial decisions to achieve the desired financial planning.

### **Financial behavior and Financial planning**

Research conducted by Saputre et al. (2021) reveals a significant correlation between one's financial behaviour and the act of financial planning. This study align with our result. In the research by Sari (2019) and Reviandani (2019), they conclude that a person with higher financial behavior will be more likely to plan for their finances. In their study, person with higher income will have a better financial behavior, therefore have the ability to plan for their finances. This demonstrated that financial behaviour is positively associated with financial planning. Furthermore, positive financial behavior will also help individual in managing their finances (Rai et al, 2019). If individuals have a wise financial behavior, they will be able to allocate their resources better. They will be more intended to succeed in their financial planning in order to meet their financial goals.

## **5.2 Implications of the Study**

The following financial attitude has a favourable effect on financial planning. The results indicate that young people have better financial attitudes than suggested by the study of Garg

and Singh (2018). The findings are consistent with previous findings by Vasudeva (2021). The nature of personal attitudes is related to retirement saving behaviour. People who are not careful tend to neglect saving and sticking to their budget. As a result, the appropriate mindset should be the first step in developing a financial strategy. (Determinants of Financial Planning among Sabah Youths, n.d.). Furthermore, the financial advisor function plays a crucial role in mediating the relationship between financial attitudes and retirement planning. These findings may be useful to anyone interested in understanding the basic factors influencing long-term retirement financial planning among Malaysian self-employed individuals.

This study also found that financial knowledge had a positive impact on self-assessed retirement saving behavior (Jacobs-Lawson and Hershey, 2005). Research indicates that having a good understanding of financial knowledge is linked to certain financial outcomes, such as the occurrence of late mortgage payments, having an additional fund, and plan for saving. This relates to respondents' ability to apply general financial knowledge or specialized financial systems, such as financial equation knowledge. The knowledge scale encompasses abilities, deposit and debit information, insurance and investment programs, and financial data. The definition of the term financial knowledge is have adequate knowledge of personal financial facts (Mean and Tao, 2015). Therefore, they can learn from successful people to minimize investment risk.

The results from this study showed that financial literacy is significantly related to intention toward financial planning. Therefore, policymakers, educators, and others can take some actions to enhance Gen-Z's intention toward financial planning. Educational institutions may include comprehensive financial literacy program into their syllabus, providing real-world financial education and practical to ensure students have a better financial literacy and able to make informed financial decision, therefore increasing their intention toward financial planning. Policymakers can also support and funding financial literacy initiatives, ensuring that such education becomes a standard part of the syllabus in school. They can integrate financial education into existing courses and provide some incentives to encourage schools to

perform comprehensive financial literacy course. By creating an environment and regulatory for financial education, they can ensure that students can possess financial literacy at an early age, increasing Gen-Z intention to engage in financial planning.

Our study's findings indicate a strong positive relationship between financial behavior and financial planning. Hence, policymakers can implement targeted educational programs to enhance Gen-Z financial behavior, this can significantly improve their intention toward financial planning. These programs can increase financial literacy, practical financial management skills and positive financial behaviors. For financial institutions, they can assist in promoting good financial behavior among their clients, as they can offer financial products and services that can encourage positive financial habits. For example, they can offer automated savings programs, budgeting tools and so on for different income groups. These can help lower income group to have a better financial behavior and consequently have an intention toward financial planning. Besides, they can also provide workshops and seminar to educate individual better financial behaviors.

### **5.3 Limitations of Study**

There are some drawbacks to this study. Firstly, the scope of this study mainly focused on Gen-z in Malaysia because desire to know the facts that average younger teenagers need to spend how long period to prepare their retirement lifestyle. This study only focuses on the financial planning among Gen-z population in Malaysia but neglected the foreigner and exchange student that might be presence in. This is because the financial literacy, knowledge, attitudes and behaviours of locals and foreigners may differ significantly due to different cultural, economic and regulatory backgrounds. For example, in many Latino cultures, family is a key concern, and money is frequently distributed among family members. This can make it difficult to prioritise individual financial goals because family necessities may come first. (Mendez, A.2023, April 18)

Second, the purpose of this research is to investigate the direct relationship between financial attitude, knowledge, behaviour, literacy and FP. There is no indication that people with more financial knowledge are capable of appropriate financial management behaviour (Herdjiono & Damanik, 2016). A person's financial knowledge often varies. One's ignorance of basic financial concepts may lead to one's poor investment planning. The financial management behaviour not only measures how much knowledge a person has, but also requires the decision-making ability and confidence to carry out good financial management behaviour. (Tang & Baker, 2016) Effective financial planning requires a combination of knowledge, skills, and behaviours. Without adequate financial literacy and knowledge, planning may be impractical or incomplete. Financial literacy alone does not guarantee good financial decisions. People may understand financial concepts but be unable to apply them due to poor attitudes or behaviours.

Finally, primary survey was used in this investigation, and the target respondents from Gen-z population in Malaysia. As the fact, we are doing observation gen-z populations in Malaysia, but we keep in touch with university students. This is because what environment we live in and will be recognised with the nearby people. Therefore, the respondents we get more likely to be chinese, this is the limitation of the study. Furthermore, limitations for this study is

limited to Gen Z; alternate research might be conducted to explore the impact on older generation investors from Millennials and Gen X. (Sharma, P., Gautam, T., Prakash, A. S. S., & edagiri, K,n.d.).

## **5.4 Recommendations**

To address the limitations of solely focusing on Malaysian Gen-Z. We recommend future research can expand the scope to include local and international students, it can ensure a more comprehensive study across people which have different cultural backgrounds. By including foreign students, the study can illustrate how differing cultural values and economic affect financial literacy, financial knowledge, financial attitudes, and financial behaviours. Understanding cultural differences, such as the prioritisation of family financial support in Latino communities, would provide further insight into how these aspects influence individual financial planning. Further research can also create and implement culturally appropriate financial education programs that cater to the specific needs of both local and foreign students. These programs is used to address the different viewpoints of diverse students. By creating these programs, it can be more effective to improve the financial preparedness and planning of diverse students.

Furthermore, future researchers should redesign the educational program to not only teaching financial principles but also the development of practical decision making and positive financial attitudes. The programs can consists real-world applications, confidence-building activities, and behavioral insights to ensure that people are not just aware but also able to apply their financial knowledge effectively. Through this holistic approach, financial education may better teach people handle their finances, in turn in better financial planning. This approach also guarantee that individuals will have both theoretical knowledge and practical skills which is required to make an informed financial decision.

