LINKAGE BETWEEN BEHAVIOURAL FACTORS AND INVESTMENT INTENTION AMONG YOUTH IN MALAYSIA

CHIA WAN THING
KOH KAH FONG
NG WEE KIT
YAP ZHENG HEE

BACHELOR OF FINANCE (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE
DEPARTMENT OF FINANCE

APRIL 2023

CHIA, KOH, NG, YAP   INVESTMENT INTENTION   BFN (HONS)   APRIL 2023

LINKAGE BETWEEN BEHAVIOURAL FACTORS AND INVESTMENT INTENTION AMONG YOUTH IN MALAYSIA

BY

CHIA WAN THING
KOH KAH FONG
NG WEE KIT
YAP ZHENG HEE

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

BACHELOR OF FINANCE (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

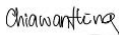FACULTY OF BUSINESS AND FINANCE
DEPARTMENT OF FINANCE

APRIL 2023

_____

DECLARATION

We hereby declare that:

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

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

(3) Equal contribution has been made by each group member in completing the FYP.

(4) The word count of this research report is <u>16159 words</u>.

Name of Student:	Student ID:	Signature:
1. CHIA WAN THING	19ABB03471	
2. KOH KAH FONG	19ABB04558	
3. NG WEE KIT	19ABB01165	
4. YAP ZHENG HEE	19ABB02568	

Date: <u>20/4/2023</u>

ACKNOWLEDGMENT

Table of Contents

x

LIST OF TABLES

LINKAGE BETWEEN BEHAVIOURAL FACTORS AND INVESTMENT INTENTION
AMONG YOUTH IN MALAYSIA
_____

xii

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CDS	Central Depository System
COVID-19	Coronavirus Disease 2019
CV	Critical Value
DE	Disposition Effect
DV	Dependent Variable
ETF	Exchange-traded Funds
FL	Financial Literacy
FOMO	Fear of Missing Out
FOREX	Foreign Exchange
HB	Herding Behaviour
INT	Investment Intentions
IPO	Initial Public Offerings
IVs	Independent Variables
MCO	Movement Control Order
OB	Overconfidence Bias
PBC	Perceived Behavioural Control
PRS	Private Retirement Scheme
RT	Risk Tolerance
SC	Securities Commission Malaysia
SI	Social Interaction
TPB	Theory of Planned Behaviour

LINKAGE BETWEEN BEHAVIOURAL FACTORS AND INVESTMENT INTENTION
AMONG YOUTH IN MALAYSIA
_____

xiv

TRA	Theory of Reasoned Action
UTAR	Universiti Tunku Abdul Rahman
YOLO	You Only Live Once

LIST OF APPENDICES

PREFACE

Investment intention portrays the reason or motive of investor in making an investment decision. It is often separated into short-term and long-term intention of investing and is related to both portfolio management and individual investing. People across the world today have easier and quicker access to the financial market in terms of the many aspects of financial services and products, especially the younger generation. Hence, it is crucial to understand that young people's investment intentions are frequently influenced by both internal and external factors. For such reason, we have been inspired to figure out the underlying factors that have the impacts toward investment intentions among youth, thereby the young people can be sensitive of behavioural factors and try to avoid biases when creating their investment strategy.

In this study, investment intention is selected as the dependent variable, while overconfidence bias, social interaction, herding behaviour, risk tolerance, disposition effect, financial literacy, and perceived behavioural control are being chosen as the independent variables. Even if this field of study is just kicking off, we intend to contribute to the financial agencies and institutions, policymakers and authorities, all levels of investors, educational institutions, families, and students with some insightful and effective recommendations. We hope that this research can be used as a reference for implementing financial-related initiatives in adopting a benevolent investing culture in Malaysia and increasing personal financial capabilities in near future.

ABSTRACT

This research carries the purpose of examining the relationship between behavioural factors and investment intention among youth in Malaysia. The explanatory variables (phycological factors) include risk tolerance, financial literacy, overconfidence bias, social interaction, herding behaviour, disposition effect, and perceived behavioural control. The combination of behavioural finance theory and the theory of planned behaviour is applied to investigate how behavioural factors affect investment intention. In this research, primary data, as well as convenience sampling method, was implemented. A total of 400 respondents were collected from individuals aged between 18 – 30 across Malaysia, in which most of the respondents are students and alumni from UTAR. Data collected for analysis and interpretation was generated with the aid of IBM SPSS Statistics Version 28. Indeed, the results obtained were examined and interpreted using Descriptive Analysis, Reliability Analysis, Pearson's Correlation Coefficient analysis, Multicollinearity Test, Multiple Regression Analysis, and ANOVA test. From the research outcomes, risk tolerance, financial literacy, overconfidence bias, social interaction, disposition effect, and perceived behavioural control have a significant impact on investment intention whereas herding behaviour is not statistically significant in influencing investment intention. In addition, the implications, limitations, and recommendations of the research are provided to facilitate future research related to this field.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

The behaviour of an individual investor is extensively influenced by various psychological factors and is highlighted in the burgeoning discipline of behaviour finance. It makes the assumption that investors are not always sensible, and behavioural factors may have some influence on their intention to invest in the financial markets (Kapoor and Prosad, 2017). In Malaysia, there are not many studies on this context since it works differently as compared to how orthodox financial theories think it should. In fact, even fewer studies have been conducted on Malaysia's youth demographic. When Malaysian investors acted irrationally towards the stock market during and after the COVID-19 outbreak, it shows how important it is to understand behavioural finance. Thereby, the purpose of this study was to determine if the behavioural characteristics, including herding behaviour, social interaction, overconfidence bias, risk tolerance, disposition effect, financial literacy, and perceived behavioural control play significant roles in affecting the investment intention of Malaysian youth investors.

1.1 Research Background

1.1.1 Behaviour and the Intention to Invest

The expansion of financial markets has provided the largest-ever opportunities for people to invest in a variety of financial instruments, especially for both money and capital markets (Bank Negara Malaysia, n.d.). In the context of the stock market, investment refers to a share purchased at a cost with the expectation of generating income or appreciation (Kearney and Lucey, 2004). The amount of money invested since the outburst of the

COVID-19 pandemic in the global equity market has almost doubled as compared to the period before COVID-19 (Value of Global Equity., 2022). The quarterly data of the shares traded worldwide is shown in Figure 1.1.
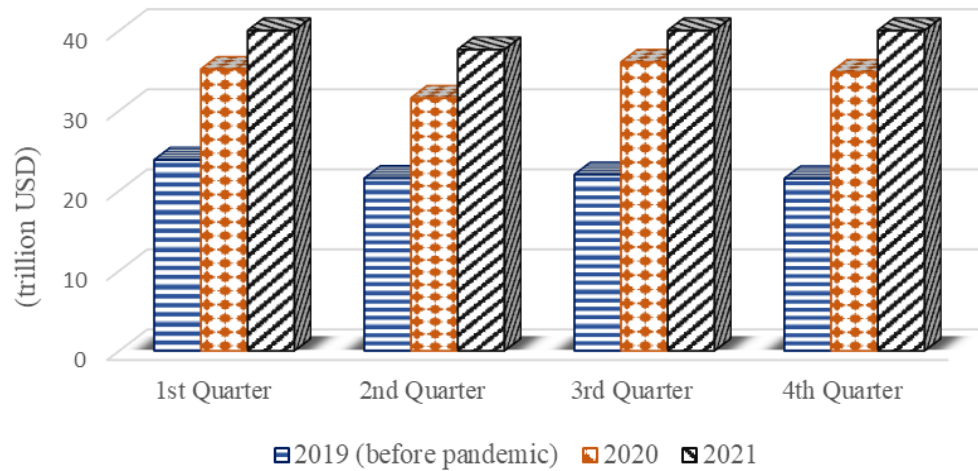
Figure 1.1. Total Value of Equity (Shares) Traded Globally Between 2019-2021.

Adapted from Statista. (2022). *Value of global equity trading worldwide from 1st quarter 2017 to 4th quarter 2021.*

Looking into Malaysia, a total of RM16.6 billion was raised from the equity market in 2021 (Capital Markets Malaysia, 2022). As compared to 2020's RM10 billion, the amount has increased by 66%. It was fuelled by a 15% rise in IPOs and a 79% spike in secondary issuances. Despite the economic reasons, there are some underlying factors that drive the intention of investors to invest and contributed to the boom in the equity market. The early studies on people's investing intentions relied on Modern Finance Theory. It believes that investors are rational and seek to maximise their return for a given amount of risk by focusing solely on macroeconomic and microeconomic considerations (Lim et al., 2013). Indeed, the cornerstone of traditional finance is working alongside with efficient market hypothesis, which states that investors have access to market information including asset prices and their behaviours are logical and rational (Madaan and Singh, 2019).

In contrast to traditional finance, behaviour finance explains how various investors interpret and react to the information available, and they do not always act logically or make unbiased and impartial predictions of stock prices (Jahanzeb, 2012). Individuals are more being shaped by their personality traits, financial profiles, and behavioural biases which prohibit them from forming their investment intention with complete rationality (Zamri et al., 2017). As a result, the father of behavioural finance, Daniel Kahneman views behavioural biases as the foundation of behavioural finance (Madaan and Singh, 2019). In contrast to the efficient market theory, previous studies have presented individual-level behaviour by exploring the impact of micro-behavioural factors which includes mental accounting, overconfidence, heuristics, and representativeness on an individual's investment intention (Musciotto et al., 2018). Hence, this study incorporates a list of more comprehensive behavioural factors, including risk tolerance, financial literacy, overconfidence bias, social interaction, herding behaviour, disposition effect, and perceived behavioural control to determine their influence on youth's investment intentions in Malaysia.

1.1.2 Youth Investors in Malaysia

Any individual or entity which invests a certain amount of capital into any financial instruments with the intention of profiting from it through dividends, interest, or capital appreciation is referred to as an investor. According to the Malaysian Youth Policy, youth in Malaysia are defined as individuals aged between 18 to 30 years (Islamic Development Bank, 2019). A Youth Capital Market Survey: A Malaysian Perspective conducted by the Securities Commission Malaysia (SC) reveals that stock investment turned up to be the second most preferred financial instrument among capital market products for youth as shown in Figure 1.2. This survey that was published on 30 June 2022 is contributed by a total sample of 1,003 participants nationwide which covers both urban and rural populations.

Unit Trust — 86%
Stock — 65%
Bond — 19%
Private Retirement Scheme — 14%
Exchange-traded funds — 7%
Equity Crowdfunding — 3%
P2P financing — 2%
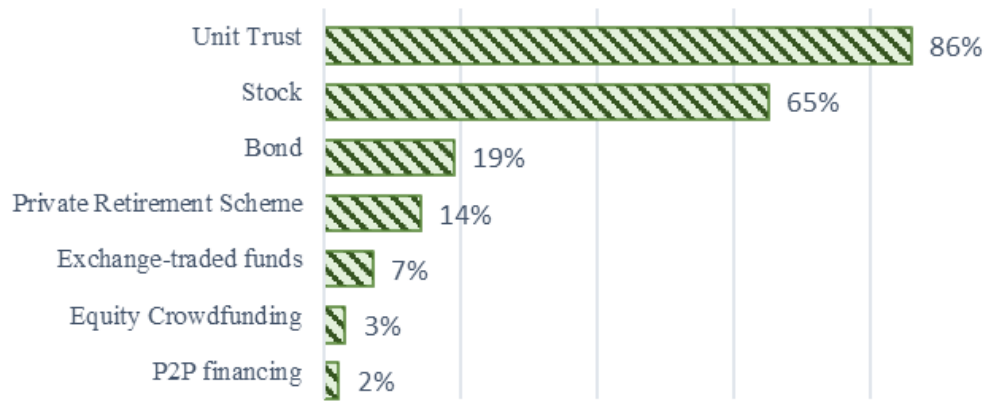
Figure 1.2. Preferred Capital Market Products.

Adapted from The Edge Markets. (2022). *Trends: Unit trust remains No 1 capital market product among youth.*

Unexpectedly, exchange-traded funds, equity crowdfunding, and peer-to-peer financing, which are thought to be more popular among young people, are less preferred. The survey showed that youth with higher financial literacy invest more in bonds (24%), PRS (17%) and ETFs (9%), compared with those with lower financial literacy (at 16%, 13% and 6% respectively).

Insurance — 79%
Tabung Haji — 68%
Fixed Deposit — 60%
Real Estate — 51%
Gold — 47%
Forex — 47%
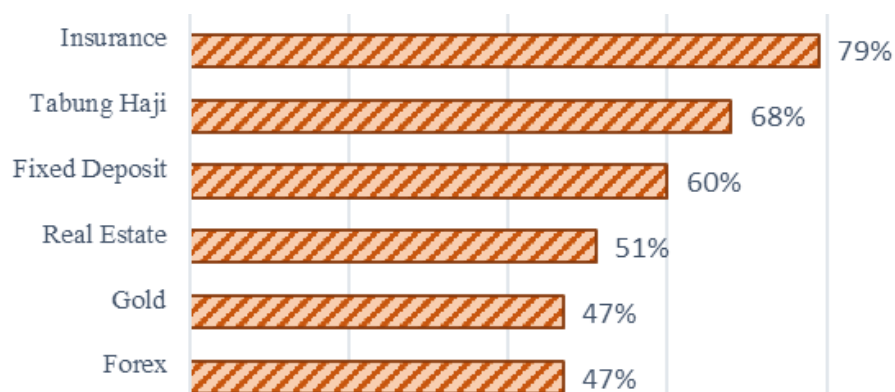
Figure 1.3. Preferred Non-capital Market Products.

Adapted from The Edge Markets. (2022). *Trends: Unit trust remains No 1 capital market product among youth.*

In the non-capital market, insurance is the most widely used product as demonstrated in Figure 1.3, followed by Tabung Haji, fixed deposits, property/real estate, gold, and FOREX. Notably, youth who are more

financially aware make lesser investment in Tabung Haji (The Edge Markets, 2022).

Apart from that, the survey shows how popular cryptocurrencies are among young people. Compared to previous years, their interest in digital assets has gradually increased. The market's tremendous volatility tempts youth to pursue higher-risk, higher-reward ventures. In addition to digital asset speculations, the way that young people think and act may render them financially susceptible in the long run (The Edge Markets, 2022). For example, young people's tendency to YOLO has resulted in overspending to please others or investing in speculative asset classes for the excitement of it. On top of that, they are also easily swayed by herd mentality, leading them to make irrational investments during the peak of the pandemic by investing blindly in glove stocks and meme stocks like GameStop Corp. (The Edge Markets, 2022). Fear of Missing Out (FOMO) is the term used to describe such a mindset. The mindsets of having crowd bias and the influence of social interaction that will shape their behaviours could totally change their investment intention.

