

**INVESTMENT SCAM VICTIMISATION:  
A STUDY OF RISK FACTOR AMONG  
MALAYSIAN YOUTH**

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MANAGEMENT**

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MALAYSIAN YOUTH**

**BY**

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of the requirement for the degree of**

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**UNIVERSITI TUNKU ABDUL RAHMAN**

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## DECLARATION

We hereby declare that:

- 1) This undergraduate FYP is the end result of our own work, and due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- 2) This FYP has not been used in any way to support an application for another degree or certification from this university, any other university, or other educational institutions.
- 3) Every group member has contributed equally to finishing the FYP.
- 4) The word count of this research report is 26,308.

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## DEDICATION

This research is devoted to all those who have contributed to its accomplishment. Whether direct or indirect, the efforts are invaluable.

We would want to dedicate our study, first and foremost, to UTAR. We have access to resources like E-Databases and facilities like computer labs thanks to the university. We can carry out the investigation efficiently because of our access to these tools and resources.

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## LIST OF ABBREVIATIONS

FBF	Faculty of Business and Finance
CCID	Corporate Crimes Investigations Department
PDRM	Royal Malaysia Police
BNM	Bank Negara Malaysia
SC	Security Commissions
PSC	System Consultancy Sdn Bhd
CSEW	Crime Study of England and Wales
OECD	Organisation for Economic Co-operation and Development
OIT	Online Identity Theft
RAT	Routine Activity Theory
PMT	Protection Motivation Theory
ELM	Elaboration Likelihood Model
UTAR	University Tunku Abdul Rahman
NGOs	Non-Governmental Organizations
VIF	Variance Inflation Factor



## PREFACE

The completion of this study is crucial to our undergraduate program at University Tunku Abdul Rahman, which is the Bachelor of Business Administration (Hons) Banking and Finance. "Investment Scam Victimization: A Study of Risk Factors Among Malaysian Youth" is the study's subject. Therefore, the purpose of this study is to identify the key variables that can greatly impact investment scams.

Victimization by investment scams is a major issue in modern society, especially for Malaysia's youth population. The attraction of wealth and financial freedom is increasing, but so is the vulnerability to con artists offering large, rapid payouts. This introduction presents a thorough investigation designed to identify the risk factors linked to teenage victimization in investment scams in Malaysia.

In this study, we delve into the intricate interplay of various independent variables that contribute to the vulnerability of individuals to investment scams. Among these variables, we focus on five key dimensions: financial literacy, risk tolerance, investment behaviour, and the influence of persuasion from offenders, as well as the absence of capable guardians.

To better understand and lower the likelihood of falling victim to an investment scam, this study looks at the variables that lead to victimization. The government,

educational institutions, and religious organizations can all benefit greatly from this study's insightful recommendations on how to increase the safety of investments made by young people in Malaysia. This study aims to provide insight into the complex nature of teenage victimisation by investment scams in Malaysia by thoroughly examining these independent variables. In addition to adding to the body of knowledge already available on victims of investment scams, our study is intended to function as a spur for preventative actions targeted at safeguarding the financial security of young Malaysians.

## ABSTRACT

Investment scams have resulted in several serious issues, including trust erosion, emotional distress, and financial losses that have impeded economic growth. To address these issues and uphold the integrity of the financial markets, a multifaceted strategy comprising community involvement, regulation, enforcement, and education is needed. This study examines the risk factors linked to youth victimisation in investment scams in Malaysia, with a particular emphasis on five major independent variables: financial literacy, risk tolerance, investment behaviour, the impact of offenders' persuasion, and the lack of capable guardians. Utilizing quantitative research techniques, information was gathered from a group of young Malaysians to investigate the connections between these factors and vulnerability to investment fraud. 400 respondents were chosen through the use of the quota sampling approach, and questionnaires were sent to them in order to gather data for this investigation. The Statistical Package for the Social Science (SPSS) version 16.0 was then used to perform Multiple Linear Regression Analysis. These findings highlight the significance of focused initiatives meant to improve financial literacy, encourage wise investing practices, and put in place efficient regulatory mechanisms to lessen the incidence and effects of investment scams among young people in Malaysia.

Keywords: Investment Scam Victimization, Financial Literacy, Risk Tolerance, Investment Behavior, Persuasion from Offender, Absence of Capable Guardians.

## **CHAPTER 1 INTRODUCTION**

### **1.0 Introduction**

The background of the research is first described. After that, the problem statement will discuss a few of the issues this study brought up. The discussion of the research questions, hypotheses, and objectives comes next. Afterward, the importance of carrying out this research is discussed. A summary of the information in every chapter is subsequently incorporated into the chapter arrangement. Finally, a summary of the key ideas from the initial chapters is given.

### **1.1 Research Background**

Investment is the act of placing cash into certain assets to earn money according to an individual's investment objectives, risk tolerance, and portfolio before making investment decisions. Investment refers to the allocation of money with the expectation of generating income, and maintaining or increasing its value (Gitman et al., 2015). The primary goal of investing is to increase wealth by investing money in potential assets to develop value and produce profit (Zamfir et al., 2016). However, the population is greedy and lazy to evaluate or analyse the investment assets, they desire to make large sums of money fastly and effortlessly. With this phenomenon, scammers utilise many techniques such as using sound business skills, technological, and effective sales strategies to trick victims into handing over money, which can be considered investment scams (Badua, 2020). Investment scams, commonly referred to as investment fraud or fraudulent investment schemes, are dishonest business practices used to defraud people or organisations of their money by making exaggerated or misleading investment return promises (Beals, 2015).

One of the famous types of investment scams is a money game, also called a Ponzi Scheme, or Pyramid Scheme. It has caused more than 50,000 investors to get tricked into illegal investment schemes and lost almost RM 90.9 million in 1992 (A. Rahman et al., 2020). In Malaysia, there were previous instances where fraudulent activities were promoted using a member-to-member multi-level marketing approach, commonly referred to as pyramid programs or "get-rich-quick" programs (H et al., 2015). Some recent schemes are JJPTR, MBI, VenusFX Forex, Richway Global Venture, and so on (Piaw et al., 2019). According to The Star (2020), Malaysia has experienced losses exceeding RM 90 million due to investment scams from January to July 2020. The figures were provided by Bukit Aman, the federal police headquarters in Malaysia. The authorities are working to address the issue and raise awareness about these fraudulent schemes. The Securities Commission Malaysia (SC) received 370 unlawful investment scheme inquiries and complaints in September 2020, up from 317 in 2019, with RM 914 million in claimed losses (*The Sun*, 2020). The Corporate Crimes Investigations Department (CCID) of the Royal Malaysia Police (PDRM) has recorded a total of 71,833 fraud cases, resulting in damages exceeding RM5.2 billion, between the years 2020 and May 2022. Of the overall number of frauds, 11,875 cases (16.5%) were investment scams (*The Edge Malaysia*, n.d.).

Investment scam cases continue to exist and attract people to put a sum of money into illegal investment schemes despite extensive media coverage and the fact that the authorities have made joint efforts. Bank Negara Malaysia (BNM) and Security Commissions (SC) continuously educate and foster public awareness (Piaw et al., 2019). For example, according to The Star (2020), the authorities are making an effort to solve the situation and spread knowledge of these dishonest tactics. The article in 2020 advises people to exercise caution and do extensive study before investing to prevent becoming a victim of such fraud. However, investment scam cases have escalated steadily in recent years. According to Malaysia's federal police headquarters, the number of investment fraud cases significantly increased in 2021

(*Malay Mail*, 2022). These fraud instances have cost more than RM 420 million in losses (*Malay Mail*, 2022).

Hence, much research tends to investigate the factors of getting scams in investment products. In addition to greedy and lazy humanity, there are still many factors that lead to investment scams. According to Mohd Padil et al. (2022), They held the belief that the risk factors for university students were their level of financial knowledge and their understanding of investment scams. Unlike most of the research (Kasim et al., 2023; DABAOma, 2017; DeLiema, 2020) which target groups are retirees or the older generation. The reason may be the education level, knowledge, awareness, and sensitivity to investment scams. Nevertheless, the study by Ibekwe and Oil (2020) has shown that the younger generation, especially students, have a higher risk of exposure to investment scams. Besides that, Jack and Ibekwe (2018) stated that due to the younger generation having more access to modern technology and online resources than the older generation, they are more prone to fall victim to and take part in investment scams. To fulfil their desire and achieve their life goals, university students are more inclined to invest their money in poor investments (Mohd Padil et al., 2022). As a result, our research seeks to analyse the risk factors associated with investment scam victimisation among the youth generation.

## **1.2 Problem Statement**

Investment fraud has become a widespread and worrying problem in today's society, costing victims significant money losses and psychological distress. Youth are developing as a highly susceptible category among these victims, especially susceptible to succumbing to different types of investment fraud. With promises of large returns and profitable prospects, investment fraud has become a serious problem in today's financial environment. These frauds prey on people's plans for financial achievement and their poor comprehension of complex investment ideas.

Online frauds have cost Malaysians damages totaling roughly RM3.3 billion since 2017 (The Malaysian Reserve, 2022).

98,607 cybercrime instances involving frauds were reported, according to police figures, of which 23,011 involved e-commerce, followed by loan scams (21,008) and investment scams (6,273). According to the most recent figures from the Malaysian Department of Insolvency, those between the ages of 25 and 34 were those who filed for bankruptcy the most frequently.

Despite media attention to the problem, 14,349 scam cases—or roughly 78 cases per day—were recorded in the first half of 2022, more than double the 7,746 cases that were reported during the same period in the previous year (Ng, 2022). According to the Securities Commission Malaysia (2021), a whopping 45% of people with strong financial literacy are Chinese, and around 61% of post-graduates and 45% of diploma/degree holders scored well in the financial field therefore, their financial literacy is high compared to non-diploma/ degree holders. Also, 56% of individuals who worked full-time for governmental organisations have good financial literacy. Compared to non-investors, those who made capital market investments were more likely to be highly financially literate. This indicates the significance of financial literacy among individuals to avoid investment fraud.

The emergence of the digital age has fundamentally changed how investments and financial transactions are carried out. While providing convenience and accessibility, this digital shift has also made it easier for dishonest individuals to exploit weaknesses. Ponzi schemes, false initial coin offers (ICOs), phony trading platforms, and affinity frauds are just a few of the financial scams that make it difficult for people, especially young adults, to tell the difference between real investment possibilities and fraudulent schemes. According to Straits Times/Asia News Network, On Tuesday, August 16, a teenager admitted to defrauding seven of his friends out of more than \$330,000 through an investment scheme and using the money to purchase stuff for online games and gambling (The Star, 2022). The teenager, who was 16 at the time of the offences, promised to assist his buddies in

making investments in the foreign exchange and cryptocurrency markets. He also promised them fixed returns if they made an investment through him and made the claim that he had made money trading Bitcoin. The young man, now 20 years old, however, wanted some of the cash to buy goods for online games like Counterstrike: Global Offensive, which he intended to resell for a profit later. He decided to lie to his pals since he was certain they would not give him the money. He defrauded his victims of \$332,067 in total. The minor, who cannot be identified because he was under the age of 18 when the offences, pled guilty to three charges of defrauding three people on Tuesday. Offenders who cheat might spend up to 10 years in prison and pay a fine (The Star, 2022).

If the issue of young people being vulnerable to investment fraud is not appropriately addressed and remedied, various major consequences could occur. These consequences may not only affect the particular victims but may also have a wider societal and economic gap. Young people are likely to keep falling for fraudulent schemes if appropriate steps aren't taken to reduce young people's vulnerability to investment scams. They may suffer substantial losses in money as a result, endangering their savings, assets, and overall financial stability. These losses might have a lasting effect on their capacity to reach financial objectives like home ownership, education, or retirement planning. Therefore, the youth may face financial losses and difficulty when desiring to buy property or daily-use products. On a larger scale, a generation of young adults who are financially precarious and susceptible to scams could result in decreased economic production. Young people might delay or lose opportunities to positively impact the economy if they are loaded with debt from illegal investments or struggle to regain their financial stability. Besides that, it will bring negative social impact as investment fraud is on the rise, which adds to a larger culture of deceit and fraud. This not only undermines social trust but can also increase young people's cynicism and scepticism, which affects their willingness to cooperate, make investments, or engage in productive economic activity. Failure to address the issue of young people's vulnerability to investment fraud can have serious social, personal, and financial effects. It is essential to aggressively address this issue through focused educational programs,



legislative actions, and awareness campaigns in order to safeguard youth from falling for scams and to uphold a strong and reliable financial environment.

In order to raise awareness and provide information about online scams, System Consultancy Sdn Bhd (PSC) recently developed a financial intelligence campaign in partnership with Malaysia's Credit Counselling and Debt Management Agency (AKPK) (The Malaysian Reserve, 2022). The campaign, which concentrated on financial literacy, targeted about 20,000 college and university students since young people are more prone to fall victim to scammers because they are eager to explore new opportunities and are less likely to be aware of online safety. Money Intelligence was one of the modules offered through PSC's financial literacy course. It uses gamification and experiential learning methodologies to make sure that participants experience and learn current, high-quality, goal-focused financial ideas in a light and enjoyable way. It gave individuals the skills they needed to make wise financial decisions. The lessons also include cybercrimes that are common in today's quick-paced, technologically advanced age, including fraud, con games, data phishing, and data intrusion. According to PSC ED Raymond D. Gabriel, these simulations let kids make mistakes and deal with the results of poor financial decisions through games. Participants demonstrated a greater understanding of their financial practices, informed financial portfolio choices, and the value of getting ready for economic shifts and avoiding economic pitfalls and scams. There are also more than 93% of participants who changed their financial conduct, and 85% told their family and friends about the new information and skills they had learned. Apart from that, This attests to their maturity in maintaining awareness of and control over their financial state, this can attest to their maturity in maintaining awareness of and control over their financial state. said Gabriel (The Malaysian Reserve, 2022).

The current research aims to examine instances of investment plan fraud involving undergraduate students in Malaysia in order to raise public awareness of the dangers of investment scams and advise people to avoid them. We defend their financial stability, prevent victimisation, and create a more secure and knowledgeable

investing environment. It will use surveys to determine the most important variables in non-voting, followed by tests to test the efficacy of various tactics.

## **1.3 Research Objectives**

### **1.3.1 General Objectives**

The objective of this research is to look into the subject matter of investment scam victimisation among young Malaysians and identify the factors contributing to investment scam victimisation among them.

### **1.3.2 Specific Objectives**

To accomplish the primary goal, we established the following specific objectives.

1. To ascertain the presence of a significant connection between financial literacy and investment scam victimisation among Malaysian youth.
2. To ascertain the presence of a significant connection between risk tolerance and investment scam victimisation among Malaysian youth.
3. To ascertain the presence of a significant connection between investment behaviour and investment scam victimisation among Malaysian youth.
4. To ascertain the presence of a significant connection between persuasion from offenders and investment scam victimisation among Malaysian youth.
5. To ascertain the presence of a significant connection between the absence of capable guardians and investment scam victimisation among Malaysian youth.

## **1.4 Research Questions**

To offer distinct guidance within our study, the following subsequent inquiries are formulated.

1. Does a significant correlation exist between financial literacy and investment scam victimisation among Malaysian youth?
2. Does a significant correlation exist between risk tolerance and investment scam victimisation among Malaysian youth?
3. Does a significant correlation exist between investment behaviour and investment scam victimisation among Malaysian youth?
4. Does a significant correlation exist between persuasion from offenders and investment scam victimisation among Malaysian youth?
5. Does a significant correlation exist between the absence of capable guardians and investment scam victimisation among Malaysian youth?

## **1.5 Significance of Study**

Firstly, the importance of conducting this study lies in its objective of identifying the determinants that contribute to the vulnerability of young Malaysians to investment scams. Instead of traditional theoretical frameworks like the Theory of Routine Activity and the Theory of Victim Precipitation, a relative model proposed by Mushafiq et al. (2021) is implemented. In this model, two additional variables, risk tolerance, and financial literacy, are included to modify the Theory of Victim Precipitation. The reason for this is that these two variables serve as critical determinants that safeguard individuals against investment fraud. Hence, through the implementation of this framework, it becomes feasible to identify and categorise the precise risk factors that elevate the probability of Malaysian youth falling prey to investment fraud. As a result, investors will identify and evaluate investment opportunities, mitigate risks, and avoid fraudulent activities.

Secondly, the findings obtained from this research will carry substantial implications. First, it will provide a deeper comprehension of the most efficient methods for securing our investment platform, and it will also increase the quantity of information that is now available regarding the relevance of investment choice learning. Furthermore, it will improve the quantity of knowledge already available about the importance of investment decisions. The findings of the research may prompt regulatory agencies to implement stricter constraints on investment programs and financial services promoted to younger generations. This may necessitate stricter screening of investment opportunities, more accurate disclosure rules, and further supervision of organisations that provide financial assistance to young people (Awais et al., 2016).

Thirdly, the findings are intended to increase awareness about the threats of becoming a victim of an investment scam and provide methods for evaluating the risk of becoming a victim of a scam among the population of Malaysia. According to Sulaiman et al. (2022), preventing people from becoming victimised by investment scams requires raising people's knowledge of the problem and educating them about ways to avoid being a victim. According to the study's conclusions, consumers should be trained on how to recognize and stay clear of disadvantages, particularly those that target young people. According to Kieffer and Mottola (2017), the research provides insight into how a lack of information and awareness of investment scams might also make consumers more vulnerable to investment scams. It highlights the significance of education and awareness as key components in the fight against investment scams. Investors who are more aware of the potential dangers of investment fraud have a reduced likelihood of becoming victims of scams. Consequently, future research concerning the susceptibility of Malaysian youth to investment schemes may be influenced by the results obtained from this study.

## 1.6 Chapter Layout

The first chapter of the report addresses the problem formulation and provides background information on the research, which also explains why the study field was selected. In addition, the study's goals, inquiries, and theories are specified. It also emphasises how important it is to carry out this investigation.

The second chapter summarises past research on investment scam victimisation among Malaysian youth. It contains a review of the factors and theoretical frameworks used in prior research. In addition, variable definitions are included. This chapter provides an organised overview of the findings of other researchers in the field of study.

The research approach is the focus of the third chapter. This section provides an in-depth analysis of the research approach data collection methodologies, sample selection approach, and research tool. In addition, the procedures for handling and analysing data are outlined.