Lastly, to address the limitations which primarily concerned on Gen-Z UTAR students. Future researchers should be come from other university which have a balance ethnicity. With

a broader view, would provide a more significant insights into how financial planning propensity differ across ethnicity groups. This comparison analysis might help in identifying ethnicity disparities in financial knowledge, attitudes, literacy and behaviors, therefore, expanding our understanding in how races can affected intention towards financial planning. Therefore, future research should include more different races of respondents such as chinese, malay, indian, and so on. Hence, it can better capture the variation in financial planning by different parts of community.

## Reference

- Abekan, A. F., Lajuni, N., Wellfren, A. C., Marimo, E. C., & Mahfirah, T. F. (2024). The determinants of financial planning among youths in Sabah. *Global Advances in Business Studies*, 3(1), 1-12.
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330-333.
- Adiputra, I. G., Suprastha, N., & Tania, L. (2021). The influence of financial knowledge, financial attitude dan locus of control on financial behavior of E-Wallet users in Jakarta. *Journal of Contemporary Issues in Business and Government*, 27(1), 3318–3332. [https://cibg.org.au/article\\_9675\\_1411d8d0e66307daf503d5da7fe45cbe.pdf](https://cibg.org.au/article_9675_1411d8d0e66307daf503d5da7fe45cbe.pdf)
- Afgani, K. F., Pringgabayu, D., Waruwu, F., and Clement, M. (2021). The Effect of Financial Literacy on Generation Z's Stock Market Participation in Bandung City. *International Journal of Business Marketing and Management*, 6(8), 44-50



- Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. D. (2015). Financial literacy and financial planning: Evidence from India. *Journal of Housing Economics*, 27, 4-21.
- Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., and Evanoff, D. D. (2015). Financial literacy and financial planning: evidence from India. *Journal of Housing Economics*, 27, 4–21.
- Ahmad Zulqarnain Onn (2024). Lack of retirement savings an ongoing concern. <https://www.thestar.com.my/news/nation/2024/03/04/lack-of-retirement-savings-an-ongoing-concern#:~:text=AmanahRaya%20clarifies%20on%20viral%20issue,the%20EPF%20chief%20executive%20officer>.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211. <https://www.sciencedirect.com/science/article/abs/pii/074959789190020T>
- Ajzen, I. (2021): The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, Vol. 50, pp. 179-211.
- Aprilia, E., Apriliani, H. J., Ridiansyah, M. H. R., & Djasuli, M. (2024). Pengaruh Literasi Keuangan Terhadap Keputusan Investasi Bagi Investor Millennial. *Jurnal Ekonom i Manajemen*, 28(5).
- Arrondel, L., Debbich, M., & Savignac, F. (2013). Financial literacy and financial planning in France. *Numeracy*, 6(2). <https://doi.org/10.5038/1936-4660.6.2.8>
- Arrondel, Luc and Debbich, Majdi and Savignac, Frederique (2011) Financial Literacy and Financial Planning in France. *Banque de France*, 6(2), 465. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2374363](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2374363)
- Ate, G. M., & Yowi, K. (2022). Single Employee Personal Financial Planning (Study on State[1] Owned Employees in Waingapu City). 2(3), 355–364
- Atkinson, A., & Kempson, E. (2014). Young people, money management, borrowing and saving. 18.
- Atkinson, A., & Messy, F. (2012). Measuring financial literacy. *OECD Working Papers on Finance, Insurance Private Pensions*. <https://doi.org/10.1787/5k9csfs90fr4-en>
- Augustin, Terrance (2022). *View of Financial literacy and the level of financial planning individuals use*. <https://openjournals.libs.uga.edu/fsr/article/view/3486/3109>

- Australian Securities and Investments Commission - ASIC. (2021). Young people and money—Survey snapshot (s. 15).  
<https://files.moneySMART.gov.au/media/kjvjabp5/young-people-and-money-survey-snapshot.pdf>
- Azizeh, N. (2022). (PDF) determinant of financial literacy in generation Z. ResearchGate.  
[https://www.researchgate.net/publication/358716070\\_Determinant\\_of\\_Financial\\_Literacy\\_in\\_Generation\\_Z](https://www.researchgate.net/publication/358716070_Determinant_of_Financial_Literacy_in_Generation_Z)
- Báčová, V., Dudeková, K., Kostovičová, L., & Baláž, V. (2017b, September 17). Financial Planning for Retirement in Young Adults: Interaction of Professional Experience, Knowledge, and Beliefs. BACOVA.
- Bado, B., Hasan, M., Tahir, T., & Hasbiah, S. (2023). How Do Financial Literacy, Financial Management Learning, Financial Attitudes And Financial Education In Families Affect Personal Financial Management In Generation Z?. International Journal Of Professional Business Review, 8(5), 1-29.
- Baek, H. Y., Kim, D., & Oh, J. (2019a). Financial attitude, knowledge, investment behaviour and satisfaction among the clients of comprehensive financial planning services. Financial Planning Research Journal, 5(1), 11–28.  
<https://doi.org/10.2478/fprj-2019-0001>
- Banthia, D., & Dey, S. K. (2022). Impact of financial knowledge, financial attitude and financial behaviour on financial literacy: Structural equation modeling approach. Universal Journal of Accounting and Finance, 10(1), 327-337.
- Berndt, A. E. (2020). Sampling methods. Journal of Human Lactation, 36(2), 224–226.  
<https://doi.org/10.1177/0890334420906850>
- Bobbitt, Z. (2021, January 19). *How to use Q-Q plots to check normality*. Statology.  
<https://www.statology.org/q-q-plot-normality/>
- Brimble, Mark & Blue, Levon (2015) A holistic approach to financial literacy education. ACRN Journal of Finance and Risk Perspectives, 4(3), pp. 34-47.
- Chang, V., Baudier, P., Zhang, H., Xu, Q., Zhang, J., & Arami, M. (2020). How Blockchain Can Impact Financial Services—The Overview, Challenges And Recommendations From Expert Interviewees. Technological Forecasting And Social Change, 158, 120166
- Cleave, P. (2023, January 1). Advantages Of Questionnaires In Online Research Turn Survey Data into Actionable Insights with Dashboards and Sentiment Analysis.