The behavioural finance theory is used in combination with the study to determine the effect of behavioural factors (risk tolerance, financial literacy, overconfidence bias, social interaction, herding behaviour, disposition effect, and perceived behavioural control) on the youth's investment intention.

1.2   Problem Statement

The participation of individual Malaysian investors has expanded dramatically in 2020 and 2021. The retail average daily trading volume in the share market rose by 236%, reaching RM1.6 billion in 2020 (Cheong, 2021). In conjunction with the spike, one of the digital equity platforms, Rakuten Trade reported a record-breaking of more than 11,000 new accounts being activated during the period of movement

control order (MCO) in April 2020 (Tan, 2020). Apart from that, compared to 2019, the number of CDS accounts registered grew by 125 percent in the first two quarters of 2020 (The Edge Markets, 2020). On top of that, the SC stated that over 300,000 new accounts have been created in 2021 to trade digital assets, while these account values were exceeding RM16 billion (Azman, 2021). In point of fact, the number of new cryptocurrency accounts created has increased by nearly 35% since January 2021, with 60% of them being opened by investors who are 18 – 35 years of age (Azman, 2021). The actual reason to invest for many of them is influenced by their social networks that direct their investment behaviours. As a result, the phenomenon of irrational and compulsive investment behaviour can be seen in the youth in Malaysia.

According to Syed Zaid Albar, the chairman of the SC, the investing sector in Malaysia has developed to fulfil a wide range of investor needs, including trading through digital-only brokers that accommodate clients who seek for no-frills (simple) services (Tan, 2020). However, the unscrupulous parties have become the wet blankets. The Domestic Trade and Consumers Affairs Ministry recorded 11,875 cases of investment scams from 2020 to February 2022 (New Straits Times, 2022). During the period of COVID-19, many individual investors, with 44% of people aged 20 to 29 got scammed in various investing activities which have been shown in the reports of the Federal Trade Commission. On top of that, the Royal Malaysian Police has revealed 370 illegal investment scams with an upsurge in losses amounting to RM914 million in the first half of 2020 (Malaymail, 2020). In fact, the number of scams for the first half of 2020 is more than the whole year of 2019 (Malaymail, 2020).

Investment scammers may conduct fraud to the public by providing fake information about a real investment as well as making up a fake investment opportunity (Aziz et al., 2021). The fake offline or online investments include investments in stocks, bonds, forex, notes, and commodities. Even though Bank Negara Malaysia is regulating the financial industry to battle against illegal investment schemes under the Financial Services Act 2013 and Islamic Financial Services Act 2013, consumers are still not protected if they choose to deal with illegal financial service providers (Aziz et al., 2021). Regarding the discussed

phenomenon, there is worrisome that more and more youth will suffer a failed investment and lead to financial problems at a young age. To date, there is a lack of study on youth's investing behaviour, not to mention in Malaysia especially after considering the impact brought by the pandemic. Due to the possibility that individuals may become aware of the behavioural aspects influencing their intentions in investing and exercise greater caution when making investment decisions, this increases the desire to carry out a pertinent study.

1.3   Research Questions

1.3.1 General Research Question

What are the behavioural factors that affect the investment intention of Malaysian youth?

1.3.2 Specific Research Questions

a.   Does risk tolerance drastically influence the investment intention?

b.   Does financial literacy immensely influence the investment intention?

c.   Does overconfidence bias excessively influence the investment intention?

d.   Does social interaction seriously influence the investment intention?

e.   Does herding behaviour significantly influence the investment intention?

f.   Does disposition effect significantly influence the investment intention?

g.   Does perceived behavioural control substantially influence the investment intention?

1.4   Research Objectives

1.4.1 General Research Objective

The goal of this study is to determine how a Malaysian youth's intention to invest is influenced by behavioural aspects such as risk tolerance, financial literacy, overconfidence bias, social interaction, herding behaviour, disposition effect, and perceived behavioural control.

1.4.2 Specific Research Objectives

a. To investigate the association between risk tolerance and investment intention.

b. To investigate the association between financial literacy and investment intention.

c. To investigate the association between overconfidence bias and investment intention.

d. To investigate the association between social interaction and investment intention.

e. To investigate the association between herding behaviour and investment intention.

f. To investigate the association between disposition effect and investment intention.

g. To investigate the association between perceived behavioural control and investment intention.

1.5   Research Significance

This research reveals that investors' investment intentions are influenced by factors other than merely market knowledge and conditions, which is crucial information for the society. Eventually, it is also impacted by the stated behavioural factors as they do not always act in a rational way. The financial market has seen an increase in the involvement of youth; thus, it is beneficial for them to grasp the psychological variables that influence their decision to invest in these financial products. Indeed, it is important, especially for the youth society where some of the investments available in the market are pseudo-investment schemes that are disguised as real investment tools.

On the other hand, this research can be used as a reference by financial institutions and investment advisors to explore the effect of behavioural aspects on investing intention. They can use the findings from this study to help individual investors make effective investment decisions in accordance with their investment goals by taking respective behavioural factors into account. Furthermore, investment companies are becoming more important in assisting individuals as they serve as consultants to individual investors for investment advice. They must therefore be able to supply investors about correct behavioural finance-related information and teach them how to make rational investment plans.

Apart from that, this study provides insights to individual investors. The findings will direct them to become more vigilant while making investment decisions. The investors, particularly youth can have the ability to avoid unnecessary losses in their investments that are caused by irrational and impulsive intentions. Additionally, they will be able to develop a clear investment intention. A clear intention to invest is important as it helps to avoid the youth investors from falling for investment scams. Thus, the youth can benefit from this study by being conscious of the behavioural elements and striving to avoid biases while developing their investment strategy.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The focus of this chapter is to explore the relevant literature and research on behavioural factors that contribute to the changes in investment intentions. Among these studies, several behavioural factors that function as the independent variables are assessed, which comprised of risk tolerance, financial literacy, overconfidence bias, social interaction, herding behaviour, disposition effect and perceived behavioural control. These past studies have provided a significant foundation in constructing the econometrics model, along with the underlying rationale of the determinants for this study.

2.1 Underlying Theories

2.1.1 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) was first founded by Icek Ajzen, incorporating the Theory of Reasoned Action (TRA) as its foundation. TPB is a prominent model that examines how information and incentives affect human behaviour (Akhtar & Das, 2019). Both theories consider a person's behavioural and normative beliefs, as well as social standards, as important factors in understanding their attitudes and intentions toward a particular action. However, TPB provides a better opportunity to comprehend a person's underlying attitudes that drive the physical behaviour being performed (Brown, n.d.).

According to Yang et al. (2021), TPB focuses on a person's intention to engage in a particular behaviour, and the stronger the intention, the more likely the person is to follow through. TPB is an extension of TRA, which suggests that a person's desire to behave is influenced by their attitudes toward the behaviour and subjective norms. Attitudes toward conduct reflect how positively or negatively an individual views the behaviour, while subjective norms reflect behaviour's perceived social acceptability. Intention is seen as a direct precursor to behaviour, indicating the individual's readiness to engage in specific actions.

Moreover, TPB aims to predict and assess behaviours that are not entirely voluntary; for instance, perceived behavioural control, which gauges the degree of difficulty for an individual to perform certain behaviours (Akhtar & Das, 2019). Additionally, attempts to evaluate investment performance and initiate investment decisions, including an assessment of one's financial situation, also reveal the individual's level of intention to participate in the stock market (Yang et al., 2021).

2.1.2 Behavioural Finance Theory

According to Madaan and Singh (2019), traditional finance posits that price movements completely reflect available information, whereas behavioural finance argues that stock or security prices differ due to non-rational investor behaviour and inefficiencies in financial markets. The theory of behavioural finance combines sociology, economics, and psychology, and arose when financial institutions sought to understand how people behave both individually and in groups when investing in a simple society (Deshmukh & Sanskrity, 2016). In fact, behavioural finance is a recently raised research field regarding finance that seeks to clarify why individual make unwise financial choices by combining behavioural and cognitive

psychology theory with classical economics and finance (Kumar, 2017). The birth of behavioural finance was attributed to the impact of psychological variables on portfolio selection. Anthony and Joseph (2017) describe behavioural finance as the study of psychological aspects that influence an investor's decision-making. Additionally, a study suggested that behavioural finance advocates understanding various components of an investor's behaviour, such as judgement, emotions, social interactions, intellectual capacity, and cognitive limitations, as the main drivers of the stock market (Ahmed et al., 2022).

Furthermore, heuristics, framing, emotions, and market impact are the four key aspects that contributed to the foundation for behavioural finance theories. Therefore, behavioural finance emphasizes more on the association between investor behaviour and their process of making decisions in the investment process, along with the rising participation of investors. However, many investors do not always act rationally when investing. In fact, emotions, heuristics, and behavioural biases are strongly linked to investment decisions (Bakar & Yi, 2016). Most financial market investors lack appropriate knowledge and information of investing and economic ideas. As a result, they may become irrational while investing because they cannot properly process all relevant information and knowledge to generate expectations about a company's future. Consequently, irrational conduct causes them to be biassed, leading to the market differing from its actual position. Additionally, behavioural finance assumes that investors are irrational when "choosing and selecting" investment routes (Antony & Joseph, 2017). They will react according to new findings, and their judgement may be mispriced due to the arbitrage limit in these circumstances. This, in turn, causes the market price to vary from the fundamental values.

2.2   Review of Variables

2.2.1 Investment Intention

Intention is characterised in various ways by various specialists. In general, intention is viewed as a person's signal of his future actions (Samsuria et al., 2019). Intention is also seen to represent one's willingness to try or how much effort one puts into engaging in a certain conduct, as well as to capture the motivating elements that impact that behaviour (Yang et al., 2021). A person's intention is therefore his or her desire or plan to carry out the relevant action in the future. As a result of intention providing knowledge about the future direction, attitudes, beliefs, and intentions typically change. Intention is a state of mind that focuses attention on particular items (goals) based on prior experiences or predetermined methods of success (Bird, 1988). Typically, investment intentions could be assessed in 2 horizons, which are short-term intentions and long-term investment intentions. Intentions to invest in short-term investment instruments would tends to produce quick returns and have high liquidity. On the other hand, a long-term investment intention refers to plans to invest in financial instruments that typically offer stable returns, little liquidity, and are kept for an incredibly long time (Mankuroane, 2020). Hence, investors have different investment intentions. Long-term intention to invest refers to the tendency of investors to prefer long-term investments when they desire to lock up their money for a long time and expect higher returns. Investors with short-term investment goals typically invest in short-term investments because they need assets that can be sold quickly or that are marketable and are ready to assume a small amount of risk in exchange for potential rewards (Sashikala & Chitramani, 2018). Some illustrations for long-term assets could be shares, bonds, real estate, and cash that have been kept for longer than a year. In fact, normally investors with short-term investment intention

would hold them for shorter periods, typically three months or less. According to Yang et al. (2021), the study has posited the significant relationship between behaviour and the investment intention in Malaysia.

2.2.2 Risk Tolerance

The tolerance to risk is a crucial factor in making personal financial decisions, defined as the willingness to take risks on opportunities for greater profit volume or the maximum uncertainty one is prepared to accept (Grable, 2008; Joo & Grable, 2004, as cited in Samsuria et.al., 2019). It plays a significant role in an investor's behaviour and determines the suitable asset mix in a portfolio. A risk-adverse investor tends to be discouraged by high risks. Vice versa, investors with higher risk tolerance level tends to have low uncertainty avoidance. They are relatively more flexible to accept uncertainties without discomfort, take risks easily, and show a great load of openness for external opinions and behaviours (Lim et al., 2013). To test the hypothesis, understanding a one's risk tolerance level and perception towards risk is essential as it is a vital portion of for decisions on wealth accumulation, personal financing planning and investment portfolio (Hanna et al., 2001).

As proposed by Grable & Lytton (1999), various techniques are introduced as metrics to measure a person's tolerance to financial risks. For instance, a survey that analyse an individual's readiness to accept risk in distinct circumstances. Financial services providers use risk assessment instruments to quickly and accurately determine how much clients and other respondents are willing to risk financially. People who are high risk averse are most probably not very risk tolerant when it comes to financial risk, and vice versa. Those who take on more risk in their portfolios are expected to get wealthier over time (Faff et al., 2008; Grable & Roszkowski, 2007).

2.2.3 Financial Literacy

According to Fernando (2022), financial literacy refers to one's capability to understand and be proficient in the applying different financial skills and theories in real-life, ranging from calculations, budgeting, hedging and speculating. Financial literacy is characterised as having a basic understanding of risk diversification and inflation (Jain et al., 2022). Due to its importance for making financial decisions, financial literacy has become a phenomenon that both policy makers and scholars are interested in (Sadiq & Azad Khan, 2019). Moreover, a study stated that high financial literacy persons are familiar with compound interest rates (Samsuria et al., 2019). Another study stated that individuals with financial literacy will be able to enrol in in formal financial markets as the concept of the time value of money is prominent in investing for sustainable and substantial income (Agarwalla et al., 2013). Besides, making wise decisions about how to use investment tools requires financial literacy (Yang et al., 2021).

Based on Adil et al. (2021), when an individual is highly proficient in financial related knowledge, he/she tends to have greater confidence and intention to be participating in investments. One of the most important factors that helps investors make rational investment decisions is financial literacy. Additionally, Adil et al. (2021) has provided that since highly literate investors have greater volume of financial knowledge, they would gain a more comprehensive financial strategy from different approaches while making judgments, as compared to those with weaker financial literacy.

The path analysis by Yang et al. (2021) has also showed that the result of path analysis shows that financial literacy has contributed a significant effect on the investment intention. Financial literacy is generally correlated with investing decisions, according to a review of the research on the topic (Hawati et al., 2016). According to Tanuwijaya and Setyawan (2021), the result of the seventh hypothesis, which is to investigate the link between

financial literacy and investment intention, showed that there is a substantial positive association between these two variables. Thus, the higher an individual's level of financial literacy may lead to investment interest. According to the findings of the study, someone who is financially literate will definitely be aware of the numerous types of uncertainty that will exist in the future, which will likely increase interest in investing as a way of addressing these uncertainties.

Based on Samsuria et al. (2019), it is well known that once parents attend financial seminars at work, overall net worth and financial wealth improve. On the other hand, households make bad investment decisions because they lack knowledge. This study concluded that there is a positive effect between financial literacy and investment intention. However, Fauzi et al. (2017) demonstrate that the financial literacy has the insignificant impact on investment intention and concluded that knowledgeable investors not necessary invest in stock market.

