IMPACT OF FINANCIAL DETERMINANTS ON INVESTMENT DECISIONS AMONG MALAYSIA UNIVERSITY STUDENTS

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THE IMPACT OF FINANCIAL LITERACY ON INVESTMENT AMONG UNIVERSITY STUDENTS

BY

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DECLARATION

We hereby declare that:

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

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

(3) The word count of this research report is .

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DEDICATION

This research is dedicated to Universiti Tunku Abdul Rahman (UTAR), where I had the opportunity to learn, grow, and apply the knowledge gained throughout my three-year finance degree. UTAR has provided me with a strong academic foundation, which has been essential in completing this Final Year Project.

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LIST OF ABBREVIATIONS

R^2	R-squared
ANOVA	Analysis of Variance
DV	Dependent Variab;e
ETF	Exchange-Traded Fund
FL	Financial Literacy
ID	Investment Decisions
IV	Independent Variable
OECD	Organisation for Economic Co-operation and Development
PLS	Partial Least Squares
RT	Risk Tolerance
SC	Self-Confidence
SEM	Structural Equation Modelling
TPB	Theory of Planned Behaviour
SD	Standard Deviation
VIF	Variance Inflation Factor
HTMT	Heterotrait-Monotrait Ratio
UTAR	Universiti Tunku Abdul Rahman

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PREFACE

This research project was undertaken as part of the requirements for the Bachelor of Finance (Financial Technology) with Honours at Universiti Tunku Abdul Rahman (UTAR). The study explores the impact of financial literacy, risk tolerance, and self-confidence on investment decisions among Malaysian university students, an area that has gained increasing importance due to the rapid development of fintech platforms, digital investment tools, and changing financial behaviour among young adults.

The motivation behind this study stems from the growing concern that, despite easy access to financial information and investment opportunities, many university students still lack the knowledge, confidence, and risk awareness needed to make informed financial decisions. As a student researcher, I was inspired to examine this issue in depth and contribute meaningful insights that may benefit future students, educators, policymakers, and financial institutions.

In conclusion, completing this research has provided me with valuable experience, not only in understanding the theoretical and empirical foundations of behavioural finance, but also in developing practical research skills such as data collection, analysis, and academic writing. This project has strengthened my appreciation for the importance of financial education and highlighted its role in shaping responsible financial behaviour among young adults.

ABSTRACT

This study investigates the impact of financial literacy, risk tolerance, and self-confidence on investment decisions among Malaysian university students. Despite the increasing accessibility of fintech platforms and investment opportunities, many students lack sufficient financial literacy and psychological readiness to make sound financial decisions. Drawing upon the Theory of Planned Behaviour and behavioural finance theory, this research develops a comprehensive framework to explain how financial knowledge and psychological factors collectively influence students' investment behaviour. A quantitative research design was employed, using stratified random sampling and self-administered questionnaires distributed to public and private university students across Malaysia. The data were analysed using multiple linear regression to examine the relationships between the independent variables and investment decisions. Findings are expected to highlight significant positive relationships between financial literacy, risk tolerance, self-confidence, and students' investment decisions. The study contributes theoretically by extending behavioural finance models to the Malaysian student context, while also providing practical implications for policymakers, educators, and financial institutions to design targeted financial education programs, risk awareness initiatives, and confidence-building strategies. Ultimately, the research aims to foster a generation of financially capable and confident young investors, thereby contributing to personal financial well-being and national economic growth.

CHAPTER 1: INTRODUCTION

1.0 Introduction

University students today are increasingly exposed to a wide spectrum of financial products, digital investment platforms, and fintech innovations, making early access to financial markets possible. While this accessibility has improved, university students often lack the confidence and depth of understanding required to make informed investment decisions due to limited financial literacy. Furthermore, financial literacy is the capacity to understand and apply a variety of financial skills such as managing debt, budgeting, saving, investing and understanding the important ideas like interest rates, inflation, taxes and risk. It involves using this information to make responsible, well-informed decisions that promote long-term financial stability and individual objectives. A financially literate individual can make strategic decisions to increase and manage their money in a variety of economic scenarios such as prepare for the future, stay clear of unnecessary debt and prevent fraud.

According to empirical studies, financial literacy significantly influences students' investments in a variety of situations. Along with variables like risk tolerance and product knowledge. A study conducted in Malaysia on university undergraduates showed that financial literacy significantly raises stock market investing intentions (Manaf et al., 2024). This connection is also supported by data from a relevant Malaysian cohort of young working adults, which indicates a significant relationship between financial literacy and desire to invest in the stock market (Wong et al., 2022). In addition to Malaysia, research conducted in Ghana revealed that students

showed a lack of understanding on several types of financial literacy topics such as stocks, bonds, mutual funds, inflation, interest compounding, time value of money and investment risk diversification (Blay et al., 2024). Moreover, research conducted among Indonesian students revealed that social factors and financial knowledge significantly and positively influence students' financial behavior. Meanwhile, students' financial behavior is significantly and negatively impacted by their lifestyle (Wiranti et al., 2023).

Nevertheless, there remains a gap in understanding how financial literacy and other financial determinants such as risk tolerance and self-confidence could influence investment decisions among university students in the Malaysian context. As these students represent the next generation of the workforce and potential investors, their investment behavior has implications not only for their personal financial well-being but also for the nation’s broader economic development.

This study aims to examine the relationship between financial literacy and investment decision-making among Malaysian university students, shedding light on how knowledge and self-confidence shape their investment behavior. The goal is to inform educational initiatives and policy measures that nurture financially capable and confident young investors.

1.1 Research Background

With the rapid transformation of the personal finance and investing scene in the digital age, young university students now have more exposure and easy access to financial involvement through online trading platforms, robo-advisors, e-wallets, and smartphone apps. University students are now more exposed to financial tools and

investment options because of programs like the Securities Commission's "InvestSmart" campaign and the expansion of fintech services (Securities Commission Malaysia, 2023). However, many students still make passive, rash, or ignorant investment decisions despite having easier access. This has sparked questions about how well-prepared young university students are financially (Mohd Kamel et al., 2021).

Financial literacy is one of the most significant indicators of individual investment decisions. According to Lusardi and Mitchell (2014), financial literacy involves more than just learning about finances, it also includes the practical ability to comprehend, assess, and apply such knowledge in real-world financial decision-making circumstances. This involves making informed choices regarding savings, investments, risk management, and retirement planning especially university students, who have a broad awareness of fundamental financial concepts like inflation, compound interest, portfolio diversification, and the time worth of money, are more likely to engage in strategic investment behaviors such as they are able assess possible returns and dangers, allowing them to make informed investing decisions. Many studies have found an absence of financial literacy among Malaysian youth, even though it is becoming increasingly important for encouraging safe financial behavior. A statewide assessment by the Credit Counselling and Debt Management Agency (AKPK, 2022) found that over 60% of Malaysia's young adults lacked basic financial literacy, pointing out specific gaps in their knowledge of concepts connected to investments and their capacity for risk assessment. Their capacity to actively participate in long-term wealth growth through investment may be restricted by this lack of experience. Furthermore, Hrulekha and Tandan (2025) found an important gap between university students' theoretical financial understanding and their real investment behavior. Despite the fact that many students understand the fundamentals of finance, this understanding is not always translated into purposeful investing or real-world application. This difference implies that educational initiatives for financial education should concentrate on developing critical thinking and decision-making abilities in addition to providing information. In the end, improving

university students' financial literacy is crucial to encouraging long-term financial stability and raising their level of involvement in the investment market. Improving higher finance education could be essential to giving the next generation the skills they need to handle hard financial situations and make wise investment decisions.

Although it is commonly accepted that having a solid understanding of finance is essential to make wise investment decisions, financial literacy is not a stand-alone concept. An increasing amount of research highlights how psychological characteristics, particularly risk tolerance and self-confidence also can influence financial decision-making. Despite being important, financial literacy does not always lead to active or logical financial decision-making. Rather, these psychological elements serve as behavioral barriers that influence how people interpret and respond to information.

Next, the ability and willingness of a person to tolerate uncertainty and possible fluctuation in investment returns, known as risk tolerance, is needed to make wise financial decisions. It includes both having the financial capacity to sustain losses and having the mental strength to accept them. As initially stated by Gilliam et al. (2010), risk tolerance plays a major role in determining investment choices and portfolio composition, especially for retail or non-professional investors. According to later research, investors that are more risk tolerant typically put more money into high-volatility, high-return assets including stocks, mutual funds, and exchange-traded funds (Roszkowski & Grable, 2005; Hallahan, Faff & McKenzie, 2004). For university students, who are generally still developing their financial independence, risk tolerance has a big influence on both the kinds of assets they look at and whether they want to invest at all. According to Gilliam, Chatterjee, and Grable (2010), students who indicate more risk tolerance are more likely to investigate diversified portfolios and take part in longer-term financial planning. Risk-averse students, on the other hand, might avoid investing altogether and instead favor safer, lower-yield options like government-backed securities, savings accounts, or fixed deposits. Not just that, this pattern is especially noticeable in Malaysia, where young people

frequently experience financial instability and economic disparities between generations. AKPK (2022) reports that a considerable proportion of young adults in Malaysia struggle to manage their daily expenses and have little exposure to investing options. Therefore, risk aversion among university students may result from personality characteristics and structural limitations, like limited financial knowledge, little exposure to investments, and less family support. This discovery supports Shahrabani's (2012) findings, which show that students' risk preferences and financial conduct are strongly influenced by their socioeconomic background.

In addition, according to behavioral finance research, people frequently assess possible losses more highly than comparable benefits due to the fear of losing, which is outlined in Kahneman and Tversky's Prospect Theory (1979). This tends to turn risk preferences in favor of stability. Financial fragility might worsen cognitive bias of university students, especially those from B40 and M40 households, causing them to overestimate investment risk and underestimate long-term financial advantages (Teoh et al., 2013). Hence, risk tolerance is not fixed, exposure to financial markets, investment experience, and financial education can make changes to it. Therefore, improving financial literacy on its own might not be enough unless combined with risk awareness education and platforms that simulate investments so that university students can experience them in a low-risk setting (Lusardi & Mitchell, 2014; Van Rooij, Lusardi & Alessie, 2011). Moreover, students' attitudes towards risk can be gradually changed by these kinds of financial courses, giving them the confidence and knowledge to make better financial choices.

Furthermore, it is commonly acknowledged that self-confidence is also another key psychological factor that supports investment behavior, especially when it comes to personal financial management. This concept, which is sometimes referred to as financial self-efficacy, represents a person's confidence in their ability to make wise financial decisions regardless of certain limitations in their financial literacy (Baloria & Bastiaansen, 2024). The Theory of Planned Behavior (TPB), developed by Ajzen in 1991, states that both purpose and actual actions are directly influenced by

perceived behavioral control, which is the belief in one's capacity to carry out a particular behavior. Thus, people are more willing to invest and stick with their financial decision-making processes, especially in the face of uncertainty, when they believe they are capable of handling financial concerns. Not just that, this statement is supported by empirical research. Higher financial self-confidence is associated with more active portfolio diversification and long-term financial planning, according to Farrell, Fry, and Risse (2016). Similarly, even after adjusting for objective financial literacy levels, Lusardi and Mitchell (2014) discovered a high correlation between financial confidence and the chance of engaging in stock market activities. Increased financial control lowers financial stress and enhances the quality of financial decisions, which encourages more proactive investing behavior, according to Phelps and Metzler (2025). Furthermore, Lusardi and Tufano (2015) point out that people who are financially secure are less likely to take out expensive loans and practice bad money management, which indirectly supports their ability to make long-term investments.

Thus, financial self-confidence is particularly crucial for university students, who are still forming their identities and financial expertise. According to Bapat (2019), students who have a higher level of financial self-confidence are more likely to put their theoretical knowledge into practice and get beyond obstacles like information overload and fear of losing money. This implies that self-confidence acts as a psychological stimulation for consistent and responsible investment engagement in conjunction with enhancing financial literacy (Xiao & Porto, 2017).

On top of that, sociodemographic factors including family income, academic year, faculty, and gender may further lower the impact of these variables. For instance, despite having similar or even better financial discipline to their male colleagues, female students frequently express poorer financial confidence (Sabri & Zakaria, 2015). Similarly, because of their academic exposure, students studying business and finance could display greater risk tolerance and investment activity.

Even research on university students' financial behavior is becoming more popular. There are still few broad investigations that look at how financial literacy, risk tolerance, and self-confidence all work together to influence investing decisions in Malaysian universities. These factors are mostly examined separately in previous studies. To close this gap, this study provides a comprehensive model that incorporates these psychological and logical factors to explain why students choose to invest. Therefore, this research's findings will be very helpful to academic institutions and financial institutions as they can create more focused measures such as required personal finance courses, risk awareness campaigns or even investment simulators to support the development of a new generation of financially capable Malaysians.

1.2 Problem Statement

The rapid expansion of fintech platforms and the availability of diverse financial instruments have increased university students' exposure to investment opportunities. However, many lack both the financial literacy and the psychological readiness such as adequate risk tolerance and financial self-confidence which they need to make sound investment decisions.

In Malaysia, the Credit Counselling and Debt Management Agency (AKPK, 2022) reported that over 60% of young adults have poor financial literacy and limited understanding of concepts like compounding, diversification, and the risk–return trade-off. This knowledge gap often leads to impulsive or overly cautious investment behaviors, resulting in missed wealth-building opportunities. While past studies have examined these factors separately, few have explored their combined influence on Malaysian university students' investment decisions, leaving an important gap in understanding how to prepare this demographic for long-term financial success.

1.2.1 Financial Literacy and Investment Decisions

A key factor in making wise investment decisions is financial literacy, which includes the information, abilities, and confidence required to properly handle financial resources. It enables people to assess possible risks, comprehend the characteristics of different financial products and match investment decisions with both short-term and long-term objectives. Financial literacy is the foundation for creating diversified portfolios, controlling exposure to market volatility and preventing adverse financial outcomes among Malaysian university students. However, research indicates that a large number of students have a weak understanding of finance, making them vulnerable to fraud, inadequate asset allocation and poor diversification strategies (Lusardi & Mitchell, 2014). This gap is especially worrisome in the developmental period of developing financial behavior in one's life as a university student, as attitudes and habits in this period can persist in the long run.