- SmartSurvey. <https://www.smartsurvey.co.uk/blog/advantages-of-questionnaires-in-online-research>
- Contino, G. (2024, June 14). *Gen Z is harnessing “one of the magical qualities of investing,” advisor says - how it helps them build wealth.* CNBC. <https://www.cnbc.com/2024/06/14/gen-z-retirement-saving-younger-millennials-ira-investing.html>
- Coskun, Ates, S., A., Şahin, M. A., & Demircan, M. L. (2016). Impact of financial literacy on the behavioral biases of individual stock investors: Evidence from Borsa Istanbul. *Business & Economics Research Journal*, 7(3).
- DBS. (2024). *Generation Z.* <https://www.dbs.com.sg/personal/articles/nav/financial-planning/gen-z-financial-trends>
- Demertzis, Maria; Domínguez-Jiménez, Marta; Lusardi, Annamaria (2020) : The financial fragility of European households in the time of COVID-19, Bruegel Policy Contribution, No. 2020/15, Bruegel, Brussels. <https://www.econstor.eu/handle/10419/237650>
- Eka Desy Purnama & Fetrik Erwanto Simarmata. (2021). Lifestyle Effects in Moderating the Influence of Financial Knowledge and Financial Literacy on Financial Planning. *Journal of Research Innovation*, Vol. 1, No.
- Erlangga, M. Y., & Krisnawati, A. (2020). Pengaruh Fintech Payment Terhadap Perilaku Manajemen Keuangan Mahasiswa. *Jurnal Riset Manajemen Dan Bisnis*, 15(1), 53. <https://doi.org/10.21460/jrmb.2020.151.348>
- Erwin, E., Saununu, S. J., & Rukmana, A. Y. (2023). The Influence of Social Media Influencers on Generation Z Consumer Behavior in Indonesia. *West Science Interdisciplinary Studies*, 1(10), 1028-1038.
- Everfi. (2018, July 31). *Gen Z & millennial financial behaviors report.* EVERFI. <https://everfi.com/campaign/financial-behaviors-report/>
- Falahati, L., & Sabri, M. F. (2015). An exploratory study of personal financial wellbeing determinants: Examining the moderating effect of gender. *Asian Social Science*, 11(4), 33–42. <https://doi.org/10.5539/ass.v11n4p33>
- Fitriah, W. (2021). Financial Literacy and Financial Inclusion on the Financial Planning of the City of Palembang. *Review of Management and Entrepreneurship*, 5(1), 19-32.

- Frost, J. (2023, January 29). *Multicollinearity in regression analysis: Problems, detection, and solutions*. Statistics By Jim. <https://statisticsbyjim.com/regression/multicollinearity-in-regression-analysis/>
- Gahagho, Y. D., Rotinsulu, T. O., & Mandejj, D. (2021). The Influence of Financial Literation on Financial Attitudes and Revenue Resources on Financial Management Behavior of Students of The Faculty of Economics and Business UNSRAT With Intention as Intervening Variables. *Jurnal EMBA*, 9(1), 543-555.
- Gaidhani, S., Arora, L., & Sharma, B. K. (2019). Understanding the attitude of generation Z towards workplace. *International Journal of Management, Technology and Engineering*, 9(1), 2804-2812.
- Gan, L. Y., Khan, M. T. I., and Liew, T. W. (2021). Understanding consumer's adoption of financial robo-advisors at the outbreak of the COVID-19 crisis in Malaysia. *Financial Planning Review*, 4(3), 1–18.
- Garg, N., & Singh, S. (2018). Financial Literacy Among Youth. *Internastional Journal of Social Economics*, 45(1), 173–186. <https://doi.org/10.1108/IJSE-11-2016-0303>
- Gladstone JJ, Hundtofte CS (2023) A lack of financial planning predicts increased mortality risk: Evidence from cohort studies in the United Kingdom and United States. *PLoS ONE* 18(9): e0290506. <https://doi.org/10.1371/journal.pone.0290506>
- Gladstone JJ, Hundtofte CS (2023) A lack of financial planning predicts increased mortality risk: Evidence from cohort studies in the United Kingdom and United States. *PLoS ONE* 18(9): e0290506. <https://doi.org/10.1371/journal.pone.0290506>
- Gorynski, M. (2024b, February 22). Millennials vs. gen Z: What are the key differences?. Zendesk. <https://www.zendesk.com/blog/millennials-vs-gen-z-customer-service-expectations-compare/#>
- Graber , J. G. (2020). Financial Literacy and Retirement Planning Education: . Proquest. <https://www.proquest.com/login>
- Greenwald, L., Copeland, C., & VanDerhei, J. (2017). The 2017 retirement Confidence Survey: Many Workers retirement confidence and Feel Stressed About Retirement Preparations. Employee Benefit. [https://papers.ssrn.com/Sol3/papers.cfm?abstract\\_id=2941583](https://papers.ssrn.com/Sol3/papers.cfm?abstract_id=2941583)
- Greg, I. (2023, June 7). Crypto is gen Z's most common investment. that may be risky, experts said. CNBC. <https://www.cnbc.com/2023/06/07/crypto-is-gen-zs-most-common-investment-that-may-be-risky.html>

- Gumulya, J., & Widiastuti, M. (2013). The Influence of Self-Concept on Consumptive Behavior of Esa Unggul University Students. *Jurnal Psikologi*  
<https://ejurnal.esaunggul.ac.id/index.php/psiko/article/view/1471>
- H.Young Baek, Doseong and Jong Oh(2019)Financial Attitude, Knowledge, Investment behaviour and satisfaction among the client of comprehensive financial planning services.  
[https://www.researchgate.net/publication/379102744\\_Financial\\_Attitude\\_Knowledge\\_Investment\\_Behaviour\\_and\\_Satisfaction\\_Among\\_the\\_Clients\\_of\\_Comprehensive\\_Financial\\_Planning\\_Services](https://www.researchgate.net/publication/379102744_Financial_Attitude_Knowledge_Investment_Behaviour_and_Satisfaction_Among_the_Clients_of_Comprehensive_Financial_Planning_Services)
- Hanson TA, Olson PM (2018) Financial literacy and family communication patterns. *J Behav Experim Financ* 19:64–71
- Harahap, S., Thoyib, A., Sumiati, S., & Djazuli, A. (2022). The impact of financial literacy on retirement planning with serial mediation of financial risk tolerance and saving behavior: Evidence of medium entrepreneurs in Indonesia. *International Journal of Financial Studies*, 10(3), 66.
- Heinonen, K. (2018). Positive and negative valence influencing consumer engagement. *Journal of Service Theory and Practice*, 28(2), 147-169.
- Henager R, Cude BJ (2016) Financial literacy and long-and short-term financial behavior in different age groups. *J Financ Couns Plann* 27(1):3–19
- Herdjiono, I., & Damanik, L. A. (2016). Pengaruh Financial Attitude, Financial Knowledge, Parental Income terhadap Financial Management Behavior. *Jurnal Manajemen Teori Dan Terapan/Jurnal Manajemen Teori Dan Terapan*, 9(3).  
<https://doi.org/10.20473/jmtt.v9i3.3077>
- Herdjiono, I., Peka, H. P., Ilyas, I., Septarini, D. F., Setyawati, C. H., & Irianto, O. (2018, October). Gender gap in financial knowledge, financial attitude and financial behavior. In 1st International Conference on Social Sciences (ICSS 2018) (pp. 1363-1366). Atlantis Press.
- Irfandi, L. (2020). The influence of self-control, financial literacy and family socio-economics on the financial behavior of economics education students
- Jacobs-Lawson, J.M. and Hershey, D.A.(2005) ‘Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement saving behaviours’, *Financial Services Review*, 14, pp.331-344.