The fourth chapter is where the investigation findings are presented. The delivery of research results is essential to attaining the research aims. Chapter four primarily presents the outcomes of descriptive evaluation, first data evaluation, and inferential evaluation.

The final chapter concludes the study and delves further into the investigation's findings obtained through the evaluation of data. The study finishes with ideas for how people can utilise the findings. Finally, the study's weaknesses are highlighted, along with ideas for overcoming them.

## **1.7 Conclusion**

In conclusion, investment scams constitute a danger to the community, with youth being especially susceptible. They are attracted by assurances of high returns, resulting in significant financial losses and emotional distress. However, due to their lack of experience and financial literacy, Malaysian youth are frequently targeted by various investment frauds. The issues can be resolved by initiatives that educate and safeguard youth. As a result, the purpose of this study is to better understand the factors that lead to investment scam victimisation among Malaysian youth. The factors that will be explored are financial literacy, risk tolerance, investment behaviour, persuasion from offenders, and the absence of capable guardians.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

The first section of Chapter 2 is an overview of the literature on the dependent variable, investment scam victimisation. After that, the linkages between the dependent variable and its predictors, which include financial literacy, risk tolerance, investment behaviour, persuasion from the offender, and the absence of capable guardians, will be discussed. The next two sections are the theoretical and conceptual frameworks. Lastly, the hypotheses are then elaborated.

### **2.1 Review of Literature**

#### **2.1.1 Investment Scam Victimization**

Investment scams have become a common problem in many nations, preying on the weak, including the young. Youth investment scam victimisation is becoming more common in Malaysia, which has caused alarm. Financial scams have a subgroup called investment scams, which happen when someone intentionally misleads an investor for financial advantage (Beals et al., as mentioned in Kieffer & Mottola, 2017). According to Kieffer and Mottola (2017), investment scams include schemes including penny stock scams, pre-IPO scams, oil and gas scams, Ponzi schemes, and high-yield investment program scams. Victimization by scams is regarded as a persistent danger to public confidence and trust, and it has the potential to harm a person's capacity to maintain their financial security. Despite aggressive measures

taken by organisations and governmental bodies to alert individuals to the dangers of having an overly trusting attitude, cases of scam victimisation are on the rise. The prevalence of scam victimisation is becoming more and more evident, according to official figures, press reports, and anecdotal tales on social media. Online dating and commerce websites are becoming more and more accessible, which makes it simpler for con artists to deceive people. The prevalence of scam victimisation may also have been influenced by anonymity options, site designs and items that seem authentic, and user information sharing (Sulaiman et al., 2022).

Criminals have been adopting a variety of techniques to occasionally obtain victims as scam activities have increased. Since the advent of the internet and other forms of technology, criminals can pick up victims without really meeting them. Online scams appear to have risen in popularity as a result of recent technological advancements (Mesch & Dodel, 2018, as referenced in Sulaiman et al., 2022). Scammers who use social networking sites like Facebook, Instagram, Twitter, WhatsApp, and others to conduct scams have benefited greatly from the development of the internet (Blanton, as cited in Sulaiman et al., 2022). These con artists frequently change their disguises, making them difficult to spot and identify because they operate in anonymity. According to Tan et al. (2017), individuals use phony identities to engage in deceitful communication since the Internet offers anonymity (as referenced in Sulaiman et al., 2022). Through a specific process, they typically gain access to people's bank, credit card, or other accounts and use the funds to carry out activities or even invest without the account users' permission. In general, victims of business crimes like scams suffer significant financial losses.

Being scammed has the side effect of lowering financial well-being, which is linked to a higher likelihood of going through financial difficulty and having to make ends meet. In terms of lowering poverty and hunger and providing good health and well-being, this will unavoidably have an impact on their sustainable development (Sulaiman et al., 2022). However, they also experience psychological harm in silence, which is not highlighted by news stories. Cross (2018) also discovered that victims frequently blame themselves for their predicament and exhibit cognitive



distortion. Additionally, victims could go through protracted psychological discomfort, and some might even have cognitive distortions like self-blame, powerlessness, and concern with danger (Zamani et al., 2014). A study's findings also indicated that scam victims faced unfavourable emotional consequences, and social media users frequently experience this. The loss of their funds, jobs, and homes as a result of the hoax has led some victims to ponder suicide to an extraordinary degree (Button et al., as cited in Sulaiman et al., 2022). These are situations when victims are unable to sustain their financial security and mental health, both of which are closely correlated with a society's level of poverty (Griggs, 2013) and its rate of economic progress.

An expansion of prior research indicates that sociodemographic factors like age, gender, and education may affect a person's chance of being a victim of a scam (Beals et al., 2017; Saad & Abdullah, 2018; Whitty & Buchanan, 2012). However, Button et al. (2014) point out that there may be a variety of causes for people to become victims, including a lack of knowledge and awareness. On the other side, Cross and Kelly (2016) emphasised that crime prevention through education and awareness is not always successful because victims of crime are sometimes tricked by perpetrators. This is because the communications that criminals employ should be recognised and taken into account while taking preventative measures. Scams can happen for a variety of reasons, but most victims are found to be naive, impulsive, and careless or reckless in general. Because of their lack of general knowledge and propensity to accept anything reasonable, it is frequently believed that the elderly are more vulnerable to scams. However, according to a Citizens Advice Scotland article from 2014, scam victims are not just the elderly (as referenced in Sulaiman, 2022). This concurs with Button et al.'s (2009) study, which concluded that "the profiles of victims cover almost everybody; hence, almost anyone could become the victim of a scam" (as cited in Sulaiman, 2022).

### **2.1.2 Financial Literacy**

Financial awareness is an essential aspect of personal finance that involves having the necessary knowledge and abilities to make informed and prudent financial choices. Individuals must have a fundamental comprehension of financial ideas to avoid investment scams. Xiao et al. (2022) examine the association between overconfidence in financial literacy and susceptibility to investment scams. The goal of this research is to ascertain whether overconfidence in financial literacy is linked to a higher chance of falling victim to an investment scam and whether the relationship can be mitigated by objective financial literacy. In addition, overconfident users are more likely to think that they can achieve the exorbitant profits promised by two risky investment options. The study also discovered that regulating the correlation between overconfidence in financial literacy and investment fraud victimisation is the objective of financial literacy. Financial literacy overconfidence is significantly more prevalent among those with a lower level of genuine financial literacy and investment fraud victimisation. Beal and Delpachitra (2003) state that it is a problem that many Australian university students lack even the most basic information and skills about money. The goal of this research is to investigate the connection between university students' financial literacy and awareness of investment opportunities. It discusses how universities and financial organisations may work together to increase financial literacy and safeguard students against investment fraud. The primary focus of the first study is on the association between overconfidence and susceptibility to fraud, whereas the second study investigates the larger picture of financial literacy's impact on university students' fraud awareness. Bar Lev et al. (2022) discovered that individuals with a greater degree of financial literacy have a greater capacity to detect and avoid investment schemes because they are more knowledgeable about the different tricks that con artists employ and can make wiser financial judgments. This study seeks to identify the specific financial literacy skills that are most effective at preventing investment scam victimisation, as well as to investigate the relationship between financial literacy and investment scam recognition. Chariri

and Meiranto (2017) concluded that enhancing financial literacy and education, as well as raising awareness about the dangers of investment schemes, could reduce the incidence of fraud and safeguard investors.

The methodology employed by Xiao et al. (2022) was a survey-based method. Using an online survey, the study obtained information from a sample of 1,000 Chinese investors. The survey included queries regarding financial literacy, overconfidence in financial literacy, investment deception victimisation, and demographic data. The study utilised a logistic regression framework to examine the correlation between overconfidence in one's financial literacy and the likelihood of falling victim to investment scams. Demographic and practical financial literacy levels were controlled for. In addition, several reliability checks were conducted to evaluate the results' sensitivity to various model requirements and sample limitations. Beal and Delpachitra (2003) employed an online survey to examine the suggested method of study, similar to Xiao et al. (2022). The study delivered survey forms to undergraduates, who responded with an overall total of 211 responses. The study's proposed research framework was evaluated using the approach known as partial least squares, which is based on structural equation modeling. Using a questionnaire survey, Bar Lev et al. (2022) analysed the relationship between personality traits, financial literacy, and their capacity to identify fraudulent investments among a sample of Indonesian investors. According to Ramayah et al. (2021), the methodology of the study included obtaining data from official and private pensioners in the Central Region of Malaysia using an online Google Form questionnaire survey. The study's technique included identifying markers for early investment fraud detection and building a model with several variables to verify the proposed hypothesis. A quantitative analysis-based approach was employed by Chariri et al. (2018) to gather survey data from a sample of 300 participants, including students from Semarang's colleges of business and economics.

The findings of the research undertaken by Xiao et al. (2022), individuals who identify as male, own higher levels of income, and have attained a higher level of education have a greater degree of confidence in their financial understanding.

People who become victims of dishonest investment schemes are at risk of experiencing significant financial distress and uncertainty, as they may face the unfortunate consequence of losing their whole life savings or retirement money. Individuals may also encounter emotions such as humiliation, embarrassment, and rage, which have the potential to impact their psychological well-being and overall mental health. Young individuals, namely those enrolled in higher education institutions, could exhibit increased susceptibility to being targets of deceptive investment schemes. This phenomenon can be explained by the higher probability of people being exposed to modern technology and internet resources, which con artists often use to spread their fraudulent schemes (Jack & Ibekwe, 2018). Bar Lev et al. (2022) present an illustrative case wherein pensioners emerge as a prominent demographic susceptible to investment scams, hence encountering severe repercussions in the form of irrevocable financial setbacks and significant psychological anguish. The rationale for this is that individuals with substantial assets may possess a greater capacity to invest while also being more susceptible to financial vulnerability throughout their advanced years. According to the study conducted by Chariri et al. (2018), people who possess little financial literacy and lack awareness regarding investment goods are frequently targeted as victims of investment scams. The research further revealed that specific signs, such as elevated returns and the presence of investment pressure, had a positive correlation with an increased susceptibility to fraudulent activities.

Xiao et al. (2022) conducted a study that revealed a significant relationship between financial literacy and overconfidence and the likelihood of falling victim to investment scams. The topic of this area holds significant ramifications for initiatives in financial education and consumer protection aimed at safeguarding consumers from investment fraud and attaining financial stability and security. Beal and Delpachitra (2003) claim that there exists a noteworthy positive correlation between budgeting abilities, financial aspirations, and the degree of awareness about investment scams among college students. This underscores the need to include financial literacy instruction as a means to enhance knowledge regarding investment scams and mitigate the risk of students falling prey to deceptive schemes.

According to the study conducted by Bar Lev et al. (2022), financial literacy emerges as a significant determinant in safeguarding pensioners against the perils of investment fraud. The proposition posits that the promotion of financial literacy among seniors may serve as an efficacious strategy for mitigating investment scams and safeguarding pensioners from potential financial losses. In their study, Chariri et al. (2018) employed a multivariate regression model to examine the hypothesised relationship. This approach facilitated the identification of significant elements associated with investment scams and the construction of a comprehensive framework for the identification and stoppage of such criminal behaviour. This document outlines the sequential procedures for enhancing financial literacy, enabling investors to safeguard themselves from investment scams and make well-informed decisions about their investments.

However, it is common for studies to possess certain limitations. The adoption of self-reported data, which might be impacted by measurement errors and social beauty bias, is the primary weakness in the Xiao et al. (2022) study. It is also important to acknowledge that the study employed a cross-sectional methodology, which places constraints on the ability to establish causation and explore the direction of the relationship between the incidence of investment scam victimisation and overconfidence in financial literacy. Notwithstanding these constraints, the research offers significant contributions to the understanding of the correlation between hyperconfidence in financial literacy and the prevalence of investment fraud victimisation. Moreover, it underscores the necessity for additional research and interventions aimed at addressing this matter. The study conducted by Bar Lev et al. (2022) is limited in scope as it primarily concentrates on retirees, hence potentially limiting its applicability to other demographic groups or communities. Furthermore, the research is dependent on data that is self-reported, thereby introducing biases and mistakes. Therefore, the investigation does not delve into the efficacy of certain financial education initiatives or interventions in mitigating the occurrence of investment fraud among retired individuals.

### **2.1.3 Risk Tolerance**

A person's propensity to take on financial risk is referred to as their risk tolerance, and it is determined by a number of factors, such as their psychology and perception of danger. It is an important aspect of identifying a person's vulnerability to investment fraud. High-risk takers are more likely to examine investment opportunities that promise significant returns, making them vulnerable to the enticing narratives that fraudulent individuals usually create. Due to their propensity to ignore red flags or minimise dangers because of the appeal of prospective rewards, they may make poor decisions when assessing prospects. Scammers' propensity to take on financial risk is referred to as their risk tolerance, and it is determined by a number of factors, such as their psychology and perception of danger. of this by making time-sensitive offers that appeal to their risk-taking nature, taking advantage of their desperation for immediate gains.

Based on the research, they have carried out the study between age and risk tolerance, which may have consequences for investment scams. In the framework of surveys about the attitude towards risk that clients fill out while meeting with their financial advisors, they look into the relationship between age and tolerance of financial risks. While the paper carried out by Williams et al. (2017) has the objective of examining the literature on individual characteristics and contextual factors that may affect vulnerability to these types of harmful influences in investment, Theoretically, a holistic approach is then put forth, focusing on the interplay between the individual, their immediate environment, and the impact message itself when taking into account expected reaction behaviour.

According to Williams et al. (2017), it has been discovered that different people have varied propensities for risk. Although it has been claimed that people's perspectives on risk differ depending on the individual context and domain, personality characteristics such as impulsiveness, sensation seeking, and weak self-control have all been related to hazardous activity across many domains (Mishra,

2014). Wider characteristics like gender and unexpected or disruptive social settings have also been demonstrated to affect risk-taking behaviour (Mishra and Lalumière, 2008; Simpson et al., 2012). Men have been reported to take greater risks than women (Byrnes et al., 1999). It has been discovered that variations in risk propensities are related to the methods people employ to gather and analyse information about risks (Yang et al., 2014). On the other hand, they investigate the explanatory value of variables such as retirement impacts, the shrinking investment horizon, and the capacity for loss. They discover that although these variables can only partially buffer the association between age and risk tolerance, they have a substantially stronger explanatory power for the cross-section of risk aversion than age. They are unable to find any evidence that older investors' decreased willingness to take financial risks may be explained by their worsening mental abilities (Brooks 2018). Many other studies have shown that risk aversion rises with age (Boyle et al., 2012; Bucciol & Miniaci, 2011; Jianakoplos & Bernasek, 2006; McInish, 1982; Morin & Suarez, 1983, as cited in Schurer, 2015), but it has been proposed that this element influences risk tolerance more than any other. This is especially true for people in the lowest socioeconomic groups (Brooks et al., 2018).

According to the Risk Information Seeking and Processing model, an individual's psychological desire for knowledge sufficiency, as well as informational subjective norms, which are societal expectations about the amount of information that should be gathered before making risk-based decisions, have a significant impact on their methodical search for and evaluation of risk-related information (Gryphon et al., 1999). According to the European Online Grooming Project (2012), risk-takers who are typically confident, extroverted, and extroverted are more likely to fall victim to investment scams than insecure people who lack confidence and self-worth. According to Mishra (2014), although current emotional states may cause people to make decisions that appear irrational to an outsider, the impact of emotions on responding to fraud on investment has largely been ignored. People may be more likely to take risks in order to feel better about themselves (De Vries et al., 2008; Fessler et al., 2004; Mishra et al., 2010), with different emotional states possibly having varying effects on risk-taking (Fessler et al., 2004). For instance, anger may

increase risk acceptance in order to attain one's goals, while fear may increase danger sensitivity, resulting in increased risk aversion (Ohman & Mineka, 2001). Therefore, the emotion and behaviour of the individual may affect the investor's risk perception towards the investment. If they are angry and aggressive, the risk they might face of becoming victims is higher due to their irrational mindset.

Unfortunately, there has been little investigation into the findings, which suggest a minor age impact on risk tolerance that cannot be explained by differences in other obvious traits that separate younger from older investors. In addition, data indicates that the link between fear of risk and age is not a straight line. For instance, they suggest that risk tolerance declines until age 65 but then rises after that point (Riley & Chow, 1992; Faff et al., 2008), while Faff et al. (2011) find that risk tolerance rises continuously with age but at an increasing rate. However, other studies contend that risk tolerance decreases with age (Bommier & Rochet, 2006; Grable, 2000; Wang & Hana, 1997). By examining the varying definitions of elderly investors in different studies, which can span from individuals in their mid-50s to those over 70s (Henninger et al., 2010), and considering the different approaches used in these studies (such as lab-based experiments, surveys, and analysis of actual portfolio holdings), it is possible to partially resolve discrepancies in the results concerning the connection between age and risk tolerance. (Brooks et al., 2018).

Essentially, the relationship between risk tolerance and investment fraud highlights the need for risk-tolerant people to be extra vigilant, do their research, and get professional advice to avoid falling for the misleading allure of fraudulent investment schemes. Regardless of risk tolerance, maintaining a realistic view of investing returns and hazards is crucial. To achieve this, individuals should look for a balanced portfolio with diversified assets that are compatible with their risk tolerance and financial objectives.



## **2.1.4 Investment Behaviour**

Investment behaviour, a key factor in the field of finance, includes the complex choices and actions that people and other entities take when they explore their available investment opportunities. Many studies have focused on the relationship between investment behaviour and the risk of an investment scam. Due to a variety of psychological, emotional, and behavioural factors, investors may unintentionally become targets and victims of investment fraud. In order to identify variations in investing practices and mentalities that could influence vulnerability to investment scams and increase a person's attractiveness as a target.

According to Dillard and Nabi (2006), emotions are regarded as a significant factor in investment behaviour. Applied most recently to cyber security, the degree to which any perceived risks are viewed as threats (threat appraisal) and the degree to which the individual feels capable of coping with that threat (coping appraisal) are two critical processes in the processing of fear appeals, according to Protection Motivation Theory (PMT; Rogers, 1983) (Williams et al., 2017). On the other hand, the goal of the study is to understand how an individual's judgment of the value they place in their online accounts affects how they perceive the threat of account hacking and how they respond to it, which in turn drives the adoption of MFA. Combining PMT with investment size offers a theoretical perspective that highlights how people's investments relate to their motive for protection. This enables the examination of secure behaviours. Previous studies have generally confirmed the concept that people and businesses tend to protect their investments in knowledge and data (e.g., Menard et al., 2017). However, the evaluation of individual protection often overlooks their specific investments in the resources being protected. Several behavioural solutions have been proposed to enhance the security of investment account verification and promote asset safeguarding. Several methodologies are based on the protection motivation theory (PMT) (Maddux and Rogers, 1983; Rogers, 1975). Each of them proposes various information sources that trigger appropriate evaluations of threats and coping mechanisms, which then

influence safe behaviours (Burns et al., 2017, Martens et al., 2019, Vance et al., 2012, as cited in Ogbanufe, 2023).