In addition, much of the previous literature in Malaysia has targeted working adults or the general population and has had little focus on younger age groups. The absence of special studies on university students does mean that there remain unanswered questions regarding how financial literacy affects, in a direct way, their decision-making patterns and investment behaviors (OECD, 2020). Filling this gap is crucial to develop methods that can provide students the skills they need to ethically and successfully access financial markets.

1.2.2 Risk Tolerance and Investment Decisions

Risk tolerance is defined as the level of uncertainty or potential loss that an investor is willing to accept in exchange for potential rewards and it is also an important consideration in portfolio development and asset selection. It affects the investor's capacity to build wealth over the long run in addition to the kind of investments they

choose, which can range from riskier assets like stocks and cryptocurrencies to more moderate ones like bonds. There are often differences between Malaysian university students' expected and real risk tolerance. For instance, those who overestimate their risk tolerance could significantly invest in high-risk investment opportunities without sufficient measures, while those with low risk tolerance might completely avoid investing and miss out on potential for wealth growth.

Although research from all over the world acknowledges that risk tolerance influences investing activity, little is known about how it interacts with other behavioral and psychological factors in the Malaysian setting such as self-confidence and financial literacy. This is very important for young, inexperienced investors who might depend on their risk assessment on emotional judgement, societal pressures or a lack of financial expertise. Research on the relationship between risk tolerance and other factors influences university students' investing decisions is urgently needed, as a mismatch between expected and actual risk might result in large financial losses (Rabbani et al., 2018). Such studies can produce information for developing advising and instructional initiatives aimed at this population.

1.2.3 Self-Confidence and Investment Decisions

Self-confidence in financial decision-making is a trust that one can successfully assess, choose and oversee investments. It acts as an intermediary between financial literacy and real investment activity since even knowledgeable people can stay away from investing if they don't believe in their own ability. On the other hand, overconfidence, also known as excessive confidence, can result in poor portfolio performance, frequent trading and an underestimating of dangers. The lack of financial experience, peer pressure and exposure to investing-related social media narratives all has an impact on Malaysian university students' confidence levels.

Although previous research examined self-confidence in relation to more general consumer financial behaviors, inadequate research has been done on how it interacts with risk tolerance and financial knowledge to impact university students' decisions about investments. Self-confidence can either strengthen the advantages of financial knowledge by promoting proactive and informed participation in investment markets or it can weaken them by encouraging risk-taking behaviors that are not backed by real skill or understanding (Kudryavtsev, Cohen, & Hon-Snir, 2013). It is crucial to investigate this connection in the context of Malaysian higher education in order to find balanced confidence-building strategies that make students both ready and motivated to make wise investments.

1.3 Research Objectives

1.3.1 General Objectives

To examine the influence of financial literacy, risk tolerance, and financial self-confidence on investment decisions among Malaysian university students.

1.3.2 Specific Objectives

To fulfil the general objectives, specific objectives are constructed.

1. To assess the level of financial literacy among Malaysian university students.
2. To examine whether there is a significant relationship between financial literacy and students' investment decisions.

3. To examine whether there is a significant relationship between risk tolerance and students' investment decisions.
4. To examine whether there is a significant relationship between financial self-confidence and students' investment decisions.

1.4 Research Questions

The purpose of the following research questions is to give this study a defined direction:

1. What is the level of financial literacy among Malaysian university students?
2. How does financial literacy influence students' investment decisions?
3. How does risk tolerance affect students' investment decisions
4. How does financial self-confidence influence students' investment decisions?

1.5 Hypothesis of the Study

H1: There is a significant relationship between financial literacy, risk tolerance, self-confidence, and investment decision-making among Malaysian university students.

H2: There is a significant relationship between financial literacy and investment decision-making among Malaysian university students.

H3: There is a significant relationship between risk tolerance and investment decision-making among Malaysian university students

H4: There is a significant relationship between self-confidence and investment decision-making among Malaysian university students

1.6 Significance of the Study

1.6.1 Theoretical Significance

Firstly, this study provides the theoretical understanding of financial decision-making by investigating how financial literacy, risk tolerance and self-confidence can work together to bring impactful investment decisions by Malaysian university students. Most of the existing research did not consider psychological characteristics such as risk tolerance and self-confidence and only emphasized financial literacy in making investment decisions (Xiao, 2008). In addition, a broader understanding of how psychological factors influence university students' investment decisions is provided in this research. As a result, it enhances well-known behavioral finance models including the Theory of Planned Behaviour (Ajzen, 1991) and financial self-confidence frameworks (Chen & Volpe, 1998).

1.6.2 Academic Contribution

Secondly, the findings of the research have significant effects for the structuring of financial education courses at the university level. If students lack the confidence to make informed decisions or the risk tolerance to participate in the markets, financial literacy alone is insufficient (Atkinson & Messy, 2012). Not just that, this research can help guide the development of educational initiatives that offer risk management

strategy and confidence-building exercises. Since many university students have poor self-confidence in financial matters and moderate levels of financial literacy (Chong et al., 2021). Moreover, the results also can be used by financial institutions and educators to develop more focused measures such as investing training programs that can enable students to make informed and confident investment decisions. Thus, this can help university students by improving their long-term financial decisions.

1.6.3 Social and Economic Significance

Lastly, on a societal level, this study promotes national efforts to improve financial literacy by fostering a generation of financially competent, confident, and ethical investors. According to earlier studies, people who show strong self-confidence and high financial literacy are better able to manage their risks and make more accurate wise financial decisions and also accumulate long-term wealth (Lusardi et al., 2010). Furthermore, this study also helps to lower financial vulnerability and improve economic stability by enhancing university students' financial literacy and boosting their confidence in handling investments. In the long run, this study can influence policies meant to improve financial education for university students. Therefore, by making the workforce of the future more equipped to handle personal financial difficulties and support the expansion of the national economy.

1.7 Conclusion

In conclusion, this study provides an overview of the research's background, problem statement, and significance, highlighting the significance of examining how financial literacy, risk tolerance, and self-confidence influence Malaysian university students' investment decisions. The study highlights existing gaps in students' knowledge,

psychological readiness, and confidence to make sound investment choices despite greater access to financial resources. By addressing this knowledge gap, the study aims to offer insightful information on how these variables interact to affect financial decisions. It is anticipated that the results will guide financial education plans, aid in the creation of policies and contribute to efforts that focus on empowering university students to engage in responsible and informed investing.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Chapter 2 presents an in-depth study of the literature that supports the study of investment decision-making among university students. This chapter goes into deep detail about the three main things that affect this decision-making process, which are financial literacy, risk tolerance, and self-confidence. These variables are examined for their influence on university students' investment choices and financial risk management. The chapter talks about each issue in detail, looking at how it helps students to handle their money responsibly. The importance of financial literacy in making informed investment choices and how risk tolerance influences the level of uncertainty that students are willing to accept in financial markets. The chapter concludes with an exploration of self-confidence and its role in empowering students to make investment decisions. This chapter also provides a foundation for understanding the complex relationships between the three variables and university students' investment decisions by analyzing and combining the evidence of previous scholarly research.

2.1 Review of Literature

2.1.1 Investment Decisions

Investment decisions are the process by which people or organizations distribute their money among different types of investments such as stocks, bonds, mutual funds or real estate with the hope of earning returns in the future. These choices are very important for university students since they are often seen as the foundation of their long-term financial habits and wealth-building plans (Lusardi & Mitchell, 2014). Due to the availability of digital tools and financial apps, university students are becoming more involved in investing platforms despite their low income and lack of financial exposure (OECD, 2020).Furthermore, making wise investment choices usually requires evaluating one's financial objectives, understanding risk and return trade-offs and choosing the right financial products (Baker & Ricciardi, 2014). However, students' decisions are frequently influenced by emotional variables and a lack of experience which may result in poor choices (Nagy & Komaromi, 2020). According to research, young investors' decision-making is greatly impacted by personality traits including herd mentality and overconfidence which cause them to follow trends rather than implement well-informed plans (Barberis & Thaler, 2003).

2.1.2 Financial Literacy

Financial literacy is the capacity to understand and apply a range of financial abilities such as investing, budgeting, and personal financial management. According to

Lusardi and Mitchell (2014), it includes understanding financial concepts such as interest rates, inflation, diversification and risk-return trade-offs. Financial literacy is a critical ability that influences university students' long-term wealth accumulation, financial planning, and investment behavior (OECD, 2020). Furthermore, financial literacy is crucial for enabling people to make logical and well-informed investing decisions according to a variety of studies. Higher financial literacy increases a person's chances of investing, diversifying their holdings and achieving better financial results stated by Chen and Volpe (1998). This is especially important for university students. Students between the ages of 18 and 24 are far more likely to participate in investments if they have even a basic understanding of financial principles, according to Lusardi, Mitchell, and Curto (2010).

University students often struggle to manage their minimal income while making long-term financial plans. They are capable of assessing risks, evaluating investment possibilities and stay clear of rash actions when they are financially literate (Ali, Rahman, & Bakar, 2014). Research conducted in Malaysia by Wahyuni et al. (2023) reveals that students who participated in financial literacy seminars had noticeably superior investment behavior compared to those who did not. Even so, data collected from both domestic and international sources suggests that university students' financial literacy levels are still insufficient. Less than 30% of young respondents in a cross-country survey by Lusardi and Mitchell (2011) provided accurate answers to questions about interest rates and inflation. Despite demonstrating a strong interest in stock trading and cryptocurrency investments, many Malaysian students lack long-term financial thinking and budgeting abilities, according to the Credit Counselling and Debt Management Agency (AKPK, 2022). A common explanation for this gap between knowledge and interest is the lack of official financial education. According to Remund (2010), states that a lot of co-curriculum lack practical financial education. Hence, leading students to rely on unofficial sources like social media which may not always provide reliable or accurate information. When making investing decisions, university students frequently turn to their family, friends or

internet influencers. Thus, this raises the possibility of false information, according to Samsulbahri et al. (2021).

The role of financial education in increasing literacy is well-established. Programs that use digital platforms, real-world simulations and multimedia resources have been shown to improve students' financial literacy. According to Kaiser and Menkhoff's (2017) meta-analysis, financial education greatly enhances financial decisions and knowledge, particularly when efforts are specific to the learner's comprehension level. Additionally, other psychological characteristics like confidence and awareness of risk interact with financial literacy. Students with higher financial knowledge are typically associated with increased self-confidence in handling their finances and assets (Hung, Yoong, & Brown, 2012). This positive view of oneself encourages progressive financial decisions and reduces anxiety related to investment (Phelps & Metzler, 2025).

Moreover, risk tolerance and financial literacy are closely related. According to a 2014 study by Fernandes, Lynch, and Netemeyer, financial literacy improves a person's capacity to accurately assess financial risk and make decisions. This can be particularly beneficial for students because it enables them to invest in long-term assets like retirement accounts or mutual funds even when their short-term income is limited. The rise of digital financial tools has both helped and hindered students' financial literacy. Although access has been enhanced by mobile investment apps. These apps often do not have educational features which might result in rash or ignorant judgements (Abdallah et al., 2024). In order to ensure that students understand the impacts of using fintech platforms, financial literacy programs must adapt to include digital literacy.

To sum up, students' financial and investing decisions are greatly influenced by their level of financial literacy. It gives them the resources they need to handle a financial environment that is getting more complicated. Therefore, raising university students' financial literacy is both a social and educational responsibility.

2.1.2.1 Financial Literacy and Investment Decisions

Investment decisions are significantly influenced by financial literacy. It is the capacity to fully understand and apply financial concepts. Therefore, more financially literate students are more likely to build diverse portfolios and successfully assess risk (Lusardi & Mitchell, 2014). However, research conducted in Malaysia has revealed that many university students only possess a moderate level of financial literacy (Sabri & Zakaria, 2015; Hrulekha & Tandan, 2025). Students who lack sufficient financial literacy face the danger of making poor choices such as falling for investment scams or purchasing inappropriate goods.

2.1.3 Risk Tolerance

Risk tolerance refers to a person's willingness and ability to accept uncertainty in investment outcomes and potential losses in order to achieve higher financial returns. It is a critical factor in determining investment choices and general financial decisions among university students. According to Gilliam et al. (2010), risk tolerance is the psychological limit at which people feel at ease with fluctuating investment returns. Risk tolerance influences investment and utilization choices among university students who are typically younger and in theory have longer time possibilities. But in reality, a lot of students behave with caution while making investments because of socioeconomic, educational, and psychological variables (Lusardi & Mitchell, 2014).Risk tolerance is a complicated idea that takes into account both situational and psychological aspects. Situational factors include family history, income levels and investment experience whereas psychological factors include individual attitudes towards uncertainty and fear of losing (MacCrimmon & Wehrung, 1990). Students

who feel vulnerable financially and have less wealth tend to have lower risk tolerance. Therefore, this can make them less likely to invest in higher-return options like stocks or exchange-traded funds (Roszkowski & Davey, 2010).

The relationship between risk tolerance and investment decisions is supported by empirical studies. As stated by Grable (2000), higher risk tolerance is associated with a greater probability of holding diverse portfolios and investing in equities as compared to low-yield assets like savings accounts. According to research by Samsulbahri et al. (2021), Malaysian university students who have more financial exposure and training also typically take on larger levels of risk when making investing decisions. Moreover, financial literacy is a key component that influences risk tolerance. Higher financial literacy makes people more capable of evaluating risk-return trade-offs and more tolerant of investing risks (Hallahan, Faff, & McKenzie, 2004). Understanding about finance might help university students to learn difficult financial products and decrease their anxiety about possible losses (Phelps & Metzler, 2025). Instead of completely avoiding risk, this information helps them to spend more effectively.

Another factor is age and time range. Theoretically, younger investors like university students have more time to recover from short-term losses which makes them an ideal candidate for riskier investments (Amponsah et al., 2025). Nevertheless, their actions frequently resist this reasoning. According to Tan and Tan's (2021) research, the majority of Malaysian undergraduates prefer unit trusts and fixed deposits over stocks because they were afraid of losing money and lacked appropriate investment understanding. Besides, another important factor that has been found to influence risk tolerance is gender. Male students tend to be more risk tolerant than female students, according to a number of studies (Bajtelsmit & Bernasek, 1997; Powell & Ansic, 1997). This could be partly explained by differences in believed capability and financial confidence. According to some studies, financial literacy can help overcome this difference by enabling female students to make more daring investment choices even though this pattern is persistent across various countries (Brown & Graf, 2013).