- Jafar, M. K., Anggrainy, N. E., Suhardin, I., & Tohai, R. N. (2023). Gaya Hidup Dan Perilaku Konsumtif Remaja Di Manado. *Maqrizi: Journal Of Economics And Islamic Economics*, 3(2), 96-105
- Johan, I., Rowlingson, K., & Appleyard, L. (2021). The Effect of Personal Finance Education on The Financial Knowledge, Attitudes and Behaviour of University Students in Indonesia. *Journal of Family and Economic Issues*, 42(2), 351–367. <https://doi.org/10.1007/s10834-020-09721-9>
- Jordan, A., & Nuringsih, K. (2023). UNDERSTANDING FINANCIAL BEHAVIOR IN GENERATION Z. *International Journal of Application on Economics and Business*, 1(4), 2535–2546. <https://doi.org/10.24912/ijaeb.v1i4.2535-2546>
- Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British journal of applied science & technology*, 7(4), 396-403. <http://research.sdpublishers.net/id/eprint/2464/>
- Kartiko, E., & Yuniarti, Y. (2024). Analisis Literasi Keuangan Di Kalangan Generasi Z. *Jurnal Riset Ekonomi Dan Manajemen*, 15(5).
- Khalisharani, H., Johan, I. R., & Sabri, M. F. (2022). The Influence of Financial Literacy and Attitude Towards Financial Behaviour Amongst Undergraduate Students: A Cross-Country Evidence. *Pertanika Journal of Social Sciences & Humanities*, 30(2).
- Khan, N. (2020). Critical review of sampling techniques in the research process in the world. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3572336>
- Khawar, S., & Sarwar, A. (2021). Financial literacy and financial behaviour with the mediating effect of family financial socialization in the financial institutions of Lahore, Pakistan. *Future Business Journal*, 7, 1-11.
- Komaria, N. (2020). The Influence of Financial Attitude, Financial Knowledge, and Personal Income on Personal Financial Management Behaviour in Millennial Generation Employees of Pt. Petrokimia Gresik. *FEB Brawijaya University Student Scientific Journal*, 8.
- Kulkarni, N., Risbud, M., & Gautam, O. (2022). View of a study of the awareness of the financial planning and implementation amongst generation Z. *JournalPPW*. <https://www.journalppw.com/index.php/jpsp/article/view/7569/4947>
- Kumar, P., Pillai, R., Kumar, N., & Tabash, M. I. (2022). The interplay of skills, digital financial literacy, capability, and autonomy in financial decision making and well-being. *Borsa Istanbul Review*. <https://doi.org/10.1016/j.bir.2022.09.012>

- Laith Yousef Bani Hani (2020). A Study of Financial Planning and Investment of Individual. International Journal of Science and Research, 9(11), 1268–1272.  
[https://scholar.google.com/scholar?hl=en&as\\_sdt=0%2C5&q=A+Study+of+Financial+Planning+and+Investment+of++Individual&btnG=#d=gs\\_qabs&t=1711628856389&u=%23p%3DAvFWijH09CsJ](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=A+Study+of+Financial+Planning+and+Investment+of++Individual&btnG=#d=gs_qabs&t=1711628856389&u=%23p%3DAvFWijH09CsJ)
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), 33267.
- Lee, J. M., Park, N., & Heo, W. (2019). Importance of subjective financial knowledge and perceived credit score in payday loan use. *International Journal of Financial Studies*, 7(3), 1–21. <https://doi.org/10.3390/ijfs7030053>
- Lim, C. T., & Cordova, W. (2024). Decoding the eco-financial mindset: financial literacy, attitudes, and efficacy measures and the spending behavior of Filipino millennials. *Bio Web of Conferences/BIO Web of Conferences*, 93, 05010. <https://doi.org/10.1051/bioconf/20249305010>
- Loibl, C. (2018), 26 Living in Poverty: Understanding the Financial Behaviour of Vulnerable Groups, Centre for Decision Research, University of Leeds, p. 421 <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118926352.ch26>
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy around the world: an overview. *Journal of pension economics & finance*, 10(4), 497–508.
- Lusardi, A., & Mitchell, O. S. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education: The problems are serious, and remedies are not simple. *Business economics*, 42, 35–44.
- Lusardi, A., and O. S. Mitchell. (2011). Financial literacy around the world: An overview. *Journal of Pension Economics and Finance* 10(4): 497–508
- Mandell L, Schmid Klein Linda (2009) The impact of financial literacy education on subsequent financial behavior. *J Financ Counsel Plann* 20(1):1
- Manning, L. (2023). Financial plans: Meaning, purpose, and Key Components. Investopedia. [https://www.investopedia.com/terms/f/financial\\_plan.asp](https://www.investopedia.com/terms/f/financial_plan.asp)
- Marheni, D. K., Ramadani, A. G., & Kelvin, K. (2024). Factors affecting saving behavior of generation Z in Batam city. *New Applied Studies in Management, Economics & Accounting*, 7(2), 44–59.
- Masdupi E., (2020) “Does Locus of Control Mediate the Relationship Between Financial knowledge and Tax Literacy within Financial Management Behaviour? Evidence