Individuals are more likely to engage in the suggested behaviour to lessen the possible threat if they believe that they are capable and willing to carry out the suggested response action (Ruiter et al., 2014). People who are seeking to convince others to utilise these tactics, which involve presenting a situation that they believe poses a hazard (like a security breach on an account) and providing a simple solution to reduce the concern (like clicking a link to confirm account details). Since attackers might take advantage of the demand for attention that comes along with emotions of loneliness, social isolation, feeling alienated from friends, and emotional loneliness have all been identified as risk factors for being vulnerable to online grooming (Whittle et al., 2013). This is especially concerning because socially fragile individuals may use higher-risk communication channels more frequently, like online chat rooms (Valkenburg & Peter, 2007). According to research (Fredrickson and Branigan, 2005; Tice et al., 2001), people are more prone to losing their self-control and narrowing their focus of attention when they feel emotionally exposed or upset. Therefore, it might influence investor behaviours when making decision choices and make them victims of investment fraud (Williams et al., 2017). On the other hand, the methods have not examined the impact of personal investments as a source of information that heightens perceptions of the threat of losing their assets (i.e., assessments of threat and coping). It's true that some people—like the YouTuber with millions of fans and subscribers—may have substantial financial stakes in revenue from their online identities, which may put them in jeopardy if the account is compromised (Ogbanufe, 2023).

Unfortunately, there is a lack of research about the reasons for, ways in which, and situations in which strategies like fear appeals (Ruiter, Kessels, Peters, & Kok, 2014) are effective on investment behaviour, which may result in an investment scam. Apart from that, there is also a gap in the literature because PMT contends that environmental and intrapersonal information sources have a significant impact on

how people perceive threats and cope, which in turn motivates them to defend themselves and their personal belongings. (Ogbanufe, 2023)

Overall, identifying the weaknesses that fraudulent individuals exploit requires a thorough understanding of how these psychological, emotional, and cognitive components interact with investor behaviour. With this knowledge, investors can become more careful and knowledgeable, examining investments critically and avoiding the appeal of frauds that play on their psychological tendencies. Therefore, investors should have practised self-control skills because it is an essential ability that enables individuals to make thoughtful decisions in line with their long-term objectives. Key tactics for improving self-control include establishing specific goals, engaging in mindfulness practices, and postponing instant gratification. Positive self-talk, gratitude, and strategies for responding to cues help to strengthen the ability to control impulsive behaviour. Self-control efforts are further supported by limiting exposure to situations that can be harmful, developing healthy habits, and adopting visualisation techniques. Sustained advancement is facilitated by rewards, responsibility, and the opportunity to learn from failure. Setting self-care as a priority and breaking down goals into doable chunks are also crucial. In conclusion, developing self-control requires a complex strategy that combines psychological understanding, strategic planning, and a dedication to personal development, which can reduce the risk of falling victim to fraudulent investment schemes significantly.

### **2.1.5 Persuasion from Offender**

Persuasion is a popular strategy employed by criminals in investment scams in order to mislead their targets. Fraudsters employ a diverse range of persuasive strategies in order to lure their victims into participating in deceptive schemes. The primary aim of this research is to enhance understanding and knowledge regarding the many persuasive strategies employed by those involved in investment scams to deceive unsuspecting victims. By comprehending these strategies, prospective targets might

enhance their preparedness to safeguard themselves from succumbing to deceptive schemes. This research seeks to elucidate the tactics employed by individuals engaging in fraudulent activities, including the utilisation of seminars, orientations, testimonials from members who have purportedly achieved substantial financial gains within a brief timeframe, persuasive language, and the persistent encouragement of their recruiters. The study seeks to enhance the ability of potential victims to make informed judgments regarding their investments by increasing their understanding of the persuasive strategies employed by fraudsters (Badua, 2020). Persuasion is an effective instrument capable of imposing an effect on customer behaviour; nevertheless, consumers may not always possess awareness about the persuasive strategies employed. The primary aim of this study is to gain insight into the manner in which consumers employ their understanding of persuasion in order to assess the credibility of an influence agent. Additionally, the study seeks to identify several aspects that might potentially impact consumers' capacity to effectively carry out this evaluation (Deliema et al., 2019). This finding lines up with the research conducted by Badua (2020). Bar Lev et al. (2022) assert that fraudsters employ a specific purpose to persuade prospective victims to engage in fraudulent investment schemes. Fraud perpetrators employ several strategies to manipulate their victims, including but not limited to offering exaggerated investment returns, employing aggressive sales techniques, and fostering a feeling of necessity or scarcity.

The research design employed by Badua (2020) is a qualitative technique utilising a method known as phenomenology. The primary objective of this study was to examine the characteristics and experiences of individuals who have fallen victim to investment scams. The research employed a sample of twelve individuals who had fallen victim to investment scams, which had been propagated through various investment scams. The participants were chosen through the utilisation of a snowball sampling methodology. The researchers employed an interview guide to facilitate the administration of an in-depth interview (IDI) with the study participants. In addition, the research employed triangulation as a methodological approach by conducting interviews with law enforcement officials responsible for

investigating investment fraud cases, as well as with the close family members of the victims. The research employed a survey approach to gather data pertaining to the perspectives and experiences of individuals who have fallen victim to investment fraud. The authors of the study prepared the survey, which was subsequently delivered by two research organisations through the use of computer-assisted telephone interviews. The authors were given the data for analysis, which was collected over a span of multiple weeks in the year 2016. The primary objective of this study was to gather empirical data pertaining to individuals who have fallen victim to investment fraud, with the aim of gaining a deeper understanding of their experiences and views (Deliema et al., 2019). Bar Lev et al. (2022) conducted a study that entailed a comprehensive examination of primary sources, including books and articles. The study involved a meticulous and comprehensive analysis of the primary characteristics of individuals who fall victim to financial fraud in developing nations. This was achieved through the collection, synthesis, and description of various examples and case studies.

The study employs the victim precipitation theory as its theoretical framework. This theory relates to the persuasive dimension of investment scam victimisation, as it proposes that victims have a role in their own victimisation by engaging in behaviours that render them susceptible to fraudsters. The study revealed that those who fell victim to fraudulent schemes were enticed by the prospect of substantial financial returns offered by the perpetrators. Enhanced comprehension of the Victim Precipitation Theory enables people and communities to enhance their preparedness against investment scams and provide enough help to victims in managing the consequences of victimisation. (Badua, 2020). According to the research conducted by Deliema et al. (2019), the Elaboration Likelihood Model (ELM) of persuasion posits that the success of persuasive communication is contingent upon the recipient's level of motivation and cognitive capacity to engage with and comprehend the message. According to the proposed model, the efficacy of persuasive communication is contingent upon the level of motivation and cognitive capacity possessed by the recipient to engage with and comprehend the message. The significance of persuasion is intricately linked to investment scams

since these fraudulent schemes frequently employ persuasive strategies to deceive and manipulate their intended victims. Through a comprehensive study of the many aspects that exert an impact on the efficacy of persuasive communications, regulators and investors may formulate and implement more efficacious policies aimed at mitigating the occurrence of investment fraud. Bar Lev et al. (2022) propose that the theory pertaining to the impact of persuasion on investment scams is predominantly grounded in the principles of social impact and persuasion. Fraudsters employ persuasive strategies to cultivate a heightened sense of urgency or enthusiasm surrounding their fraudulent endeavours, thereby increasing the likelihood of potential victims making uninformed investment decisions without engaging in a complete investigation.

However, there is a lack of research on these studies. According to Badua (2020), it was found that the research had several limitations that hindered the attainment of a thorough knowledge of the persuasive power associated with investment fraud. Another limitation that should be acknowledged is the lack of information about the specific elements that render individuals susceptible to persuasion. The study highlighted several elements that might lead to victimisation, including limited knowledge, engagement in risky behaviour, and insufficient financial stability. However, it did not provide a thorough comprehension of the psychological and social aspects that render people susceptible to persuasion. In their study, Deliema et al. (2019) identified a key shortcoming pertaining to the examination of the function of persuasion inside investment frauds. The provided analysis lacks comprehensiveness in examining the many persuasive strategies employed by scammers, as well as the underlying elements that contribute to individuals' susceptibility to persuasion. It is important to comprehend the fundamental mechanisms that contribute to the victimisation of individuals in investment scams in order to devise more efficacious techniques for fraud prevention. Bar Lev et al. (2022) identified a drawback in their study pertaining to the examination of the precise persuasive strategies employed by fraudsters and their varying degrees of efficacy across diverse demographics. Furthermore, further investigation is required in order to comprehensively comprehend the intricate interplay between the

psychological and social variables of victims and the persuasive strategies employed, which ultimately heighten their susceptibility to investment scams.

### **2.1.6 Absence of Capable Guardians**

The "lack of capable guardianship" is a key component in the routine activity theory. It refers to the absence or ineffectiveness of individuals, institutions, or other elements that might serve as deterrents to crime. In order to prevent crime, this idea emphasises the value of effective guardianship, such as security guards, law enforcement, surveillance technology, or even the presence of responsible people. According to Tomison (2011), the objective of the research is to study how competent guardianship may be improved while dealing with fraud in rural and distant communities. Guardians can be anyone whose presence could prevent a crime from happening, not just police officers or security guards. Even if guardianship is frequently unintentional, it nevertheless significantly reduces crime. Promoting capable guardianship can be done in a variety of ways and by a variety of people (Tomison, 2011). Two types of financial harm specifically target older individuals: elder fraud, which involves deceitful actions by unknown individuals, and elder financial exploitation, which involves the abuse of trust by individuals in positions of authority. This study examines the traits of individuals who have been victims of fraud and financial exploitation. It also assesses the concept that everyday activities can make individuals more vulnerable to becoming victims. Akdemir and Lawless (2020) aim to investigate the role of human factors in facilitating victimisation by cyber-dependent crimes (such as hacking and malware infection) and cyber-enabled crimes (such as phishing). Additionally, they seek to determine the applicability of the lifestyle routine activities theory (LRAT) to victims of cybercrime. Using the Routine Activity Theory (RAT), the current study seeks to identify the variables that go into the victimisation and fear of online identity theft (OIT). Additionally, it looks into the effects of variables including socio-demographic traits, offline criminal apprehension, and computer-perceptive

abilities. The data used in this analysis came from a self-reported online survey that was distributed to a sample of university employees and students (Guedes et al., 2022).

Halder and Saiyed (2022) reported that in response to individuals being ensnared by the cryptocurrency trap, the parliament enacted the Emergency Cryptocurrency and Regulation of Official Digital Currency Bill, 2019 (the Bill). This legislation not only prohibits the use of cryptocurrencies for commercial purposes or recognition, but also imposes legal responsibility on cryptocurrency exchanges, investors, and agencies for criminal activities. Due to the lack of clarity in the law, individuals involved in cryptocurrency trading, investing, exchanges, and agencies have lost their legal protection and may no longer be able to exercise their fundamental rights as victims under the UN Declaration of Fundamental Principles of Justice for People who are victims of Crime and Abuse of Power. It is essential to assess the problems in such legal challenges from a cyber-victimological perspective in order to offer useful recommendations for recovering fairness (Halder & Saiyed, 2022). Apart from that, Parti (2023) proposes expanding the criterion of target suitability and capable guardianship to assess the application of RAT in financial fraud. In particular, they suggest that the existence of social (competent) guardians, such as relatives, might protect elderly people against financial fraud or scams. They propose expanding the list of measures to include suitable targets and capable guardianship by integrating these new measures into the analysis, updating RAT measures, and analysing investment scam victimisation.

They also further suggest that these measures have age-dependent properties, assuming that elderly and teenage groups respond to them in various ways (Parti, 2023). By subjecting prospective targets to hackers, some routine online actions, according to the notion of routine activities (Van Wilsem, 2013; Mesch & Dodel, 2018), are positive independent variables of cyber victimisation. According to the integrated lifestyles and routine activities theory (L-RAT), certain people are more vulnerable to victimisation than others because of differences in their everyday activities and risk-taking tendencies (Tapp, 2018). In addition, it has been identified



that using public computers and unprotected Internet connections increases the risk of becoming a victim of both cyber-enabled and cyber-dependent crime. The probability of being a target of phishing increased due to both intentional and unintentional sharing of personal information on social networking sites and online advertising platforms. The proliferation of deviant online activities, such as file sharing between peers and free streaming, has increased the risk of falling prey to cyber-dependent crimes (Akdemir & Lawless, 2020). Eck and Clark (2003) argued in a similar vein that this paradigm can help to explain these kinds of online crimes because the victim and the perpetrator are both part of the same geographically dispersed network, making it possible for the perpetrator to contact the victim through the network. Accordingly, Reyns et al. (2011) stated that the temporal overlap between victims and offenders may be lagged for either a short time or a longer time in networks rather than a real-time convergence of them. As a result, it is anticipated by RAT that certain online behaviours, such as banking, shopping, instant chatting, or downloading media, may be linked to increasing rates of victimisation. Increased security measures, such as installing antivirus software, blocking junk email, or periodically changing passwords, may also make it harder for criminals to access personal data (Guedes et al., 2022).

The study employed a mixed-methods research technique to answer the research questions and objectives. The researchers employed binary logistic regression and content analysis methods to assess the Crime Study of England and Wales (CSEW) 2014/2015 dataset, as well as 42 semi-structured interviews conducted with both cybercrime victims and individuals from a non-victim control population. (Akdemir & Lawless 2020). An online anonymous self-report survey designed to research the RAT-related characteristics that influenced victimisation, perceived risk, and fear of OIT was used to gather data for the current study in 2017. The University of Porto Services sent an email inviting students and employees (teaching and non-teaching) to participate in the study with the study's goal and the link to the survey for that reason. The questionnaire was answered by 831 people in total (Guedes et al., 2022). Theoretically, stronger guardianship may be associated with lower rates of victimisation in general and victimisation of OIT in particular,

particularly in people who take several security precautions to secure their personal information. Furthermore, it is anticipated that those who fear and view OIT as posing a greater risk will be more likely to implement these security measures. Thirteen items were used in the current study to assess capable guardianship (Williams, Ngo, and Paternoster, as cited in Guedes et al., 2022).

Studies utilize Routine Activity Theory (RAT) to establish the correlation between a motivated offender, a vulnerable target, the lack of effective guardians, and crime victimisation (Guedes et al., 2022; Akdemir & Lawless, 2020). Akdemir and Lawless (2020) conducted a study that utilized both Lifestyle Exposure Theory (LET) and Routine Activities Theory (RAT) to elucidate the occurrence of victimisation. The study specifically examined the likelihood of persons becoming victims by exposing them to possible offenders. According to these beliefs, crime happens when a vulnerable target and a determined offender come together in the absence of a capable guardian who can prevent the threat (Akdemir & Lawless, 2020). Nevertheless, every research study possesses its own constraints and deficiencies, which can be addressed by forthcoming investigations. The Parti (2023) faced difficulties in accurately assessing the extent of competent guardians and online lifestyle activities. They contended that it is crucial to offer comprehensive explanations of computer proficiency and incorporate contemporary computer security programs to assess competent protection. Furthermore, the list of online manipulation methods offered by them is inadequate, as online fraud adapts to natural calamities like as the COVID-19 pandemic (Parti, 2023). Therefore, our research aims to address the existing knowledge gap by utilizing surveys and conducting face-to-face interviews to get input from participants and disseminate information about the circumstances of victimisation. In addition, the survey items were not developed in collaboration with older adult victims of financial theft to ensure precise measurement (Parti, 2023).

They proposed that conducting a case-specific inquiry is essential, given the diverse manifestations of financial fraud and its tendency to focus on individuals with distinct socio-economic profiles (Parti, 2023). One further constraint identified by

the authors is the utilisation of Mann-Whitney U tests to assess the relationship between age groups and victimisation (Parti, 2023). This approach is labor-intensive, which may be subject to human error, and it does not clarify what factors differentiate the groups (Nachar, as cited in Parti, 2023). Another study, by Guedes et al. (2022), used a convenience sample to do the research. Their target respondent is the university population, including students and staff. They are not allowing generalisation to a larger population, which could make the results less accurate. Thus, our study aims to survey the youth generation from 18 to 30 years old with different occupations, incomes, and education levels. Also, their limitation is only focusing on individual online activities and online crime victimisation. Hence, our study adds more independent variables, such as persuasion from the offender, to investigate the relationship. The study from Akdemir and Lawless (2020) has several limitations, including the absence of measurement of online deviance in CSEW 2014/2015, the lack of macro-variables to determine the risk of cybercrime victimisation, and the failure of designing longitudinal research to assess the efficiency of online guardianship measures.

## **2.2 Theoretical Framework**

The association between investment scam victimisation and its predictors has been explained by two theories that have been analysed in other studies. The studies discussed the victim precipitation theory and the routine activity theory in the investment scam issue.

### **2.2.1 Victim Precipitation Theory**

The victim precipitation theory explains the connections between offenders and victims. It suggests that some victim characteristics or behaviours may unintentionally prompt or encourage criminal activity (Badua, 2020). A study

showed that victim precipitation is still valuable in understanding crime and may even help to decrease victimisation and crime (Petherick, 2017). This theory was used by Badua (2020) to conduct research on the characteristics and exploitation of investment fraud. Those that are not dependent variables, which are persuasion from the offender and investment behaviour, can be explained by this theory. The offenders specifically target wealthy, gullible, and defenceless individuals. According to Badua (2020), scammers always pay attention to investors who have a strong desire to boost their revenue in a short period of time. Hence, scammers can take advantage of this desire by guaranteeing big returns or profits, trapping victims into making investments without performing adequate due diligence (Baker & Puttonen, 2017). Besides that, persuasive techniques used by scammers may affect investment scam victims. Scammers frequently establish credibility and trust through seminars and statements from members who received large sums of money in a short time, which makes them more open to manipulation and dishonest tactics (Badua, 2020). The victims readily accepted the attractive and lucrative investment, oblivious to the possibility of being duped.