2.2.4 Overconfidence Bias

According to Yang et al. (2021) and Bakar and Yi (2016), overconfidence is also known as a heuristic bias that investors use to supposedly lower their risk of suffering losses in uncertain circumstances. It also stated that overconfidence caused the stock market participants to overestimate their stock market knowledge. As a result, they tend to be engaged in excessive trading, which ultimately has an impact on their behaviours. Investors who are overconfident take more risks because they think they can time the market and overestimate their ability to forecast future events (Waweru et al., 2014). Hence, the investors who are overconfident will be more likely to take higher risk. Overconfidence is when investors think they know more than they actually do because of their successful trading experience (Keswani et al., 2019). In this scenario, the investor underestimates the risk, and his overconfidence causes him to make investments with little

diversification. Overconfidence is the propensity to think highly of oneself and one's chances of success (Antony & Joseph, 2017). When people believe they have control over some traits that are familiar to them, overconfidence comes in and they place an excessive amount of value on their own skills and knowledge (Joyce & Leong, 2013). According to Akhtar and Das (2019), investors who are overconfident trade too often. Overconfidence is a well-known bias that allows people to have excessive confidence in their knowledge and abilities without considering the risk associated with an investment (Mankuroane, 2020)

Bakar and Yi (2016) and Antony and Joseph (2017) concluded that overconfidence contributes a positive severe influence on the investor's decision making. According to Adil et al. (2021), Keswani et al. (2019) and Rehan and Umer (2017), the study also shows the significance of overconfidence bias as a variable in affecting investment decision. In short, overconfident investors tend to invest at higher risks. It also concluded that the overconfident investors would trade more than rational investors. However, Adil et al. (2021) further concluded that overconfidence bias is linked with financial literacy as investors with higher financial literacy will show more overconfidence while investing.

However, the results of Park et al. (2010) implied that the overconfidence bias has a detrimental effect on investment performance, indicating that it has an impact on the quality of investment judgments. In addition, the study found that the overconfidence had a detrimental effect on choices and outcomes related to investments (Kengatharan & Kengatharan, 2014).

2.2.5 Social Interaction

The concept of social influence refers to how individuals perceive others' behaviour and their expectations of that behaviour. In the context of product or service consumption, social influence considers how users perceive other

users' opinions about the product or service, and how this can influence their own behaviour. Feedback mechanisms such as likes and comments can serve as recognition and validation and encourage users to conform to the perceived expectations of others. Studies have shown that social interaction and media can have a positive impact on trading decisions, and social interaction, in particular, can have a substantial impact on trading decisions and investment intention. However, the application of modern communication gadgets may minimize the informational effect of interactions. The marketing and spread of successful investment stories on social platforms may also contribute to fluctuations in the stock market. These findings suggest that social factors, such as social interaction, play a crucial role in shaping individuals' behaviours and decisions related to investment and consumption (Yang. Et al., 2021).

2.2.6 Herding Behaviour

People that exhibit herding behaviour would execute their investment choices on the trading done by the group, which leads to speculative bubbles and, as a result, makes the stock market inefficient (Yang et al., 2021). There are two effects of herding behaviour which are to protect them from losses and to maximise their profit. In the financial market, herding is a phenomenon that is frequently seen. Individuals have a tendency observe, and act similarly like the actions of others perceived, especially when there is uncertainty in the financial markets (Madaan & Singh, 2019). According to Antony and Joseph (2017), herd behaviour is a type of heuristic in which people are persuaded to comply with the majority of people in the decision-making environment by copying their behaviours. According to Kengatharan and Kengatharan (2014), investors may favour herding if they think it will enable them to gather accurate and helpful information. As a result, investors' financial decision-making and choice-making may be greatly affected by herding behaviour.

According to Yang et al. (2021), the study shows that herding behaviour had a strong effect on the intention to invest. As a result, investors who exhibit herding behaviour mimic the actions of other investors while ignoring their own individual requirements and expectations. In other words, herding behaviour would cause someone to follow and mimic the way of others behave, affecting their intention to invest. Moreover, Nareswari et al. (2021) and Keswani et al. (2019) demonstrated that herding behaviour has a favourable effect on decision making and concluded that herding can influence stock investment choices and build momentum. This research has collectively implied the significance of herding behaviour in affecting investment intentions, along with the choices made.

Apart from that, a study also shows that herding behaviour influences investing choices in a favourable and significant way (Madaan & Singh, 2019). Investors do not make rational investing decisions when herding is present. Besides, a study concluded that herding behaviour has a moderate impact on investors' decision making (Kengatharan & Kengatharan, 2014).

However, Bakar and Yi (2016) show that herding behaviour has insignificant effect on investment decisions since they showed that some investors believe it is improper to merely invest according to the majority view. However, a study demonstrates that there is no evidence of a substantial association between herding behaviour and investor investment choices in Pakistan's financial market (Ahmed et al., 2022).

According to Adil et al. (2021), it found that herding biases have negative and significant effects on investment decisions among male and female investors. However, herding behaviour was shown to be having less impact in accordance with Antony and Joseph (2017).

2.2.7 Disposition Effect

Disposition effect is the trend of investors to hold onto unrealized losses in the hopes of eventual gains, as studied by Pelster and Hofmann (2018). This effect is estimated by calculating the discrepancy between the proportion of realised profits and the proportion of realised losses (Odean, 1999; Odean, Strahilevitz, & Barber, 2010). Holding onto losing investments can lead to underperformance, while selling winning investments too early can also lead to underperformance (Aspara & Hoffmann, 2013). The disposition effect may affect investor's investment intention by influencing their perception on risk and return, whereby if investors experience regret of discomfort for selling a winning investment too early or holding a losing investment for too long, they may become less confident in the subsequent intention on investing. However, it has been acknowledged by other researchers that manipulating projected future profits or losses in experiments has no impact on the disposition effects (Lee et al., 2008).

Several studies have addressed the influence of the disposition effect on investment decision making. For example, researchers studied the effect of disposition on e-trading of stocks and found that it can sometimes have a negative financial impact (Madaan & Singh, 2019). The presence of the disposition effect has also been observed in the Taiwanese warrant markets, with warrants at different market prices displaying different disposition behaviour (Chang, 2008). In the emerging Chinese stock market, investors tend to recognize gains but not losses, leading to a persistent disposition behaviour (Chen et al., 2007).

Other studies have analysed the effect of socio-economic and demographic factors on the disposition effect. Wealthier and professional investors tend to display a lower DE (Dhar & Zhu, 2006). The market-wide influence of the DE on trading volume of IPOs has also been studied, with the present purchase price driven by IPO investors having the most reliable impact (Kaustia, 2004). It has also been examined with regard to the equity

premium how the disposition impact, which is genuine and makes investors pay higher risk premiums for stock investments (Roger, 2009). Furthermore, research has also looked into how the DE affects investment performance in the Korean stock index futures market, finding that retail investors are much more prone to the effect than foreign and institutional investors.

Ultimately, the disposition effect can have a negative impact on investment performance, with a stronger bias observed in long positions than in short positions. While the individual investors' education level has been discovered to have a favourable relationship with the DE in the Taiwan Stock Market, the effect varies among Taiwan mutual fund investors depending on market states (Lee et al., 2013).

2.2.8 Perceived Behavioural Control

The theory of planned behaviour includes a further variable which is perceived behavioural control - that is not normally included in traditional attitude behavioural models in order to account for non-volitional aspects of conduct. The perceived behavioural control describes the perceived level of difficulty in carrying out the behaviour, taking into account both previous experience and potential obstacles (Xiao, 2008). In general, the stronger the behavioural intention, the larger the perceived social acceptability, the easier the activity is considered to be performed, and the more favourable the attitude toward engaging in the behaviour. The likelihood that a behaviour will be carried out increases with behavioural intention. Additionally, the behaviour may be directly impacted by the perceived control (Ajzen, 1991). Mahardhika and Zakiyah (2020) defined perceived behaviour control as a result of beliefs, specifically personal views regarding the existence or absence of elements that assist or hinder people's conduct.

The argument presented by Mahardhika and Zakiyah (2020) that perceived behaviour control has a positive impact on investment intention is supported. It can be concluded that youth investors' evaluation of their purchasing capacity will influence on whether they intended to do so. Youth investors who believe they are competent and skilled in the stock market are more likely to be interested in conducting stock transactions.

Besides, Ibrahim and Arshad (2017) and Adam and Shauki (2014) reached the conclusion that individual investors' investing intentions are not significantly impacted by PBC. According to their research, individual investors frequently rely more on the opinions of individuals who are important to them than on their own judgement when making investment decisions.

Based on the results from the study by Fauzi et al. (2017) and Setyorini and Indriasari (2020), it demonstrates that PBC has a favourable impact on INT. It concludes that the high control perceivers will continue to be driven and strive for investment success because they are sure that with the opportunities and resources at their disposal, the challenges they encounter can be overcome.

2.3   Theoretical Framework

Figure 2.1. Theoretical Framework of the Research

2.4   Hypothesis

2.4.1 Risk Tolerance

According to Yang et al. (2021), the study has posited the significant relationship between behaviour and the investment intention in Malaysia. Investor with high level of risk tolerance may take more risk on investment since he/she is competent to control emotions and attitudes in the face of risk. When one is more flexible to be accepting risks, it's more likely that he/she will be involve in investment.

H_1: There is a significant relationship between risk tolerance and investment intention.

2.4.2 Financial Literacy

Raut (2020) shows that financial literacy not only assists investors in developing a consistent method of thinking for investing decision-making, but also gives them the self-assurance to make an informed and calculated decision. Hence, investor may involve in stock market when he/she own financial knowledge.

H$_2$: There is a significant relationship between financial literacy and investment intention.

2.4.3 Overconfidence Bias

According to Adil et al. (2021), Keswani et al. (2019) and Rehan and Umer (2017), the study also shows the significance of overconfidence bias as a variable in affecting investment decision. They concluded that overconfident investors tend to invest at higher risks. It also concluded that the overconfident investors would trade more than rational investors. On the other hand, Ahmad and Shah (2020) and Kafayat (2014) indicated that overconfidence bias had a significant negative correlation with investment decision-making and substantially impacted the quality of investment decisions. This meant that individual investors might have made irrational investment strategies because they were too confident in themselves on a particular investment, resulting in negative experiences and a lack of intention to invest in the future.

H$_3$: There is a significant relationship between overconfidence bias and investment intention.

2.4.4 Social Interaction

Studies have shown that social interaction and media can have an impact on trading decisions, and social interaction, in particular, can have a substantial impact on trading decisions and investment intention. However, the application of modern communication gadgets may minimize the informational effect of interactions. Investors' investment intentions may change due to social interactions.

H_4: There is a significant relationship between social interaction and investment intention.

2.4.5 Herding Behaviour

Investors prefer to group think and possess herding behaviours when they believe it will help them obtain useful and reliable information. According to Pahlevi and Oktaviani (2018), herding behaviour has a significant favourable effect on investor attitudes toward investing, implying that herd behaviour influence on investor attitudes toward investing. Hence, it is hypothesized that there is an association between herding behaviour and investment intention.

H_5: There is a significant relationship between herding behaviour and investment intention.

2.4.6 Disposition Effect

The disposition effect is the propensity of investors to hold failing securities and sell winning ones instantly. The disposition effect is always brought on by short-term investments as opposed to long-term investments, and people who sell winning stocks right away do so because they don't want to take

any investment risk. A study shows that there is a positive significant linkage between the disposition effect and investment decision (Ahmed et al., 2022). In short, it means that the individual investors' intention to invest would be affected by the fear of losses, alongside with the potential risks, causing them to be selling their winning investments too quickly or holding their losing investments for too long. Thus, the investment intention may vary due to the disposition effect while the investor wants to minimize losses and risk.

H_6: There is a significant relationship between disposition effect and investment intention.

2.4.7 Perceived Behavioural Control

PBC is subject to a person's perceptions of the elements that support or prevent them from engaging in an activity. When sophisticated investors need additional confidence in selecting a stock, they will use their social references as controls to improve their confidence in the aspects that can support the research they have done (Masrurun & Yanto, 2015). Therefore, an investor with perceived behavioural control will be involved in stock market.

H_7: There is a significant relationship between perceived behavioural control and investment intention.

2.5 Gap of Literature

The present study aims to provide a more comprehensive analysis of investment intention by drawing on two theoretical perspectives, namely the Theory of Planned Behaviour (TPB) and Behavioural Finance Theory. By combining both theories, the study seeks to examine the impact of various independent variables on

investment intention, including Risk Tolerance, Financial Literacy, Overconfidence Bias, Social Interaction, and Perceived Behavioural Control, which are derived from the TPB theory. Additionally, the study also examines the impact of Disposition Effect and Herding Behaviours, which are derived from Behavioural Finance Theory. The incorporation of these two theoretical perspectives allows for a more nuanced and detailed understanding of investment intention, as it takes into account various psychological and behavioural factors that may influence investment intentions.

Furthermore, the study distinguishes itself from previous research by examining investment intentions among Malaysian youth, while previous studies have focused on other geographic regions and target groups such as Taiwan, Pakistan, India, Klang Valley, and Pahang, and on groups such as millennials and adults (as attached in **Appendix 2.1**). The study also provides a unique perspective on investment intentions specifically among Malaysian youth, which is an important demographic given the increasing importance of financial literacy and investment in today's economy.

However, the study omits the determinant of financial well-being due to the unreliable characteristic of the determinant, as revealed by the reliability test. Despite this limitation, the study provides valuable insights into the factors that influence investment intention among Malaysian youth, and the findings can be used to develop targeted interventions to promote financial literacy and investment among this demographic.

CHAPTER 3: METHODOLOGY

3.0   Introduction

Chapter 3 introduces the techniques applied in this research. The research design which discusses the methodology employed in this study is presented in the first section, followed by sections on data collecting, sampling design, research tools, construct assessment, processing of data, and last but not least, analysis of data.

3.1   Research Design

Research design is a concept for the intended research endeavour; it is the "Glue" that holds all of a research's elements together. Research design may be regarded of as the pattern of research (Akhtar, 2016). The two main categories of research data are quantitative or qualitative. Both quantitative and qualitative study approaches obviously vary from each other in terms of the ways of the data are obtained and evaluated. Variables must be converted to numeric before statistical analysis may be performed in quantitative research. In contrast, qualitative research involves collecting data using non-numerical formats like writings, photographs, films, etc. (Gelo et al., 2008). In this research, we will use quantitative research to investigate how risk tolerance, financial literacy, overconfidence bias, social interaction, herding behaviour, disposition effect, and perceived behavioural control give an impact towards the investment intention of the Malaysian youth.

Also, a cross-sectional survey was performed in this research to gather quantitative data through an online survey using Google Form. We decided to share the google form URL on several social platforms which including Facebook, Instagram, UTAR Mail, and a Chinese Platform which is known as "Xiao Hong Shu". In comparison to other survey techniques like the paper-and-pencil approach and human interviews, conducting an online survey has proved a speedier way to gather

data from respondents. In addition to this benefit, the online survey offers additional advantages for anybody that wants to conduct a survey (Sincero, 2012).