Additional factors include family-related background and cultural background. University students who grow up in modest families are more likely to adopt smart investing techniques (Phelps & Metzler, 2025). On the other hand, people who are exposed to personal investment debates and choices typically have greater risk tolerances because they are more experienced in dealing with financial uncertainty (Jorgensen & Savla, 2010). Additionally, university students' psychological traits including confidence bias, loss avoidance, and overconfidence also have a big impact on their risk tolerance. According to Kahneman and Tversky (1979), loss avoidance means avoiding investment possibilities despite possible rewards, whereas overconfidence can result in excessive trading and risk-taking. University students who overanalyze their capacity for investment management may either take unnecessary chances or lose up opportunities that are beneficial.

Finally, social media and technology have changed how university students see investment risk. Students' perceptions of real investment risks may be greatly influenced by the quick emergence of influencer-driven material, online investment forums and customized trading systems such as those that encourage regular trading or replicate market conditions (Abdallah et al., 2024). Financial decisions can be significantly influenced by personal feelings which are frequently raised by social media articles, especially in high-stimulus settings like customized platforms, stated Kuhnen and Knutson (2011). Similarly, regardless of their level of financial expertise, Huang et al. (2022) discovered that ordinary investors who were affected by online peer talks showed a greater risk tolerance and frequently followed the actions of others without fully comprehending the potential risks. Furthermore, Sokolova and Perez (2020) point out that, especially among younger customers with less financial expertise, confidence in social media influencers might take priority over critical thinking and due studies.

In summary, university students' risk tolerance is a complex but crucial component affecting their investing choices. It is possible to promote a more strategic and

balanced investment decisions for university students by improving their financial literacy and encouraging an educated awareness of risk.

2.1.3.1 Risk Tolerance and Investment Decisions

Risk tolerance is an essential variable in determining investment decision-making. It is commonly defined as the level of uncertainty an individual is willing to tolerate in the pursuit of possible investment returns. It affects an investor's entire approach as well as the financial instruments they choose. In addition, Grable and Lytton (2000) state that whereas those with low risk tolerance typically favor safer options like government bonds or fixed deposits and those with high risk tolerance are more likely to invest in stocks, mutual funds, or emerging financial assets. However, university students frequently lack the knowledge and experience necessary to properly determine their own risk preferences. Hence, due to a lack of practical exposure to investment markets and insufficient financial education, many young investors in Malaysia have a habit of displaying either severe risk aversion or excessive risk-taking. For instance, students with limited risk tolerance might stay away from investing altogether and instead choose to store their money in low-yield savings accounts. This will miss out on chances for long-term capital growth.

On the other hand, students who have a high risk tolerance but with a little understanding can be more attracted to uncertain assets like cryptocurrencies or uncertain investment ideas. Thus, this would increase their chance of suffering financial losses. Moreover, studies have shown a strong correlation between risk tolerance and financial knowledge. According to Yao et al. (2011), people with more financial knowledge are more likely to assess risks and make well-rounded investment decisions. However, while taking financial risks, students frequently rely on peer pressure or emotional judgement due to a lack of knowledge. This behavioral bias can cause panic or overconfidence especially when the market is volatile.

2.1.4 Self-Confidence

According to Keller and Siegrist (2005), self-confidence is a crucial psychological factor that influences university students' willingness to engage in investment activities and explore financial markets independently. They are more likely to take calculated risks, conduct independent research and explore a variety of financial opportunities. Thus, all of this will lead to a more decisive and strategic investment decisions. In the financial context, self-confidence refers to an individual's belief in their ability to understand, manage and come up with effective financial decisions including investment choices (Barber & Odean, 2001). Numerous research points out how closely self-confidence and investment decisions are related. University students who have greater financial self-confidence are more likely to engage in investment activities and have faith in their ability to make appropriate financial product selections (Hu et al., 2021). On the other hand, people who lack confidence frequently steer clear of investing entirely out of concern that they will make mistakes or lose money (Lusardi & Mitchell, 2014). Such behavior could hinder the development of long-term wealth management abilities and financial growth.

Self-confidence and financial knowledge have no separate relationships. A student's confidence in making investment decisions increases with their level of financial literacy (Phelps and Metzler, 2025; Hung, Yoong, & Brown, 2012). University students are more likely to feel empowered to take action after receiving instruction on risk management, market operations and fundamental investment concepts. It has been demonstrated that financial literacy courses greatly increase knowledge and self-efficacy which in return encourages improved investing practices (Lusardi, 2019). However, overconfidence can also have some negative impact on making investment decisions. This is because making decisions requires a certain amount of confidence but too much confidence might cause students to overestimate their abilities and

overlook important risk variables (Barber & Odean, 2001). This frequently leads to speculation in investment behavior, low diversification or even high-frequency trading. All of which can have a negative impact on financial performance (Ricciardi & Simon, 2000). According to a 2005 study by Montier, overconfident investors typically underperformed because they were unable to evaluate information accurately and modify their plans in response to shifting market conditions.

Despite having similar real financial expertise, studies have often found that male students report higher levels of financial self-confidence than their female counterparts (Bajtelsmit & Bernasek, 1997; Chen & Volpe, 2002). Despite their potential equal ability, female students may be prevented from engaging in investment activities by this confidence gap. The confidence gap can be closed and balanced involvement in investment behavior can be encouraged by addressing this issue through inclusive financial literacy (Brown & Graf, 2013). Self-confidence can also be strengthened or reduced by peer support and social influence. University students are more likely to feel inspired and validated when they observe fellow learners participating in investment activities and going to financial literacy events or talking about market developments (Widyastuti & Irwanto, 2021). However, an absence of encouraging social networks could make unwilling learners avoid financial activities out of fear of criticism or failure.

One important factor influencing university students' financial self-confidence is peer pressure. People frequently seek their friends, classmates or online peers for guidance on financial practices. Even if students have little financial expertise, they may be inspired by following their peers' investing activity or confident discussions of financial subjects (Shim et al., 2009). Peer interactions provide students with informal learning chances and encouragement which can increase their observed financial competence (Bandura, 1997). However, overconfidence and irresponsible financial decisions can also result from too much reliance on peer pressure without critical analysis (Yanti, 2024).

In conclusion, university students' decisions about investments are significantly influenced by their level of self-confidence. It must be based on actual financial knowledge to avoid overconfidence and bad decision-making even though it can enable students to take charge and control their financial goals. Therefore, financial literacy programs that promote genuine self-confidence in addition to providing information should be given top priority by academic institutions and government in order to generate young investors who are capable, responsible, and confident in oneself.

2.1.4.1 Self-Confidence and Investment Decisions

Self-confidence is another important key factor in deciding whether people act on their financial knowledge especially when it comes to financial decision-making. It is frequently called financial independence and indicates a person's confidence in their own capacity to handle money issues including choosing investments. Although financial literacy serves as the basis for understanding investment possibilities, self-confidence affects whether a person believes that they can use that information successfully in practical settings (Farrell et al., 2016). Furthermore, the importance of self-confidence is significantly greater for university students. This is because many students are handling their personal finances on their own for the first time at this point in their lives. Even people with sufficient financial literacy may continue to invest passively or avoid investing altogether if they lack confidence in their capacity to assess and select appropriate financial goods.

According to Hira and Loibl (2005), active financial behaviors which include investing, budgeting and setting objectives have a positive connection with financial self-confidence. Thus, their results indicate that even with moderate objective knowledge, students are more likely to invest if they have confidence in their financial ability. Nonetheless, there is a complicated relationship between investing

decision-making and self-confidence. People who are overconfident usually overestimate their financial knowledge or abilities. Hence, this can result in taking too many risks or bad asset selection. On the other hand, low self-confidence may hinder investing activity. According to Barber and Odean (2001), overconfident investors typically trade more frequently and make unsafe choices, which generally lead to worse returns. Moreover, peer pressure and social media influences may make this worse for students by developing irrational expectations or false senses of financial control.

2.2 Underlying Theory

2.2.1 Theory of Planned Behavior (TPB)

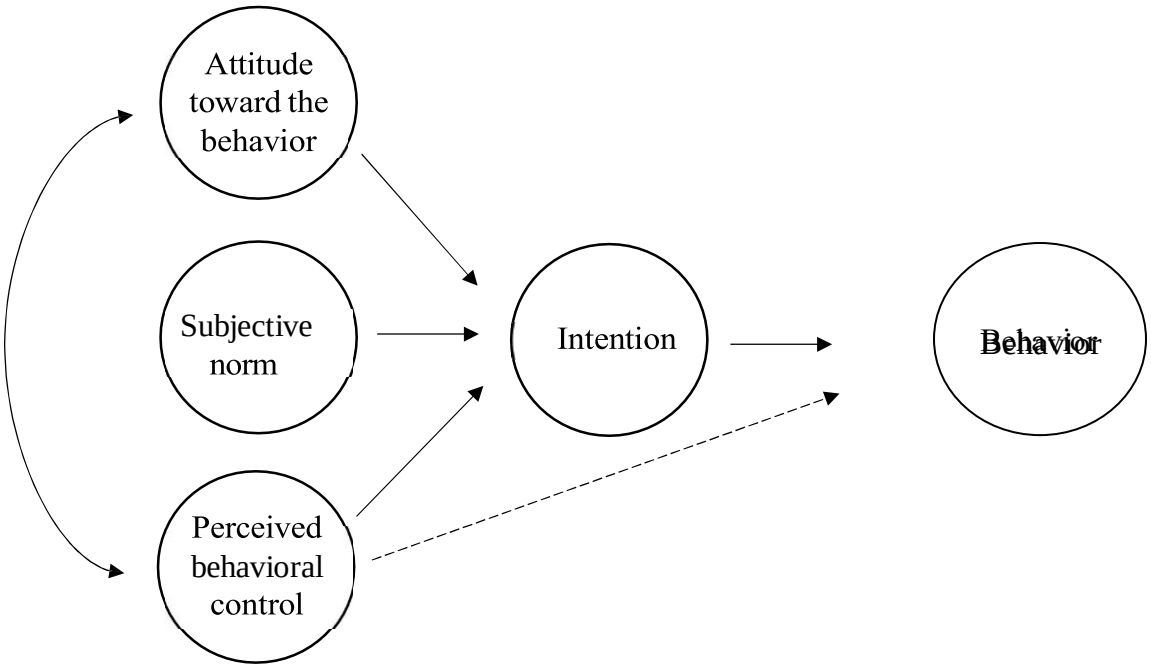

Figure 2.1

Ajzen's (1991) Theory of Planned Behavior (TPB) is a popular tool for analyzing the variables affecting human behavior, particularly investment choices. According to the concept, there are three main factors in the theory that influence a person's intention to engage in a behavior. They are attitudes, subjective standards and perceived behavioral control. These elements offer helpful insights on how university students make investment decisions in the financial markets. A person's perception of investment as a positive or negative action is referred to as their attitude. According to Lusardi & Mitchell (2011), students who have a better perspective on investing are probably more likely to make investments because they believe the advantages surpass the dangers. Due to their understanding of the advantages of financial goods and risk management techniques, students who possess high levels of financial literacy typically have more positive views towards investing (Parsai & Chandok, 2025). Subjective standards are a reflection of the societal pressures to participate in or refrain from investing. According to Ahmad et al. (2024), students who have mentors or peers who invest are more likely to view it as a socially acceptable action which increases their intention to invest. Last but not least, financial self-confidence has a significant impact on investment decisions. Perceived behavioral control is the belief that one can carry out a desired behavior. According to Lusardi & Mitchell (2014), students are more likely to make investment decisions if they have confidence in their capacity to comprehend financial concepts and control risks. To summarize, the TPB says that the best way to encourage investment decisions is to help students become more financially literate and help them develop a positive attitude towards investing and also increase their financial knowledge.

2.2.2 Behavioral Finance Theory

Behavioral finance theory highlights how psychological variables and cognitive biases affect financial decision-making, challenging the traditional view of rational investors. According to recent research, one of the most common biases is still overconfidence, which occurs when investors overestimate their expertise and forecasting skills. This can result in excessive trading and inadequate diversification (Kumar & Chaurasia, 2024). This is directly related to how self-confidence plays a part in investing, since while it can promote active involvement, excessive confidence can also lead to illogical decision-making. Likewise, fear-based biases like regret aversion and loss aversion lead investors to make unnecessarily conservative investing decisions by prioritizing preventing losses over making gains (Kahneman & Tversky, 1979; Kumar & Chaurasia, 2024). Furthermore, empirical data indicates that people frequently follow the decisions of others rather than using their own judgement, especially during uncertain market times, indicating that peer pressure and herding behavior are becoming more and more important among young and new investors (Singla et al., 2024). Investors frequently rely on firsthand knowledge, the way results are presented, or current incidents rather than objective facts, which cause anchoring, framing, and availability biases to further influence decisions (Barberis, 2018). According to Mahmood et al. (2024), it is significant that financial literacy has been demonstrated to mitigate these behavioral consequences by empowering people to identify and minimize bias-driven mistakes. Therefore, by explaining the ways in which psychological biases interact with self-confidence, risk tolerance, and financial literacy to influence investing decisions among Malaysian university students, behavioral finance theory offers a strong framework for our investigation.

2.3 Hypothesis Development

2.3.1 Financial Literacy and Investment Decisions

According to TPB, a higher level of financial literacy improves positive attitudes toward investment, leading to better investment decisions. Students who understand investment concepts are more confident and intentional in their actions

H0: There is no significant relationship between financial literacy and investment decision-making of Malaysian university students.

H1: There is a significant relationship between financial literacy and investment decision-making of Malaysian university students.

2.3.2 Risk Tolerance and Investment Decisions

According to TPB, a person's confidence in their capacity to carry out a behavior in an environment of uncertainty is reflected in their perception of behavioral control. This control is reflected in risk tolerance, as university students who have a higher risk tolerance are more likely to invest because they believe they can manage the uncertainty of investments (Grable, 2000; Yanti, 2024). Thus, it is anticipated that risk tolerance will favorably impact Malaysian students' investing decisions.