### 2.2.2 Routine Activity Theory

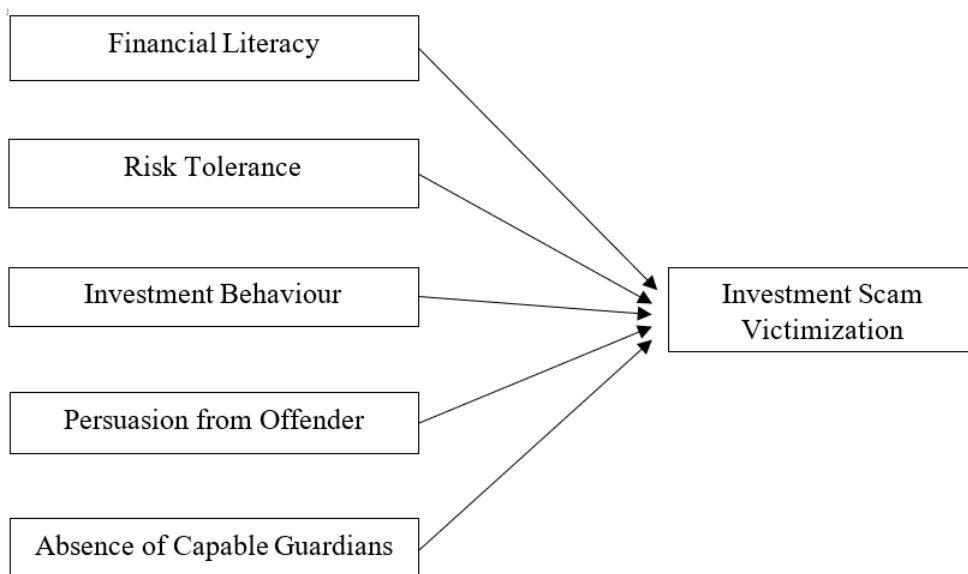


*Figure 2.1.* Routine Activity Theory. Adapted from (Cohen & Felson, 2010).

Routine Activity Theory posits that the probability of becoming a victim of a crime increases when three factors—motivated offenders, vulnerable targets, and a lack

of effective guardianship—coincide (Cohen & Felson, 2010). It has been employed in research to investigate several forms of fraud, such as investment fraud, financial statement fraud, and insider fraud (Badua, 2020; Reurink, 2019; Samonas, 2013). A crucial component of this idea is the lack of a competent protector. Therefore, our study seeks to determine the correlation between the lack of competent protectors and the susceptibility to investment fraud. As stated by Felson (1995, p. 53), guardianship refers to the act of deterring crime via the presence of individuals and enabling crime through their absence (Felson, as cited in Hollis et al., 2013). In some instances, the lack of competent guardians can also be referred to as a lack of efficient supervision and regulation in the financial sector (DiNapoli, 2008). When there are gaps in the law or ineffective enforcement, fraudsters have the possibility of operating undetected or without being held accountable (DiNapoli, 2008). On the other hand, a lack of a capable guardian can be considered isolation and a lack of social support. Studies have revealed that victims are more likely to be those who are socially isolated and have no one with whom to debate investment suggestions (Finra, 2021). Scammers may find it simpler to influence and deceive their victims due to this lack of social support.

## 2.3 Conceptual Framework



*Figure 2.2.* Factors affecting investment scam victimisation among Malaysian youth.

A conceptual framework in Figure 2.2 has been introduced to investigate the victimisation of young Malaysians in investment scams, in accordance with the theories and models that were covered in the previous section on theoretical framework. Five independent variables are included in this conceptual framework: financial literacy, risk tolerance, investment behaviour, offender persuasion, and lack of capable guardians. Prior studies have proven that there is a significant impact of the five independent factors on those who fall victim to investment scams, often known as financial scams. Therefore, in order to ascertain whether the conclusion is accurate, this study will employ this conceptual framework. In the following part, the hypotheses will be created using this framework.

## **2.4 Hypotheses Development**

### **2.4.1 Financial Literacy and Investment Scam Victimization**

H1: Higher levels of financial literacy are associated with a reduced likelihood of investment scam victimisation.

Financial literacy, according to Venkatesan and Venkataraman (2018), is the ability to make wise decisions about financial resources. Financial literacy, as defined by the Organisation for Economic Co-operation and Development (OECD), encompasses a range of factors including awareness, knowledge, skills, attitude, and behaviour that are essential for making informed financial decisions and achieving personal financial well-being (OECD INFE, as cited in Padil et al., 2020). Prior research (Li et al.; Al-Tamimi & Kalli, as cited in Padil et al., 2020) has shown that financial literacy plays a crucial role in investment decision-making. Lokanan's research, as cited in Chariri et al. (2018), indicates that individuals with limited

financial expertise are most vulnerable to investment fraud. According to Titus et al., the likelihood of successfully defrauding investors who are aware of previous fraudulent investments is low (as stated in Chariri et al., 2018). This rationale aligns with the findings of Shiller's research on the decision-making process of non-professional investors, as cited in Chariri et al. (2018). Novice investors are more inclined to trust the guidance of those who guarantee substantial profits since they lack concrete proof of the investment's legitimacy (Shiller, as cited in Chariri et al., 2018).

Demographic factors, such as gender, work position, ethnicity, family income, and education, play a role in moderating the relationship between financial literacy and the likelihood of falling victim to investment scams. This has been discussed by various researchers, including Danes & Hira, Markovich & DeVaney, Chen & Volpe, Murphy, and Thaden & Rookey, as cited in Chariri et al. (2018). Investors with higher levels of financial literacy are more adept at identifying investment scams. According to Chariri et al. (2018), There exists an inverse relationship between knowledge of finances and the likelihood of falling victim to investment fraud. Financial education programs enhance individuals' understanding of financial matters and decrease the occurrence of individuals being deceived by fraudulent investment schemes (Fernandes et al., 2014).

#### **2.4.2 Risk Tolerance and Investment Scam Victimization**

H2: There is a significant relationship between risk tolerance and investment scam victimisation among youth.

This investigation established the hypothesis stated above. An investor's risk tolerance is determined by the level of volatility in the value of their investments. Risk tolerance is a crucial factor in investing since it often dictates the kinds and quantities of assets that an individual chooses to purchase. In addition, the level of

risk tolerance can also exert a substantial impact on the likelihood of falling victim to investment scams. The reason for this is that individuals with greater risk tolerance and engagement in risky behaviours, together with higher levels of debt (Anderson, 2004; Kerley & Copes, 2002), have a higher probability of falling victim to fraud (Van Wyk & Benson, 1997; Schoepfer & Piquero, 2009).

Kieffer and Mottola (2016) have established that the impact of overconfidence on financial decisions is not a novel concept. A seminal study on investment behaviour conducted by Barber and Odean (2001) found that there is a correlation between overconfidence and increased trading activity as well as decreased portfolio results. Other researchers have also found similar results, indicating that overconfidence strongly predicts dangerous financial behaviour. Individuals with excessive self-assurance made a greater contribution to an investment competition and showed a higher propensity to accept financial risks (McCannon et al., 2015).

### **2.4.3 Investment behaviour and Investment Scam Victimization**

H3: There is a significant relationship between investment behaviour and investment scam victimisation among youth.

The above is the hypothesis developed for this study. Investment behaviour can significantly influence investment scam victimisation. This is because investment behaviour indicates the individual's personality and mindset when making investment decisions. Humans have an instinct to categorise certain events into different mental compartments, and the distinction between these compartments sometimes affects their behaviour more than the actual situations. Personal motives and character are said to have contributed to a person being a victim of investment fraud. Greater vulnerability results from a desire for wealth (Badua, 2020). The repercussions of victimisation vary based on which victims pose the greatest harm to an individual's life. The victims had significant financial losses, leading to



challenges with managing money, accumulating debt, and ultimately facing bankruptcy (Badua, 2020). Hence, investment fraud poses a substantial issue (Button et al., 2006; Button, Lewis & Tapley, 2012; Australian Bureau of Statistics, 2012).

In practice, the victims may experience financial losses, loss of employment, psychological effects, emotional impacts, high levels of anger, stress, health problems, social problems like broken relationships and breakdown of the family, physical problems, and self-blame. Cross, Richards, & Smith (2016); Harvey, Kerr, Keeble & Nicholls (2014). As a result, behavioural change is a factor that may result in investment scam victimisation. Investment behaviour has a significant impact on youth investment decisions and their likelihood of becoming victims. (Badua, 2020).

#### **2.4.4 Persuasion from Offender and Investment Scam Victimization**

H4: There is a significant relationship between persuasion from the offender and investment scam victimisation among Malaysian youth.

Lastly, persuasion can also be significantly related to investment scam victimisation. Individuals who fall victim to investment scams are inclined to be more susceptible to persuasive strategies that target their emotions rather than their cognitive capabilities. The premise of this concept is rooted in the observation that individuals engaging in fraudulent activities frequently employ tactics that leverage emotional appeals to convince prospective victims to engage in their schemes. Consequently, those with a stronger propensity towards experiencing affective states may have a higher susceptibility compared to those with a lower propensity (Kaufman et al., 1999).

Many studies have shown that people who are easier to persuade are more likely to fall for investment scams. The susceptibility of consumers to persuasion approaches is influenced by their previous knowledge of the product or offer and their ability to recognize persuasion attempts (Campbell & Kirmani, 2000). Additionally, Button et al. (2006) found that persuasive strategies, such as social proof and scarcity, will enhance the risk of individuals becoming victims of investment scams. It demonstrates the relationship between persuasion and investment scam victimisation.

#### **2.4.5 Absence of Capable Guardians and Investment Scam Victimization**

H4: There is a significant relationship between the absence of capable guardians and investment scam victimisation among Malaysian youth.

Previous research has established a robust correlation between social support and falling victim to scams. Specifically, individuals who lack adequate social support are more susceptible to being targets of fraudulent activities. Social support is the moral or material assistance an individual receives from society, including assistance from family, friends, coworkers, neighbours, public welfare organisations, and business associations (Person, 1986). Scam victims are more likely to explore the full spectrum of social activities and engage with strangers if real society is less supportive of them. As a result, the likelihood of being exposed to a criminal circumstance rises. Less social support will also prevent victims from having efficient supervisors. The routine activity theory holds that a crime happens when a motivated offender, an appropriate target, and a lack of or poor prevention efforts come together (Cohen and Felson, 1979; Cohen et al., 1981). A "protector" who effectively stops the incidence and growth of scams may be created if a victim discusses the situation with someone else before or during victimisation. This is a

crucial deficiency for those who do not have social support, which helps the crime be committed successfully (Zhang & Ye, 2022).

The absence of safety measures, such as antivirus software, online camera protection, or credit card monitoring, heightens the probability of criminal conduct (Leukfeldt and Yar, 2016; Hawdon et al., 2020). Simultaneously, the level of computer expertise and familiarity may affect the applicability of the target (Bossler and Holt, 2009). In a study conducted by Choi (2008), the researcher assessed the appropriateness of a group of college students as potential candidates for engaging in risky online activities, such as visiting unfamiliar websites, downloading free MP3 files or software, and clicking on icons without caution. The application of firewall, antispymware, and antivirus software was used in the study to gauge digital guardianship (Parti, 2023). Higher guardianship could theoretically be linked to lower rates of victimisation overall, particularly for those who take several security precautions to safeguard their personal information.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.0 Introduction**

Examining the characteristics that influence victimisation from investment scams among young Malaysians is the main goal of this research. We have covered study design, data collecting, sample design, research instrument, measurement constructs, data processing, and data analysis in this chapter.

### **3.1 Research Design**

The design of the investigation refers to the structured framework or procedures that will be used in the inquiry. Researchers gain by focusing on approaches that are relevant to their chosen topic and organising their work to produce positive results. To choose the best model for the study, a researcher needs to have a thorough awareness of the many forms of research design. There are several forms of research. There are various sorts of study designs, including descriptive, experimental, correlational, diagnostic, and interpretative. Two categories of research designs are both quantitative and qualitative investigations.

Quantitative techniques are the most used research frameworks in social science research. Quantitative research is a collection of tools, procedures, and assumptions used to analyse numerical patterns (Uta libraries, 2023). Thus, statistics are employed to analyze the acquired data. Quantitative research utilises methods such as experiments, methodical observations, and questionnaires, as opposed to qualitative investigation. Qualitative analysis is predicated upon narratives and

open-ended observations, which are collected and analysed through the utilisation of various methods such as focus groups, interviews, ethnographies, and quantitative and qualitative research course manuals (What Is Quantitative Research?, 2023). Consequently, it can reduce the duration and exertion demanded by researchers while also guaranteeing the impartiality of the study.

## **3.2 Data Collection**

Collecting data is a fundamental component of any investigation. The final result will ultimately depend on the accuracy of the data at the moment it is obtained. There exist two clearly different types of information sources which consist of data from both primary and secondary sources. The previous method was selected to gather the essential data required to achieve the study's objective.

### **3.2.1 Primary data**

Primary data, in the context of research, refers to material that is collected directly from personal experiences or empirical evidence, without relying on existing sources. It might also be called unprocessed data or direct knowledge. The data collection approach is expensive as it necessitates the allocation of human resources and financial resources to engage an agency or external organisation to carry out the study. The investigator directly supervises and manages the data collection process. The bulk of the data is collected by methods such as assessments, physical tests, surveys, personal interviews, telephone interviews, case studies, focus groups, and other similar approaches (Byjus, 2022). Questionnaires are sent to particular respondents in order to collect primary data and gather information relevant to the study's topic. The study incorporated a series of questions that inquired about individuals' encounters with victimisation from investment frauds. The reason for

using questionnaires in this research is their cost-effectiveness and time efficiency compared to other methods. Furthermore, the questionnaire is more dependable as it is offered in written format, enabling respondents to choose from a variety of answers for each subject. Moreover, data is gathered with a specific purpose in order to enhance its reliability and suitability for the study's objective (Byjus, 2022).

### **3.3 Sampling Design**

A vital component of research is sampling design. Samples are taken to better understand a population because it is not always achievable to monitor every member of it. Acquiring samples that fairly represent the population is the objective. The sampling effort needs to be exact due to time and money constraints. More samples are needed than for less variable groups to describe the characteristics of highly variable populations. This study's sampling design incorporates the target population size, framework and location collection, sample process, and sampling size (Wills, Roecker, and Avello, 2020).

#### **3.3.1 Target Population**

The population under investigation and from which conclusions are drawn is referred to as the target population. When conducting efficiency research, it is crucial to offer a comprehensive description of the characteristics of the population being studied and any subgroups. The researchers must guarantee that respondents are a true reflection of the target population in order to gather and interpret precise data. It is essential to confirm the eligibility of the survey participants.

This study aims to analyse the factors that can impact the victimisation of young individuals by investment scams. Hence, the specific demographic under

investigation in this study comprises Malaysian individuals aged 18 to 29, encompassing individuals of Malay, Chinese, and Indian descent.

### **3.3.2 Sampling Location**

The designated area for data collection is referred to as the sample location. As the target population consists of all young people in Malaysia, the sampling location will be any area inside Malaysia. The sampling area for this study will include both West and East Malaysia. Malaysia consists of thirteen states.

### **3.3.3 Sampling Elements**

A component is a discrete unit or individual that is chosen from a certain population. The research will choose and analyse particular elements from the population using a certain sampling technique. This study focuses on sampling elements or target respondents who are young individuals in Malaysia from Peninsula Malaysia. The sampling method used is quota sampling. In addition to states, the participants chosen for this study also vary in terms of their race, age groups, backgrounds, and years of job experience.

### **3.3.4 Sampling Technique**

McCombes (2023) identifies two distinct sampling methods: probability sampling and non-probability sampling. Random selection is an essential element of probability sampling, a method used to obtain reliable statistical conclusions about the entire population. In contrast, non-probability sampling involves selecting participants in a non-random manner, often based on practical considerations or

other variables, which facilitates the data collection process. Both sampling designs yield various sampling procedures.

Quota sampling involves setting specific targets for the total number of respondents required from each subgroup, which are determined by splitting the population into smaller groups based on criteria such as age or location. The data utilised in this study were collected using questionnaires specifically tailored for Malaysians aged 18 to 30. Consequently, those who answered were not given an equal opportunity to take part in the study. The study has employed quota sampling, a non-probability sampling approach, to pick respondents. The rationale for selecting this method is that quota sampling yields comparable outcomes to probability sampling when a sampling frame is not accessible. Quota sampling is a direct and uncomplicated method used for selecting samples. Therefore, quota sampling makes it possible to gather the collection of sufficient and reliable data to conduct the pilot test and continue with evaluating the hypotheses. According to the study's criteria, Malaysian citizens aged 18 to 30 are eligible to respond to the questionnaire.

### **3.3.5 Sampling Size**

Sample size is the total quantity of participants in a study, who are categorised based on variables such as geography, gender, and age to ensure that the sample accurately represents the overall population. Determining the ideal number of samples is an essential component of statistical analysis. The study section of the National Education Association allegedly published a methodology for calculating sample size, as described by Krejcie and Morgan (1970). A table was supplied to ascertain the ideal number of samples so that a reliable decision model can be generated.



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

Where:

N = Population size

e = Acceptable sampling error

n = Sample size

The calculation indicates a confidence level of 95% and a p-value of 0.05. Based on the information provided by the contributors of Wikipedia (2023), the estimated population of West Malaysia in 2023 is approximately 22.5 million. Hence, replace all the data provided earlier into the given equation.

$$n = \frac{22,500,000}{1+22,500,000(0.05^2)}$$

$$n = 399.99$$

$$n = 400$$

The result indicates that the sample size consists of 399.999 individuals. A sample size of 400 respondents is chosen to guarantee the acquisition of precise data, thereby necessitating a minimum of 400 respondents.

## **3.4 Research Instrument**

### **3.4.1 Questionnaire**

The major information regarding Malaysian youth was collected using a questionnaire as the study technique. The questionnaire is a commonly employed technique for gathering data, particularly in the realm of social scientific research. The main objective of a questionnaire in research is to gather relevant data in the most precise and reliable manner feasible. Thus, a crucial aspect of research technique is assessing the validity and reliability of a questionnaire, which refers to its precision and uniformity (Taherdoost, 2016). The concepts and items were meticulously developed based on the study's objectives, research inquiries, and the specific set of participants being targeted. The reliability of the measurement scales was enhanced by referring to literature on relevant topics. The questionnaires in this study are disseminated electronically through the use of Google Forms.