To analyse the data for this research and conduct the investigation, Statistical package for the social sciences (SPSS) was utilized. The major purpose of this programme is to analyse research data from the social sciences. This information may be utilised for market research, polls, data mining, and other functions. Research workers employ the comprehensive software SPSS to process important information in a series of simple steps. Dealing with data is a challenging and time-consuming activity, but with the support of specific strategies, this programme may effortlessly manage and run data. These techniques are deployed to analyse, change, and produce a clear pattern between different data variables. Furthermore, the result can be graphically depicted to enable a person to easily understand the result (Noels, 2018).

3.1.1 Correlational Research

We have adopted correlation research in this study because it aims to identify links between two or more variables. Simply expressed, it investigates whether a rise or fall in one variable is accompanied by a rise or fall in another. Researchers can assess if two variables alter together and to what extent by using the results of correlational studies. When two variables move in the same direction, there is a positive correlation. In contrast, when two variables move in opposite to one another, this is known as a negative correlation.

3.2 Data Collection Method

To respond to specific study questions, formulate text assumptions, and evaluate results, data collection refers to the process of gathering and analysing relevant data on parameters in a structured and predetermined way. The goal of any data

collection is to acquire trustworthy information that can be utilised to conduct in-depth data analysis and build a compelling argument for responding to specific issue. No matter the subject of research or desired option for describing data (quantitative/qualitative), accurate data collection is essential in maintaining the integrity of reserving (Kabir, 2016).

3.2.1 Primary data

Primary data collection will be used in this research. Primary data is information that has been gathered from first-hand experience. Primary data is more dependable, authentic, and unbiased and has not yet been published. Since primary data has never been modified or altered by individuals, its validity is higher than that of secondary data. The information gathered through surveys is fresh and gives one comprehensive detail about the chosen subject. Depending on the sort of research, it reflects on how individuals think while taking in mind the present environmental and societal aspects (Harbor, 2022). In general, there are several types of collecting primary data. For example, observations, interviews and questionnaires. In our research, we will conduct a survey to collect our data by distributing the questionnaire to the youth in Malaysia. The online survey was specifically created with the goals of the research in mind to ensure the accuracy and quality of the data.

3.3 Sampling Design

In most cases, samples of participants rather than the entire population are used in research investigations. The hardest part of fieldwork is selecting a random sample from the intended population that will be used to generalise the study's findings (Banerjee & Chaudhury, 2010). Sampling design, a mathematical function, gives the probability of choosing any certain sample. Since sampling forms the basis of almost all research projects, the analysis of sampling design is an essential

component of statistics. It entails not only mastering how to calculate the knowing how to create the sample strategy that will work the best in a given scenario (Glen, 2021). A population parameter estimate, and a hypothesis test are the two main goals of sampling. When there are an infinite number of members in a population, sampling is still the only option. In some circumstances, sampling is the only feasible method for gathering data (Kabir, 2016). According to Taherdoost (2016), Figure 3.1 depicts the steps that are typically taken when doing sampling.
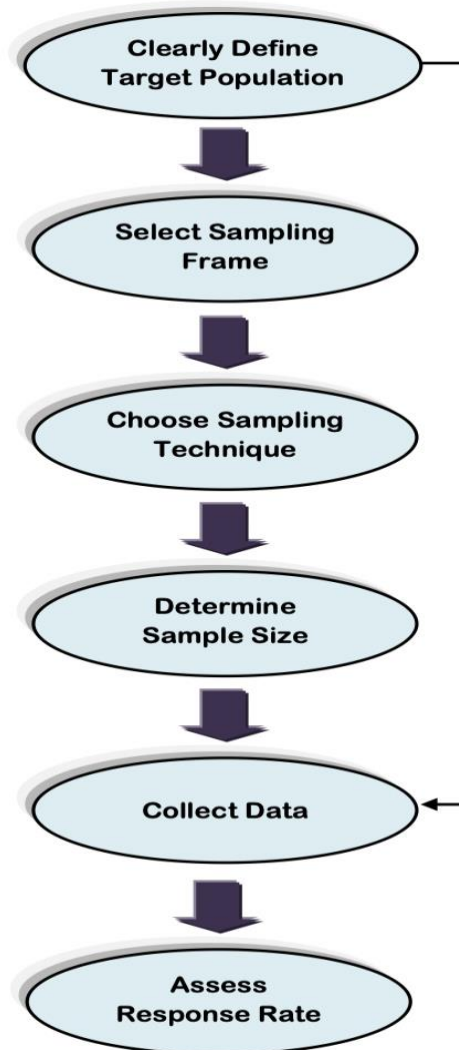
Figure 3.1: Steps Involved in Sampling Process.

Adapted From Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3205035

3.3.1 Target Population

The target population includes all the demographics that the researchers are interested in. Even when the entire group is not included in the study, the outcomes are used to generalise the entire group. It is necessary to define the target population precisely. Ineffective research will be produced when the target population is not accurately defined and the data acquired does not match. This research's targeted population includes youth aged from 18 to 30 in Malaysia. To guarantee the outcome is unbiased, we will follow the population size of the ethnic group and gender. Bumiputera made up 71.63% of the 5.2 million citizens in 2019, while the Chinese and Indian people in the population are 20.59% and 6.76%, respectively. Others held steady at 1.02%. Apart from that, with 2.63 million men and 2.56 million women, respectively, the men population will outnumber the female population in 2022 (Department of Statistics Malaysia, 2022).

3.3.2 Survey Frame

Survey frame is known as a list of the elements that can serve as a source for a sample (Taherdoost, 2016). The functioning population is another name for the sampling frame because these elements will ultimately provide the units needed for an analysis (Zikmund & Carr, 2008). The sample ought to be able to represent the sampling frame, which should ideally be comparable to the population but commonly varies due to practical issues with information accessibility (Welman et al., 2005). Malaysian investors were chosen using a non-probability, deliberate sampling process, which is described below.

3.3.3 Sampling Method

When performing research on a group of people, it is extremely rare to collect data from every individual in the group. A sample which representing the actual study's participant population is instead chosen by the researcher. An investigator must properly assess when choosing a sample that represents the whole group to make accurate conclusions from the data collected (McCombes, 2019). The two main categories of sampling techniques are probability sampling and non-probability sampling (Acharya et al., 2013). Probability sampling is conducted with randomisation, whereas probability sampling is not (de Vos et al., 2011). It is necessary to select a broad sampling methodology first before setting on a particular kind of sample strategy. The various sampling methodologies are shown in Figure 3.2.
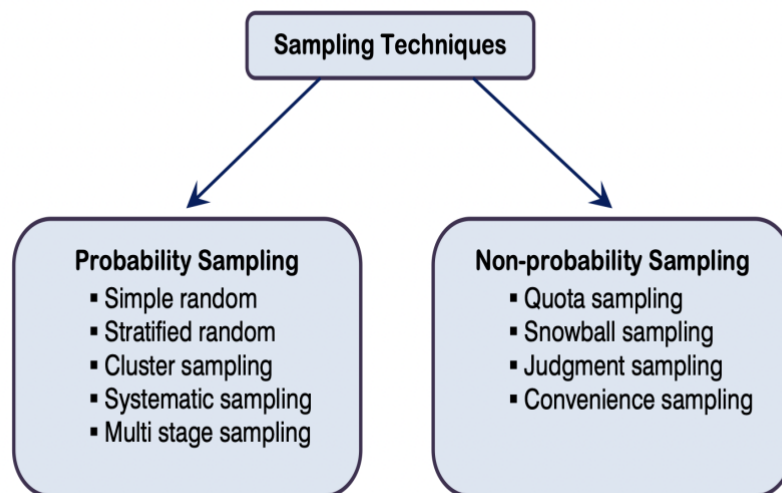
Figure 3.2: Sampling Techniques.

Adapted From Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.3205035

In our study, we employed convenience sampling to enable us to reach the respondents required easily. Convenience sampling refers to the selection of units for the sample based on their accessibility to the researcher

(Nikolopoulou, 2022). This makes it possible to thoroughly examine the phenomena known as "youth investment intention" in related circumstances.

3.3.4 Sample Size

To eliminate biases or sampling errors, a random sample must be large enough to allow generalisation from it. What is adequate depends on a vvariety of parameters that commonly confound first-time questionnaire respondents. This is because, in this case, what concerns is the actual size of the sample that is decided in connection to the intricacy of the population, the investigator's goal, and the quantitative technique types which are going to be utilised in analysis of data. It does not matter what proportion of the study population is sampled (Taherdoost, 2016). Although there may be decreasing returns at a given sample size, that have to be measured against the resources of the investigators, it is undeniable that findings are less likely to be biased as the sample are bigger (Gill et al., 2014). In other words, higher sample sizes may minimize error of sampling, but the effect wears off over time. The sample size can be calculated using a variety of statistical formulas. Table 3.1 displays the sample size needed for a precise set.

Table 3.1:

Sample Size Determined on Required Precision

	Variance of the population P=50%					
	Confidence level=95% Margin of error			Confidence level=99% Margin of error		
Population Size	5	3	1	5	3	1
50	44	48	50	46	49	50
75	63	70	74	67	72	75
100	79	91	99	87	95	99
150	108	132	148	122	139	149
200	132	168	196	154	180	198
250	151	203	244	181	220	246
300	168	234	291	206	258	295
400	196	291	384	249	328	391
500	217	340	475	285	393	485
600	234	384	565	314	452	579
700	248	423	652	340	507	672
800	260	457	738	362	557	763
1000	278	516	906	398	647	943
1500	306	624	1297	459	825	1375
2000	322	696	1655	497	957	1784
3000	341	787	2286	541	1138	2539
5000	357	879	3288	583	1342	3838
10000	370	964	4899	620	1550	6228
25000	378	1023	6939	643	1709	9944
50000	381	1045	8057	652	1770	12413
100000	383	1056	8762	656	1802	14172
250000	384	1063	9249	659	1821	15489
500000	384	1065	9423	660	1828	15984
1000000	384	1066	9513	660	1831	16244

Note. From Gill, J., Johnson, P., & Clark, M. (2014). *Research methods for managers*. SAGE.

The population of Malaysian citizens expanded to 30.2 million in 2022, with the growth rate that fell from 0.8% to 0.7% over that time (Department of Statistics Malaysia, 2022). Referring to Table 3.1, the minimum sample size, at a 95% confidence level and 5% margin of error, required in this study is 384.

3.4   Research Instrument

Data gathering instruments are those used in research. There are two primary approaches for doing this: (1) survey methods, and (2) non-survey methods. The survey approach involves the researcher and subject having direct contact while the researcher is asking questions and the subject is responding. On the other hand, a non-survey method is one in which information is gathered about subjects without always asking them questions or always involving any actual interactions between both the researcher and the respondent (Afolayan & Oniyinde, 2019). According to Tan (2018), quantitative research is more likely to include simulation, standardised

assessments, actual measuring equipment, and questionnaires. Many quantitative data are frequently gathered via questionnaires. There are various methods of distributing questionnaires, including mailing or electronic distribution (Sekaran & Bougie, 2016). In this study, we decided to design a questionnaire in Google Form and distribute it to the target participants. This is because questionnaires are typically less expensive than observations and interviews. The development of the questionnaire is described in depth in the following parts.

3.4.1 Questionnaire Design

A questionnaire consists of a number of questions to be asked to participants in order to gather information (Tan, 2018). Additionally, de Vos et al. (2011) state that the majority of questionnaires consist of relevant questions that are highly organised, have few options for responses and ratings, and rarely include options along with the explanation. Tan (2018) also mentioned that a preliminary test should be organized with a small sample of participants before the questionnaire is finalised in order to get input on its content, design, ordering, and complexity. The questionnaire was constructed in plain language for this research so that respondents whose mother language is not English could understand it. This questionnaire comprises 9 sections with 47 questions in total. A sample of our questionnaire is attached on **Appendix 3.2**. Demographic questions are included in Section A to help gather the essential respondent's data. Gender, age group, ethnicity, education, occupation, and annual income were among the demographic data.

3.4.2 Pilot Study

Pretesting is the practise of running a small sample of people through the questionnaire to find and address any potential problems. It is important to test a questionnaire's entirety, including the order of the questions, their

format, their content, their phrasing, their layout and their level of difficulty (Malhotra et al., 2020). In terms of background information, knowledge with the topic, interest-related behaviours, and attitudes, respondents who participated in the pre-test and the real survey should be comparable (Malhotra, 2019). A pilot test can be referred to in two ways in the field of social science. The phrase can be used to describe so-called feasibility studies, which are "limited scale versions, or test runs, conducted in preparation for main study" (Polit & Beck, 2006). Pilot studies, on the other hand, can also be employed to pre-test or "try out" a certain research tool (Baker, 2014). According to Johanson and Brooks (2009), a suitable minimum recommendation for a pilot research with the aim of questionnaire study or scale development is 30 relevant respondents from the demographic of interest. After collecting 30 responses, the validity and reliability of the responses will next be evaluated by SPSS. The questionnaire will undergo any necessary revisions based on the feedback from the participants in order to increase its quality.

Referring to **Appendix 3.1**, the Cronbach's Alpha of Financial Well-Being was found to be 0.421, which falls under the category of "Poor Reliability". Thus, we will remove this independent variable to improve the overall reliability.

3.4.3 Source of Questionnaire

The questionnaire was mostly constructed from three sources. A portion of the questionnaire was created using questions from previous research. Besides, some of the questions in this questionnaire were developed by us using the evidence gathered from internet sites. The origin of questionnaire for each variable are displayed in **Appendix 3.3**.

3.5   Construct Measurement

To gauge quality, surveys are frequently utilized. Likert scales are a typical survey rating format. Five or seven levels are used to rate respondents' quality on a scale of highest to lowest or strongly agree to strongly disagree (Allen & Seaman, 2007).

3.5.1 Scale of Measurement

Measurement levels, commonly referred to as scales of measurement, can be used by researchers to determine how precisely variables are captured. Something that can take on different values based on the data gathering is referred to as a variable in scientific inquiry. Scales of measurement come in four varieties: nominal, ordinal, interval, and ratio (Bhandari, 2021). The simplest level type is the nominal scale because it just uses labels to identify or categorise objects, such as numbers and characters (Zikmund & Carr, 2008). The rank-ordering process gives rise to the ordinal scale. This scale has an isotonic or order-preserving group structure because any "ordering-preserving" transformation will render the scale form invariant (Stevens, 1946). Using an ordered relationship and an ordinal scale, items are arranged and classified according to their degree (Zikmund, 2008). In Section A, we will apply the nominal and ordinal scale to collect the data, including the participant's age, gender, ethnicity, education, occupation, and income level.