H0: There is no significant relationship between risk tolerance and investment decision-making of Malaysian university students.

H1: There is a significant relationship between risk tolerance and investment decision-making of Malaysian university students.

2.3.3 Self-Confidence and Investment Decisions

Additionally, TPB emphasizes how intentions and behaviors are shaped by a sense of self-confidence. More confident students are more likely to think they can assess opportunities and make wise investing choices (Barber & Odean, 2001; Kumar & Chaurasia, 2024). Therefore, it is expected that a major factor in determining whether or not students actively engage in investment activities would be their level of self-confidence.

H0: There is no significant relationship between self-confidence and investment decision-making of Malaysian university students.

H1: There is a significant relationship between self-confidence and investment decision-making of Malaysian university students.

2.4 Research Gap

Despite the fact that financial literacy is widely recognised as a critical factor in determining financial behaviour, there is currently no study focussing on how it affects Malaysian university students' decision-making when making investments. For example, Mad et al. (2024) investigated the influence of literacy in spending decisions without connecting it to investment results, whereas Wan Nawang (2025) studied financial literacy and financial planning behaviour, although their focus was on general financial planning rather than investments. Similarly, Mahat and Lau (2023) showed that risk tolerance, investment experience, and financial literacy influence investment behaviour during the pandemic. However, their study covered a wide range of people and failed to take into account the particular situation of university students, who often have little money and little investment experience. Additionally, although the impact of risk tolerance has been studied in Malaysian

contexts, less is known about how it affects younger and less seasoned investors such as university students, even though there is evidence that beliefs on financial risk differ significantly by age and income level. The lack of attention paid to self-confidence as a factor influencing investing behaviour is another significant gap. Although earlier behavioural finance research has emphasised the dangers of market overconfidence, there is no empirical data on how Malaysian students' investing choices are impacted by their level of confidence. Lastly, current research frequently looks at these factors separately, without combining them into a comprehensive model such as behavioural impacts, risk tolerance, or financial literacy. In order to explain Gen Z stock market involvement, Zainordin et al. (2025) included behavioural and financial literacy but their model failed to specifically evaluate the combined influence of risk tolerance and self-confidence. To close these gaps and offer a better understanding of the factors influencing investment decision-making, a thorough study that also takes into account financial literacy, risk tolerance, and self-confidence in the context of Malaysian university students is necessary.

2.5 Conclusion

These hypotheses were developed in response to current research and theoretical frameworks that indicate risk tolerance, self-confidence, and financial literacy are important variables influencing university students' investment decisions. In order to provide a thorough picture of how students' investment decisions are influenced by their personal characteristics and financial knowledge, the hypotheses seek to investigate the direct and moderating relationships between these variables. The methodology used to examine the validity of these hypotheses and test them will be described in the following chapter.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This study aimed to look at how an individual with different financial literacy makes decisions on the choices of investment. With that in mind, the study also takes into account how the willingness to take risks and an individual's self-confidence will affect their investment decisions and choices. Hence, this chapter will discuss the research design. Next, this chapter will include what methods to collect the data, sample designs and research instruments. Construct measurements that explain the study will also be included. Lastly, this chapter also will include data processing and data analyzing methods used to study this research.

3.1 Conceptual Framework

Independent Variables (IV) Dependent Variable (DV)

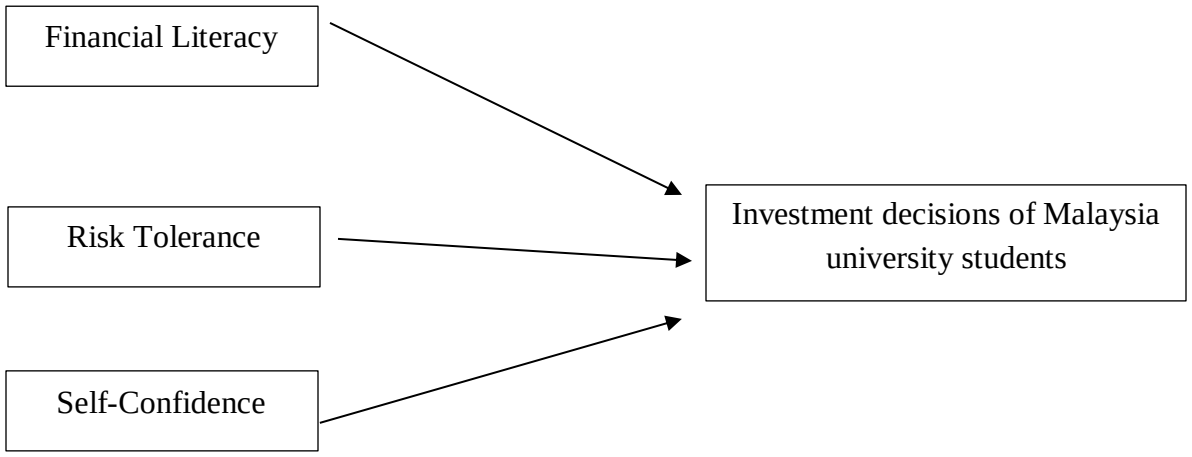

Figure 3.1

A conceptual framework has been created to study the impact of financial literacy on investment decisions among university students. The conceptual framework illustrates how university students' investing decisions are influenced by their level of financial literacy, risk tolerance, and confidence. Understanding investments, risk assessment, and money management are all components of financial literacy. Students are more likely to feel comfortable investing and making wise choices when they have strong financial understanding. The amount of risk that students are willing to take when investing is referred to as their risk tolerance. While some students favor safer options, others feel more at ease with greater risks. Lastly, students' willingness to put their investment knowledge into practice is influenced by their level of confidence, particularly when it comes to money management. They are more willing to invest if they have confidence in their capacity to handle their money.

3.1.1 Independent and Dependent variable

3.1.1.1 Investment Decisions (DV)

Investment decision-making is the process by which people divide their money among various investment products, including stocks, mutual funds, and digital assets. It includes long-term planning, portfolio selection, and involvement. According to recent research, psychological factors including confidence and risk tolerance as well as financial knowledge influence students' investing behaviour. For instance, Mohd Kamel et al. (2021) emphasised that financial confidence impact the

possibility of making investment decisions, while Zainordin et al. (2025) showed that financial literacy together with behavioural qualities such as confidence predicts Gen Z's stock market involvement. This study considers the three determinants that have an impact on the outcome variable of Malaysian university students' investment decision-making.

3.1.1.2 Financial Literacy (IV)

The term "financial literacy" describes a person's comprehension and familiarity with financial ideas such interest rates, inflation, diversification, and investment assessment. Financial literacy dramatically improves investment-related behaviour, according to recent studies. For instance, Mad et al. (2024) emphasised the impact of financial literacy on responsible financial behaviours, whereas Wan Nawang (2025) discovered that it had a significant impact on financial planning among Malaysian students. In the same way, Mahat and Lau (2023) showed that better investment decisions during the pandemic are correlated with more financial knowledge. These results are consistent with international research demonstrating that financial literacy enables young investors to assess risks, distribute resources effectively, and take deliberate action when making investment decisions (Zainordin et al., 2025).

3.1.1.3 Risk Tolerance

When making financial decisions, a person's risk tolerance shows how at ease they are with uncertainty and possible loss. Given that more tolerance frequently results in riskier but possibly higher-return investments. It is seen as a crucial factor in determining investment involvement. Recent research indicates that the connection between literacy and behavior, particularly for university students and inexperienced investors are mediated by risk tolerance. For example, Zainordin et al. (2025)

highlighted that Gen Z investors with greater tolerance are more inclined to participate in the stock market, while Mahath and Lau (2023) found that risk tolerance strongly influenced investing behaviour during times of market volatility. However, there are very few studies that explicitly address students' risk tolerance in Malaysian situations, which calls for more research.

3.1.1.4 Self-Confidence

Self-confidence is the trust that one can assess and make investing decisions. Studies on behavioral finance warn that while modest levels of confidence might promote prudent risk-taking, excessive confidence may lead to excessive trading. According to Mohd and Rosli (2023), among young Malaysians, self-confidence was positively correlated with their plans to invest and start their own business. Similarly, despite having fewer finances, university students who were more confident in themselves showed a stronger desire to look into investing opportunities. However, empirical data on self-confidence as a direct factor in university students' investment choices is still lacking, resulting in a significant study gap.

3.1.2 Control Variable

Several control factors are included in this study to increase its validity since they can have an indirect impact on Malaysian university students' investing decisions. These variables make sure that demographic or experience factors don't influence the results of the independent variables which are financial literacy, risk tolerance, and self-confidence.

3.1.2.1 Age

Younger investors are often more willing to take risks and try new things since they have a longer time horizon and less urgent financial responsibilities, therefore age plays a big part in influencing investing decisions. On the other hand, older students could take a more cautious approach to investing, putting capital preservation ahead of growth (Yau, 2022). Additionally, according to behavioural finance research, attitudes towards risk and expected returns change as people age, which supports the inclusion of age as a control element.

3.1.2.2 Gender

Another important factor is gender, as men and women frequently have different financial habits and risk tolerances. While female students could show more cautious investing techniques and a preference for safe financial products, whereas male students are generally linked to stronger financial confidence and a higher tendency for taking risks (Chia et al., 2024). These disparities show how important it is to consider gender in order to prevent attributing observed differences to confidence or financial knowledge alone.

3.1.2.3 Investment experience

The most direct control variable is probably investing experience since past exposure to financial markets, trading, or investment instruments influences confidence and how people make decisions. While inexperienced university students may be reluctant to spend even with sufficient financial knowledge. Moreover, university students with real-world experience are more likely to have higher levels of financial confidence and strategic risk-taking (Mahat & Lau, 2023). This control

makes it easier to distinguish between the impacts of self-confidence derived from natural characteristics and those obtained through active market engagement.

3.1.2.4 Types of Universities

The type of university such as private versus public may also have an impact on the choice to invest. Private university students sometimes come from wealthier families and could have more access to funding sources, workshops, and networking opportunities. However, public university students can be more financially limited and have less access to platforms that provide information on investments, which might have an impact on their investment involvement and strategy (Sandrasegaran & Rambeli, 2023). By adjusting for university type, the results are guaranteed to be neutral due to differences in institutional exposure.

3.2 Model specifications

3.2.1 Multiple Linear Regression Analysis

Multiple Linear Regression Analysis is a statistical technique used to examine the relationship between one dependent variable and two or more independent variables. It aims to predict the value of the dependent variable based on the linear combination of the independent variables. (Hair, Black, Babin, & Anderson, 2010)

The multiple regression models in this study is being analyzed based on the summary model, coefficients table, and ANOVA. R-squared (R^2) is a statistical measure that

represents the proportion of the variance in the dependent variable that is explained by the independent variables in a regression model (Hair et al., 2010). According to Chok (2010), the R-squared values can be interpreted as follows: 0.00–0.19 (very weak), 0.20–0.39 (weak), 0.40–0.59 (moderate), 0.60–0.79 (strong), and 0.80–1.00 (very strong), though thresholds may vary as It indicates the goodness of fit of the model which can be understood as how well the model accounts for the variability of the outcome. The predicted model's significance can be examined using the ANOVA table. A university student's investment decision may be explained by the model if the P-value from the F-statistic is less than the 0.10 level of significance. Finally, the table of coefficients shows if the three independent variables in the model can be utilized to explain the predicted variable in a meaningful way. Hence, an independent variable can be deemed statistically significant in explaining a predicted variable if its p-value is less than the significance level of 0.10.

Equation of multiple regression models:

$$ID = \beta_0 + \beta_1 (FL) + \beta_2 (RT) + \beta_3 (SC) + \varepsilon$$

Where:

β_1 (Financial Literacy): The expected change in Investment Decision-Making for each one-unit increase in Financial Literacy, holding other variables constant.

β_2 (Risk Tolerance): The effect of Risk Tolerance on Investment Decision-Making, controlling for FL and SC.

β_3 (Self-Confidence): The influence of Self-Confidence on Investment Decision-Making, all else equal.

A multiple regression analysis is conducted using the previously given equation as the basis. Each independent variable on the right side of the equation can be assumed to have a significant effect on the dependent variable on the left.

3.3 Research Design

According to Bryman (2016), research design is a fundamental aspect to consider as it aims to provide a suitable framework for a research. In this study, quantitative design is adopted to determine whether there is a significant relationship between financial literacy, risk tolerance and self-confidence and investment decision-making of Malaysia university students. Hence, the study is suitable to use a survey-based approach via online questionnaires to collect primary data.

3.4 Data Collection

As there are two widely used data which are the primary and secondary data in quantitative

research. The primary data of this study will be collected through self-administered questionnaires by distributing it through online platforms such as in the form of Google

Forms to students from various universities since the study is on Malaysian university students. Primary data refers to data that is collected directly by the researcher for the specific purpose of the study at hand. The information is first-hand and has not been gathered or examined by anybody else before. Usually, surveys, interviews, experiments, observations and questionnaires are used to collect primary data. Primary data is to address specific research questions, making it highly relevant and tailored to the objectives. Moreover, the student's participation is voluntary and they can refuse or withdraw from the study. Their data will also be anonymous to ensure data reliability and comply with the ethical code of research.

This study has constructed an instrument by applying and adapting questions from different questionnaires or studies to access the variables that needed to be deduced to obtain data for further analysis. The structured questionnaire will be divided into five sections and all items measured use a 5-point Likert scale ranging with 1 = Strongly Disagree and 5 =Strongly Agree, except basic financial literacy which may include multiple-choice questions. Starting with Demographic, where relatable questions such as age, gender, university type and investment experience will be included. Next, Financial Literacy Scale from Lusardi & Mitchell (2011) will also be included. For example, "Buying a single company's stock usually provides a safer return than a stock mutual fund." Participants will choose to rate by using a 5 point likert scale according to their state of agreement. The third section of this study will adapt Risk Tolerance Scale from Grable and Lytton (2011), for example, "In terms of experience, how agreeable are you to invest in stocks or stock mutual funds?" Participants can choose either from strongly disagree to strongly agree. Other than that, the questionnaire will also include Self-Confidence Scale where questions by Chen, Greene & Crick (1998) such as strongly agree or Strongly disagree on this question, "I improvise when I do not know what is the right action/decision might be in a problematic situation." Lastly, inclusion of a list of prior investment and their schedule make up for the fifth section of the questionnaire.