- from Productive Aged People in West Sumatera Indonesia. *International Journal of Advanced Science and Technology*”,
- Mendez, A. (2023, April 18). Overcoming cultural differences in financial planning. *Crediverso*. <https://crediverso.com/en/learning-center/financial-planning/overcoming-cultural-differences-in-financial-planning/>
- Mien, N. T. N., & Thao, T. P. (2015, July). Factors affecting personal financial management behaviors: Evidence from Vietnam. In *Proceedings of the Second Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences (AP15Vietnam Conference)* (Vol. 10, No. 5, pp. 1-16).
- Miller BG (2001) Early family experiences and the financial behavior of college students: the impact of gender and gambling
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). *Descriptive statistics and normality tests for statistical data*. *Annals of cardiac anaesthesia*. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6350423/#:~:text=When%20P%20%3E%200.05%2C%20null%20hypothesis,sometimes%20called%20kurtosis%20\(proper\)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6350423/#:~:text=When%20P%20%3E%200.05%2C%20null%20hypothesis,sometimes%20called%20kurtosis%20(proper)).
- Mitchell, B. (2019). Generation Z & Consumer Trends In Environmental Packaging.
- Mohidin, R.; Jamal, A.A.A.; Geetha, C.; Sang, L.T.; Karim, M.R.A.; Abdul Karim, M. Revisiting the relationship between attitudes and retirement planning behavior: A study on personal financial planning. *Int. J. Multidiscip. Thought* 2013, 3, 449–461.
- Morris, M.H., Kuratko, D.F., Audretsch, D.B. et al. Overcoming the liability of poorness: disadvantage, fragility, and the poverty entrepreneur. *Small Bus Econ* **58**, 41–55 (2022). <https://doi.org/10.1007/s11187-020-00409-w>
- Morrison, J. (2019, September 20). Assessing questionnaire reliability. *Select Statistical Consultants*. <https://select-statistics.co.uk/blog/assessing-questionnaire-reliability/>
- Mustafa, M. Q. A., & Salsabil, N. Z. (2020). The Effect of Social Media Content and Personal Background Performance on Financial Planning Awareness of Generation Z Muslim. *Ekonomi Islam Indonesia*, 2(2).
- Mustafa, W. M. W., Islam, M. A., Asyraf, M., Hassan, M. S., Royhan, P., & Rahman, S. (2023). The effects of financial attitudes, financial literacy and health literacy on sustainable financial retirement planning: The moderating role of the financial advisor. *Sustainability*, 15(3), 2677. <https://doi.org/10.3390/su15032677>



- Mustafa, W. M. W., Islam, M. A., Asyraf, M., Hassan, M. S., Royhan, P., & Rahman, S. (2023). The effects of financial attitudes, financial literacy and health literacy on sustainable financial retirement planning: The moderating role of the financial advisor. *Sustainability*, 15(3), 2677.
- Mustafa, W. M. W., Islam, M. A., Asyraf, M., Hassan, M. S., Royhan, P., & Rahman, S. (2023). The effects of financial attitudes, financial literacy and health literacy on sustainable financial retirement planning: The Moderating role of the Financial Advisor. *Sustainability*, 15(3), 2677. <https://doi.org/10.3390/su15032677> *View of The determinants of financial planning among youths in Sabah.* (n.d.). <https://journal-gabs.org/gabs/article/view/33/21>
- Nikolaos, P. D., & Avdoulas, C. (2021, July 21). Financial Literacy and financial well-being among generation-Z univers. Taylor & Francis. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003169192-5/financial-literacy-financial-well-being-among-generation-university-students-evidence-greece-nikolaos-philippas-christos-avdoulas>
- Nisa, F.K., and Haryono, N.A. (2022). Pengaruh financial knowledge, financial attitude, financial self efficacy, income, locus of control, dan lifestyle terhadap financial management behavior generasi z. *Jurnal Ilmu Manajemen*, 10(1), 82-97.
- Odrynska, A. (2023, March 27). What is a Data Source: Definitions, Types, Examples. Retrieve from <https://www.alphaservesp.com/blog/what-is-a-data-source-definitions-types-examples>
- OECD. (2022). Financial planning and financial education for old age in times of change. In OECD Finance and Business Policy Papers.
- OECD. (2023). *Site homepage*. OECD iLibrary. <https://www.oecd-ilibrary.org/>
- Pamikatsih, T. R., Lusia, A., Rahayu, A. S., Maisara, P., & Farida, A. (2022, March). The influencing factors for financial behavior of gen Z. In International Conference of Business and Social Sciences (pp. 440-449).
- Pandya, J. D. (2022). A Study on Financial Literacy among Millennials & Gen Z. “A Study on Financial Literacy Among Millennials & Gen Z. [https://ij.darshan.ac.in/Upload/DIJCM/December-2023-Vol-3-Issue-II/December-2023-Vol-3-Issue-II\\_JD\\_2312.pdf](https://ij.darshan.ac.in/Upload/DIJCM/December-2023-Vol-3-Issue-II/December-2023-Vol-3-Issue-II_JD_2312.pdf)
- Pandya, Ms. J. D. (2023). “A Study on Financial Literacy among Millennials & Gen Z.” *DJournal*. <https://ij.darshan.ac.in/DIJCM/Past-Issues>

- Pankow, Debra. (2012). Financial Values, Attitudes and Goals. NDSU Extension Service. Available at: <https://www.ag.ndsu.edu/pubs/yf/fammgmt/fs591.pdf>
- Patel, A. T. (2022). A Study of Awareness, Attitude and Factors influencing Personal Financial Planning for Residents of Gujarat. GTU. <https://www.gtu.ac.in/uploads/Avni> Patel - Thesis - 129990992002.pdf
- Patel, A. T., & Kumar, S. (2017). A Study of Awareness, Attitude and Factors influencing Personal Financial Planning for Residents of Gujarat. Unpublished doctoral dissertation). Gujarat Technological University, Ahmedabad (Gujarat), India.
- Pereira, N. and Varma, S.L. (2018), "Financial planning recommendation system using content-based collaborative and demographic", Smart Innovations in Communication and Computational Sciences: Proceedings of ICSICCS, 2017, Vol. 1, p. 141. [https://link.springer.com/chapter/10.1007/978-981-10-8968-8\\_12](https://link.springer.com/chapter/10.1007/978-981-10-8968-8_12)
- Purnama, E. D., & Simarmata, F. E. (2021). Efek Lifestyle dalam Memoderasi Pengaruh Pengetahuan Keuangan dan Literasi Keuangan terhadap Perencanaan Keuangan. Jurnal Inovasi Penelitian, 1(8), 1567-1574. <https://stp-mataram.e-journal.id/JIP/article/view/322>
- Putri, W. A. E., & Rasyid, R. (2021). Influence of Demographic Factors and Socioeconomic Status of Parents on the Level of Financial Literacy in Generation Financial Management Studies, 1(4), 01-17
- Rahmah, S., Muslimah, M., & Khairunnisa, A. (2021). Determinants of Understanding Generation Z Financial Literacy in the Vocational School Students of Kahayan Hilir. At-Tarbiyat: Jurnal Pendidikan Islam, 4(2).
- Rahman, M. M., Tabash, M. I., Salamzadeh, A., Abduli, S., & Rahaman, M. S. (2022). Sampling Techniques (Probability) for Quantitative Social Science Researchers: A Conceptual Guidelines with Examples. SEEU Review, 17(1), 42–51. <https://doi.org/10.2478/seeur-2022-0023>
- Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021, November 1). *The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 Group in Malaysia - future business journal*. SpringerOpen. <https://fbj.springeropen.com/articles/10.1186/s43093-021-00099-0>
- Rai, K., Dua, S., & Yadav, M. (2019). Association of financial attitude, financial behaviour and financial knowledge towards financial literacy: A structural equation modeling