Almost all common statistical measures work on an interval scale, with the exception of those that need knowledge of a "real" zero point. (Stevens, 1946). Although the intervals between each point in an interval scale are evenly spaced, they likewise follow a distinct sequence. As a composite score created by aggregating the responses to at least four questions, the overall Likert-scale data is sometimes regarded as interval data (Bhandari, 2022). We will apply the 5-point Likert scale in Section B to Section I in the questionnaire. Table 3.2 shows an example of the 5-point Likert scale.

Table 3.2:

5-point Likert scale

5	Strongly Agree
4	Agree
3	Neither Agree or Disagree
2	Disagree
1	Strongly Disagree

3.5.2 Scaling Techniques

The development of the Likert scale is anchored in the research's objective. Sometimes the goal of the study is to comprehend respondent perceptions and attitudes in relation to a single "hidden" variable. Several "observable" components in the questionnaire "reveal" these "hidden" characteristics. These created components, which are mutually exclusive, each address a particular aspect of the phenomenon under investigation and together measure the phenomenon as a whole. The results from each questionnaire component are added up (summarised) in this study to produce a combined score, that logically evaluates a single trait overall. The Likert scale is the name of this tool. The Likert scale, in its ultimate iteration, is a 5-point scale that lets a person indicate how strongly they agree or disagree with a given proposition. A Likert scale usually offers five options for responses to a question or statement, allowing respondents to express their level of agreement or disapproval with the question or statement on a negative-to-positive scale (McLeod, 2008).

3.6   Data Processing

Processing of data is the collection and conversion of information into a useful form. Research data checking, editing, coding, and transcribing are parts of data processing. In order to prevent having a negative impact on the final outcome of data, proper data processing is essential.

3.6.1 Data Audit

Auditing on data is essential to help with the process of quality assurance for the information and responses acquired during market research studies. The study could be ruined by errors that arise during data entry. In this phase of the study, we have to ensure the validity of the responses received in the questionnaires.

3.6.2 Data Editing

Editing is the process of evaluating questionnaires with the goal of increasing exactness and correctness (Malhotra, 2010). When editing takes place, questionnaires are checked to detect responses that are incomplete, unclear, inconsistent, or unreadable (Malhotra, 2019). The method of data gathering will determine how the content is verified for completeness. In order to reduce some of the potential issues, the questionnaire responses should also be examined (Kumar, 2014).

3.6.3 Data Coding

The procedure of identifying and numbering the responses given by the responders is known as "coding" (Richards, 2015). This is done mainly to help the researcher interpret and classify responses. Chawla and Sondhi

(2011) mentioned that the results of the questionnaire are then documented in a spreadsheet. Nine sections, labelled A to I, make up the questionnaire utilised in this study. The variable codes and assigned values used in the various questionnaire sections are shown in Table 3.3. For sections B to I, the following codes are used to label each question.

Table 3.3:

Variable-specific codes

Degree of Agreeance	Code
Strongly Disagree	1
Disagree	2
Neither Agree or Disagree	3
Agree	4
Strongly Agree	5

3.7 Data Analysis

The most fundamental use of social statistics involves quantitative data analysis, which involves utilizing numbers to find and explain trends in the data (Chambliss & Schutt, 2019). Data must first be readied for analysis after it has been gathered. To do this, data must be entered into an electronic file using a statistical software programme. Statistical techniques must next be used to analyse the data after they have been summarised (Antonius, 2004). In our research, we will analyse the data collected using SPSS software.

3.7.1 Descriptive Analysis

The immediate monitoring of the desired behaviour under normal conditions is required for descriptive analysis to study about relevant and potentially significant environmental occurrences without the usage of

experimental modification. Descriptive studies therefore identify situations that are related to the happening of a specific target response. Descriptive analysis is typically used before doing an experimental functional analysis as part of a full functional assessment of issue behaviour (Sloman, 2010). The data can be transformed using a standard descriptive approach like measures of central tendency (mean, mode median), measures of dispersion (variance and standard deviation), and measures of position (percentage) (Antonius, 2004).

3.7.2 Reliability Test

The regularity of a metric is correlated with its trustworthiness`. A person taking a test to determine motivation should give reasonably consistent responses each time (Twycross & Shields, 2004). Cronbach's α is the most often used test that measure an instrument's internal reliability. A dependability score of 0.7 or greater is regarded as acceptable (Shuttleworth, 2009).

Table 3.4:

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

Note: If alpha > 0.95, items should be inspected to ensure they measure different aspects of the concept.

Note. From Hair, J. F., Page, M., & Brunsveld, N. (2020). *Essentials of Business Research Methods* (4th ed.). Routledge.

3.7.3 Inferential Analysis

A whole population can be inferred from a small portion of a sample using inferential statistics (Vergura et al., 2009; Zikmund et al., 2013). Therefore, to ensure the greatest possible interest population representation, inferential statistics depend on appropriate sampling techniques. Inferential statistics are built on a foundation of probability theory and hypothesis testing (Allua & Thompson, 2009). The primary goal of inferential statistics is not to guarantee 100 percent certainty, but rather to provide reliable tools for assessing the likelihood or unlikelihood of the generalization the researcher desires to make (Núñez, 2007).

3.7.3.1 Linear Correlation Coefficient Analysis

Linear correlation coefficient is also known as Pearson's correlation coefficient. It determines how strongly two variables are linearly associated. When applied to a sample, the Person's correlation coefficient is denoted by r. The Pearson coefficients' range is from positive 1 to negative 1, with positive 1 signifying a positive correlation, negative 1 signifying a negative correlation, as well as 0 signifying no link (Sedgwick, 2012).

Table 3.5:

General Guide To Interprete Correlation Coefficient Size

Range of Correlation Coefficient Values	Level of Correlation	Range of Correlation Coefficient Values	Level of Correlation
0.80 to 1.00	Very Strong Positive	-1.00 to -0.80	Very Strong Negative
0.60 to 0.79	Strong Positive	-0.79 to -0.60	Strong Negative
0.40 to 0.59	Moderate Positive	-0.59 to -0.40	Moderate Negative
0.20 to 0.39	Weak Positive	-0.39 to -0.20	Weak Negative
0.00 to 0.19	Very Weak Positive	-0.19 to -0.01	Very Weak Negative

Note. From Evans, J. D. (1996). *Straightforward statistics for the Behavioral Sciences*. Brooks/Cole Pub. Co.

3.7.3.2 Multiple Linear Regression (MLR)

Similar to linear regression, multiple regression is built on the identical core principles. When using multiple regression, more than one predictor variable is utilised to identify the factors that have an effect on the predicted variable (Kellerman et al., 2019). The predicted component, Y, typically depends on a wider set of predictor variables, sometimes known as regressors. According to Asteriou and Hall (2021), the multiple regression model's general structure is as follows:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + B_3 X_{3t} + \cdots + \beta_n X_{nt} + \mu_t$$

Whereby

Y_t = Dependent variable

β_0 = Dependent variable's intercept

β_n = n[th] observation's sample scope coefficient

X_{nt} = n[th] observation's independent variable

μ_t = Error term

This study employed multiple regression to identify the predictor variables, such as risk tolerance, financial literacy, overconfidence bias, social interaction, herding behaviour, disposition effects, and perceived behavioural control. Investment intentions were treated as the predicted variable, whereas the aforementioned variables and demographic characteristics were handled as predictor factors.

3.7.3.3 Analysis of Variance (ANOVA)

In situations when there is one predicted variable and one or more predictor variables, the ANOVA statistical test is performed to detect variations in the categories' mean (Sawyer, 2009). The

purpose of the ANOVA test is to assess the influence of IVs on the DV (Shayfull et al., 2012). F-statistic is used by the ANOVA test to determine whether the means of all the classes are similar (Park, 2009). There are two methods for doing the ANOVA test. One predictor variable is included in a one-way ANOVA. While the n-way ANOVA is employed if there are more than two predictor variables (Malhotra, 2010).

3.8   Conclusion

For an appropriate study to be done, we should have a solid comprehension of the research process. Thus, the various research approaches employed for the empirical section of this study were covered in Chapter 3.

CHAPTER 4: DATA ANALYSIS

4.0   Introduction

Data analysis assists this study in transforming a set of raw data collected into actionable insights and constructive findings by examining, organizing, and interpreting it. There is a total of 403 respondents collected through survey via Google Forms. However, only 400 responses are being examined because the remaining 3 disagreed on the acknowledgement of notice. Thus, their data will not be processed. By utilising IBM SPSS Statistics Version 28, the results obtained from the questionnaire are analysed and interpreted to help to draw conclusions on our research goals. This chapter presents and discusses a series of analyses including descriptive analysis, reliability analysis, and inferential analysis are shown and discussed with numbers and tables.

4.1   Descriptive Analysis

Descriptive analysis refers to the strategy adopted to organize, rearrange, as well as manipulate data to analyse and interpret them effectively. It assists in summarizing and explaining data points in a meaningful manner. When collecting data, demographic information is first obtained through a questionnaire under 'Section A' and the results are presented in frequency tables. The group of respondents comprises individuals who are Malaysians and all aged between 18 and 30 years old.

4.1.1 Demographic Profile

This section demonstrates the respondents' personal information, including their age, gender, ethnicity, highest education level, occupation, annual

income, and years of investment experiences. The number of responses for each item is analysed and presented through frequency tables.

4.1.1.1 Age

Appendix 4.1 presents the frequency distribution of age among 400 participants, indicating that the majority respondents are aged between 22 – 24, which accounted for 39.3% of the total sample. Other than that, the age group of 28 – 30 has the lowest frequency, representing only 12.3% of the sample.

4.1.1.2 Gender

Appendix 4.2 demonstrates the gender distribution of 400 participants. There are more males as compared to female. Specifically, the number of males is 220, which accounts for 55% of the total participants, whereas the number of females is 180, contributing 45% of the respondents.

4.1.1.3 Ethnicity

As demonstrated in **Appendix 4.3**, it shows the frequency distribution of ethnicity among 400 participants. The majority participants are Malay, accounting for 64.5% of the total sample, followed by Chinese – 29%, Indian – 6.3%, and Dayak – 0.3%.

4.1.1.4 Highest Education Level

As illustrated in **Appendix 4.4**, the frequency of highest education level for the 400 participants is shown. Number of individuals who hold or currently pursuing a bachelor's degree hit the highest amount, contributing 71.8% of the sample. On the other hand, respondents with the highest qualifications of secondary school certificate, diploma, master and/or doctoral degree are approximately equal, contributed with 7%, 9.3%, and 12% of the total participants.

4.1.1.5 Occupation

Appendix 4.5 shows the frequency of occupation for the 400 participants. As illustrated, more than half of the respondents are students, contributing 56% of the total sample. Besides, a total of 43.3% respondents are working, who comprised by employed participants, self-employed participants, and businessman.

4.1.1.6 Annual Income

The frequency of annual income for the 400 participants is shown in **Appendix 4.6**. There are 224 respondents with annual income below RM 21,000 which is the highest, contributing 56% of the sample. The second highest goes to the respondents with annual income above RM 48,000 (approximately 20%), while annual income between RM 21,000 to RM 24,000 is the lowest (2.3%) among the total participants.

4.1.1.7 Year(s) of Investment Experience

As demonstrated by **Appendix 4.7**, it shows the frequency of years of investment experience among the 400 participants. 37% of the participants have no experience in investing whereas 63% of them have investment experience in between the range of less than 1 year to above 7 years. Individuals with more than 7 years of investment experience is the least among the 400 participants.

4.1.2 Measure of Central Tendency

This section includes the mean, median, mode, and standard deviation for the items in each variable. The data of the dependent variable (DV) is collected in 'Section B' of the questionnaire whereas for independent variables (IVs) are obtained in between 'Section C' to 'Section I' of the questionnaire. The overall summary of the results and their respective measurements is presented in **Appendix 4.8**.

In overall, all the variables have a mean value in between 3 to 4, in which DV (INT) has the highest mean value, 3.9605 whereas IV4 (SI) has the lowest, 3.0245. Similar to mean value, IV4 (SI) has the lowest median value of 3.0000 while DV (INT), IV1 (RT), IV2 (FL), and IV6 (DE) all have the highest median values of 4.0000. On the other hand, the mode values for IV6 (DE) and IV7 (PBC) are the highest, recorded at 4.8000 whereas IV4 (SI) and IV5 (HB) have the lowest mode values of 3.2000. The standard deviation for IV4 (SI) is the highest, indicating a higher spread of data from the mean, while the standard deviation for DV (INT) is the lowest, recorded at 1.04569.

4.2   Reliability Analysis

A reliable test is a statistical method that evaluates the dependability and constancy of a measuring tool or evaluation instrument. It is used to ascertain the degree to which the instrument or tool consistently assesses the same thing throughout time and in various circumstances. Cronbach's coefficient of 1.0 is uncommon since every research has some degree of inaccuracy. The majority of researchers set thresholds that specify "acceptable" degrees of reliability (Portney & Watkins, 2015). In general, coefficients below 0.60 indicate poor reliability; coefficients from 0.60 to 0.69 is acceptable; coefficient ranging from 0.70 to 0.79 imply good reliability; coefficient lies from 0.80 to 0.89 represent excellent reliability; and coefficient greater than 0.9 is classified as somewhat high or too high reliability despite the fact that these limitations are largely arbitrary.

4.2.1 Dependent Variable – Investment Intention

Table 4.1:

Reliability Test of Investment Intention

N of Items	Cronbach's Alpha	Information
5	0.908	Reliable

Looking on Table 4.1, we can see that the Cronbach's coefficient of Investment Intention is 0.908. This indicates that 90.8% of the tested statements were accurate. The reliability regime is at its highest level since it exceeds 0.75. To put it another way, it indicates that all the independent variables that were utilized to determine the dependent variable have high dependability.

4.2.2 Independent Variables

Table 4.2:

Reliability Test of All Independent Variables

Items	N of Items	Cronbach's Alpha	Information
Risk Tolerance	5	0.884	Reliable
Financial Literacy	5	0.771	Reliable
Overconfidence Bias	5	0.898	Reliable
Social Interaction	5	0.746	Reliable
Herding Behaviour	5	0.760	Reliable
Disposition Effect	5	0.756	Reliable
Perceived Behavioural Control	5	0.946	Reliable

As demonstrated in Table 4.2, the Cronbach's coefficient for the predictor variables varied from least at 0.746 to most at 0.946. Perceived Behavioural Control (PBC), Overconfidence Bias, and Risk Tolerance all have Cronbach's Alpha values above 0.80, which is categorized as "Excellent Reliability", with PBC having the greatest value at 0.946. These input variables are considered to be very trustworthy. According to the results, the rest predictor variables are deemed to be trustworthy because they have the values of Cronbach's Alpha more than 0.70.