3.5 Population and Sampling

3.5.1 Target Population

According to the definition of target population mentioned by Sekaran and Bougie (2016), target population refers to the particular group of people or things that a researcher wants to study and will be gathering data from. It is the whole population

of individuals or objects that have a common trait that is important to the study and the results from the sample of this population can be applied to the full population. The researcher defines the target population according to the requirements for the study which includes age, gender, location, occupation and other features relevant to the research. As this study aims to find out the relationship between financial knowledge and investment behaviors in university students, the target population comprises undergraduates and postgraduate students from both public and private universities in Malaysia. The first reason being that the students consist of a diverse group of young adults who are at a stage as they start to step into young adulthood, developing their financial knowledge and planning their financial sources. The students particularly start to form and explore suitable financial habits and learn to make early investment decisions.

3.5.2 Sampling Design and Methods

In this study, the selection of particular survey subjects from the target population is crucial to ensure the reliability of the study. To ensure representation from all groups, the sampling method that this study will be using is stratified random sampling where the population is divided into subgroups based on specific characteristics and will draw random samples from each subgroup (Creswell & Creswell, 2018). To further collect a more precise data, purposive sampling will be implemented as well as it is a non-probability sampling technique participants with specific characteristics, knowledge and expertise that is relevant to the research (Etikan, Musa, & Alkassim, 2016). In this case, it is to target Malaysian students with basic exposure to financial products or investment to make the result accurate and sound.

3.5.3 Sampling Size

It is important to determine if the sample size calculated is reliable for an inferential analysis, it can be achieved by calculating effect size or running a hypothesis test (Lakens, 2022). The sample size of this study is determined using Krejcie & Morgan's (1970) table or G*Power analysis, where a study requires typically 300–400 respondents for SEM-PLS analysis to ensure statistical validity. Furthermore, the questionnaire will be distributed through online social media platforms such as Instagram, WhatsApp, Facebook, Telegram, Twitter and Little Red Book. With this, taking in account the possibilities there will be rejected questionnaires because of human error has been included as well.

3.6 Summary of the Chapter

A review of the research technique brings chapter three to a close. The nature of the research is quantitative.

CHAPTER 4: DATA ANALYSES

4.0 Introduction

Chapter four presents the results obtained from the analysis of the collected data. The chapter begins with descriptive analyses to provide an overview of the respondents' demographic characteristics and the general distribution of the study variables. This is followed by initial data screening procedures, including checks for multicollinearity and non-normality, to ensure the suitability and accuracy of subsequent statistical

tests. Next, reliability tests were conducted to confirm the internal consistency of the measurement instruments used in this study. After establishing data reliability, Multiple Linear Regression analyses were performed to examine the relationships between financial literacy, risk tolerance, self-confidence and investment decisions among Malaysian university students. All analyses in this chapter were conducted using SmartPLS 4.0.

4.1 Data Processing

Based on, data processing is the collection and manipulation of items of data to give the raw information obtained a meaning. Data processing involves a series of operations such as validation, sorting, classification, calculation, interpretation, organization, and summarization. After participants have responded, data processing will be performed and a statistics software named SmartPLS 4.0 will be used for data processing.

4.1.1 Data Checking

Using SmartPLS 4.0 to check obtained data, involves reviewing collected data to ensure completeness, accuracy, and consistency before analysis (Shiferaw et al., 2022). This step helps identify and eliminate any errors, missing values, or discrepancies in the responses hence ensuring the quality and increasing the accuracy of the responses and the study.

4.1.2 Data Editing

Data editing in SmartPLS 4.0 refers to the process of inspecting and correcting raw data for errors or omissions to improve its quality. This includes removing incomplete responses or correcting inconsistencies to ensure the dataset is usable for analysis. Hence, by editing to identify and correct data input errors, researchers may make sure that the information acquired is consistent with the study's objectives and accurately reflects the intended variables.

4.1.3 Data Coding

According to Cooper & Schindler (2014), data coding is the process of assigning numerical or symbolic codes to qualitative responses so they can be entered into statistical software for analysis. It can also simplify open-ended responses into analyzable formats. For example, in this study, a number code will be assigned to a response ranging from 1 to 5 and these codes are input into SmartPLS 4.0 to enable data processing and computation on the data, which can also ease the analysis of the data.

4.1.4 Data Transcribing

As this study uses online surveys as the primary source of data, the data will then be entered into SmartPLS 4.0 software for transcribing data and for further analysis. As Bryman (2016) mentioned that data transcribing involves converting audio-recorded or handwritten data into a written or digital format for analysis. In qualitative research, it often refers to converting interviews or discussions into textual form.

4.2 Data Analysis

Shiferaw et al. (2022) mentioned that data analysis is the process of applying statistical and logical techniques systematically to describe, summarize, and evaluate data. It helps researchers identify patterns, relationships, or trends and draw meaningful conclusions. After data processing, SmartPLS 4.0 will be used to analyse the findings and to ascertain the acceptance of the hypothesis of the study. Other than that, this social science statistical tool can be used to conduct several different statistical tests as it is user friendly and suitable for fresh researchers (Lameck, 2013).

4.3 Descriptive Analysis

As Sandelowski (2000) mentioned that qualitative descriptive studies are a reasonable combination of sampling, data collection, analysis, and re-presentation techniques. Identifying patterns and themes that emerge from the raw data can be done using descriptive analysis. Hence, in this study, a few analyses will be done upon the acquired data, for example reliability test, multicollinearity test, multiple regression analysis and so on.

4.3.1 Demographic Profile

This research includes several demographic categories such as age, gender, type of university, level of study and investment experience. Each of these categories will be analysed in detail in the following sections to provide a clearer understanding of the respondents' background.

4.3.1.1 Gender

Table 4.1:

Gender Descriptive Data

Gender	No. of respondents	Proportion (%)
Female	132	51
Male	129	49
Total	261	100

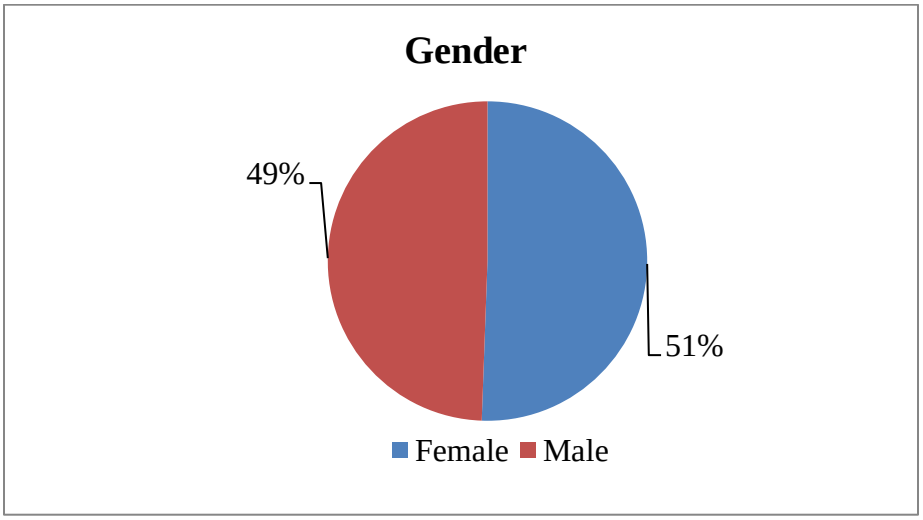

Figure 4.1: Gender Descriptive Data

To begin the demographic analysis, respondents were categorized based on their gender. As shown in Table 4.1, 51% (132 respondents) were female and 49% (129 respondents) were male out of the total of 261 respondents. This indicates a slightly

higher representation of female respondents compared to male respondents in the study.

4.3.1.2 Age

Table 4.2:

Age Descriptive Data

Age	No. of respondents	Proportion (%)
Below 20 years old	55	21
20 - 22 years old	88	34
23 - 25 years old	75	29
Above 25 years old	43	16
Total	261	100

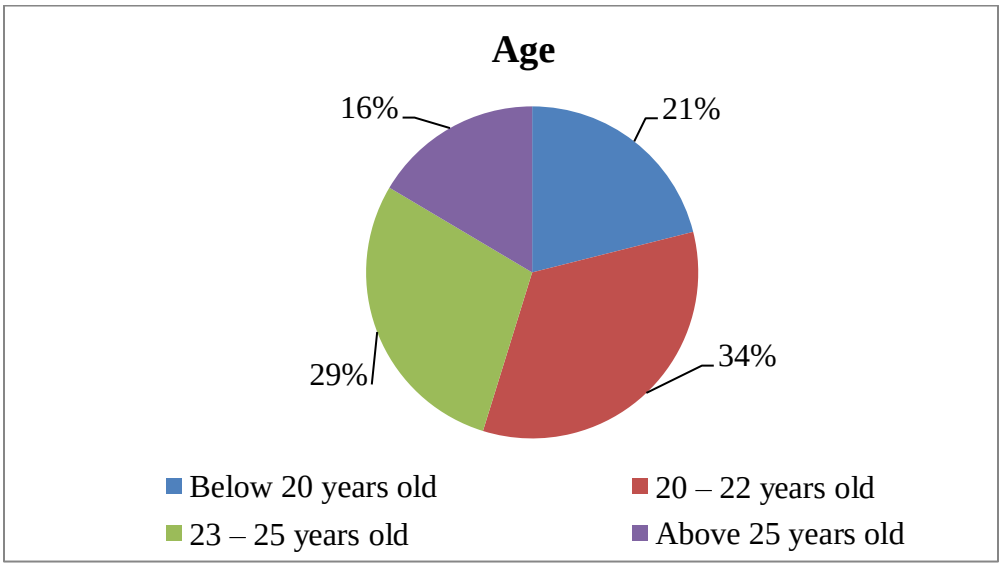

Figure 4.2: Age Descriptive Data

Furthermore, the respondents were further categorized according to their age groups. As depicted in the table 4.2, the largest proportion of respondents falls within the 20–22 years old category, accounting for 34% (88 respondents) of the total sample. This is followed by the 23–25 years old group, which represents 29% (75 respondents). Meanwhile, 21% (55 respondents) of participants are below 20 years old, and the smallest group, comprising 16% (43 respondents), consists of those above 25 years old. Overall, the distribution indicates that the majority of respondents are young adults aged between 20 and 25 years old.

4.3.1.3 Type of University

Table 4.3

Type of University Descriptive Data

Type of University	No. of respondents	Proportion (%)
Private	147	56
Public	114	44
Total	261	100

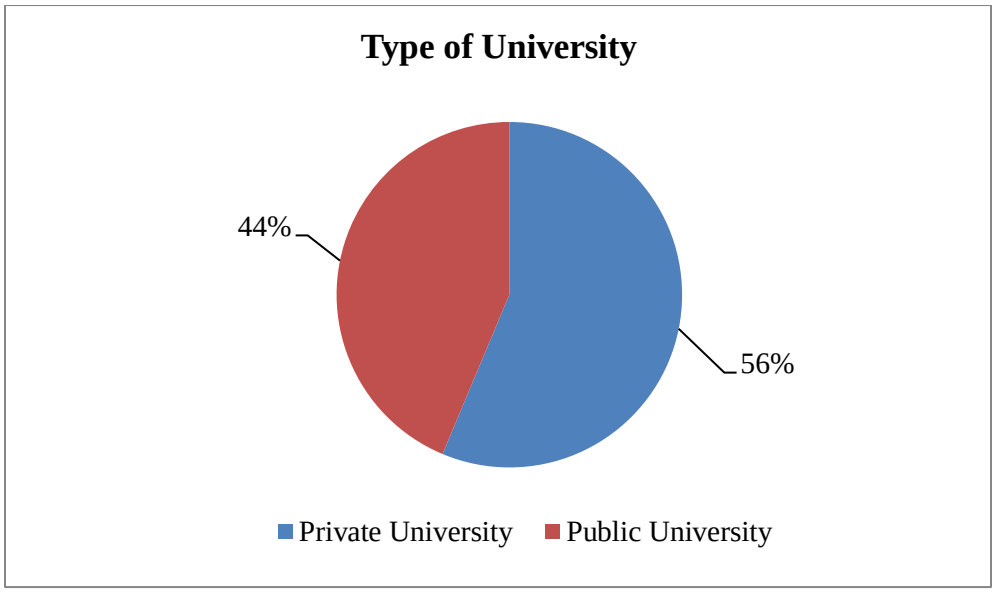

Figure 4.3: Type of University Descriptive Data

In addition, the respondents were also categorized based on the type of university they are attending. As shown in table 4.3, a majority of the participants are from private universities, representing 56% (147 respondents) of the total sample. Meanwhile, 44% (114 respondents) of the respondents are enrolled in public universities. This indicates that more than half of the surveyed individuals come from private institutions, reflecting a slightly higher representation compared to those from public universities.