- approach. FIIB Business Review, 8(1), 51–60.  
<https://doi.org/10.1177/2319714519826651>
- Renaldo, N., Sudarno, S., & Marice, H. B. (2020). THE IMPROVEMENT OF GENERATION Z FINANCIAL WELL-BEING IN PEKANBARU. *Jurnal Manajemen Dan Kewirausahaan (E-journal)*, 22(2), 142–151.  
<https://doi.org/10.9744/jmk.22.2.142-151>
- Reviandani, W. (2019). Pengaruh pengalaman keuangan dan tingkat pendapatan terhadap perilaku keuangan keluarga di desa Yosowilangun kecamatan manyar Gresik. *Jurnal Manajerial*, 6(01), 48–58. <https://journal.umg.ac.id/index.php/manajerial/article/view/862>
- Reviandani, W. (2019). The influence of financial experience and income level on family financial behavior in Yosowilangun village, Manyar Gresik sub-district. *managerial journal*, 6(01), 48-58.
- Roopa, S & Menta, S. R. (2012). Questionnaire designing for a survey. *The Journal of Indian Orthodontic Society*, 46. 37-41. doi:10.5005/jp-journals-10021-1104.
- Rosdiana, R. (2020). Analysis of Investment Interests, Motivation, Social Environment, Financial Literacy (Comparative Study of Generation Z and Millennial Generation). *Int. J. Business, Econ. Law*, 22(1), 111-121.
- Sabri, Mohamad Fazli, and Teo Tze Juen (2014). The influence of financial literacy, saving behaviour, and financial management on retirement confidence among women working in the Malaysian public sector. *Asian Social Science* 10: 40.
- Saputra, E. D., & Murniati, M. P. (2021). Pengaruh Literasi Keuangan, Perilaku Keuangan, Karakteristik Sosial Demografi, Toleransi Risiko terhadap Perencanaan Keuangan Hari Tua Pegawai Instansi XYZ Semarang. *Fokus Bisnis: Media Pengkajian Manajemen Dan Akuntansi*, 20(2), 216–229.  
<https://doi.org/10.32639/fokusbisnis.v20i2.950>
- Sari, L. N., & Afrizal, A. (2019). Pengaruh Pengetahuan Keuangan, Lokus Pengendalian Dan Pendapatan Terhadap Perilaku Keuangan Pegawai Dinas Tanaman Pangan Dan Holtikultura Kabupaten Rokan Hulu. *Jurnal Ilmiah Cano Ekonomos*, 8(2), 54–64.  
<https://doi.org/10.30606/cano.v8i2.728>
- Satria, R. A., & Yuhertiana, I. (2024). Perilaku Generasi Millennial Dalam Pengambilan Keputusan Berinvestasi Di Pasar Modal. *Reslaj: Religion Education Social Laa Roiba Journal*, 6(3), 1416-1431

- Schrepp, M. (2020). On the Usage of Cronbach's Alpha to Measure Reliability of UX Scales. *Journal of Usability Studies*, 15(4).
- Sharma, M., Kaushal, D., & Joshi, S. (2023). Adverse Effect Of Social Media On Generation Z User's Behavior: Government Information Support As A Moderating Variable. *Journal Of Retailing And Consumer Services*, 72, 103256.
- Sharma, M., Kaushal, D., & Joshi, S. (2023). Adverse Effect Of Social Media On Generation Z User's Behavior: Government Information Support As A Moderating Variable. *Journal Of Retailing And Consumer Services*, 72, 103256.
- Sharma, P., Gautam, T., Prakash, A. S. S., & Vedagiri, K. (n.d.). *Impact of financial literacy on investment behavior among Gen Z*. Jetir.org. Retrieved July 29, 2024, from <https://www.jetir.org/papers/JETIR2404291.pdf>
- Stasny, E. A. (2001). Nonsampling Error. *International Encyclopedia of the Social & Behavioral Sciences*, 10691-10696. <https://doi.org/10.1016/B0-08-043076-7/00414-9>
- Stewart, L. (2024, March 20). Primary Data: Definition, Examples & collection methods. ATLAS.ti. <https://atlasti.com/research-hub/primary-data>
- Sudha, B., Farouk, M., & Ahmed, G. (2022, October). An Empirical Study of Association Among Financial Literacy, Financial Attitude and Financial Behaviour of Gen-Z. In 2022 International Conference on Cyber Resilience (ICCR) (pp. 1-6). IEEE.
- Susanto, Y. B., Setiawan, U. M., Ariyanto. (2022). Financial planning for millennials and gen-Z (Study of millennials and gen-Z financial behaviour). *ULTIMA Management*, 14(1), 156–168
- Taherdoost, H. (2016). (PDF) sampling methods in research methodology; how to choose a sampling technique for research. *ampling Methods in Research Methodology; How to Choose a Sampling Technique for Research*. [https://www.researchgate.net/publication/319998246\\_Sampling\\_Methods\\_in\\_Research\\_Methodology\\_How\\_to\\_Choose\\_a\\_Sampling\\_Technique\\_for\\_Research](https://www.researchgate.net/publication/319998246_Sampling_Methods_in_Research_Methodology_How_to_Choose_a_Sampling_Technique_for_Research)
- Talib, N.F.M.; Manaf, H.A. Attitude towards retirement planning behaviour among employee's. *Int. J. Bus. Manag.* 2017, 1, 12–17.
- Tamplin, T. (2024, February 16). Financial planning: Definition, principles, process, & tools. Finance Strategists. <https://www.financestrategists.com/financial-advisor/financial-planning/>