4.3   Inferential Analysis

4.3.1 Pearson's Correlation

A pair of metric variables' linear relationship is measured via Pearson correlation. Correlation coefficients are used to describe the numerical representation of the Pearson correlation. Its value falls between -1.00 and +1.00, with 0 denoting a complete lack of correlation between the two measured variables. Although a perfect link between two variables could be represented by a value of -1.00 or +1.00, this is a rare occurrence (Hair et al., 2020).

Table 4.3:

Results of Linear Correlation Coefficient Analysis of Predictor Variables and Investment Intention

	INT	RT	FL	OB	SI	HB	DE	PBC
INT	1							
RT	0.690**	1						
FL	0.766**	0.713**	1					
OB	0.672**	0.794**	0.759**	1				
SI	0.580**	0.420**	0.504**	0.501**	1			
HB	0.531**	0.396**	0.432**	0.480**	0.689**	1		
DE	0.724**	0.679**	0.632**	0.713**	0.607**	0.618**	1	
PBC	0.752**	0.694**	0.777**	0.833**	0.575**	0.575**	0.716**	1

** Correlation is significant at the 0.01 level (2-tailed)

Table 4.3 shows the correlation results between a pair of variables. There is a 0.690 correlation between RT and INT. This implies that the greater the RT, the greater the intention of a person to invest. In addition, the correlation between FL and INT was shown to be positive 0.766. The higher the FL, the greater the investment intention of a person. Furthermore, there is a 0.672 relationship between OB and INT. Apart from that, the DE has been determined to be positive correlated with INT at a value of 0.724. This suggests that INT rises due to an increment in a person's propensity to sell assets with rising values while holding those with declining ones. Besides that, the PBC and INT have a 0.752 correlation. With that being said, the stronger the discernment of an individual's ability to execute the action, the greater the intention to invest. To conclude, the above predictor variables' correlation coefficient lies between 0.60 and 0.79, indicating a strong positive connection between the aforementioned predictor variables and investment intention.

On top of that, the correlation between social interaction and investment intention is 0.580. This indicates that the intention of an individual to invest rises in proportion to how much they are impacted by the social environment. Last but not least, herding behaviour and investment intention have a correlation coefficient of 0.531. This illustrates how youth are more likely to invest when the phenomena of choosing to follow others is stronger. All in all, both predictor variable's correlation coefficient lies between 0.40 and 0.59, indicating a moderate positive association between SI/HB and INT.

4.3.2 Multicollinearity Test

Appendix 4.9 displays the results of the multicollinearity test using the VIF and TOL. When the value of VIF is below 10, we can infer no to have significant multicollinearity issue. Each and every predictor variable's VIF value is less than 10, which indicates that the multicollinearity issue is not

critical among the IVs. Next, the TOL used to examine for the presence of multicollinearity; if TOL less than 0.2, the model is said to have significant multicollinearity. According to the results displayed in **Appendix 4.9**, the value of TOL for each IVs is above 0.2, further demonstrating that there is no multicollinearity issue across all independent variables. As a result, the multicollinearity test's findings indicate the projected regression result are always fair, consistent, and efficient.

4.3.3 Multiple Regression Analysis

Model below illustrates how the results of multiple regression analysis might be interpreted:

$$INT = \beta_0 + \beta_1\,RT + \beta_2\,FL + \beta_3\,OB + \beta_4\,SI + \beta_5\,HB + \beta_6\,DE + \beta_7\,PBC$$

$$INT = 0.037 + 0.196\,RT + 0.432\,FL + (-0.189)\,OB + 0.077\,SI + 0.033\,HB + 0.296\,DE + 0.192\,PBC$$

Whereby:

INT= Investment Intention
RT= Risk Tolerance
FL= Financial Literacy
OB= Overconfidence Bias
SI= Social Interaction
HB= Herding Behaviour
DE= Disposition Effect
PBC= Perceived Behavioural Control

Appendix 4.10 displays the multiple regression analysis result, and it employed to demonstrate the connection among the DV and IVs. Firstly, 0.037 as the intercept value indicates that the investment intention among

youth will be 0.037 unit if the value of all IVs equal to 0. Next, the coefficient value of risk tolerance is 0.196 which represents that the investment intention among youth will increase by 0.350 unit for every 1 unit increase in risk tolerance, all else unchanged. Third, the coefficient value of financial literacy is 0.432 and it represents that the investment intention among youth will increase 0.432 unit for every 1 unit rise in financial literacy, all else being equal. However, the OB with the value of -0.189 states that the investment intention among youth will decrease by 0.189 unit for every 1 unit increase in overconfidence bias, ceteris paribus. Besides, the value of social interaction is 0.077, which represents that the investment intention among youth will increase by 0.077 unit for every 1 unit rise in social interaction, all else unchanged. Furthermore, the herding behaviour has the value of 0.033, which indicates that the investment intention among youth will increase by 0.033 unit for every 1 unit rise in herding behaviour, all else unchanged. In addition, the coefficient figure of disposition effect is 0.296, which represents that the investment intention among youth will grow 0.296 unit by every 1 unit grow in disposition effect, ceteris paribus. Lastly, the perceived behavioural control has the value of 0.192 which shows that the investment intention among youth will grow 0.192 unit by every 1 unit rise in perceived behavioural control, holding all other variables unchanged.

Financial literacy has the greatest coefficient value, hence it's possible to conclude that financial literacy has the most influence on investment intention among youth. Contrarily, among all the independent variables, herding behaviour with the smallest coefficient value considered to have the least influence toward the investment intention among youth. Nevertheless, the overconfidence bias has the negative coefficient value, thus it can be argued that the overconfidence bias has adverse influence on investment intention among youth.

On the other hand, the figure of R^2 used to indicate the model's ability to fit data. The variation in the IVs employed in this analysis may account for 71.9% of the variation in the DV, according to the R^2 value of 0.719. The

adjusted R^2 (0.714) number also demonstrates that 71.4% of the variation in the DV can be accounted for by the variance in the IVs after the degree of freedom has been taken into consideration.

4.3.3.1 Risk Tolerance (RT)

H_0: There is no significant relationship between RT and INT among youth.

H_1: There is a significant relationship between RT and INT among youth.

Appendix 4.10 displays the risk tolerance's p-value below 0.001, which is below the CV of 0.05. Consequently, at a significance level of 5%, it can be argued that risk tolerance statistically contributes to the explanation of young people's investment intentions. As a result, we accept H_1 and reject H_0. Risk tolerance and investing intention among youth has a positive connection, as evidenced by the positive coefficient value of 0.196.

4.3.3.2 Financial Literacy (FL)

H_0: There is no significant relationship between FL and INT among youth.

H_1: There is a significant relationship between FL and INT among youth.

Appendix 4.10 shows the p-value of financial literacy is below 0.001, which is below the CV of 0.05. Thus, at a significance level of 5%, it can be argued that the financial literacy is statistically significant to the explanation of young people's investing intentions.

As a result, we accept H_1 and reject H_0. Financial literacy and investing intention among youth has a positive connection, as proven by the positive coefficient value of 0.196.

4.3.3.3 Overconfidence Bias (OB)

H_0: There is no significant relationship between OB and INT among youth.

H_1: There is a significant relationship between OB and INT among youth.

P-value of the overconfidence bias is below 0.001, which is smaller than the CV of 0.05, according to **Appendix 4.10**. So, it can be stated that overconfidence bias is statistically important to the explanation of young people's investment intentions at a significance level of 5%. Thus, we accept on H_1 and reject with H_0. The negative coefficient value of 0.189 demonstrates there is an adverse relationship between youth investment intention and overconfidence bias.

4.3.3.4 Social Interaction (SI)

H_0: There is no significant relationship between SI and INT among youth.

H_1: There is a significant relationship between SI and INT among youth.

The p-value of social interaction with 0.032, which is less than the CV of 0.05, as per **Appendix 4.10**. So, it can be stated that social interaction is highly significant to the explanation of young people's investment intentions at a significance level of 5%. Thus, we accept

with H_1 and reject with H_0. The positive value of coefficient with 0.077 represents a positive relationship among social interaction and youth investment intention.

4.3.3.5 Herding Behaviour (HB)

H_0: There is no significant relationship between HB and INT among youth.

H_1: There is a significant relationship between HB and INT among youth.

P-value for herding behaviour is 0.394, which is above the CV of 0.05, according to **Appendix 4.10**, which supports this conclusion. So, it can be argued that the herding behaviour is not statistically significance to the explanation of young people's investment intentions at significance levels of 5%. Thus, we accept on H_0 and reject with H_1. The positive coefficient value of 0.033 demonstrates a positive linkage between herding behaviour and investment intention among youth.

4.3.3.6 Disposition Effect (DE)

H_0: There is no significant relationship between DE and INT among youth.

H_1: There is a significant relationship between DE and INT among youth.

Appendix 4.10 demonstrates the outcome, which indicates that p-value of disposition effect is below 0.001, and below the crucial value of 0.05. Consequently, at the 5% significance level, the

disposition effect statistically contributes to the explanation of young people's investment intention. H_1 is accepted and H_0 is rejected, demonstrating a significant link between investment intention among youth and disposition effect. Youth investment intention and disposition effect have a coefficient value of 0.296, indicating a positive relationship.

4.3.3.7 Perceived Behavioural Control (PBC)

H_0: There is no significant relationship between PBC and INT among youth.

H_1: There is a significant relationship between PBC and INT among youth.

Appendix 4.10's outcome indicates the p-value of PBC is less than the CV of 0.05 and is 0.001. It can be inferred that there is a strong correlation between youth investment intention and PBC as a result of H_0 being rejected and H_1 being accepted. The relation between PBC and investment intention among youth is positive, with a coefficient value of 0.192.

4.3.4 ANOVA

The outcome of the ANOVA displayed in **Appendix 4.11**. The outcome reveals that the p-value for ANOVA is below 0.001, which is below the CV of 0.05, suggesting that the outcome is significant at the level of 5%. This is based on the F-statistic and its associated significance value. As a result, it can be judged that the means of all groups differ from one another and the IVs and DV are statistically significant related.

_____

4.4   Conclusion

The study's findings were reached using a variety of data analysis techniques. The descriptive analysis provides the characteristics of the sampled demographics. The validity of the constructs used in the questionnaire is subsequently evaluated. Lastly, inferential analysis was used to investigate the factors influencing young people's intention to make investments. The discussion and implications derived from the findings of this study, together with its limitations and recommendations, will be more thoroughly discussed in the final chapter.

CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATION

5.0 Introduction

This section encapsulates the essence of the research and presents potential avenues for future investigation and refinement. Furthermore, it undertakes an evaluation of the significant findings of this study, using various behavioural determinants to assess the investment inclination of the youth cohort in Malaysia. The section conscientiously acknowledges the study's limitation and provided viable suggestions to enhance the quality of future research endeavours.

5.1 Discussion on Major Findings

The following *Table 5.1* summarizes the major findings for each determinant:

Subtopic Hypothesis	IV	Beta	P-value	Significance	Decision
5.1.1 H_1	RT	0.196	<0.001(<0.05)	Significant	Supported
5.1.2 H_2	FL	0.432	<0.001(<0.05)	Significant	Supported
5.1.3 H_3	OB	-0.189	<0.001(<0.05)	Significant	Supported
5.1.4 H_4	SI	0.077	0.032(<0.05)	Significant	Supported
5.1.5 H_5	HB	0.033	0.394(>0.05)	Insignificant	Not Supported
5.1.6 H_6	DE	0.296	<0.001(<0.05)	Significant	Supported
5.1.7 H_7	PBC	0.192	<0.001(<0.05)	Significant	Supported
	Constant	0.037			

Table 5.1: *Summary on Major Findings*

5.1.1 Risk Tolerance

In accordance with the statistical analysis purported in Table 5.1, risk tolerance is found to be positively affecting investment intention. This could be indicated by the significance of the determinant at confidence interval of 95%. The result aligns with Yang et al. (2021) who proposed the significance of risk tolerance in affecting investment intention on working adults in Malaysia, which is also incompatible with the findings from Fauzi et al. (2017). Additionally, it is further specified that risk-takers tend to be more actively engage in the investment market. However, this study does provide a minor disparity in term of the research group, whereby the risk tolerance significance was present among the Malaysian youth.

5.1.2 Financial Literacy

In accordance with the statistical analysis purported in Table 5.1, financial literacy is found to be positively affecting investment intention. The result from this study aligns with the research by Tanuwijaya and Setyawan (2021) as well as Samsuria et al. (2019) who claimed the same positive relationship between these two variables. In other words, a greater level of financial literacy would lead to a greater level of investment intention accordingly. However, the results contradict with the research by Fauzi et al. (2017) who has proposed an insignificant impact of financial literacy on investment intention on the general public. This disparity could be explained as Fauzi assess the financial literacy on the investment intention from the perspective of a general public, whereas this study assess the financial literacy among youth in Malaysia. In this context, it is shown that the financial literacy tends to be a significant factor among Malaysian youth in the stock market investment.

5.1.3 Overconfidence Bias

In accordance with the statistical analysis purported in Table 5.1, it is surprising to find that overconfidence bias negatively affecting investment intention. This finding has been a disruptive one as this contradicts with most research, such as research from Yang et al. (2021), Adil et al. (2021), Rehan and Umer (2017), Anthony and Joseph (2017) and Bakar and Yi (2016). However, the results of a study support the idea that investors make irrational decisions. According to Ahmad and Shah (2020) and Kafayat (2014), the quality of investment decisions is substantially impacted by overconfidence, which is considerably negatively correlated with investment decision-making. In short, it means that the individual investors might make some irrational investment strategies because they are too confident in themselves on the particular investment, therefore, they have some bad experiences and no longer have the intention to invest.

5.1.4 Social Interaction

In accordance with the statistical analysis purported in Table 5.1, social interaction is found to be positively affecting investment intentions. The result from these studies is align with Tauwijaya & Setyawan (2021) which also applies the theory of planned finance in studying investment intentions. Besides, the result supports the finding of a study by Shanmugham and Ramya (2012) and Yang et al. (2021) which found that the social interaction is significantly influence investment intention in stock market. Therefore, the youth's intention regarding the investment increase as their level of social interaction increase. This is due to the fact that social interactions play a role in the trading process, and the highly sociable youth think the market more alluring when the people around them are engaged in investment.

5.1.5 Herding Behaviour

In accordance with the statistical analysis purported in Table 5.1, it is another surprising finding that the result indicates non-significance of herding behaviours to investment intention. In the research of Nareswari et al. (2021) and Keswani et al. (2019), it is shown that herding behaviour is a significant determinant that positively contributes to investment intention. However, Ahmed et al (2021) provided that there is no evidence of strong relationship between these two variables. On the other hand, Adil et al. (2021) provided that herding biases could be positively and negatively affecting investors depending on their gender. Thus, these studies have shown that herding behaviour could be an instable element for assessing investment intention as it varies across different aspects, may it be gender, geographical area and so forth. However, this study does provide an insight that herding behaviour appeared to be insignificant in indicating youth's intention to invest in Malaysia.