4.3.1.4 Level of Study

Table 4.4:

Level of Study Descriptive Data

Level of Study	No. of respondents	Proportion (%)
Diploma	49	19
Bachelor's Degree	104	40
Master's Degree	64	25
PhD	44	17
Total	261	100

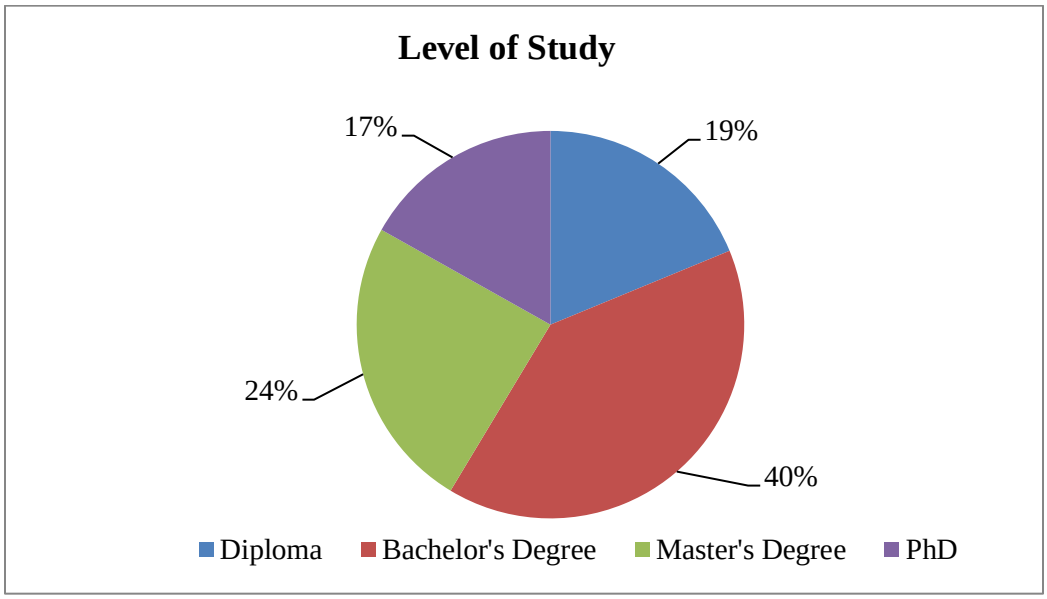

Figure 4.4: Level of Study Descriptive Data

Moreover, the respondents were further classified according to their level of study. As shown in table 4.4, the majority of participants are pursuing a Bachelor's Degree, accounting for 40% (104 respondents) of the total sample. This is followed by those undertaking Master's studies, which make up 24% (64 respondents) of respondents. Meanwhile, 19% (49 respondents) of the participants are enrolled in Diploma programmes and the remaining 17% (44 respondents) are pursuing PhD

qualifications. Overall, the distribution indicates that most respondents are at the undergraduate level, with smaller proportions at the postgraduate and diploma levels.

4.3.1.5 Experience in Investment

Table 4.5:

Experience in Investment Descriptive Data

Experience in Investment	No. of respondents	Proportion (%)
No experience	74	28
Less than 1 year	66	25
1 – 3 years	70	27
More than 3 years	51	20
Total	384	100

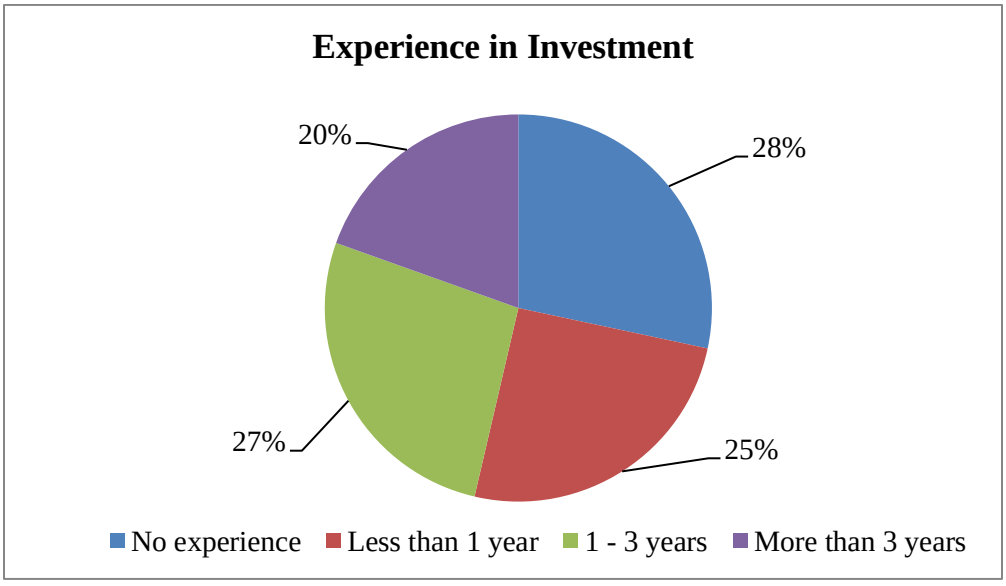

Figure 4.5: Experience in Investment Descriptive Data

In addition, the respondents were also classified based on their level of investment experience. As shown in table 4.5, 28% (74 respondents) of the participants reported having no prior investment experience, making it the largest group. This is followed closely by those with 1 to 3 years of experience, who account for 27% (70 respondents) of the sample. Meanwhile, 25% (66 respondents) of respondents indicated having less than 1 year of investment experience. The remaining 20% (51 respondents) of participants reported having more than 3 years of experience. Overall, the distribution suggests that while a portion of respondents have some degree of investment exposure, a significant number are still relatively new to investing or have yet to engage in it.

4.4 Scale Measurement

4.4.1 Reliability Test

A reliability test assesses the consistency, stability, and dependability of a measurement instrument over time. In research, it is used to determine whether the results obtained are consistent using the same tool so that the results are reliable. Furthermore, Cronbach's alpha is used to determine internal consistency or dependability of the collected data, measurements or ratings as according to Muhammad Amirrudin et al. (2021). In Cronbach alpha, the term Cronbach alpha coefficient is used to determine the reliability of the result. When the Cronbach alpha coefficient is close to 0, it means the result is not reliable and if the coefficient

obtained is closer to 1, the result is highly reliable. As an example, the Cronbach alpha coefficient will be shown as $\alpha \geq 0.9$ means that internal consistency is high.

Table 4.6:

Cronbach's Alpha Results

No.	Variable	Cronbach's Alpha
1	Investment Decisions	0.833
2	Financial Literacy	0.911
3	Risk Tolerance	0.716
4	Self-Confidence	0.903

Table 4.6 indicates that financial literacy (0.911) and self-confidence (0.903) demonstrated excellent internal consistency, as both values exceeded the 0.90 threshold. Meanwhile, the Cronbach's Alpha values for investment decisions (0.833) and risk tolerance (0.716), which fall between 0.70 and 0.90, indicate acceptable to good internal consistency. Therefore, all constructs in this study achieved the minimum required reliability level

4.4.2 Discriminant Validity

The Heterotrait–Monotrait Ratio of Correlations (HTMT) is a modern and more accurate method for assessing discriminant validity in structural equation modelling (SEM). Discriminant validity refers to the extent to which a construct is truly distinct from other constructs in the model, both conceptually and statistically. HTMT evaluates discriminant validity by comparing the correlations between items

measuring different constructs (heterotrait–heteromethod) with the correlations of items measuring the same construct (monotrait–heteromethod). When the HTMT value is below the recommended threshold—commonly 0.85 for strict criteria or 0.90 for more liberal criteria—it indicates that the constructs are sufficiently distinct from one another (Henseler, Ringle, & Sarstedt, 2015). Moreover, compared to traditional methods such as the Fornell–Larcker criterion and cross-loadings, HTMT has been shown to be more reliable in detecting problems of discriminant validity. Therefore, it is widely used in PLS-SEM and is recommended for assessing the measurement model before evaluating the structural model.

Table 4.7:

Heterotrait–Monotrait Ratio (HTMT)

	Financial Literacy	Investment Decision	Risk Tolerance	Self-Confidence
Financial Literacy				
Investment Decision	0.771			
Risk Tolerance	0.86	0.797		
Self-Confidence	0.635	0.843	0.723	

In the above table 4.7, all HTMT values fall within the acceptable threshold. The HTMT ratios between FL and ID (0.771), FL and RT (0.860), and FL and SC (0.635) indicate that these constructs are sufficiently distinct. Similarly, the HTMT values between ID and RT (0.797) and ID and SC (0.843) remain below the 0.90 benchmark, further demonstrating adequate discriminant validity. Lastly, the HTMT ratio between RT and SC (0.723) is well below the threshold, confirming that these constructs are clearly differentiated.

4.5 Preliminary Data Screening

To ensure the accuracy and validity of the dataset, preliminary data screening was carried out before conducting the inferential analysis. This process involved performing essential diagnostic tests, including multicollinearity test, to confirm that the data met the required statistical assumptions for further analysis.

4.5.1 Multicollinearity Test

To determine if independent variables in a regression model have a strong correlation with one another, the multicollinearity test is used. Strong linear relationships between two or more predictors are known as multicollinearity and they can skew regression results, increase standard errors and also lower the model's dependability. Determining each predictor's unique contribution to the dependent variable is challenging when multicollinearity is present. The Variance Inflation Factor (VIF) and tolerance values are frequently used in regression analysis to evaluate multicollinearity. Multicollinearity is not an issue if the VIF value is less than 5 or the more stringent criterion of 3 and the tolerance value is more than 0.2 (Hair, Hult, Ringle, & Sarstedt, 2017). If values exceed these limits, corrective actions such as removing variables or combining constructs may be necessary.

Table 4.8:

Statistic of Collinearity

Independent Variables Statistic of Collinearity

	VIF

FL1	1.065
FL2	1.071
FL3	1.024
FL4	1.017
FL5	1.014
RT1	1.029
RT2	1.025
RT3	1.027
RT4	1.028
RT5	1.031
SC1	1.022
SC2	1.033
SC3	1.035
SC4	1.012
SC5	1.049

Table 4.8 presents the Variance Inflation Factor (VIF) values for all measurement items under the constructs of Financial Literacy (FL), Risk Tolerance (RT) and Self-Confidence (SC). The VIF test is used to detect multicollinearity which occurs when indicators or independent variables are highly correlated with each other. According to Hair et al. (2017), a VIF value below 5 or stricter threshold of below 3 indicates that multicollinearity is not a concern. Based on the results, all VIF values range between 1.012 and 1.071, which are far below the recommended thresholds. This demonstrates that none of the items under FL, RT or SC show problematic multicollinearity. In other words, each indicator measures a unique component of its respective construct without overlapping excessively with other indicators. Therefore,

the analysis confirms that multicollinearity is not present in the measurement model and all indicators can be safely retained for further structural model assessment.

4.6 Inferential Analysis

In qualitative research, analysis is made using inferences by identifying patterns and meanings in textual data, moving from descriptive codes to abstract concepts and interpretations that explain the data. (Miles, Huberman, & Saldaña, 2014) In this case, the study employed multiple regression analysis to determine the correlationship between the available independent variables which are financial literacy, risk tolerance and self-confidence and the dependent variable which is the investment decisions among university students.

4.6.1 Multiple Regression Analysis

4.6.1.1 Path Coefficients

Table 4.9:

Multiple Regression Analysis

	t	Unstandardized Coefficient Beta	P-value	Std. Error
FL	2.301	0.162	0.021	0.071
RT	3.161	0.210	0.002	0.066
SC	2.025	0.231	0.043	0.114

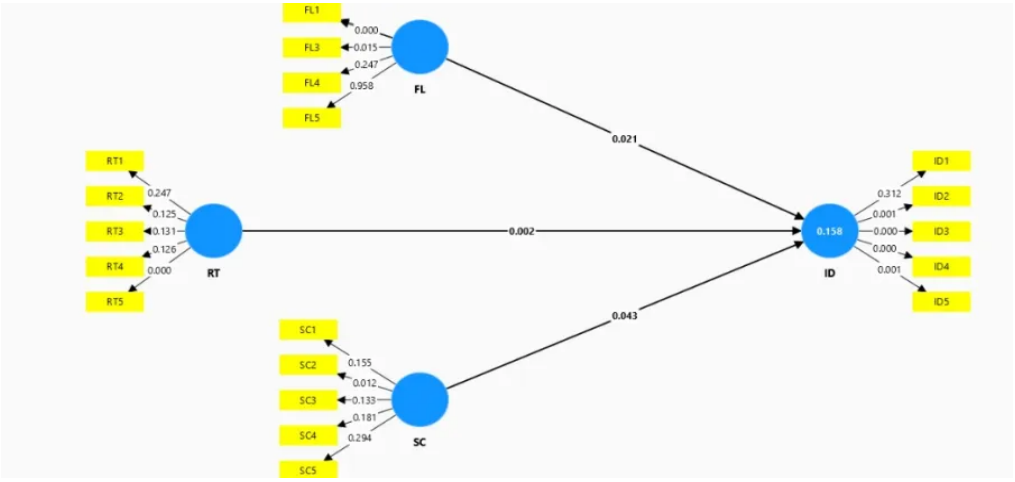

Figure 4.6: Structural Model

In this analysis, the relationship between the dependent variable, investment decisions (ID) and three independent variables: financial literacy (FL), risk tolerance (RT) and self-confidence (SC) was examined. Based on the results shown in Table 4.9, all three independent variables were statistically significant at the 95% confidence level as each p-value was below the 0.05 significance threshold. The corresponding t-statistics for FL, RT and SC were 2.301, 3.161 and 2.025 respectively, confirming the significance of these relationships.

Furthermore, financial literacy emerged as a significant predictor of investment decisions which supported by a p-value of 0.021. This indicates that financial literacy has a meaningful influence on investment decisions at the 95% confidence level. This finding is consistent with previous studies such as Lusardi & Mitchell (2014), Wahyuni et al. (2023) and Hrulekha & Tandan (2025), which also concluded that individuals with higher financial literacy tend to make better investment decisions. The path coefficient of 0.162 indicates that holding other variables constant, a one-

unit increase in financial literacy increases investment decisions by 0.162 units, ceteris paribus.

Similarly, risk tolerance demonstrated a significant positive relationship with investment decisions with a p-value of 0.002. This result confirms that individuals with higher tolerance for risk are more likely to make confident and informed investment decisions. The finding is aligned with prior literature including Gilliam et al. (2010), Samsulbahri et al. (2021) and Phelps & Metzler (2025) which documented that risk-tolerant individuals generally display more proactive investment behaviour. The unstandardized coefficient of 0.210 indicates that a one-unit increase in risk tolerance increases investment decisions by 0.210 units, assuming other variables remain constant.

Moreover, self-confidence also revealed a statistically significant effect on investment decisions with a p-value of 0.043 which is below the 0.05 threshold. This suggests that higher self-confidence contributes positively to students' investment decision-making. This finding is supported by prior studies such as Farrell et al. (2016), Barber and Odean (2001) and Keller & Siegrist (2005) which reported that confident individuals tend to engage more actively in investment activities. The regression coefficient of 0.231 indicates that holding other factors constant, a one-unit increase in self-confidence increases investment decisions by 0.231 units, ceteris paribus.