- Tang N, Baker A (2016) Self-esteem, financial knowledge, and financial behavior. *J Econ Psychol* 54:164–176
- Tang, N., & Baker, A. (2016). Self-esteem, financial knowledge and financial behavior. *Journal of Economic Psychology*, 54, 164-176.
- Tang, N., & Baker, A. (2016). Self-esteem, financial knowledge and financial behavior. *Journal of Economic Psychology*, 54, 164–176. <https://doi.org/10.1016/j.joep.2016.04.005>
- Taylor, S. (2023, November 22). *R-squared*. Corporate Finance Institute. <https://corporatefinanceinstitute.com/resources/data-science/r-squared/>
- Utami, N., & Sitanggang, M. L. (2021). The analysis of financial literacy and its impact on investment decisions: A study on generation Z in Jakarta. *Inovbiz: Jurnal Inovasi Bisnis*, 9(1), 33-40.
- Van Deventer, M., De Klerk, N., & Bevan-Dye, A. L. (2014). African Generation Y Students' Attitudes towards Personal Financial Planning. *Mediterranean Journal of Social Sciences*. <https://doi.org/10.5901/mjss.2014.v5n21p111>
- Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial economics*, 101(2), 449-472.
- Vanessa, C. (2017, January 8). Factors affecting personal financial management behaviors: Evidence from Vietnam. *Academia.edu*. [https://www.academia.edu/30812292/Factors\\_Affecting\\_Personal\\_Financial\\_Management\\_Behaviors\\_Evidence\\_from\\_Vietnam](https://www.academia.edu/30812292/Factors_Affecting_Personal_Financial_Management_Behaviors_Evidence_from_Vietnam)
- Vincent, R. J., & Ahmad, F. S. (2021). Gen-Z Effect: New Opportunities of Employee Collaboration and Knowledge Sharing on Service Innovation in Malaysia. *Journal of Advanced Research in Business and Management Studies*, 25(1), 6-16.
- Watson, P. (2020). *MRC CBU Wiki*. FAQ/Collinearity - CBU statistics Wiki. <https://imaging.mrc-cbu.cam.ac.uk/statswiki/FAQ/Collinearity>
- Weinbrenner, H. L. (2023). Impact investment intentions of Generation Z: exploring the factors that drive young private investors to decide for environmental, social and governance (ESG) funds.
- Whitehead, A. L., Julious, S. A., Cooper, C. L., & Campbell, M. J. (2015). Estimating the sample size for a pilot randomised trial to minimise the overall trial sample size for the external pilot and main trial for a continuous outcome variable. *Statistical Methods in Medical Research*, 25(3), 1057–1073.

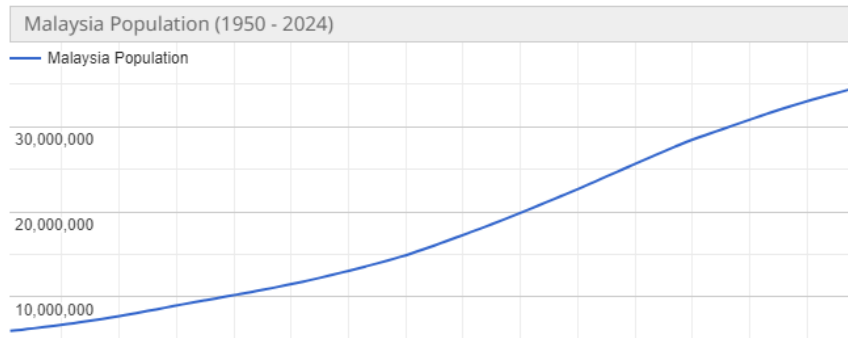
- Widyakto, A., Liyana, Z. W., & Rinawati, T. (2022). The influence of financial literacy, financial attitudes, and lifestyle on financial behavior. *Diponegoro International Journal of Business*, 5(1), 33-46.
- Wiyanto, H., Putri, Y. I., and Budiono, H. (2019). Keterkaitan pengetahuan dan perencanaan keuangan terhadap perilaku karyawan pria. *Jurnal Ekonomi*, 14(2), 176-192. DOI: <http://dx.doi.org/10.24912/je.v24i2.567>
- Worldometers. (2020). Malaysia demographics. Retrieved from <https://www.worldometers.info/demographics/malaysia-demographics>
- Yogasnumurti, R. R., Sadalia, I., & Irawati, N. (2019). The Effect of Financial, Attitude, and Financial Knowledge on the Personal Finance Management of College Collage Students. *SciTePress*. Retrieve from <https://www.scitepress.org/PublishedPapers/2019/93292/93292.pdf>
- Yogasnumurti, R. R., Sadalia, I., & Irawati, N. (2021). The effect of financial, attitude, and financial knowledge on the personal finance management of college students. In *Proceedings of the 2nd Economics and Business International Conference-EBIC* (pp. 649-657).
- Yong, K. C., Chung, J. F., & Al-Khaled, A. A. S. (2021). The relationship between socio-demographics and financial literacy with financial planning among young adults in Klang Valley, Malaysia. *Jurnal Pengurusan*, 63, 17-30. [https://www.ukm.my/jurnalpengurusan/wp-content/uploads/2022/10/jp\\_63-2.pdf](https://www.ukm.my/jurnalpengurusan/wp-content/uploads/2022/10/jp_63-2.pdf)
- Zhao, H., Liu, Z., Wu, Z., Li, Y., Yang, T., Shu, P & Liu, T. (2024). Revolutionizing Finance With Llms: An Overview Of Applications And Insights. *Arxiv Preprint Arxiv:2401.11641*. <https://doi.org/10.48550/Arxiv.2401.11641>
- Zwaan de, L., Lee, C., Liu, Y., & Chardon, T. (2017). Overconfidence in financial literacy: implications for planners. *Financial Planning Research Journal*, 3(2), 31-46.

## **Appendix**

### **Appendix 1.1: Malaysia Population**

## Malaysia Population (LIVE)

**34,590,456**



### Appendix 1.2: Descriptive analysis of Gender

#### Statistics

Gender

N	Valid	381
	Missing	0

#### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	171	44.9	44.9	44.9
	Female	210	55.1	55.1	100.0
	Total	381	100.0	100.0	

### Appendix 1.3: Descriptive analysis of Age



## Statistics

Age

N	Valid	381
	Missing	0

## Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-21	145	38.1	38.1	38.1
	22-25	196	51.4	51.4	89.5
	26-29	40	10.5	10.5	100.0
	Total	381	100.0	100.0	

### Appendix 1.4: Descriptive analysis of Area

## Statistics

Area

N	Valid	381
	Missing	0

## Area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Selangor	65	17.1	17.1	17.1
	Penang	50	13.1	13.1	30.2
	Johor	73	19.2	19.2	49.3
	Perak	156	40.9	40.9	90.3
	Others	37	9.7	9.7	100.0
	Total	381	100.0	100.0	