The survey instrument employed in this research comprises a summary page and seven sections. Sections A through G contain a total of 48 questions. Respondents must fill out Section A of the questionnaire, which requests information about their demographic profile, including age, sex, ethnicity, relationship status, level of education, job, monthly income, and other pertinent variables. All participants were instructed to indicate their level of financial literacy, risk tolerance, investment behaviour, persuasion from the offender, lack of capable guardians, and investment scam victimisation (dependent variable) on a 5-point Likert scale in Sections B through G of the acknowledgement. This was done to measure their responses to the questions. As an illustration, the scale can be interpreted as follows: "1 = Strongly Disagree", "2 = Disagree", "3 = Neutral", "4 = Agree", and "5 = Strongly Agree"

### **3.4.2 Pre-Test**

One of the professors from Universiti Tunku Abdul Rahman examined the questionnaire before it was given to the undergraduate students at the UTAR Kampar Campus.

### **3.4.3 Pilot Test**

One type of preliminary investigation that is carried out prior to the main research is called a pilot test. This type of research is also referred to as a feasibility study or a pilot study. According to Simkus (2023), the purpose of this study is to evaluate the research methodologies, tools, and procedures that are planned for the bigger study in terms of their level of feasibility, validity, reliability, and efficacy. It provides researchers with assistance in refining their study design, determining whether or not the techniques of data collecting are feasible, and estimating the sample sizes that are necessary for the primary study. As an illustration, this may involve running a test run of a survey questionnaire with a limited number of participants in order to discover items that are confusing or ambiguous. In order to increase the effectiveness of the questionnaires in measuring respondent behaviour, a few small changes and additions were made to the questionnaires based on the pilot study (Mokhsin et al., 2019). This study's pilot study was carried out over the course of five days, beginning on 1 March 2024 and ending on 5 March 2024. At the UTAR Kampar Campus, 30 questionnaires were delivered to undergraduate students from several faculties. The cafeterias at UTAR were chosen as the designated location for gathering primary information from undergraduate students. To evaluate the dependability of such surveys, all gathered data was subjected to analysis using the SPSS 26.0 programme.

## **3.5 Constructs Measurement**

Construct evaluation refers to the quantitative assessment of abstract concepts (Bhandari, 2023). The purpose of construct measurement in this study is to provide a reliable and precise result.

### **3.5.1 Scale of measurement**

The use of measuring scales greatly improves the collection, analysis, and representation of data. The statistical methodologies used to gather and analyse data might differ based on the characteristics of the data being gathered. Mishra et al. (2018) assert that scales of measurement are employed to establish and categorise variables. The factors were classified and characterised to enable measurement using a measurement scale. This study utilised three different types of measuring scales which are the ordinal scale, the nominal value scale, and the interval value scale.

#### **3.5.1.1 Nominal Scale**

A nominal scale is a classification of scale for measuring in which labels or identifiers are assigned numerical values to denote or distinguish the objects being assessed. The data's identification is determined by the nominal scale of measurement. The data can be categorised, but it cannot undergo multiplication, division, addition, or subtraction with other pieces of information. Mishra et al. (2018) state that the use of a nominal scale allows for the classification of acquired data into distinct groupings or categories. The value system is employed in Section A. This study used a nominal scale to measure categorical variables, such as gender, as seen below.

Example of nominal scale:

<p><b>Your gender:</b></p> <p><input type="checkbox"/> Male                      <input type="checkbox"/> Female</p>
--

### 3.5.1.2 Ordinal Scale

Ordinal scales are utilised as an estimation instrument in the fields of statistics and research. Franceschini et al. (2004) define it as a scale that assigns ranks to data based on the relative significance of the numbers but does not have a fixed unit of measurement or an actual zero point. This scale is alternatively referred to as a relative magnitude scale. Ordinal scales are a variety of metric instruments where data is organised and categorised according to the relative importance or order of classes in a single direction. Ordinal measurement can be employed to compare and establish a hierarchy among diverse entities. The absence of precise gaps between the data points does not suggest, but rather indicates the order or ranking of the data points. The scale is utilised in Section A. Depicting the age grouping in the subsequent fashion, the ordinal system was applied to the present research.

The illustration of an ordinal scale:

<p><b>Your age:</b></p> <p><input type="checkbox"/> 18-21                      <input type="checkbox"/> 22-25                      <input type="checkbox"/> 26-29</p>
---

### 3.5.1.3 Interval Scale

An interval scale is a type of measurement scale where the gaps between each point on the scale are of equal distance. Nevertheless, it is important to note that interval scales lack a genuine zero point, hence signifying that a value of zero does not signify the whole absence of the measured feature (Wu & Leung, 2017). The Likert scale, a frequently employed tool in surveys and questionnaires, is a form of interval scale. While the Likert scale is not a perfect interval scale, it can be considered an imperfect interval scale, especially when the number of response alternatives is increased. This assumption is derived from the observed consistent intervals between consecutive points on the range, despite the absence of a definitive zero point on the scale (Tsui, 1997). This scale is used in Sections B to G. Therefore, the Likert scale was utilised for analysis in this research the independent factors and dependent variables in the following manner.

An illustration of an interval scale in the financial literacy:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I understand the basic concepts of investing.	1	2	3	4	5

## 3.6 Data Processing

The systematic conversion of unprocessed data into meaningful and valuable insights constitutes data analysis. Kveder and Galico (2008) identified four main stages in data processing: verification, editing, coding, and transcription. After gathering the respondents' responses, data processing is carried out. When processing data, great attention to detail and caution are required to prevent errors. In essence, raw data is transformed into information through data processing.

Certain computer programs, like the study's use of SPSS 16.0, can be used for data processing.

### **3.6.1 Data Checking**

The data checking stage was completed first. This will guarantee the validity of each and every survey. The surveys might not be legitimate because of errors such as data omission, missing data, and inconsistent answers (Kaji et al., 2014). By reviewing the data, this problem is minimised. You can find these mistakes by performing a pilot test. The surveys can then be modified and changed in order to increase dependability. Moreover, the researchers are responsible for ensuring the accuracy and appropriateness of the data obtained from the surveys (Quality gurus, 2023). Bell et al. (2022) found that data verification leads to increased accuracy and consistency of the data.

### **3.6.2 Data Editing**

After completing the data verification procedure, the next stage is data modification. This procedure entails the examination, modification, or revision of the target respondents' incomplete or contradictory responses. The number of inadequate responses can be decreased by editing the data. The researchers fill in the gaps in the data when they discover incomplete responses by mimicking the respondents' manner of answering. Editing the data helps to improve the consistency of the data and reduce the number of dissatisfied responses (Quality gurus, 2023).

### **3.6.3 Data Coding**

Data processing is a subsequent phase. Data coding is the allocation of numerical values to the replies given by the persons under investigation. Next, the user inputs these numerical codes into the SPSS 16.0 software. The unspecified value will be assigned the code 99, while the responses will be encoded from 1 to 5. To summarise, data coding refers to the procedure of classifying modified data into numerical values or other symbols (Quality gurus, 2023).

### **3.6.4 Data Transcribing**

In the concluding stage, the data are transcribed. Data transcription is the process of converting raw information into usable data. SPSS 16.0 was used for the whole data processing procedure.

## **3.7 Data Analysis**

Data analysis, according to Simplilearn (2023), is the process of examining, modifying, and modelling data in a way that provides meaningful data and enables inferences or conclusions. The data are evaluated to determine whether the study's hypotheses are supported or refuted. Therefore, it will help us to understand our proposed research questions. SPSS is utilised to do many statistical analyses, including descriptive statistics, validity test, multicollinearity test, normality test, and inferential analysis.



### **3.7.1 Descriptive Analysis**

An first descriptive analysis has been conducted. Descriptive analysis is an approach to statistical analysis employed to ascertain and articulate the primary characteristics of a dataset (Corporate finance institute, 2022). It is employed to ascertain measures of dispersion, variability, and mean values (Hayes, 2024). This research includes tables that present the average, variance, frequency, and proportion of the data. In addition to tables, Google Forms also generate graphs such as pie charts and histograms for the obtained data.

### **3.7.2 Scale Measurement**

#### **3.7.2.1 Reliability Test**

Following this, Cronbach's alpha is utilised to evaluate the scale's accuracy (Sharma, 2016). According to Sharma (2016), if the scales are correct, they are not affected by random mistakes. Consequently, it is imperative to utilise reliable scales. Internal consistency is one of the key signs of reliability. When assessing internal reliability, the Cronbach's alpha value is often employed (Santos, as cited in Sharma, 2016). It explains how closely each scale item analyses the same underlying quality. It establishes the mean correlation of the scale's constituent parts. It always ranges from 0 to 1, and higher numbers imply greater reliability.

Table 3.1:

*Cronbach's Alpha Rule of Thumb*

Alpha Coefficient Range	Reliability Assessment
< 0.6	Poor
0.6 to < 0.7	Acceptable for exploratory research
0.7 to < 0.8	Good
0.8 to < 0.9	Excellent
0.9 to 0.95	Somewhat high
≥ 0.95	Too high; indicators are redundant

Source: Hair et. al, 2019

The study on Table 3.1 demonstrates that the dependability of the scales is affected when the Cronbach's alpha value falls below 0.6. When the result is more than or equal to 0.6 but less than 0.7, the dependability of the scales is considered high. The reliability of the scales is confirmed when the Cronbach's alpha is between 0.7 and 0.8, inclusive. When the value of Cronbach's alpha falls within the range of 0.8 to 0.9, the scales are said to possess exceptional reliability. A Cronbach's alpha value ranging from 0.9 to 0.95 is classified as quite high. If the value reaches 0.95, it suggests the presence of duplicate variables, which is deemed too high. In order to guarantee the dependability of a scale, it is necessary for the Cronbach's alpha coefficient to be within the range of 0.6 to 0.95.

### **3.7.3 Preliminary Data Screening**

#### **3.7.3.1 Multicollinearity**

According to Frost (n.d.), multicollinearity occurs when a regression model contains two or more independent variables that are correlated with one another. According to Statistics How To (n.d.), the factors that can cause multicollinearity include a lack of data, the use of dummy variables, and the inclusion of two related variables in a regression model. It is essential for a researcher to be able to spot multicollinearity in their study as multicollinearity problem could have an impact

on the research's conclusions and results. Therefore, early detection is required in study before the regression is carried out. Tolerance and the variation inflation factor (VIF) are two ways to measure multicollinearity. SPSS can be used with either approach (Sekaran & Bougie, 2016). There is high multicollinearity between the independent variables if the VIF is greater than 10 and the tolerance value is less than 0.1 (Sekaran & Bougie, 2016).

### **3.7.3.2 Normality**

It is necessary to conduct inferential statistical techniques on the assumption that normalcy is met (Coakes & Ong, 2011). The absence of a normal distribution in data prevents the acquisition of precise and reliable results, which are necessary for inferring population parameters (Ghasemi & Zahediasl, 2012). According to Hair et al. (2010), the normal range is the essential constant distribution of probability needed to create the sample normal distribution. This study examines the assumption of normalcy by utilizing the statistical techniques of skewness and kurtosis. According to Hair et al. (2010), data is considered normal if the skewness falls within the range of -2 to +2 and the kurtosis falls within the range of -7 to +7.

### **3.7.4 Inferential analysis**

A crucial component of data analysis is inferential analysis. The collected sample data is utilized at this stage to draw inferences about the general population. In order to provide more clarification, it should be noted that the sample statistics acquired during a research are utilised to make estimations about the population parameters that are not known. This study examines the relationship between investment scam victimisation (the dependent variable) and several independent variables, including financial literacy, risk tolerance, investment behaviour, persuasion from offenders,

and absence of capable guardians. The analysis used is inferential, specifically multiple linear regression analysis.

### 3.7.4.1 Multiple Linear Regression Analysis

When a single dependent variable is present alongside several independent variables, a mixture of linear regression is applied. Since our study has five independent variables, multiple linear regression can be employed in this investigation.

Several-linear regression is represented by the equation:

$$ISV_i = \beta_0 + \beta_1 FL_i + \beta_2 RT_i + \beta_3 IB_i + \beta_4 PO_i + \beta_5 ACG_i + \mu_i$$

Where

$ISV_i$  = Investment Scam Victimization

$FL_i$  = Financial Literacy

$RT_i$  = Risk Tolerance

$IB_i$  = Investment Behaviour

$PO_i$  = Persuasion from Offender

$ACG_i$  = Absence of Capable Guardians

$\mu_i$  = error term

Based on the above equation, we will do another linear regression analysis. According to the hypothesis developed in chapter two, it has been hypothesised that the dependent variable, situated on the left, is significantly influenced by each of the independent variables, which are positioned on the right side of the formula.

## **CHAPTER 4: RESEARCH RESULTS**

### **4.0 Introduction**

This chapter contains the conclusion of the data analysis. The initial analysis involves examining the descriptive aspects, while the subsequent step entails conducting a reliability assessment to ensure the scales' dependability. Thirdly, multicollinearity and non-normality issues are checked for during the initial screening of the data. Finally, an analysis of multiple linear regression is carried out. These analyses are all completed with SPSS 16.0.

### **4.1 Descriptive Analysis**

To enhance data clarity, an initial examination of descriptive is performed. Beginning with a descriptive analysis, demographic data from the first part of the survey is examined. Additionally, a comprehensive analysis is conducted on the data obtained from Sections B and C. In the subsequent study, data is summarized through the utilization of tables and pie charts.

#### **4.1.1 Respondents' Demographic Profile**

This research includes five demographic data categories which are gender, age, race, occupation, educational level, and income level. The ensuing sections examine each of them individually.

#### 4.1.1.1 Gender

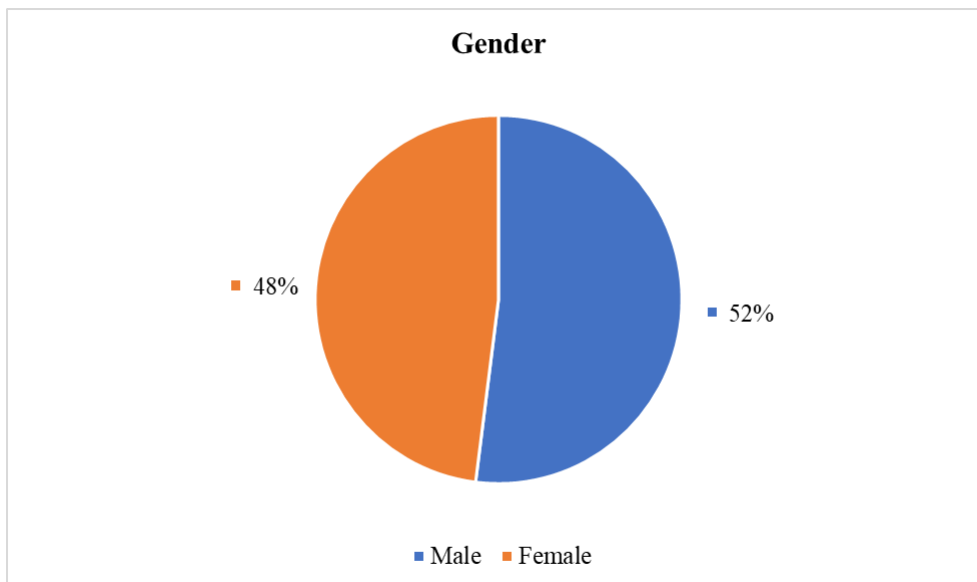
Table 4.1

*Descriptive Analysis for Gender*

Gender	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
Male	208	52	208	52
Female	192	48	400	100

Figure 4.1

*Descriptive Analysis for Gender*



Initially, participants are classified based on their gender. According to Table 4.1 and Figure 4.1, 208 respondents, accounting for 52% of the total, are male, while 192 respondents, making up 48%, are female. Therefore, a greater number of males have successfully participated in our study compared to females.

#### 4.1.1.2 Age Group

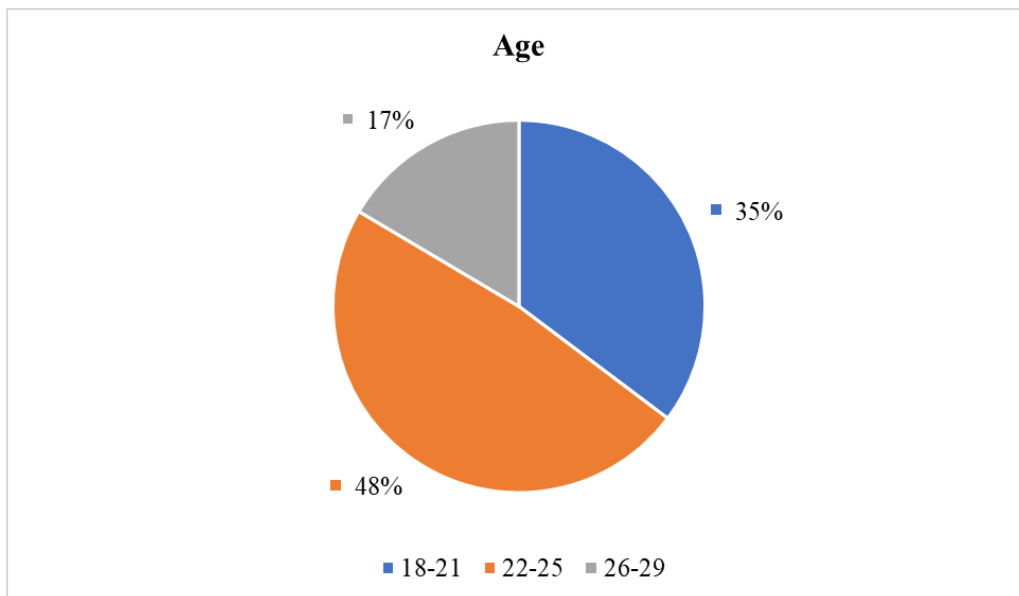
Table 4.2

*Descriptive Analysis for Age*

Age	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
18-21	141	35.3	141	35.3
22-25	193	48.3	334	83.5
26-29	66	16.5	400	100

Figure 4.2

*Descriptive Analysis for Age*



The age group of the responders is then used to group them. Table 4.2 and Figure 4.2 show that 193 responders, or 48% of the participants, are between the ages of 22 and 25. Then, 141 responders, 35% of the respondents are between the ages of

18 and 21. Lastly, 66 responders, or 17% of the participants, are between the ages of 26 and 29.