Overall, all three independent variables: financial literacy, risk tolerance and self-confidence showed significant positive effects on investment decisions. These results confirm that improvements in any of these behavioural and financial factors can contribute to stronger investment decision-making among private university students in Malaysia.

4.6.1.2 R-squared and adjusted R-squared

Table 4.10:

R-squared and adjusted R-squared Analysis

	R-square	R-square adjusted
ID	0.158	0.148

R-squared (R^2), also known as the proportion of variance explained, measures the degree to which the independent variables in the regression model account for the variation of the dependent variable (Ruan, 2024). The study's R-squared value for investment decisions (ID) is 0.158, meaning that the combined effects of financial literacy, risk tolerance and self-confidence account for 15.8% of the variation in investment decisions among Malaysian university students. Other variables not included by this model such as personality traits, financial behaviour, demographics or outside market effects are responsible for the remaining 84.2% of the variation. Furthermore, the adjusted R-squared value is 0.148, meaning that after accounting for the number of predictors and sample size, 14.8% of the variation in investment decisions is explained by the independent variables. This adjusted value provides a more accurate representation of model fit by considering the degrees of freedom. Although the R-squared value is relatively modest, it is considered acceptable in behavioural and social science research, where human attitudes and decision-making are influenced by many external and psychological factors.

4.7 Conclusion

Table 4.11:

Significance of independent variable

Independent variable	Result	Literature support
Financial Literacy	Significant	Lusardi & Mitchell (2014)
		Wahyuni et al. (2023)
		Hrulekha & Tandan (2025)
Risk Tolerance	Significant	Gilliam et al. (2010)
		Samsulbahri et al. (2021)
		Phelps & Metzler (2025)
Self-Confidence	Significant	Farrell et al. (2016)
		Keller & Siegrist (2005)
		Barber & Odean (2001)

SmartPLS 4.0 was utilized for data analysis and it assisted in assessing both the measurement model and the structural model based on the survey data collected. The reliability analysis confirmed that all scales used in the questionnaire were reliable. Additionally, the model did not exhibit any issues related to multicollinearity or discriminant validity. To conclude this chapter, the analysis demonstrated that all three independent variables: financial literacy, risk tolerance and self-confidence had a significant relationship with the dependent variable which is investment decisions among Malaysia university students as presented in Table 4.11.

CHAPTER 5: CONCLUSION AND IMPLICATIONS

5.0 Introduction

This chapter presents the overall interpretation of the research findings based on the analyses conducted in Chapter 4. It discusses the results in relation to the research objectives and existing literature, highlighting how the independent variables: financial literacy, risk tolerance and self-confidence affect investment decisions among Malaysia university students. Furthermore, this chapter outlines the implications of the study, provides practical recommendations and concludes with suggestions for future research.

5.1 Summary of Findings

Table 5.1

Summary of findings

Variables	T-stat	P-value	Findings
Financial Literacy	2.301	0.021	Significant
Risk Tolerance	3.161	0.002	Significant
Self-Confidence	2.025	0.043	Significant

According to Table 5.1, financial literacy, risk tolerance and self-confidence all have significant relationships with investment decisions among Malaysia university students. This indicates that each of these independent variables possesses valid predictive power in explaining investment decisions. As all three variables recorded significant t-values and p-values below 0.05, they are confirmed as meaningful predictors within the model.

5.2 Discussion on Major Findings

This section further elaborates on the major results reported in Section 5.1, providing an in-depth discussion to support the overall interpretation of the study's outcomes.

5.2.1 The Impact of Financial Determinants on Investment Decisions among Malaysia University Students

5.2.1.1 Financial Literacy and Investment Decisions among Malaysia University Students

According to the inferential research, investment decisions made by Malaysian university students are significantly positively correlated with financial literacy. This result aligns with the findings of Lusardi and Mitchell (2014), who stressed that financial literacy gives people the fundamental information they need to assess financial products and make wise investment choices. In the same way, Wahyuni et al. (2023) discovered that students with more financial literacy are more likely to display responsible financial behaviour and better investment plans.

Furthermore, Hrulekha and Tandan (2025) emphasised that financial literacy improves one's capacity to comprehend risk-return trade-offs, evaluate market data and choose suitable investment possibilities. The conclusion is that students with greater financial literacy are more confident and competent when making investment decisions and is supported by these earlier studies.

The Bursa Young Investor Club's investment simulations, financial planning workshops and industry-led seminars are just a few of the learning resources that UTAR provides to encourage the development of financial literacy. Students' confidence and investing behaviour are further strengthened by these organised exercises, which provide them hands-on experience applying financial concepts in actual decision-making situations.

5.2.1.2 Risk Tolerance and Investment Decisions among Malaysia University Students

Additionally, it was shown that risk tolerance had a major impact on Malaysian university students' investment decisions. This outcome is consistent with the findings of Gilliam et al. (2010), who identified risk tolerance as a crucial psychological factor influencing an individual's desire to take financial risks. According to their research, those who have a higher risk tolerance are more likely to look into investing options that may yield larger returns.

This idea was supported by Samsulbahri et al. (2021), who showed that those with higher risk tolerance make more proactive financial decisions and participate in investing activities more frequently. Additionally, Phelps and Metzler (2025) claimed that increased financial literacy improves a person's capacity to precisely evaluate risk, leading to more certain investing behaviour. In general, students who have a higher risk tolerance view fluctuations in markets as controllable rather than dangerous. They are more inclined to experiment with new financial products, diversify and choose investments with the potential for long-term development.

5.2.1.3 Self-Confidence and Investment Decisions among Malaysia University Students

Another important element impacting Malaysian university students' investments was found to be self-confidence. Higher self-confidence makes people more likely to take charge of their money management and make their own investing decisions, according to Farrell et al. (2016). Similarly, Keller and Siegrist (2005) discovered that confidence is a key factor in encouraging people to evaluate financial data and take decisive action in investing situations.

Barber and Odean (2001) also emphasised that people who are confident in their financial judgement and decision-making skills are more likely to participate in investment activities. Higher self-confidence motivates university students to believe in their financial expertise, assess investment prospects objectively and make investment decisions without excess hesitation.

5.3 Implication of the Study

Based on the results of the SmartPLS research, the study shows that among Malaysian university students, investment decisions are significantly influenced by financial literacy, risk tolerance and self-confidence. These findings have significant effects for academic institutions, financial organisations, legislators and young investors. Stakeholders may create plans to improve students' financial awareness and investing capacity by comprehending how these behavioural and financial elements influence investment decisions.

5.3.1 Implications Related to Financial Literacy

The first implication relates to financial literacy, which has been shown to have a major impact on investment decisions. This emphasises how important it is for universities to provide students with a solid understanding of financial markets and investing tools. In both business and non-business programs, universities can include basic subjects like stocks, bonds, mutual funds, portfolio diversification and the risk-return trade-off in their educational programs.

Universities may use interactive learning resources like financial planning applications, virtual trading platforms and investment simulations alongside to traditional classroom instruction. Students may experience making investing decisions in a risk-free setting using these tools, which helps them develop long-term financial discipline and confidence. Furthermore, universities can also hold seminars, guest lectures and workshops on behalf with industry partners such as Bursa Malaysia, financial institutions and investment businesses. Skilled financial experts may give students up-to-date market knowledge, useful tactics and real-world observations.

Moreover, students may also be advised to further their education outside of formal lectures using online financial learning tools, accredited investing modules and community education initiatives. Students are more likely to comprehend financial dangers, assess investment possibilities and make wise financial decisions if they have greater financial literacy.

5.3.2 Implications Related to Risk Tolerance

The second important conclusion relates to risk tolerance, which is a key factor in determining investment decisions. Both academic institutions and prospective young

investors can benefit from this. Through planned activities like financial personality tests, investment profiling evaluations and guided reflection exercises, universities may assist students in determining their own risk profiles. Students may learn to select investment products that suit their comfort levels and long-term financial objectives by being aware of their own risk tolerance levels. Developing good financial habits is crucial for new investors. As their expertise and experience grow, investors should be encouraged to exercise progressive diversification, beginning with safer investment vehicles and gradually moving into higher-risk assets. As their financial circumstances change, young investors can also profit by routinely assessing their risk tolerance.

In order to gain a deeper understanding of investor risk preferences, firms listed on Bursa Malaysia may examine shareholder trading patterns and behavioural trends. Businesses may customise their investor relations strategy to offer clearer, more transparent information to lower uncertainty and assist young investors in making educated decisions by looking at variables like holding length and trading frequency.

5.3.3 Implications Related to Self-Confidence

Self-confidence was revealed as a key predictor of investment decisions among Malaysia university students. This result emphasises how crucial it is to give students confidence in their financial judgement and capacity to evaluate investment data. By providing financial training programs, workshops and basic investing courses that increase students' competency and lessen anxiety or uncertainty, universities may play a crucial role. Peer learning groups and student-organized investing clubs are also useful venues for students to practise financial information analysis, exchange knowledge and analyse market trends in a safe setting. Students gradually gain more confidence in their ability to assess financial facts and make wise investment decisions thanks to these academic and extracurricular activities.

In addition to academic education, practical experience boosts self-confidence. Students may experience market volatility, rehearse making decisions and safely try out various tactics through exercises including financial case studies, investing simulations and simulated trading. In addition to lowering anxiety, this kind of hands-on learning motivates students to take charge of their investing path. Students' knowledge with actual investing environments is further strengthened by exposure to financial news, stock market happenings and interactive learning resources. Students are more likely to overcome reluctance and adopt proactive, autonomous investing activity as their comprehension grows.

Through open communication and easily accessible information, listed firms can help to shape investor trust. Young and inexperienced investors may find it easier to comprehend market signals if clear financial disclosures, streamlined investor briefings and easy-to-understand explanations of corporate performance are provided. Students feel more encouraged in analysing financial data and making choices that support their long-term objectives when businesses communicate well. Together, these initiatives from businesses, investors and academic institutions foster more self-assurance, allowing students to ethically and successfully navigate financial situations.

5.4 Limitation of Study

This study's first drawback has to do with the model's capacity for explanation. Although still slightly low, the R^2 value of 0.158 and the adjusted R^2 value of 0.148 are regarded as appropriate for behavioural investigations (Singh, 2017). This shows that factors not included in this model account for 84.2% of the variance in investment decisions. This finding implies that while risk tolerance, self-assurance and financial literacy are important predictors, other factors like financial

socialisation, personality traits, market exposure or economic conditions may also be important in influencing investment decisions (Nakagawa & Schielzeth, 2012). For a more thorough understanding, future studies could think about adding other behavioural and environmental factors to the model.

Second, the results' predictability is limited by the sample size of 261 Malaysian university students. The sample may not fairly represent the larger population of Malaysian students or adults, although offering insightful information about this group's investing choices. The financial background, educational environment, investment exposure and financial behaviour of students from various universities such as public, private or community colleges, for example, may differ. Because of this, the results could not accurately represent the investing decision-making habits of Malaysian students or other demographic groups, such working adults or those with significant investment expertise.

Finally, the study used a self-administered questionnaire, which might lead to response bias. Due to social desirability bias, misinterpretation of the questions or overestimation of their financial capabilities, participants may have misunderstood their degrees of financial knowledge, risk tolerance or self-confidence. Furthermore, establishing causal links between variables is limited by the cross-sectional research approach. Continuous or mixed-method studies might offer greater insights into how financial variables affect long-term investment decisions since investing behaviour changes over time and may be impacted by economic conditions or life phases.

5.5 Recommendation for Future Research

A number of suggestions for future study may be made in order to improve knowledge of the financial factors influencing investing choices among Malaysian

university students. These recommendations are meant to improve the methodological quality, depth and adaptability of future research in this field.

First, characteristics other than financial literacy, risk tolerance and self-confidence should be taken into account in future research. A more thorough explanation of investment choices may be offered by elements including financial socialisation, exposure to digital finance, behavioural biases (such as mental accounting and anchoring), financial anxiety and economic knowledge. A wider variety of determinants would increase the model's capacity for explanation and provide more profound understanding of the environmental and psychological factors influencing university students' investing behaviour.

Second, it is recommended that future studies broaden the sample to include a more varied population. Although 261 students from a Malaysian university were the focus of this study, comparisons across demographic and socioeconomic categories would be possible if the sample was expanded to include students from both public and private institutions, students from other areas and working adults. While working individuals may act differently because of their stable income, financial obligations or past investing experience, public university students may have distinct financial backgrounds or academic exposure. The findings' scope and applicability would be enhanced with a bigger and more varied sample.

Lastly, persistent or mixed-method study designs may be used in future investigations. While qualitative interviews or focus groups might offer deeper insights into students' motives, attitudes and investing obstacles, a long-term strategy would enable researchers to monitor changes in investment activity over time. Both the statistical correlations and the more complex behavioural background underlying investment decision-making would be captured by such methodological improvements.

5.6 Conclusion

The purpose of this study was to investigate the financial factors that affect Malaysian university students' investment decisions. A structured questionnaire was used to gather data from 261 respondents and SmartPLS 4.0 was used for analysis. The results showed that self-confidence, risk tolerance and financial literacy are important indicators of investing choices. These findings demonstrate how crucial psychological readiness and financial literacy are in influencing the willingness of learners to engage in investing activities.

The research went on to address the significance of these results for academic institutions, policymakers and young investors, highlighting the need for better financial education, more hands-on experience and more robust support networks to boost students' investing capacity. The study's weaknesses were also noted, especially the small sample size and somewhat low R^2 value, which might constrain how far the findings can be applied. A number of suggestions were made for further study, such as broadening the sample to include a wider range of demographics and adding more financial and behavioural factors.

Overall, the study offers insightful information on how financial factors affect university students' investment decisions. These results can help future researchers choose relevant factors, improve research frameworks and provide more thorough studies of Malaysian investing behaviour.