### Appendix 1.5: Descriptive analysis of Ethnicity

## Statistics

Ethnicity

N	Valid	381
	Missing	0

## Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	7	1.8	1.8	1.8
	Chinese	363	95.3	95.3	97.1
	Indian	10	2.6	2.6	99.7
	Others	1	.3	.3	100.0
	Total	381	100.0	100.0	

## Appendix 1.6: Descriptive analysis of Level of Education

## Statistics

LevelofEducation

N	Valid	381
	Missing	0

## LevelofEducation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Formal Education	2	.5	.5	.5
	Primary and Secondary School	7	1.8	1.8	2.4
	University Preparatory Program (Foundation and Form 6)	20	5.2	5.2	7.6
	Undergraduate (Diploma)	14	3.7	3.7	11.3
	Undergraduate (Bachelor Degree)	335	87.9	87.9	99.2
	Professional Certifications (ACCA, CFA, CPA, CA, etc)	3	.8	.8	100.0
	Total	381	100.0	100.0	

## Appendix 1.7: Descriptive analysis of Monthly Income

### Statistics

MonthlyIncome

N	Valid	381
	Missing	0

### MonthlyIncome

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than RM2,499	319	83.7	83.7	83.7
	RM2,500 to RM3,169	36	9.4	9.4	93.2
	RM3,170 to RM3,969	14	3.7	3.7	96.9
	RM3,970 to RM4,849	8	2.1	2.1	99.0
	RM4,850 to RM5,879	2	.5	.5	99.5
	RM7,110 to RM8,699	1	.3	.3	99.7
	More than RM10,959	1	.3	.3	100.0
	Total	381	100.0	100.0	

## Appendix 1.8: Descriptive analysis of Employment

### Statistics

Employment

N	Valid	381
	Missing	0

### Employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	27	7.1	7.1	7.1
	Self-Employed	10	2.6	2.6	9.7
	Unemployed	4	1.0	1.0	10.8
	Student	340	89.2	89.2	100.0
	Total	381	100.0	100.0	

## Appendix 1.9 Reliability Test of Financial Planning

### ➔ Reliability

Scale: Financial Planning

#### Case Processing Summary

		N	%
Cases	Valid	381	100.0
	Excluded <sup>a</sup>	0	.0
	Total	381	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.887	5

## Appendix 1.10: Reliability Test of Financial Knowledge

### ➔ Reliability

Scale: Financial Knowledge

#### Case Processing Summary

		N	%
Cases	Valid	381	100.0
	Excluded <sup>a</sup>	0	.0
	Total	381	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.883	5

## Appendix 1.11 Reliability Test of Financial Attitude

➔ **Reliability**

**Scale: Financial Attitude**

**Case Processing Summary**

		N	%
Cases	Valid	381	100.0
	Excluded <sup>a</sup>	0	.0
	Total	381	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.820	5

## Appendix 1.12: Reliability Test of Financial Behaviour

➔ **Reliability**

**Scale: Financial Behavior**

**Case Processing Summary**

		N	%
Cases	Valid	381	100.0
	Excluded <sup>a</sup>	0	.0
	Total	381	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.825	5

## Appendix 1.13: Reliability Test of Financial Literacy

<b>➔ Reliability</b>			
<b>Scale: Financial Literacy</b>			
<b>Case Processing Summary</b>			
		N	%
Cases	Valid	381	100.0
	Excluded <sup>a</sup>	0	.0
	Total	381	100.0
a. Listwise deletion based on all variables in the procedure.			
<b>Reliability Statistics</b>			
		Cronbach's Alpha	N of Items
		.908	5

#### Appendix 1.14: Result of multicollinearity test

<b>Coefficients<sup>a</sup></b>			
		Collinearity Statistics	
Model		Tolerance	VIF
1	FK	.295	3.391
	FA	.237	4.220
	FB	.308	3.247
	FL	.313	3.192
a. Dependent Variable: FP			

## Appendix 1.15: Result of Multiple Linear Regression Analysis

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778 <sup>a</sup>	.605	.600	.18623

a. Predictors: (Constant), FB, FK, FA, FL

b. Dependent Variable: FP

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.946	4	4.987	143.781	<.001 <sup>b</sup>
	Residual	13.040	376	.035		
	Total	32.986	380			

a. Dependent Variable: FP

b. Predictors: (Constant), FB, FK, FA, FL

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.519	.180		2.886	.004		
	FA	.255	.048	.252	5.312	<.001	.467	2.141
	FK	.407	.043	.419	9.584	<.001	.550	1.820
	FL	.149	.050	.149	2.958	.003	.413	2.422
	FB	.085	.049	.086	1.733	.084	.422	2.369

a. Dependent Variable: FP

## Appendix 1.16: Descriptive analysis

Descriptive Statistics									
	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
FP	381	4.00	5.00	4.7417	.29463	-.788	.125	-.628	.249
FA	381	4.00	5.00	4.7150	.29076	-.699	.125	-.482	.249
FK	381	4.00	5.00	4.7034	.30317	-.655	.125	-.612	.249
FL	381	4.00	5.00	4.7102	.29527	-.670	.125	-.487	.249
FB	381	3.60	5.00	4.7328	.30070	-.928	.125	.070	.249
Valid N (listwise)	381								

Variables	Attribute	Items
Financial knowledge	FK1	I know the benefit of having life insurance early to reduce bearing insurance fees
	FK2	I understand money received today more worth than money receive tomorrow.
	FK3	I understand interest rate, financial costs and credit terms.
	FK4	I know how important it is to make timely financial decisions to maximize returns.
	FK5	I know financial concepts such as money management, investment and budgeting.
Financial Attitude	FA1	I feel that I am capable in controlling my financial situation.
	FA2	I enjoy talking to my peers about money related issues.
	FA3	I give importance to saving money from my monthly income.
	FA4	I feel that learning about finance is important.
	FA5	I feel that managing my finances well is very important to me.
Financial Behavior	FB1	I analyze savings/finances before making a large purchase.
	FB2	I save money every month for future needs.
	FB3	I comparison-shop or buy things on sale.
	FB4	I keep track of my expenses on a regular basis.
	FB5	I paid all my bills on time.
Financial Literacy	FL1	I understand the risk and return patterns of all financial instruments.
	FL2	I know a lot about the different kinds of mutual funds available.
	FL3	I know how insurance can be used as an investment tool.
	FL4	I know about the tax rules for all types of investments.
	FL5	High inflation means that the cost of living is increasing rapidly.