#### 4.1.1.3 Race

Table 4.3

*Descriptive Analysis for Race*

Race	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
Malay	50	12.5	50	12.5
Chinese	267	66.8	317	79.3
India	83	20.8	400	100

Figure 4.3

*Descriptive Analysis for Race*

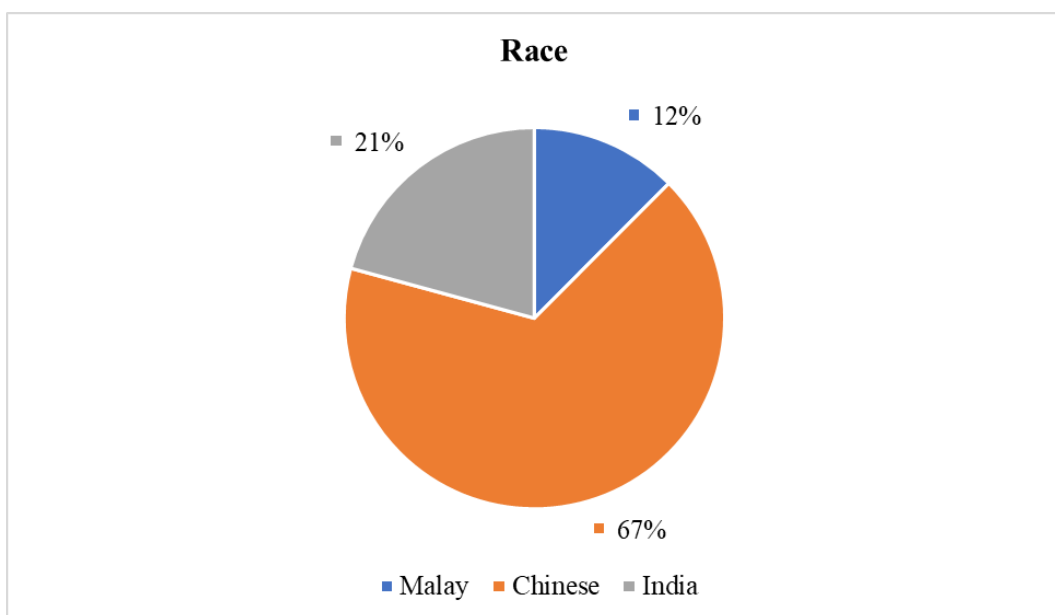




Table 4.3 and Figure 4.3 indicate that the participants are divided into three racial categories. Chinese respondents make up 267 out of the total respondents, or 67% of the respondents. Indians make up 21% of the respondents, or 83 people. Malays make up the least percentage of respondents, with only 50 out of 12%.

#### 4.1.1.4 Education Level

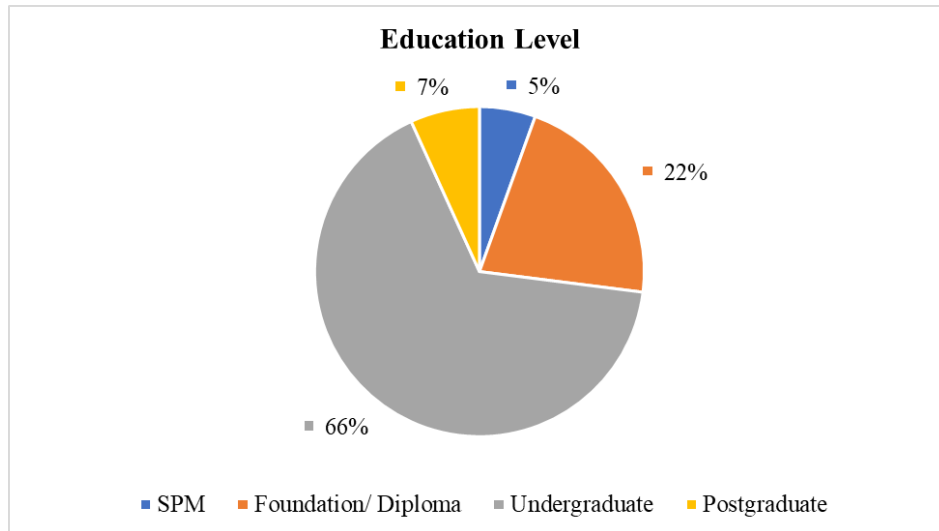
Table 4.4

*Descriptive Analysis for Education Level*

Education Level	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
SPM	22	5.5	22	5.5
Foundation/ Diploma	86	21.5	108	27
Undergraduate	265	66.2	373	93.2
Postgraduate	27	6.8	400	100

Figure 4.4

*Descriptive Analysis for Education Level*



The participants are categorised into four educational levels, as shown in Table 4.4 and Figure 4.4. Among the 265 those who responded, undergraduate students make up the majority of responders (66%). The next group of respondents, including 86 people, are foundation or diploma students (22%). Postgraduate and SPM students make up the remaining 7% and 5% of the sample.

**4.1.1.5 Occupation**

Table 4.5

*Descriptive Analysis for Occupation*

Occupation	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
Student	276	69	276	69
Employee	81	20.3	357	89.3
Self-employed	31	7.8	388	97.1
Unemployed	12	3	400	100

Figure 4.5

*Descriptive Analysis for Occupation*

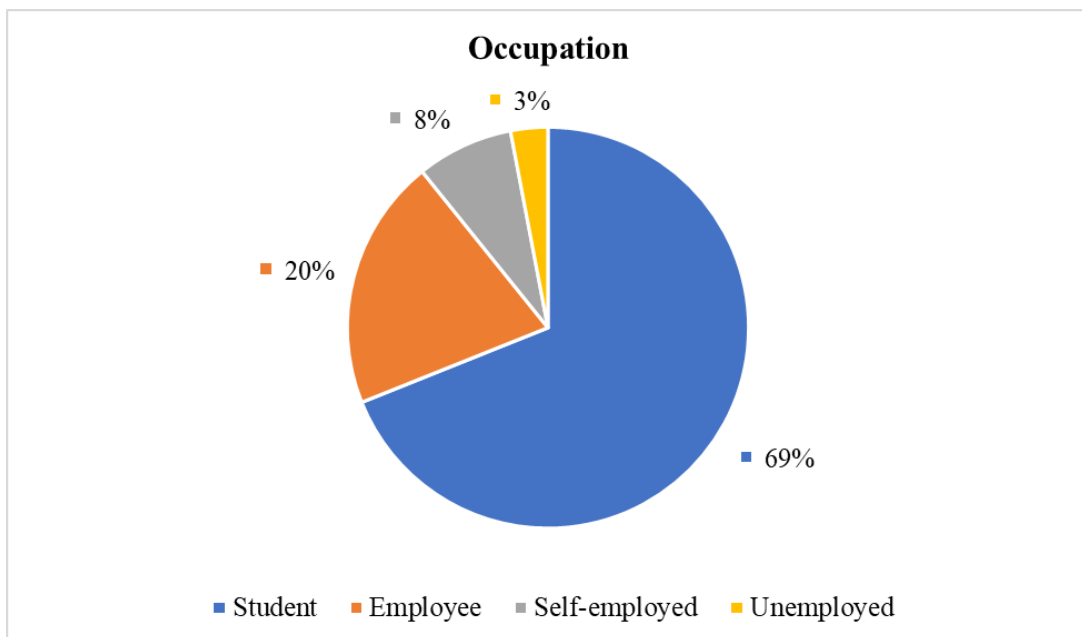


Table 4.5 and Figure 4.5 display the four occupation categories into which the participants are divided. Students made up the majority of responses (69%), out of the total 276 respondents. Employees (20%) make up the next category of respondents, including 81 individuals. The remaining 8% and 3% of the sample are self-employed and jobless.

#### 4.1.1.6 Income

Table 4.6

##### *Descriptive Analysis for Income*

Income	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
Less than RM 1,500	255	63.7	255	63.7
RM1,500 to RM4,999	103	25.8	358	89.5
RM5,000 to RM9,999	28	7	386	96.5
More than RM10,000	14	3.5	400	100

Figure 4.6

*Descriptive Analysis for Income*

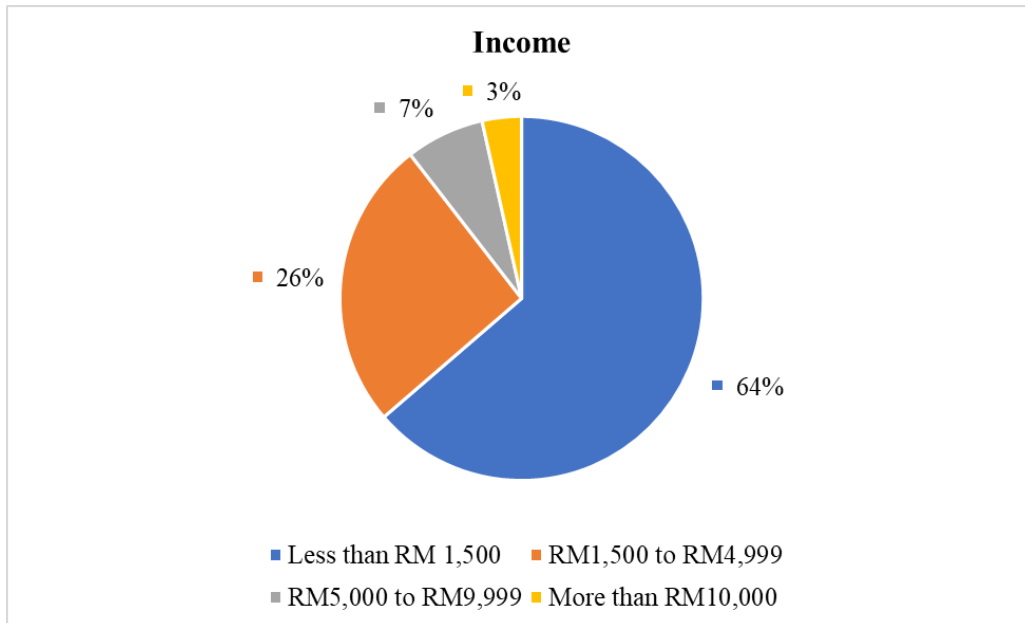


Figure 4.6 and Table 4.6 show the four income brackets that the participants are assigned to. The majority of respondents, at 64% or 255 people, make less than RM1,500 per month. Among the 103 participants, the next group of respondents or 26% of the total, fell into the RM1,550 to RM4,999 range. People with incomes between RM5,000 and RM9,999 and over RM10,000 make up the remaining 7% and 3% of the sample, respectively.

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

The analysis of the replies regarding both dependent and independent variables gathered from Sections B and C is conducted in the subsequent part. The average (mean) and variability (standard deviation) were employed as indicators of central tendency for evaluating each variable.

#### 4.1.2.1 Investment Scam Victimization

Table 4.7

*Central Tendencies Measurement of Investment Scam Victimization*

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
ISV1	I am more cautious when it comes to investing my money	400	4.0325	0.7569	2	5
ISV2	I am willing to take risks to make money	400	3.9675	0.9212	5	2
ISV3	I am careful when receiving investment offers.	400	4.16	0.8038	1	4
ISV4	I felt pressured to invest in the opportunity	400	3.9975	0.9272	3	1
ISV5	I believed that the investment opportunity was legitimate	400	3.9825	0.8479	4	3

First, the questions related to investment scam victimisation are analysed. Referred to Table 4.7, the highest average, 4.16, and fourth-largest standard deviation, 0.8038 are seen in ISV3. ISV1 has the second-largest mean, 4.0325, with a standard deviation of 0.7569. Subsequently, ISV4 has the third-highest average, 3.9975, with a standard deviation of 0.9272. The fourth-highest average, 3.9825, with a standard deviation of 0.8479, is obtained by ISV5. Finally, ISV2 has the lowest mean, 3.9675, and the second-largest standard deviation, 0.9212.

#### 4.1.2.2 Financial Literacy

Table 4.8

##### *Central Tendencies Measurement of Financial Literacy*

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
FL1	I understand the basic concepts of investing in financial assets.	400	3.9825	0.8390	3	6
FL2	I am familiar with the different types of investment scams.	400	3.9625	0.9345	4	3
FL3	I know how to identify warning signs of investment scams.	400	3.995	0.9204	2	5
FL4	I am confident in my ability to make informed investment decisions.	400	3.9825	0.9431	3	2
FL5	I have a good understanding of the risks associated with investing in financial assets.	400	4.0075	0.9325	1	4
FL6	I often seek advice from financial professionals before making investment decisions.	400	3.9275	0.9898	5	1

Next, there are questions about financial literacy. Table 4.8 shows that FL5 has the largest mean (4.0075) and fourth-largest standard deviation (0.9325). FL3 has the second-largest mean value, 3.995, with a standard deviation of 0.9204. The third-

largest mean, 3.9825, is shared by FL1 and FL4, while their respective standard deviations are 0.8390 and 0.9431. FL2 produces the fourth-largest mean, 3.9625, with a standard deviation of 0.9345. Lastly, FL6 has the biggest standard deviation (0.9898) and the lowest mean (3.9275).

#### 4.1.2.3 Risk Tolerance

Table 4.9

*Central Tendencies Measurement of Risk Tolerance*

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
RT1	I am willing to take risks with my investments.	400	3.91	0.8448	5	4
RT2	I am willing to invest a significant portion of my portfolio in a single asset or investment opportunity.	400	3.9475	0.9444	4	1
RT3	I prefer investments with a higher potential return, even if they come with a higher level of risk.	400	3.965	0.8892	3	2
RT4	I am comfortable with short-term fluctuations in the value of my investments.	400	3.9675	0.8823	2	3
RT5	I am willing to invest in assets or investment opportunities that require a long-term commitment.	400	4.05	0.8026	1	5



Furthermore, there are inquiries on one's level of risk tolerance. According to Table 4.9, RT5 has the highest average value (4.05) and the lowest measure of variability (0.8026). RT4 possesses the second-greatest average value, standing at 3.9675, accompanied by a standard deviation of 0.8823. RT3 has a mean of 3.965, which is the third-largest among the data points. It also has a standard deviation of 0.8892. Among the datasets, RT2 has an average of 3.9475, ranking as the fourth highest. It also has the biggest standard deviation of 0.9444. Finally, RT1 has the lowest average of 3.91 with a variability of 0.8448.

#### 4.1.2.4 Investment Behaviour

Table 4.10

*Central Tendencies Measurement of Investment Behavior*

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
IB1	I feel confident in my ability to make investment decisions.	400	3.91	0.8825	5	2
IB2	I can accept profit or loss when investing.	400	4.0975	0.8214	3	3
IB3	I have research before investing.	400	4.1025	0.8054	2	4
IB4	I believe that having a diversified investment portfolio is important.	400	4.205	0.7446	1	5
IB5	I am willing to invest in high-risk, high-return investments.	400	3.975	0.9678	4	1

The questions related to investment behaviour then come out. Table 4.10 demonstrates that IB4 has the largest mean (4.205) and smallest standard deviation (0.7446). IB3 has the second-largest value of mean (4.1025) and the variability is 0.8054. IB2 possesses the third-largest average value, 4.0975, with the same third-largest standard deviation of 0.8214. IB5 yields the fourth-highest mean, standing at 3.975, accompanied by the highest standard deviation of 0.9678. Finally, IB1 exhibits the lowest mean of 3.91, with a standard deviation of 0.8825.

#### 4.1.2.5 Persuasion from Offender

Table 4.11

*Central Tendencies Measurement of Persuasion from Offender*

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
PO1	I believe that offenders use persuasive techniques to deceive their victims.	400	4.03	0.7846	1	5
PO2	I feel confident to recognize persuasion attempts by offenders.	400	3.955	0.8630	2	4
PO3	I was influenced by the offender's use of emotional appeals.	400	3.85	1.0417	5	1
PO4	I felt like the offender is an expert in the field of investment.	400	3.905	0.9291	3	3
PO5	I agree with the offender due to their reasoning.	400	3.9	0.9861	4	2

Questions related to offender persuasion follow. Table 4.11 shows PO1 has the highest mean (4.03) and lowest standard deviation (0.7846). PO2 has the second-largest mean (3.955) and standard deviation (0.8630). PO4 has the third-largest mean (3.905) and standard deviation (0.9291). PO5 has the fourth-largest mean, 3.9, and second-largest standard deviation, 0.9861. Finally, PO3 has the lowest mean (3.85) and biggest standard deviation (1.0417).

#### 4.1.2.6 Absence of Capable Guardians

Table 4.12

*Central Tendencies Measurement of Absence of Capable Guardians*

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
ACG1	I feel that the absence of capable guardians will increase the risk of investment scam.	400	4.07	0.7426	2	5
ACG2	I have no capable guardians to help me evaluate the legitimacy of investment opportunities.	400	3.91	0.9561	4	2
ACG3	I believe that there are enough law enforcement officers to prevent me from investment scams.	400	3.88	1.0041	5	1
ACG4	I believe that the government should protect individuals from investment scams.	400	4.14	0.7855	1	4
ACG5	I feel that the government is not proactive in preventing investment scams.	400	3.98	0.9092	3	3

Last but not least, the questions have to do with guardians who aren't able to help. The data in Table 4.12 indicates that ACG4 possesses the biggest mean of 4.14, along with the second-lowest standard deviation (0.7855). The mean number for ACG1 is 4.07, ranking as the second largest, while its standard deviation is 0.7426, marking the smallest among the data. ACG5 has the third-largest mean (3.98), and its standard deviation is 0.9092. With a standard variation of 0.9561 and a mean of 3.91, ACG2 ranks second., indicating a significant range. Last but not least, ACG3 has the smallest average value (3.88), as well as the biggest variability (1.0041).