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Appendices

Appendix 3.1

Ethical approval for research project

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)
Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/78-615/2025

6 October 2025

Dr Lim Boon Keong
Head, Department of Finance
Faculty of Accountancy and Management
Universiti Tunku Abdul Rahman
Jalan Sungai Long
Bandar Sungai Long
43000 Kajang, Selangor

Dear Dr Lim,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your students' research project from Bachelor of Finance (Financial Technology) with Honours programme enrolled in course UKFN3026. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Examining the Influence of Green Financial Initiatives on the Automation and Performance Growth of Malaysia's Eco-conscious SMEs	Tan Yuki	Dr Eaw Hooi Cheng	6 October 2025 – 5 October 2026
2.	The Role of Trust in Adoption of Digital Insurance Services in Malaysia	Lim Xian Ting	Pn Farida Bhanu Binti Mohamed Yousoof	
3.	Exploring Factors Influencing E-wallet Adoption in Malaysia	Lee Jia Wen	Dr Tiong Kui Ming	
4.	Antecedents Influencing University Students' Acceptance of AI-Based Investment Advisors	Tee Boon Jing	Dr Sia Bik Kai	
5.	Scam Awareness & Risk Behavior in Malaysian University Students	Lau Jing Xuan		
6.	Developing a User-Friendly Digital Wallet: A Dual-System Approach for Seniors (45 Years and Above) in Malaysia	Crystal Lim Sim Yee		
7.	The Role of Financial Literacy on BNPL Behavior Among Malaysian University Students	Law Zi Ning	Dr Ng Kar Yee	
8.	Impact of Financial Determinants on Investment Decisions Among Malaysia University Students	Heman Inbaraj a/l Alexander	Ms Salizatul Aizah Binti Ibrahim	
9.	Fintech Adoption Among Generation Z in Malaysia	Chan Pak Lim	Ms Ung Leng Yean	
10.	User Acceptance of Blockchain Technology in Cross-Border Payments Using the Technology Acceptance Model (TAM) for International Private and Public University Student	Ong Kok Cheng	Dr Yogambigai a/p Rajamoorthy	
11.	Impact of Digital Financial Services on Consumer Spending Behaviour Among Malaysian Youth	Wong Xiang Yu	Pn Raja Nurul Aini Binti Raja Aziz	

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (605) 468 8888 Fax: (605) 466 1313
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Tel: (603) 9086 0288 Fax: (603) 9019 8868
Website: www.utar.edu.my

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,

Professor Dr Zuraidah Abd Manaf
Chairman
UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Accountancy and Management
Director, Institute of Postgraduate Studies and Research

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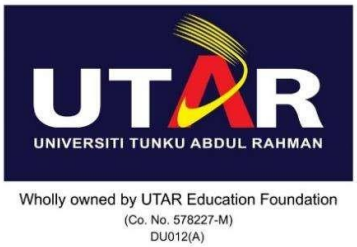
Website: www.utar.edu.my

Appendix 3.2

Survey questionnaire

SURVEY QUESTIONNAIRE



UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

BACHELOR OF FINANCE (HONOURS)

FINAL YEAR PROJECT

THE IMPACT OF FINANCIAL DETERMINANTS ON INVESTMENT DECISIONS AMONG MALAYSIA UNIVERSITY STUDENTS

Dear respondent,

I am Heman Inbaraj A/L Alexander, a final-year undergraduate student in Bachelor of Finance (Financial Technology) at Universiti Tunku Abdul Rahman (UTAR) and currently conducting a survey for my final year project on Impact of Financial Determinants on Investment Decisions among Malaysia University Students.

Your participation in this questionnaire is very important for the success of my project. Don't worry, your answers are confidential and will only be used for academic purposes. There are no right or wrong answers, so just be honest with your responses.

This questionnaire will take approximately 5 to 15 minutes to complete. It is divided into 5 sections, covering topics such as

Section A - Demographics

Section B - Financial Literacy

Section C - Risk Tolerance

Section D - Self-confidence

Section E - Investment Decisions

Your participation is voluntary, and your honest responses are greatly appreciated. If you have any questions or concerns, please contact me at heman5176@1utar.my.

Thank you very much for your time and support. Your responses are greatly appreciated!!!

PERSONAL DATA PROTECTION NOTICE

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

1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion. Among others it includes:

a) Name
b) Identity card
c) Place of Birth
d) Address
e) Education History
f) Employment History
g) Medical History
h) Blood type
i) Race
j) Religion
k) Photo
l) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

a) For assessment of any application to UTAR
b) For processing any benefits and services
c) For communication purposes
d) For advertorial and news
e) For general administration and record purposes
f) For enhancing the value of education
g) For educational and related purposes consequential to UTAR
h) For replying any responds to complaints and enquiries
i) For the purpose of our corporate governance
j) For the purposes of conducting research/ collaboration

3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.

7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

Acknowledgment of Notice

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

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

……

Name:

Date:

Section A: Demographic information

1. Gender
   - Male
   - Female

2. Age
   - Below 20
   - 20 - 22
   - 23 – 25
   - Above 25

3. Type of University
   - Public University
   - Private University

4. Level of Study
   - Diploma
   - Bachelor's Degree
   - Master's Degree
   - PhD

5. Experience in Investment
   - No experience
   - Less than 1 year
   - 1 - 3 years
   - More than 3 years

Section B: Financial Literacy

1. What does the term inflation mean?

a) Prices of goods and services are increasing

b) Prices of goods and services are decreasing

c) The value of money is increasing

d) Don't know

Answer: A

2. Which of the following is considered a low-risk investment?

a) Government bonds

b) Company stocks

c) Cryptocurrency

d) Don't know

Answer: A

3. What is the main benefit of diversifying investments?

a) It guarantees higher returns

b) It avoids paying taxes

c) It reduces overall risk

d) Don't know

Answer: C

4. Which of the following best describes compound interest?

a) Paying interest only on the amount borrowed

b) Earning interest on both the money saved and the interest earned earlier

c) Interest rates that never change

d) Don't know

Answer: B

5. If a financial product is said to have "high risk, high return," what does it mean?

a) It can give big profits but also big losses

b) It always gives high profits with no loss

c) It is safe and guaranteed

d) Don't know

Answer: A

Section C: Independent variable

		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1.	I am willing to take risks when investing my money..	1	2	3	4	5
2.	I would choose an investment with high returns even if it involved greater risk.	1	2	3	4	5
3	I feel comfortable making investment decisions in uncertain conditions.	1	2	3	4	5
4	I prefer "safe" investments over risky ones.	1	2	3	4	5
5	I believe taking financial risks is necessary to achieve higher investment returns.	1	2	3	4	5

Section D: Self-Confidence

		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1.	I am confident in my ability to make sound investment decisions.	1	2	3	4	5
2.	I can evaluate investment options effectively before deciding.	1	2	3	4	5
3	I trust my judgment when choosing between different investment opportunities.	1	2	3	4	5
4	I feel less capable than my peers in making investment decisions.	1	2	3	4	5
5	I believe I can achieve good results from my investment choices.	1	2	3	4	5

Section E: Investment Decisions

		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1.	I actively search for investment opportunities (stocks, mutual funds, crypto)	1	2	3	4	5
2.	I allocate part of my income or allowance toward investments.	1	2	3	4	5
3	I consider risk and return before making an investment decision.	1	2	3	4	5
4	I rely on my own judgment when making investment decisions.	1	2	3	4	5
5	I plan to continue investing in the future.	1	2	3	4	5

Appendix 4.1

Statistic of Collinearity

	VIF
FL1	1.065
FL2	1.071
FL3	1.024
FL4	1.017
FL5	1.014
ID1	1.010
ID2	1.066
ID3	1.032
ID4	1.061
ID5	1.041
RT1	1.029
RT2	1.025
RT3	1.027
RT4	1.028
RT5	1.031
SC1	1.022
SC2	1.033
SC3	1.035
SC4	1.012
SC5	1.049

Appendix 4.2

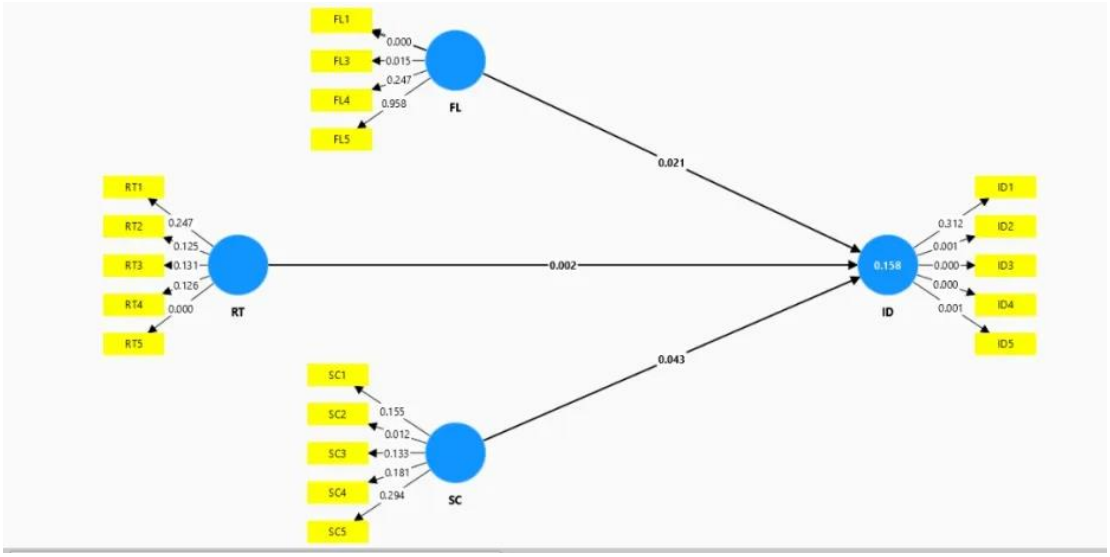
R-squared and adjusted R-squared

R-square - Overview

	R-square	R-square adjusted	
ID	0.158	0.148	

Appendix 4.3

Structural Model



Appendix 4.4

Multiple Regression Analysis

Path coefficients - Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
FL -> ID	0.162	0.190	0.071	2.301	0.021
RT -> ID	0.210	0.233	0.066	3.161	0.002
SC -> ID	0.231	0.240	0.114	2.025	0.043

Appendix 4.5

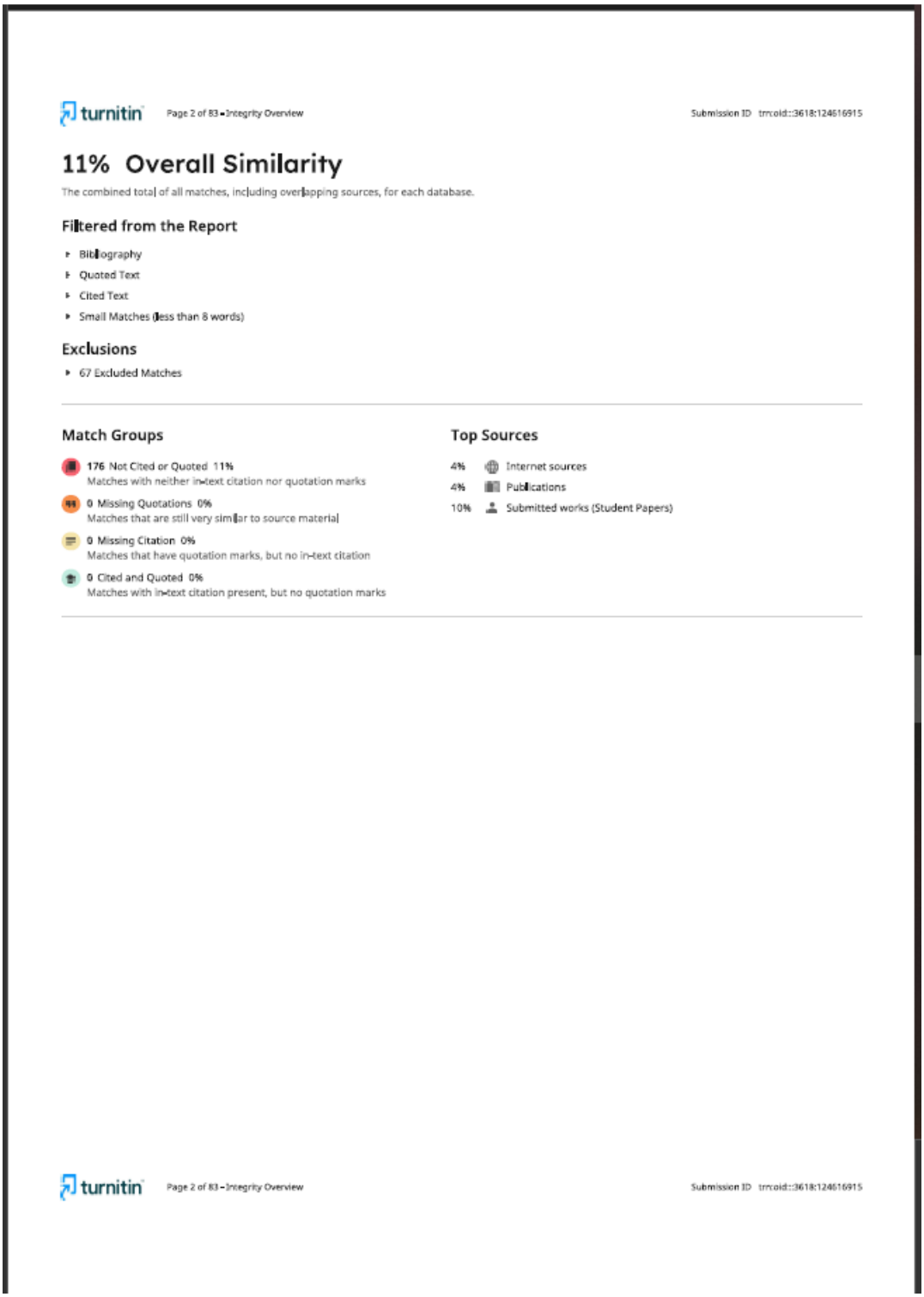
Heterotrait-Monotrait Ratio (HTMT)

Discriminant validity - Heterotrait-monotrait ratio (HTMT) - Matrix

	FL	ID	RT	SC
FL				
ID	0.771			
RT	0.860	0.797		
SC	0.635	0.843	0.723	

Appendix 4.6

Turnitin Report



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