5.1.6 Disposition Effect

In accordance with the statistical analysis purported in Table 5.1, it is demonstrated that disposition effect does possess a significant positive relationship onto investment intention. The result from this study has shown a contradicting viewpoint with Lee et al. (2019) that proposed a disposition effect that negatively affect the stock market investment intention. However, it could be supported by a study shows that there is a positive significant linkage between the disposition effect and investment decision (Ahmed et al., 2022). The difference between this two research is due to geographical factor, where first was researching on Taiwan, while the later was on Pakistan. Thus, this study also indicates that the Malaysian youth's intentions to invest are vulnerable to the disposition effect.

5.1.7 Perceived Behavioural Control

In accordance with the statistical analysis purported in Table 5.1, it is demonstrated that perceived behavioural control would positively affect Malaysian youth's investment intention. This result could be supported by Fauzi et al. (2017), Mahardhika and Zakiyah (2020), and Setyorini and Indriasari (2020). Hence, it could be concluded that high control perceivers would be motivated and encouraged to strive for investment success when taking consideration of the difficulty of how hard an investment could be conducted. In this study, the behaviours of the respondents have illustrated a positive impact of PBC onto their investment intentions. In other words, the higher their belief on their investment success, the more motivated they are to be investing.

5.2 Implication of study

5.2.1 Theoretical Implication

This study has made a significant contribution by applying a combination of two well-known theories, namely the Theory of Planned Behaviours (TPB) and Behavioural Finance Theory, to evaluate the investment intentions of youth in Malaysia. The TPB theory was used to examine the underlying attitudes and beliefs of the participants towards investing, while behavioural finance theory explained the impact of psychological factors on investment intention. The study found that several factors, including risk tolerance, financial literacy, overconfidence bias, social interaction, disposition effect, and perceived behavioural control, were significant determinants affecting investment intentions. Interestingly, herding behaviour was found to be insignificant in influencing investment intentions.

It is noteworthy that the two theories have distinct focuses and scopes, with behavioural finance theory being more specific to financial decisioning and intentions and TPB theory is applicable to a broader range of behaviours. Nonetheless, the study highlights the potential overlap between the two theories in examining how investors behave in the market, as depicted in Figure 5.1. Overall, the findings of this study could have important implications for financial planners and policymakers in Malaysia seeking to better understand the investment behaviour of youth.
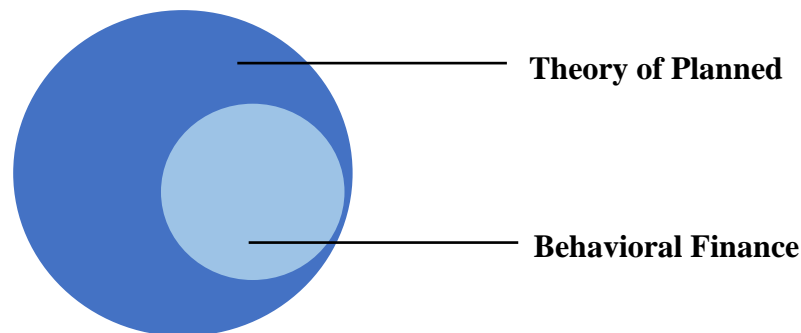
Figure 5.1. Illustration on Theories Used

5.2.2 Policy/Practical Implication

This study has illustrated the importance of risk tolerance, financial literacy, overconfidence bias, social interaction, disposition effect and perceived behavioural control in influencing investment intentions. A myriad of policies and pragmatic measures could be taken to address the importance of these determinants.

The current study suggests that respondents who believed themselves to be financially literate showed a negative overconfidence bias on their investment intentions. Most respondents disagreed, indicating a conservative behaviour. This could be because they have no confidence bias in investment intention. When investors act in an overly confident manner, these investors tend to be taking excessive risks, leading to poor downsides. However, the analysis has implied that youth in Malaysia are not affected

by overconfidence bias. As such, they tend to be more conservative and may possibly refuse to participate in investments.

Besides, the study revealed that financial literacy is a significant factor that drives youth towards investing. To encourage youth participation in the investment market, it's important to equip them with knowledge on personal finance and economics. Azhar (2022) explains that the Malaysian capital market faces systemic problems, resulting in low confidence among investors. Behavioural factors such as perceived control and disposition effect could play a crucial role in determining investors' confidence in the market. Financial institutions and individual investors could use this information to predict how young investors may behave during significant events like financial crises, political instability, or wars. These factors, along with risk appetite, can serve as important indicators for investors looking to make investment decisions. Risk-takers may enter the market early to make profits during risky conditions, while risk-averse investors may enter when the market becomes more liquid to minimize risks. Additionally, this study has also provided that herding behaviour is insignificant in affecting the youth's investment intention. This could imply the ability of the youth to think independently, which could be a result of higher financial literacy. Additionally, the high financial literacy shown among the youths may be attributed to the success of the Financial Education Network (FEN) in Malaysia. The inter-agency grouping has been actively providing reports, articles, talks and conferences to equip the public with better financial knowledge. In fact, students, youth, adults, and retirees were accommodated with distinct financial information. The initiatives conducted encompasses a myriad of topics, ranging from personal finance, financial scams, cybersecurity, financial management and investments (Financial Education Network, n.d.). However, the initiatives conducted were observed to be slightly halted in 2023. Hence, this study highlights the significance of the Financial Education Network to pursue the strategy in nurturing a greater level of financial literacy in the nation.

Apart from that, the study provided valuable insights to the Malaysian government and policymakers regarding the investment behaviours of Malaysian youth. The National Strategy for Financial Literacy 2019-2023 had highlighted the low confidence levels of Malaysians in their financial knowledge, and the study further revealed that investors had unrealistic expectations regarding potential annual returns and insufficient knowledge about the risk levels of capital market investments (Securities Commission Malaysia, 2023). This was reflected in the skewed responses obtained during the survey, indicating a lack of financial confidence and confidence in surpassing average market returns. Therefore, there was a pressing need for increased transparency within the investment sector to provide better access and outreach to youth and other investors regarding market risks.

5.3   Limitations of study

The present study faces a number of limitations that can be attributed to several factors, including the sampling method, questionnaire design, and the overall nature of the study. Firstly, it is important to acknowledge that convenience sampling was employed for this study, primarily due to practical reasons. Although this approach has its advantages, it is also vulnerable to certain limitations inherent in the sampling method itself. For instance, convenience sampling can result in a biased sample that may not accurately represent the target population. Consequently, it may lead to overestimation or underestimation of certain cohorts, and this needs to be taken into account while interpreting the findings.

Regarding the questionnaire design, it is prominent to note that the survey instrument is primarily comprised of closed-ended questions. While this approach is considered a standardized means of collecting quantitative data, it may restrict the diversity and breadth of responses that the respondents can provide. Essentially, participants are constrained to select from a predefined set of answers, which may not accurately reflect their actual

opinions. Thus, the data obtained from closed-ended questions may not be the most reliable method for comprehending the behaviour of Malaysian youth.

Moreover, the limitations of this study can also be attributed to the nature of quantitative research. In general, quantitative studies heavily rely on the active involvement of the researcher in collecting and analysing the data. In this context, the study may be susceptible to the interpreter's subjectivity, where their experiences and perspectives may influence the interpretations made. Therefore, it is essential to consider these limitations while drawing conclusions from the findings of this study.

5.4 Recommendations of study

This section has addressed several pragmatic recommendations to improve on future studies. The recommendations are as following:

1. Change in Sampling Method

    Instead of relying merely on convenience sampling, future studies could incorporate other types of sampling techniques, such as stratified or cluster sampling. These methods involve dividing the population into subgroups and then selecting a random sample from each subgroup, which can increase the representativeness of the sample and reduce potential bias. This could be supported by Margaret (2017) who recommends the application of stratified sampling in mitigating potential biases and assist in improving representativeness of a sample.

2. Open-ended Questions
    As all humans do not behave in an identical way, it is crucial to study behavioural factors in view of different perspectives. As such, to obtain

more diverse and comprehensive data, the study could incorporate open-ended questions in addition to closed-ended questions. Open-ended questions allow the respondents to provide more detailed and nuanced responses that may not be captured by closed-ended questions. This could provide more accurate and detailed insights into the behaviours and attitudes of Malaysian youth. Besides, it is also recommended that future studies could venture into qualitative interviews to gain in-depth understanding on their investment intentions.

3. Change in the Nature of Study

    Future research could also benefit from incorporating a qualitative research approach alongside quantitative methods. As mentioned by Marja and Ann (1997), the combination of quantitative and qualitative method could result to a degree of comprehensiveness that may not be achieved by either the approach solely. Qualitative research provides an in-depth understanding of the experiences and perspectives of individuals, which can complement the data collected through quantitative methods. This approach can also help to address the potential subjectivity of the researcher by providing insights from multiple perspectives. At the same time, qualitative studies could be used as supporting references to validate the quantitative studies.

    In short, incorporating these recommendations into future research could enhance the quality and reliability of the data collected and provide a more accurate understanding of the behaviours and attitudes of Malaysian youth.

5.5   Conclusion

In conclusion, this study looks into the linkage between a number of behavioural factors and the investment intention of Malaysian youth. This study has shown that behavioural factors, such as risk tolerance, financial literacy, social interaction, disposition effect, and perceived behavioural control have a favourable and strong

impact on youth's investment intention. However, it has been discovered that one of the factors which is overconfidence bias has a negative impact on youth's intention to invest in financial products. Not only that, but herding behaviour was likewise found to have no impact on the investment intention of Malaysian youth.

From the theoretical standpoint, this study has contributed to the application of merging the theory of planned behaviour and behavioural finance theory, incorporating behavioural elements from both theories to facilitate a more thorough comprehension. Additionally, practical implications were provided for lawmakers and professionals where the understanding of behavioural factors should be brought into concerns as it has been observed the significance of these behavioural characteristics in shaping the youth's intention to be participating in investment markets.

However, it is important to note that the sampling method that was employed was exposed to limitations of convenience sampling in collecting data. Questionnaire design that applied close-ended questions, and the nature of quantitative research were also found to be shortcomings of this study. To enhance future findings of the study, there are several pragmatic recommendations provided for future research co-workers, which includes changing of sampling method to other types of techniques such as stratified sampling or cluster sampling, implementing open-ended questions which enables respondents to give more in-depth and detailed answers that may not be reflected by close-ended questions, and changing the nature of study to combination of qualitative and quantitative research.

REFERENCES

Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it? *Indian Journal of Medical Specialities*, *4*(2). https://doi.org/10.7713/ijms.2013.0032

Adam, A. A., & Shauki, E. R. (2014). Socially responsible investment in Malaysia: Behavioral Framework in evaluating investors' decision-making process. *Journal of Cleaner Production*, *80*, 224–240. https://doi.org/10.1016/j.jclepro.2014.05.075

Adil, M., Singh, Y., & Ansari, M. S. (2021). How financial literacy moderate the association between behaviour biases and investment decision? *Asian Journal of Accounting Research*, *7*(1), 17–30. https://doi.org/10.1108/ajar-09-2020-0086

Afolayan, M. S., & Oniyinde, O. A. (2019). Interviews and questionnaires as Legal Research Instruments. *Journal of Law, Policy and Globalization*, *83*`, 51–59. https://doi.org/10.7176/jlpg/83-08

Agarwalla, S. K., Barua, S. K., Jacob, J., & Varma, J. R. (2013). Financial Literacy Among Working Young in Urban India. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2338723

Ahmad, M., & Shah, S. Z. (2020). Overconfidence heuristic-driven bias in investment decision-making and performance: Mediating effects of risk perception and moderating effects of Financial Literacy. *Journal of Economic and Administrative Sciences*, *38*(1), 60–90. https://doi.org/10.1108/jeas-07-2020-0116

Ahmed, Z., Rasool, S., Saleem, Q., Khan, M. A., & Kanwal, S. (2022). Mediating role of risk perception between Behavioural biases and investor's investment decisions. *SAGE Open*, *12*(2), 215824402210973. https://doi.org/10.1177/21582440221097394

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-t

Akhtar, F., & Das, N. (2019). Predictors of investment intention in Indian Stock Markets. *International Journal of Bank Marketing*, *37*(1), 97–119. https://doi.org/10.1108/ijbm-08-2017-0167

Akhtar, I. (2016). Research design. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2862445

Allen, I. E., & Seaman, C. A. (2007). Likert Scales and Data Analyses. *Statistics Roundtable*, 64–65. from https://www.bayviewanalytics.com/reports/asq/likert-scales-and-data-analyses.pdf.

Allua, S., & Thompson, C. B. (2009). Inferential statistics. *Air Medical Journal*, *28*(4), 168–171. https://doi.org/10.1016/j.amj.2009.04.013

Antonius, R. (2004). *Interpreting Quantitative Data with Spss*. SAGE Publications. https://books.google.com.my/books?hl=en&lr=&id=H1_mH0glk0IC&oi=fnd&pg=PR9&dq=quantitative+data+analysis+spss&ots=fec9CYB4SI&sig=bE-EBXf9K2OSmlRepe6paR3bl1w#v=onepage&q&f=false.

Antony, A., & Joseph, A. I. (2017). Influence of behavioural factors affecting investment decision—an AHP analysis. *Metamorphosis: A Journal of Management Research*, *16*(2), 107–114. https://doi.org/10.1177/0972622517738833

Aspara, J., & Hoffmann, A. O. (2013). Selling losers and keeping winners: How (savings) goal dynamics predict a reversal of the disposition effect. *Marketing Letters*, *26*(2), 201–211. https://doi.org/10.1007/s11002-013-9275-9

Asteriou, D., & Hall, S. G. (2021). *Applied econometrics*. Red Globe Press.

Azhar, D. (2022). Be prepared for long stock market downturn. *Free Malaysia Today*. https://www.freemalaysiatoday.com/category/highlight/2022/06/22/be-prepared-for-long-stock-market-downturn-say-experts/

Aziz, A. A. A., Azhar, S. B. H. J., Yatim, A. I. A., Hamid, A. A. A., Nordin, N. A., Zabidin, N. S., & Asmawi, A. (2021). Modelling the Language of Cyber Scammers: A Forensic Linguistics Analysis of Malaysian Illegal Investment Scheme. *International Journal of Academic Research in Business and Social Sciences, 11(6),* 1612–1621.

Azman, N. H. (2021, November 1). *Investments in cryptocurrencies increasing steadily in Malaysia.* https://themalaysianreserve.com/2021/11/01/investments-in-cryptocurrencies-increasing-steadily-in-malaysia/

Bakar, S., & Yi, A. N. (2016). The impact of psychological factors on investors' decision making in Malaysian Stock Market: A case of Klang Valley and Pahang. *Procedia Economics and Finance*, *35*, 319–328. https://doi.org/10.1016/s2212-5671(16)00040-x

Baker, T. L. (2014). *Doing Social Research*. McGraw-Hill Education.