## 4.2 Scale Measurement

### 4.2.1 Reliability Test

Table 4.13

*Cronbach's Alpha Reliability Analysis*

No.	Type of the Variable	Name of the Variable	Number of Items	Cronbach's Alpha	Reliability Test
1	Dependent Variable	Investment Scam Victimization	5	0.651	Fair
2	Independent Variable	Financial Literacy	6	0.834	Excellent
3	Independent Variable	Risk Tolerance	5	0.770	Good
4	Independent Variable	Investment Behaviour	5	0.698	Fair
5	Independent Variable	Persuasion from Offender	5	0.758	Good
6	Independent Variable	Absence of capable guardians	5	0.685	Fair

Table 4.13 exhibits the Cronbach's alpha values for individual variables. It indicates that independent variables with Cronbach's alpha exceeding 0.80, like financial literacy (0.834), demonstrate a remarkably high level of reliability. With Cronbach's alpha values falling between 0.70 and 0.80, the reliability of variables such as risk tolerance (0.770) and persuasion from the offender (0.758) is considered robust. Cronbach's alpha for investment behavior (0.698) and the lack of skilled guardians (0.685) have a reasonable level of reliability because they are greater than 0.60 but less than 0.70. The dependent variable has a Cronbach's alpha of 0.651, indicating a moderate level of reliability. Given that both dependent and independent variables have Cronbach's alphas exceeding 0.60, all scales are deemed reliable, thus warranting their retention in this research.

### **4.3 Preliminary Data Screening**

Preliminary data analysis is conducted prior to inferential analysis to assure the reliability of the study's findings. Two first analyses of the data are conducted, one to check for normality and the other for multicollinearity.

#### **4.3.1 Multicollinearity Test**

Multicollinearity is defined as significant correlations among independent variables in a regression model, which can result in incorrect coefficient estimates and make model interpretation challenging (Hayes, 2023). Multicollinearity tests measure the degree of correlation between independent variables, frequently use methods such as the variance inflation factor (VIF) and tolerance value to discover and alleviate multicollinearity difficulties (Frost, 2023).

Table 4.14

*Tolerance Value and Variance Inflation Factor (VIF)*

Independent Variables	Collinearity Statistics	
	VIF	Tolerance
Financial literacy	2.349	0.426
Risk tolerance	2.949	0.339
Investment behaviour	2.924	0.342
Persuasion from offender	2.490	0.402
Absence of capable guardians	2.324	0.430

Table 4.14 indicates that the VIF values of all independent variables are less than 10. As a result, the variables that are independent are clearly not the source of the multicollinearity problem. Moreover, they have tolerance levels that exceed 0.1.

### 4.3.2 Normality Test

After checking for multicollinearity, the data is subjected to normalization procedures to ensure it follows a normal distribution. This study employs three methods for assessing data normality: evaluating skewness and kurtosis values, analyzing histograms, and scrutinizing normal Q-Q plots.

Table 4.15

*Normality Test Result*

<b>Variables</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>Dependent Variable:</b>		
<b>Investment Scam Victimization</b>	<b>(0.798)</b>	<b>0.499</b>
<b>Independent Variable 1:</b>		
<b>Financial literacy</b>	<b>(1.121)</b>	<b>1.047</b>
<b>Independent Variable 2:</b>		
<b>Risk tolerance</b>	<b>(0.869)</b>	<b>0.508</b>
<b>Independent Variable 3:</b>		
<b>Investment behaviour</b>	<b>(0.861)</b>	<b>0.776</b>
<b>Independent Variable 4:</b>		
<b>Persuasion from offender</b>	<b>(0.615)</b>	<b>(0.412)</b>
<b>Independent Variable 5:</b>		
<b>Absence of capable guardians</b>	<b>(0.824)</b>	<b>0.369</b>

The data's normality is evaluated by examining its skewness and kurtosis. When examining datasets with sample sizes exceeding 300, presuming a normal distribution is a safe bet when the skewness and kurtosis values are within the specified ranges (Kim, 2013). Table 4.15 indicates that the skewness values are within the range of -2 to +2. The skewness score is highest for persuasion from the offender at 0.615, and lowest for financial literacy at 1.121. All kurtosis values fall within the acceptable range of -7 to +7. Financial literacy has the highest kurtosis value at 1.047, while persuasion from an offender has the lowest kurtosis value at 0.412. The skewness values of all variables fall within the range of -2 to +2, whereas



the kurtosis values vary from -7 to +7. This suggests that the data for all variables follows a normal distribution.

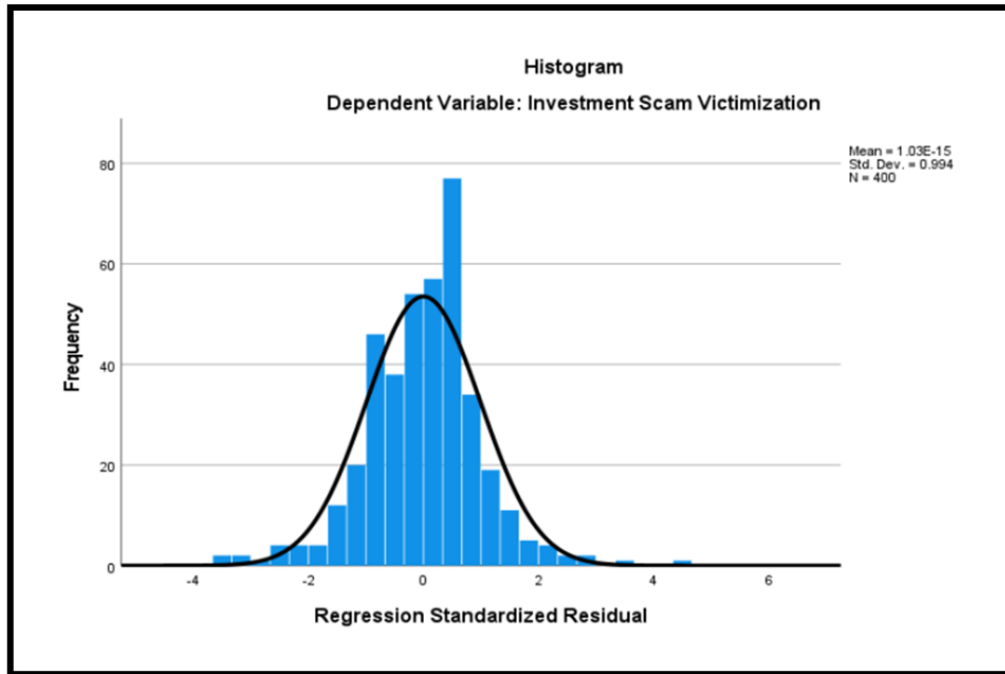


Figure 4.7. Histogram.

Secondly, histograms are graphical depictions that illustrate the distribution of data by separating it into intervals or bins and providing the frequency of points of data for each bin. Histograms are widely used to visually check if a dataset follows a normal distribution (Mishra et al., 2019). Figure 4.7 depicts the histogram generated based on the data from our dependent variable, investment scam victimisation. This histogram displays a distribution plot with a laminated normal distribution curve. The distribution of the plot closely approximates the Gaussian distribution curve. The data has a peak frequency at the center and diminishes as it extends towards the extremes. Consequently, it is commonly characterized as being symmetrical and having a bell-shaped appearance. Consequently, it is thought that the data follows a normal distribution.

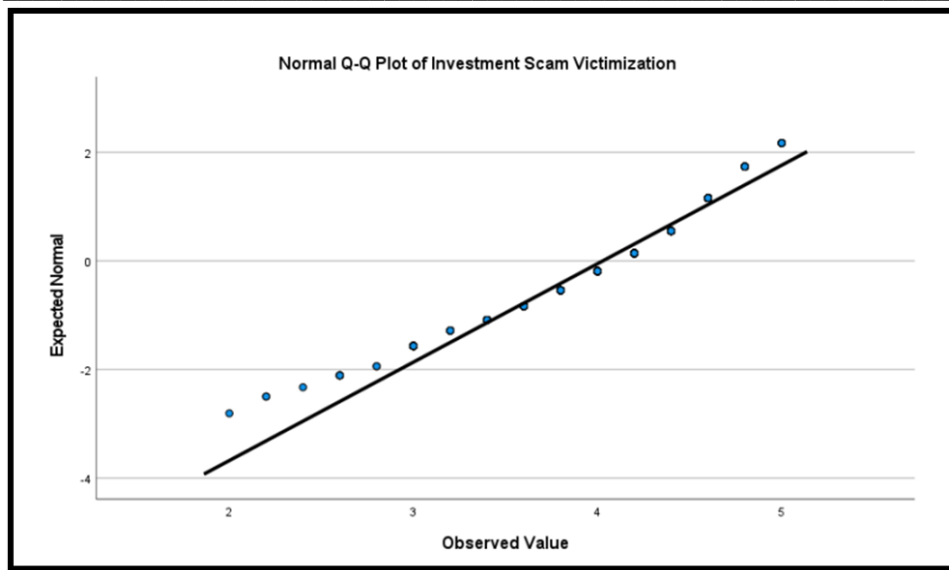


Figure 4.8. Normal Q-Q Plot.

Thirdly, A normal Q-Q plot, also known as a quantile-quantile plot, contrasts the quantiles of a sample dataset to those of a theoretical normal distribution. The Q-Q plot is a regularly used visual aid for determining if a dataset has a normal distribution. It uses the presumption of normalcy to compare the actual data points with the expected values. If there is a very straight line connecting most of the points on the graph, it implies that the amount of data follows a normal distribution. The nearer the points are to the horizontal line, the more closely they resemble a normal distribution (Frost, 2023). Figure 4.8 illustrates that all data points align closely along the diagonal, forming a linear pattern. This alignment suggests that the data conforms to a normal distribution.

## 4.4 Inferential Analysis

### 4.4.1 Multiple Regression Analysis

Table 4.4.1

*Multiple Regression Analysis. Dependent variable: Investment scam victimisation (ISV)*

Model	Unstandardized Coefficients		Standardised Coefficients	T-statistics	Sig.
	Beta	Std. Error	Beta		
1 (Constant)	1.19	0.155		7.684	0.000
Financial Literacy (FL)	0.184	0.045	0.229	4.094	0.000
Risk Tolerance (RT)	0.036	0.055	0.041	0.654	0.514
Investment Behavior (IB)	0.281	0.060	0.291	4.660	0.000
Persuasion from Offender (PO)	0.098	0.048	0.117	2.028	0.043
Absence of Capable	0.109	0.052	0.117	2.103	0.036

R-squared	0.476
Adjusted R-squared	0.469
F-test	71.558

This study investigates the relationship between the dependent variable, investment scam victimisation, and the five independent variables, financial literacy (FL), risk tolerance (RT), investment behaviour (IB), persuasion from offender (PO), and absence of capable guardians (ACG). Table 4.4.1 presents the findings, which indicate that financial literacy, investment behaviour, persuasion from offenders, and the absence of capable guardians are significant factors. For these factors, the p-value is less than 0.10 and the t-statistics are 4.094, 4.660, 2.028, and 2.103, respectively. However, with a p-value of more than 0.10 and a t-statistic of 0.654, risk tolerance is not significant.

This study found that financial literacy is highly significant at a 99% confidence level, indicated by a p-value of 0.000 which is below the significance threshold of 0.01. This supports the hypothesis that there is a strong connection between financial literacy and the vulnerability of Malaysian youth to investment scams. Moreover, the positive unstandardized regression coefficient of 0.184 suggests that with each unit increase in financial literacy, there is an associated 0.184 unit rise in the likelihood of Malaysian youth becoming victims of investment scams, provided other variables remain unchanged.

The research findings indicate that risk tolerance does not significantly impact the frequency of young Malaysians falling for investment scams. With a p-value of 0.514 exceeding the significance level of 0.10, it suggests that contrary to the study's assertion, risk tolerance does not play a significant role in susceptibility to investment scams among young Malaysians. Moreover, the positive unstandardized regression coefficient of 0.036 implies that, assuming all other conditions remain

same, an additional unit in risk tolerance marginally decreases the likelihood of young Malaysians falling for investment scams by 0.036 units.

In addition, investing behaviour demonstrates significance at a 99% confidence level, as indicated by the p-value of 0.000 surpassing the significance criterion of 0.01. The study's hypothesis that there is a substantial relationship between investment behaviour and being a victim of an investment scam is supported by the results. The unstandardized regression coefficient in this instance is 0.281, which is positive. Therefore, while all other factors remain unchanged, a rise of one unit in investment behaviour tends to raise 0.281 units of investment scam victimisation among young Malaysians.

There is a 95% confidence level stated that the fourth independent variable, persuasion from the offender, is significant. This is due to its p-value of 0.043 falls below the significance level of 0.05, indicating a person who falls for an investment scam is greatly affected by how well they can convince others. At 0.098, the unstandardized regression coefficient also shows a positive value. This shows that the number of Malaysian youths who fall for investment scams goes up by 0.098 units for every unit increase in the level of persuasion from the scammer.

Moreover, the study's final independent variable, the lack of capable guardians, has shown significance with a confidence level of 95%. This is because its p-value, at 0.036, is less significant than the 0.05 threshold. They argue that a high victimisation rate of investment scams is substantially caused by the lack of skilled guardians. Furthermore, at 0.109, the unstandardized regression coefficient indicates a positive relationship. This implies that, while keeping all factors equal, the likelihood of Malaysian adolescents falling victim to an investment scam increases by 0.109 units for every unit that there is no capable guardian present.

R-squared ( $R^2$ ), also known as the coefficient of determination, is a statistical measure that shows how many percentage points of change in the dependent variable are caused by changes in the independent factors (Zhang, 2017). The  $R^2$

value of 0.476 shows that 47.6% of the variation in Malaysian youth falling for investment scams is caused by differences in how much they know about money, how they spend, how convincing the scammer is, and whether they have responsible adults around them. Other important factors are used to explain the remaining 52.4% of the difference in the number of Malaysian youth who fall for investment scams. The adjusted R-squared value is also 0.469. This means that 46.9% of the differences in the number of Malaysian youth who fall for investment scams can be explained by differences in how much they know about money, how they spend, how easily they are persuaded by scammers, and whether they have responsible adults around them.

As well, the regression model holds statistical significance with a 99% confidence level. This is evident as the p-value for the F-test, standing at 0.000, falls below the significance level of 0.01. Consequently, the F-statistic of 71.558 is deemed significant. Consequently, this model demonstrates the correlation among the dependent variable (being a victim of investment scams) and the four independent variables (not knowing much about money, investing, being persuaded by criminals, and not having skilled guards).

## **4.5 Conclusion**

SPSS 16.0 is used to analyze the data. It helps with analyzing and summarizing the answers given by the interviewees. It comes out that the scores on the questionnaire are reliable. On top of that, there is no problem with multicollinearity or non-normality. To sum up, the multiple regression analysis shows that four independent variables—financial knowledge, investment behavior, persuasion from the scammer, and lack of capable guardians—are significantly linked to falling for an investment scam. However, only the level of comfort with risk has a small effect on the number of Malaysian youths who fall for financial scams.

## CHAPTER 5: DISCUSSION AND CONCLUSION

### 5.0 Introduction

Findings from chapter four are covered in detail in chapter five, which begins with an overview of the results obtained from the inferential analysis. It then delves into an examination of the factors influencing these results. Subsequent sections provide recommendations for applying these findings effectively. The chapter concludes by discussing the limitations of the study and offers recommendations for the study to enhance its quality and assist future researchers.

### 5.1 Summary of Statistical Analysis

Table 5.1:

*Summary of the Statistical Findings*

Independent Variables	T-statistics	Sig.	Results
Financial Literacy	4.094	0.000	Significant
Risk Tolerance	0.654	0.514	Insignificant
Investment Behavior	4.660	0.000	Significant
Persuasion from Offender	2.028	0.043	Significant
Absence of Capable Guardians	2.103	0.036	Significant

The independent variables outlined in Table 5.1, which include financial literacy, risk tolerance, investment behavior, persuasion from offender, and absence of

capable guardians, play crucial roles in understanding the dynamics of investment scam victimisation among Malaysian youth. The results presented in the table highlight significant relationships between investment scam victimisation and factors such as financial literacy, investment behavior, persuasion from offender, and the absence of capable guardians. Notably, while risk tolerance does not show statistical significance in relation to investment scam victimisation, the other variables serve as reliable indicators of Malaysian youth's susceptibility to falling prey to investment scams. These independent variables collectively offer insightful information on the intentions of Malaysian youth regarding investment scam victimisation.

## **5.2 Discussion on Major Findings**

In this section, we conduct a thorough examination of the primary discoveries mentioned in Section 5.1, providing insight into the factors influencing investment scam victimisation among Malaysian youth. Each finding is meticulously examined, enabling a thorough comprehension of their implications.

### **5.2.1 Key Factors Affecting Investment Scam Victimization among Malaysian Youth**

#### **5.2.1.1 Financial Literacy and Investment Scam Victimization**

H1: Financial literacy significantly affects investment scam victimisation among Malaysian youth.

Financial literacy, which is the capacity to comprehend and use a variety of financial abilities, is an essential component in preventing people from becoming victims of investment scams (Nursanti & Trinugroho, 2023). According to Mohd



Padil et al. (2022), having sufficient financial literacy has a substantial impact on the awareness of investment scams among university students, with a focus on the value of budgeting abilities in averting victimisation. This highlights the necessity for early financial education to instill disciplined financial habits that can shield individuals from scams. As part of comprehensive efforts to avoid investment scams among students, the report emphasizes the necessity for educational institutions to work with regulators and law enforcement to provide vital financial literacy education.

According to Yu et al. (2023), victims of investment fraud likely to have better basic financial literacy than non-victims. These data further demonstrate the relationship between financial literacy and scam victimisation. This suggests that while having a certain level of financial knowledge is important, it is not solely about the depth of knowledge but also about how this knowledge is applied in recognizing and avoiding fraudulent schemes. Therefore, initiatives to improve financial literacy should concentrate on both theoretical knowledge and practical skills that allow people to effectively identify possible scams and make educated financial decisions. Research by Xiao et al. (2022) explores the role that financial literacy overconfidence plays in investment scam victimisation. It finds that overconfident individuals, especially males, wealthy, and educated respondents, are more susceptible to believing in abnormally high returns claimed in investment scam opportunities. This study highlights the importance of understanding one's degree of confidence in financial decision-making to prevent overconfidence bias, which can cause people to fall for dishonest scams. It implies that minimizing the chance of falling victim to an investment scam requires a balanced approach to financial literacy that takes knowledge and self-awareness into account.

Additionally, the study by Xiao et al. (2022) explores the impact of financial literacy on individuals' ability to recognize investment scam. It finds that there is a U-shaped correlation between financial literacy and scam victimisation, which is influenced by subjective risk views. This study emphasizes how the relationship between financial literacy and investment scam susceptibility is dynamic, demonstrating that

variables beyond mere knowledge levels, such as risk preferences, significantly influence one's vulnerability to scams. Improving financial literacy through education and hands-on training is essential in enabling people to make wise financial decisions and safeguard themselves against investment scams. In conclusion, reducing the risks of becoming a victim of an investment scam requires a thorough understanding of financial literacy and its practical application.

### **5.2.1.2 Risk Tolerance and Investment Scam Victimization**

H2: Risk tolerance insignificantly affects investment scam victimisation among Malaysian youth.

According to Philpott and Gantz (2012), risk tolerance, is the measure of an individual's readiness to accept risks while making investments. It may not have a significant influence on being a victim of an investment scam. The research by Knupfer et al. (2021) examines the effects of being a victim of an investment scam and suggests that sensitivity to scam activities may not be significantly influenced by risk tolerance. According to the study, people who have been financially abused may have varied backgrounds in terms of their risk tolerance, indicating that variables other than risk appetite are more important in predicting the susceptibility of a person to investment scams. This suggests that although risk tolerance plays a significant role in investing behavior, it could not be the only element that keeps people safe from falling victim to scams.

Furthermore, the study by Harvey et al. (2014) highlights that risk tolerance alone may not significantly influence the likelihood of falling victim to scams. Furthermore, it provides insight into the behaviors and activities shown by different sorts of investors when they fall victim to investment scams. Vulnerability to investment scams appears to be more heavily influenced by other contextual circumstances, efficient grooming techniques used by scammers, and investor behaviour, according to a qualitative review of victim typologies, including risk-

averse individuals. While risk tolerance is significant, it may not be the major driver of susceptibility to scams, as this research highlights the diversity of characteristics that lead to investment scam victimisation.

Whereas Lim and Letkiewicz (2023) highlight that more risk-averse people are more likely to fall victim to investment scams. This implies that people who are more likely to take chances with their assets can miss alerts or red signals connected to scam schemes, leaving them more vulnerable to financial abuse. However, based on the study by Grable (2008), risk tolerance plays a significant role in influencing individuals' vulnerability to investment scams. It shows that people who are more tolerant of risk are more likely to become victims of scams. A study conducted by Harvey et al. (2014) on victims of investment scam states that risk tolerance is one of the characteristics of several investor groups, including risk-averse investors, dabblers, providers, and adventurers. The study indicates that even when presented with deceptive strategies and pleas, risk-averse investors, who handle investments cautiously and have a low appetite for risk, are less inclined to send money to scammers. This implies that people who have a limited tolerance for risk would approach investment opportunities more cautiously, which would lessen their vulnerability to scams.

### **5.2.1.3 Investment Behaviour and Investment Scam Victimization**

H3: Investment behaviour significantly affects investment scam victimisation among Malaysian youth.

Investment behaviors encompass the multifaceted decisions and actions individuals undertake when exploring investment opportunities. The result from this study is in sync with the result of the Protection Motivation Theory (PMT; Rogers, 1983) states that investment behaviors have a positive and significant influence on the investment process and the likelihood of falling victim to investment scams. This finding supports the notion that certain behavioural traits and tendencies can

influence individuals' susceptibility to fraudulent investment schemes. Understanding these behavioural patterns is crucial for developing effective strategies to prevent and mitigate the impact of investment scams. This is because compliance with investment behaviour is related to emotion, to the extent to which the individual feels able to cope with that threat and the degree to which any perceived risks are considered to be a threat (Williams et al., 2017). A theoretical side in which the individuals' investments can be highlighted in their protection motivation is provided by merging investment size and PMT to examine secure behaviours.

Drawing from the Protection Motivation Theory (PMT), individuals' evaluation of investment risks and responses to threats significantly influence their vulnerability to investment scams. Fear appeals, often utilized in cybersecurity, prompt individuals to assess both the perceived threat and their ability to cope with it. The study suggests that emotional vulnerability, such as feelings of loneliness or social isolation, may amplify susceptibility to fraudulent schemes, as individuals may engage in higher risk behaviors to mitigate emotional distress. Regulatory authorities and financial institutions can utilize this information to design targeted educational programs aimed at raising awareness about common investment scams and enhancing investors' ability to recognize and avoid fraudulent schemes. By addressing the underlying behavioral factors that contribute to vulnerability, policymakers can better safeguard investors from financial exploitation.

Moreover, the study sheds light on the influence of personal investments on individuals' perceptions of threats and coping mechanisms. Despite previous research highlighting the importance of environmental and intrapersonal factors in threat perception, the specific role of personal investments in motivating individuals to protect their assets remains understudied. This research fills this gap by emphasizing the significance of considering individuals' financial stakes in their investment decisions and risk management strategies.

This study highlights the critical importance of considering investment behavior in the context of investment scam victimisation. Empowering investors with knowledge and skills to critically evaluate investment opportunities and mitigate emotional vulnerabilities can significantly reduce the risk of falling victim to investment scams. Therefore, individual personal emotion may influence their investment decision and it is essential to build self-control as it requires a complex strategy that combines psychological understanding, strategic planning, and a dedication to personal development which can reduce the risk of falling victim to fraudulent investment schemes significantly.

#### **5.2.1.4 Persuasion from Offender and Investment Scam Victimization**

H4: Persuasion from offenders significantly affects investment scam victimisation among Malaysian youth.

This result lines up with the research conducted by Badua (2020). Bar Lev et al. (2022) assert that fraudsters employ a specific purpose to persuade prospective victims to engage in fraudulent investment schemes. Throughout the research process, it became evident that persuasion plays a pivotal role in the susceptibility of individuals to fall victim to fraudulent investment schemes. Fraudsters use a variety of tactics to trick their victims, such as making false claims about investment returns, pushing hard during sales pitches, and creating a sense of urgency or scarcity.

The research was guided by theoretical frameworks such as the Victim Precipitation Theory and the Elaboration Likelihood Model (ELM) of persuasion. The Victim Precipitation Theory suggests that victims play a role in their victimisation by engaging in behaviours that render them susceptible to fraudsters. Meanwhile, the ELM posits that the success of persuasive communication depends on recipients' motivation and cognitive capacity to engage with the message. These frameworks

provide valuable insights into the psychological and social factors that contribute to individuals' vulnerability to persuasion in the context of investment scams.

The study identified a multitude of persuasive strategies employed by offenders to deceive and manipulate unsuspecting victims into participating in fraudulent investment schemes. These strategies encompass a range of techniques, including offering exaggerated investment returns, utilizing aggressive sales tactics, creating a sense of urgency or scarcity, and leveraging testimonials from purportedly successful investors. By employing these persuasive tactics, offenders exploit psychological vulnerabilities and induce individuals to make uninformed and impulsive investment decisions.

The findings underscore the importance of enhancing investor protection measures to mitigate the impact of persuasive strategies employed by offenders. Educating investors about common persuasion tactics used in fraudulent schemes and empowering them to critically evaluate investment opportunities are crucial steps in preventing victimisation. Additionally, regulators and policymakers must implement targeted interventions aimed at disrupting the operations of fraudulent entities and deterring deceptive practices. By understanding the persuasive tactics employed by fraudsters and the factors that contribute to individuals' susceptibility to persuasion, stakeholders can work towards developing more robust fraud prevention measures and policies.

#### **5.2.1.5 Absence of Capable Guardians and Investment Scam Victimization**

H5: The absence of capable guardians significantly affects investment scam victimisation among Malaysian youth.

The findings of this study underscore the significant role played by the absence of capable guardianship in investment scam victimisation. Drawing upon insights from Routine Activity Theory (RAT) and related literature, this discussion delves

into the implications of this relationship and its relevance in the context of safeguarding individuals against fraudulent activities. Studies have the strength of applying Routine Activity Theory (RAT) to prove the relationship between motivated offenders, suitable targets, absence of capable guardians, and crime victimisation (Guedes et al., 2022; Akdemir & Lawless, 2020). Routine Activity Theory (RAT) serves as a foundational framework for understanding the dynamics of crime victimisation, emphasizing the convergence of motivated offenders, suitable targets, and the absence of capable guardians as precursors to criminal activity. In the context of investment scams, the absence of capable guardians, such as regulatory oversight, financial literacy education, and vigilant individuals, creates opportunities for fraudsters to exploit unsuspecting victims.

The study highlights the indispensable role of capable guardianship in preventing investment scam victimisation. Effective guardianship encompasses a range of measures, including regulatory interventions, law enforcement efforts, public awareness campaigns, and individual vigilance. By promoting capable guardianship, stakeholders can create a hostile environment for fraudsters, thereby deterring fraudulent activities and protecting potential victims from financial harm. The findings also indicated an urgent need for policy and practice interventions aimed at enhancing guardianship measures to combat investment scam victimisation effectively. Regulatory agencies and law enforcement authorities must prioritize efforts to strengthen oversight and enforcement mechanisms, while also investing in financial literacy education initiatives to empower individuals to recognize and report fraudulent activities.

In conclusion, the findings of this study show there are significant relationship between capable guardianship in preventing investment scam victimisation. By understanding the mechanisms through which the absence of capable guardianship contributes to fraudulent activities, stakeholders can develop targeted interventions aimed at enhancing guardianship measures and protecting potential victims. Continued efforts to promote capable guardianship are essential for effectively combating investment scams and preserving financial integrity in the future.

## **5.3 Implications of the Study**

In this part, managerial implications are addressed. The primary focus is on what acts those universities, governments, and non-governmental organisation may do based on data analysis findings to prevent investment scam victimisation.

### **5.3.1 Managerial Implications**

Using multiple regression analysis, we determine that first independent variable, financial literacy, has a significant influence on investment scam victimisation among Malaysian youth. To prevent investment scam victimisation, universities can evaluate and revise the financial literacy elements within their curriculum. These components should encompass many areas of knowledge and be supplemented by dedicated courses and workshops. Engaging in collaborative projects with financial institutions and experts can enhance students' understanding of financial concepts and the risks involved in making investment decisions. Meanwhile, it is the responsibility of governments to implement robust regulatory frameworks that mandate financial institutions to provide explicit and transparent information regarding their investments and risks. Additionally, they should allocate resources towards national or local financial literacy programs that target different demographic groups, ensuring that there is clear and meaningful information available to all sectors of society. NGOs, with their community-oriented approach, can offer essential support systems for those affected by investment fraud through the provision of counseling, legal assistance, and financial restitution initiatives.

Next, the second independent variable, risk tolerance, has an insignificant influence on investment scam victimisation among Malaysian young. Although risk tolerance may not directly result in individuals being victims of scams, it does play a significant role in shaping their investment behavior and overall financial decisions.



In order to tackle this outcome, colleges can enhance their financial literacy programs by incorporating sections on evaluating and managing risks, enabling undergraduate students to make informed decisions regarding investments according to their degrees of risk tolerance. Governments can enforce regulations that mandate the clear and open disclosure of the risks involved in investments, while also ensuring that investors have access to trustworthy information to aid them in their decision-making process. In addition, non-governmental organisations (NGOs) can offer educational resources and workshops to help individuals identify their risk tolerance and develop effective investment strategies, thereby enhancing their ability to withstand any fraudulent activities. While risk tolerance itself does not directly affect vulnerability to scams, it is crucial to integrate it into educational, regulatory, and support systems. This integration is essential for improving investor protection and promoting responsible financial decision-making practices across society.

The third independent variable, investment behaviour significantly influences investment scam victimisation among Malaysian youth. Universities can enhance their initiatives by integrating principles of behavioural economics across several disciplines, leading to a heightened understanding of how cognitive biases impact investment choices. One approach to illustrate the psychological factors that impact investing behavior and vulnerability to fraud is by utilizing case studies, modeling, and real-life examples. Alternatively, governments might collaborate with academic institutions to research the behavioural factors that contribute to scam victimisation. This collaboration enables the formulation of targeted policies and regulatory actions. NGOs can enhance these endeavors by promoting consciousness of cognitive biases and providing resources to enhance individuals' decision-making skills and resistance to fraudulent activities. These stakeholders can work together to improve the knowledge and mental resilience of investors, reducing the chances of them falling victim to investment scams.

The fourth independent variable, persuasion from offender, has a significant influence on the investment scam victimisation among Malaysian youth.

Universities can provide programs or workshops on customer psychology and interpersonal techniques, which can provide students a deep understanding of the strategies employed by fraudsters to deceive and manipulate investors. Implementing this interdisciplinary approach can enhance students' critical thinking skills and enhance their ability to identify the persuasive tactics employed by criminals. Authorities can enact laws that restrict deceptive marketing practices and enhance the implementation of measures against fraudulent schemes, thereby reducing the prevalence of manipulative tactics in the investment industry. Non-governmental organizations (NGOs) can enhance these endeavors by increasing awareness of prevalent fraudsters' manipulative tactics and offering resources to aid individuals in identifying and reporting illicit activities. By equipping individuals with the necessary knowledge and resources to withstand manipulation from criminals, stakeholders can mitigate the likelihood of individuals falling victim to investment scams and cultivate a more resilient community of investors.

Lastly, the last independent variable, absence of capable guardians, has a significant influence on the investment scam victimisation among Malaysian youth. Universities may create complete financial literacy programmes that not only teach students about investing methods but also highlight the necessity of obtaining advice from trustworthy mentors or guardians when making financial decisions. Government measures might include the creation of legal frameworks to safeguard vulnerable people, such as children, against fake investment scams. Furthermore, government organisations should work with educational institutions to create awareness programmes that emphasise the hazards of doing financial transactions without parental or guardian supervision. Furthermore, Non-governmental organizations (NGOs) can outreach programmes that may encourage ethical ideals and appropriate financial behaviour, encouraging young people to seek advice from trustworthy elders or mentors within their faith-based groups. By addressing the root causes of susceptibility, such as a lack of capable guardians, collaborative efforts between universities, governments, and religious organisations can effectively reduce the risk of investment scam victimisation among Malaysian youth, fostering a culture that promotes endurance and empowerment.

## 5.4 Limitations of Study

Several constraints affect both the depth and breadth of the study. To begin, the correlation between the independent variables may be better understood in this quantitative analysis because it relies on questionnaire data which are financial literacy, risk tolerance, investment behaviour, persuasion from the offender, and absence of capable guardians, and the dependent variable, which is investment scam identification. The reliance on a quantitative research method poses a limitation as it might not fully capture the complex qualitative components of the phenomenon. Although quantitative tools are useful for statistical research, they may miss the intricate stories and firsthand accounts that offer deeper understanding of the dynamics of young victimisation in investment scams in Malaysia. This constraint raises the possibility of a knowledge gap about the individualized experiences and motivations of those who fall prey to investment scams, a gap that would be best investigated using qualitative research methods.

Second, the next limitation of the study is that the target respondents only focused on Malaysian youth, who are between 18 and 29 years old. This restricted emphasis on a certain age group within the Malaysian population may limit the findings' applicability to other age groups, such as the elderly. Excluding participants who do not fall within the designated age range may cause the study to miss out on important information that may be obtained from older or younger participants, who may also be vulnerable to investment scams. Understanding the perspectives and experiences of a more diverse range of age groups could provide a more comprehensive understanding of the factors influencing investment scam victimisation across different generations and age brackets. This limitation emphasizes the necessity for more varied sample sizes to be taken into account in future research to capture a more holistic view of the issue of Malaysian victims of investment scams.

Lastly, while the study applies routine activity theory to analyse investment scam victimisation, it has the limitation of considering only the variable of the absence of capable guardians within the theory for examining victimisation in investment scams. The three main components of routine activity theory are the lack of a suitable target, a competent guardian, and a motivated offender. The study ignores the roles that appropriate targets and motivated criminals play in the occurrence of investment scam victimisation by concentrating only on the lack of skilled guardians. While routine activity theory emphasises the convergence of all three factors for a crime to occur, this constraint impedes a comprehensive understanding of the dynamics involved in investment scam victimisation. Consequently, to improve the study's efficacy in identifying and resolving the underlying causes of investment scam victimisation among the Malaysian youth demographic, future research should strive to encompass all components of routine activity theory.

## **5.5 Recommendations for Future Research**

To mitigate the constraints noted in the research study, several recommendations can be proposed to enhance the future research methodology and broaden the scope of the investigation. Firstly, to overcome the limitation of using a quantitative method, future researchers could consider employing a mixed-methods approach. A more thorough understanding of the experiences and attitudes of Malaysian youth about investment scams can be attained by combining quantitative surveys with qualitative methods like focus groups and interviews. Rich qualitative data would supplement the statistical analysis with a deeper examination of individual narratives and motives made possible by this mixed-methods approach.

Second, future studies should broaden the target population to encompass a wider range of age groups to lessen the limitation of concentrating just on Malaysian youth between the ages of 18 and 29. A future study can capture a wider range of viewpoints and experiences connected to investment scam victimisation by

including individuals from various age categories. This broader sampling strategy would enable researchers to identify common patterns and unique challenges faced by individuals of varying ages, enhancing the study's applicability and relevance to a wider population. Additionally, including older and younger participants can provide valuable insights into how different age groups perceive and respond to investment scams.

Finally, future scholars should consider the entire spectrum of factors stated in routine activity theory in order to solve the limitation of solely taking into account the absence of capable guardians within the theory. Gaining a comprehensive understanding of the mechanisms behind investment scam victimisation can be accomplished by looking at the roles of motivated offenders and appropriate targets, in addition to skilled guardians. Researchers will be able to determine how these factors interact and how Malaysian youth are more susceptible to investment scams. The study can provide more insights and provide focused interventions to effectively avoid investment scam victimisation by adopting the whole framework of routine activity theory.

## **5.6 Conclusion**

The ultimate objective of this research is to investigate the variables affecting investment scam victimisation among Malaysian youth. Data were gathered by the distribution of questionnaires, and SPSS 16.0 was utilized for data analysis. According to the analysis results, the hypotheses H1, H3, H4, and H5 are accepted; only H2 is rejected. This demonstrates that investment scam victimisation is significantly influenced by financial literacy, investment behaviour, persuasion from the offender, and the absence of capable guardians. However, only risk tolerance insignificantly affects the investment scam victimisation among Malaysian youth. These results are extensively examined, and some implications are offered. Last but not least, the limitations of the study are reviewed, and

suggestions for additional study are made by them. Thus, this study may offer some guidance to researchers in the future regarding variable selection, data collecting, and respondent selection.

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