Banerjee, A., & Chaudhury, S. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry Journal*, *19*(1), 60. https://doi.org/10.4103/0972-6748.77642

Bank Negara Malaysia. (n.d.). *How has financial market development affected monetary policy and financial stability in EMEs: the Malaysian experience.* https://www.bis.org/publ/bppdf/bispap113_m.pdf

Bhandari, P. (2021, December 3). *Levels of measurement: Nominal, ordinal, interval, ratio*. Scribbr. https://www.scribbr.com/statistics/levels-of-measurement/

Bhandari, P. (2022, July 21). *What is a Likert scale? Examples & Analysis*. Scribbr. https://www.scribbr.com/methodology/likert-scale/

Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, *13*(3), 442–453. https://doi.org/10.5465/amr.1988.4306970

Brown, A. (n.d.). *Development of Theory of Planned Behavior*. Models and Mechanisms of Public Health. https://courses.lumenlearning.com/suny-buffalo-environmentalhealth/chapter/development-of-theory-of-planned-behavior/

Capital Markets Malaysia. (2022). *Equites*. https://www.capitalmarketsmalaysia.com/public-equities/#:~:text=204%20trillion%20or%2067.3%25%20of,0%20billion

Chambliss, D. F., & Schutt, R. K. (2019). Elementary Quantitative Data Analysis. In *Making sense of the social world: Methods of investigation* (pp. 154–177). Sage Publications. Retrieved from https://www.sagepub.com/sites/default/files/upm-binaries/46056_Pages_from_Chambliss_(4e)_Chapter_8.pdf.

Chang, C.-H. (2008). The impact of behavioral pitfalls on investors' decisions: The disposition effect in the Taiwanese warrant market. *Social Behavior and Personality: an International Journal*, *36*(5), 617–634. https://doi.org/10.2224/sbp.2008.36.5.617

Chen, G., Kim, K. A., Nofsinger, J. R., & Rui, O. M. (2007). Trading performance, disposition effect, overconfidence, representativeness bias, and experience of emerging market investors. *Journal of Behavioral Decision Making*, *20*(4), 425–451. https://doi.org/10.1002/bdm.561

Cheong, A. (2021). *Bursa Malaysia saw significant increase in retail participation in 2020.* https://ringgitplus.com/en/blog/investment/bursa-malaysia-saw-significant-increase-in-retail-participation-in-2020.html

De Vos, A. S., Strydom, H., Fouché, C. B., & Delport, C. S. L. (2011). *Research at grass roots: For the Social Sciences and Human Services Professions* (4th ed.). Van Schaik Publishers.

Department of Statistics Malaysia. (2022, July 29). *Current Population Estimates, Malaysia, 2022.* https://www.dosm.gov.my/v1/index.php?r=column%2FcthemeByCat&cat=155&bul_id=dTZXanV6UUdyUEQ0SHNWOVhpSXNMUT09&menu_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09

Deshmukh, G. K., & Sanskrity, J. (2016). *Behavioural finance: An introspection of investors psychology.* https://www.researchgate.net/publication/296845953_Behavioural_Finance_An_Introspection_of_Investors_Psychology

Dhar, R., & Zhu, N. (2006). Up close and personal: Investor sophistication and the disposition effect. *Management Science*, *52*(5), 726–740. https://doi.org/10.1287/mnsc.1040.0473

Evans, J. D. (1996). *Straightforward statistics for the Behavioral Sciences*. Brooks/Cole Pub. Co.

Faff, R., Mulino, D., & Chai, D. (2008). On the linkage between financial risk tolerance and risk aversion. *Journal of Financial Research*, *31*(1), 1–23. https://doi.org/10.1111/j.1475-6803.2008.00229.x

Fauzi, A. A. W., Husniyah, A. R., Fazli, S. M., & Amim, O. M. (2017). Financial risk tolerance as a predictor for Malaysian employees' gold investment behavior. *Eurasian Studies in Business and Economics*, 63–76. https://doi.org/10.1007/978-3-319-54112-9_5

Fernando, J. (2022). *Financial literacy*. Investopedia. https://www.investopedia.com/terms/f/financial-literacy.asp#:~:text=Financial%20literacy%20is%20the%20ability,a%20lifelong%20journey%20of%20learning.

Financial Education Network. (n.d.). https://www.fenetwork.my/eng/

Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: Beyond the debate. *Integrative Psychological and Behavioral Science*, *42*(3), 266–290. https://doi.org/10.1007/s12124-008-9078-3

Gill, J., Johnson, P., & Clark, M. (2014). *Research methods for managers*. SAGE.

Glen, S. (2021, August 21). *Sampling design: Definition, examples*. Statistics How To. https://www.statisticshowto.com/sampling-design/

Grable, J. E. (2008). Risk tolerance. *Handbook of Consumer Finance Research*, 3–19. https://doi.org/10.1007/978-0-387-75734-6_1

Grable, J. E., & Roszkowski, M. J. (2007). Self-assessments of risk tolerance by women and men. *Psychological Reports*, *100*(3), 795–802. https://doi.org/10.2466/pr0.100.3.795-802

Grable, J., & Lytton, R. H. (1999). Financial Risk Tolerance Assessment Instrument. *PsycTESTS Dataset*. https://doi.org/10.1037/t67533-000

Hair, J. F., Page, M., & Brunsveld, N. (2020). *Essentials of Business Research Methods* (4th ed.). Routledge.

Hanna, S.D., Gutter, M.S., & Fan, J.X. (2001). A measure of risk tolerance based on economic theory. *Financial Counseling and Planning* 12(2): 53–60

Harbor, M. (2022, March 1). *Advantages of primary data - management*. Business Finance Articles. https://businessfinancearticles.org/advantages-of-primary-data#Advantages_of_Primary_Data

Hawati, J., Rubayah , Y., Hashim, N. A., Zanariah, & Aniza , C. C. W. (2016). *Financial literacy and investment decisions in Malaysia and United Kingdom: A comparative analysis*. Malaysian Journal of Society and Space. http://journalarticle.ukm.my/9817/1/10x.geografia-si-feb16-hawati-edam.pdf

Ibrahim, Y., & Arshad, I. (2017). Examining the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan. *Investment Management and Financial Innovations*, *14*(4), 181–193. https://doi.org/10.21511/imfi.14(4).2017.15

Islamic Development Bank. (2019) *Country Youth Profile: Malaysia.* https://www.isdb.org/youth-development/publications/country-youth-profile-malaysia

Jahanzeb, A. (2012). Implication of behavioral finance in investment decision-making process. *Information Management and Business Review, 4(10)*, 532-536.

Jain, R., Sharma, D., Behl, A., & Tiwari, A. K. (2022). Investor personality as a predictor of investment intention – mediating role of overconfidence bias and Financial Literacy. *International Journal of Emerging Markets*. https://doi.org/10.1108/ijoem-12-2021-1885

Johanson, G. A., & Brooks, G. P. (2009). Initial scale development: Sample Size for Pilot Studies. *Educational and Psychological Measurement*, *70*(3), 394–400. https://doi.org/10.1177/0013164409355692

Joo, S.-hyun, & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, *25*(1), 25–50. https://doi.org/10.1023/b:jeei.0000016722.37994.9f

Joyce, N. K. H., & Leong, K. Y. (2013). The influence of personality trait and demographics on financial decision making among generation Y. *Young Consumers*, *14*(3), 230–243. https://doi.org/10.1108/yc-11-2012-00325

Kabir, S. M. S. (2016). Methods of Data Collection. In *Basic Guidelines for Research: An Introductory Approach for All Disciplines* (1st ed., pp. 201–275). essay, Book Zone Publication.

Kabir, S. M. S. (2016). Sample and Sampling Designs. In *Basic Guidelines for Research: An Introductory Approach for All Disciplines* (1st ed., pp. 168–180). essay, Book Zone Publication.

Kafayat, A. (2014), "Interrelationship of biases: effect investment decisions ultimately", *Theoretical and Applied Economics*, Vol. 21 No. 6, pp. 85-110.

Kapoor, S. & Prosad, J. M. (2017). Behavioural Finance: A Review. *Procedia Computer Science, 122 (2017)*, 50 – 54. https://doi.org/10.1016/j.procs.2017.11.340

Kaustia, M. (2004). Market-wide impact of the disposition effect: Evidence from IPO trading volume. *Journal of Financial Markets*, *7*(2), 207–235. https://doi.org/10.1016/j.finmar.2003.11.002

Kearney, C. & Lucey, B. M. (2004). International equity market integration: Theory, evidence, and implications. *International Review of Financial Analysis, 13(5),* 571-583. https://doi.org/10.1016/j.irfa.2004.02.013

Kellerman, D., Dickason, Z., Ferreira, S. J., & Swanepoel, E. (2019). *Analysing the investor life cycle in a south african universal bank*.

Kengatharan, L., & Kengatharan, N. (2014). The influence of Behavioural factors in making investment decisions and performance: Study on investors of Colombo Stock Exchange, Sri Lanka. *Asian Journal of Finance & Accounting*, *6*(1), 1. https://doi.org/10.5296/ajfa.v6i1.4893

Keswani, S., Dhingra, V., & Wadhwa, B. (2019). Impact of Behavioural factors in making investment decisions and performance: Study on investors of National Stock Exchange. *International Journal of Economics and Finance*, *11*(8), 80. https://doi.org/10.5539/ijef.v11n8p80

Kumar, R. (2014). *Research methodology: A step by step guide for beginners* (3rd ed.). ISAGE Publications Ltd.

Kumar, R. (2017). Perspectives on Strategic Finance. *Strategic Financial Management Casebook*, 1–29. https://doi.org/10.1016/b978-0-12-805475-8.00001-x

Lee, H.-J., Park, J., Lee, J.-Y., & Wyer, R. S. (2008). Disposition effects and underlying mechanisms in e-trading of stocks. *Journal of Marketing Research*, *45*(3), 362–378. https://doi.org/10.1509/jmkr.45.3.362

Lee, J.-S., Yen, P.-H., & Chan, K. C. (2013). Market states and disposition effect: Evidence from Taiwan Mutual Fund Investors. *Applied Economics*, *45*(10), 1331–1342. https://doi.org/10.1080/00036846.2011.617696

Lim, K. L., Soutar, G. N., & Lee, J. A. (2013). Factors affecting investment intentions: A consumer behaviour perspective. *Journal of Financial Services Marketing*, *18*(4), 301–315. https://doi.org/10.1057/fsm.2013.23

Madaan, G., & Singh, S. (2019). An analysis of Behavioural biases in investment decision-making. *International Journal of Financial Research*, *10*(4), 55. https://doi.org/10.5430/ijfr.v10n4p55

Mahardhika, A. S., & Zakiyah, T. (2020). Millennials' intention in stock investment: Extended theory of planned behavior. *Riset Akuntansi Dan Keuangan Indonesia*, *5*(1), 83–91. https://doi.org/10.23917/reaksi.v5i1.10268

Malaymail. (2020, Oct 23). *Malaysians lost RM914m to investment scams for first six months of 2020, says SC chairman.* Retrieved August 7, 2022, from https://www.malaymail.com/news/malaysia/2020/10/23/malaysians-lost-rm914m-to-investment-scams-for-first-six-months-of-2020-say/1915544

Malhotra, N. K. (2010). *Marketing research: An applied orientation* (6th ed.). Pearson.

Malhotra, N. K. (2019). *Marketing research: An applied orientation* (7th ed.). Pearson Educación.

Malhotra, N. K., Nunan, D., & Birks, D. F. (2020). *Marketing research: An applied approach*. Pearson.

Mankuroane, T. E. (2020, November). *Analysing the factors that influence investment intentions in South Africa*. https://repository.nwu.ac.za/bitstream/handle/10394/37041/Mankuroane%20TE%2022485546.pdf?sequence=1

Margaret, A., M. (2017). The Relationship between Teacher Evaluation Ratings and Student Achievement in Rural, Midwest School District. https://www.proquest.com/openview/59111ed522d821491736f94c28287993/1?pq-origsite=gscholar&cbl=18750

Marja, J., V. & Ann, L., C. (1997). Broadening horizons: Integration quantitative and qualitative research. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3327344/#:~:text=Quantitative%20research%20generates%20factual%2C%20reliable,perspectives%20and%20interpretations%20(1).

Masrurun, I., & Yanto, H. (2015). DETERMINAN PERILAKU INVESTOR INDIVIDU DALAM PENGAMBILAN KEPUTUSAN INVESTASI SAHAM . *Accounting Analysis Journal*, *4*(4), 1–9. https://doi.org/10.15294/aaj.v4i4.9116

McCombes, S. (2019, September 19). *Sampling methods: Types, techniques & examples*. Scribbr. https://www.scribbr.com/methodology/sampling-methods/

McLeod, S. (2008). *Likert scale definition, examples, and analysis*. Simply Psychology. Retrieved August 4, 2022, from https://www.simplypsychology.org/likert-scale.html

Mittal, S. K. (2019). Behavior biases and investment decision: Theoretical and Research Framework. *Qualitative Research in Financial Markets*, *14*(2), 213–228. https://doi.org/10.1108/qrfm-09-2017-0085

Musciotto, F., Marotta, L., Piilo, J., & Mantegna, R. N. (2018). Long-term ecology of investors in a financial market. *Palgrave Communications, 4(1),* 92. https://doi.org/10.1057/s41599-018-0145-1

Nareswari, N., Salsabila Balqista, A., & Priyo Negoro, N. (2021). The the impact of Behavioural aspects on investment decision making. *Jurnal Manajemen Dan Keuangan*, *10*(1), 15–27. https://doi.org/10.33059/jmk.v10i1.3125

Nauman Sadiq, M., & Ased Azad Khan, R. (2019). Impact of personality traits on investment intention: The mediating role of risk behaviour and the moderating role of Financial Literacy. *Journal of Finance & Economics Research*, *4*(1), 1–18. https://doi.org/10.20547/jfer1904101

New Straits Times. (2022, August 7). *RM5.2b in losses through online scams since 2020.* https://www.nst.com.my/news/crime-courts/2022/08/819331/rm52b-losses-through-online-scams-2020

Nikolopoulou, K. (2022, December 1). *What is convenience sampling? Definition & examples*. Scribbr. https://www.scribbr.com/methodology/convenience-sampling/

Núñez, R. (2007). Inferential statistics in the context of empirical cognitive linguistics. *Human Cognitive Processing*, 87–118. https://doi.org/10.1075/hcp.18.09nun

Nur Aini, N. S., & Lutfi, L. (2019). The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. *Journal of Economics, Business & Accountancy Ventura*, *21*(3), 401. https://doi.org/10.14414/jebav.v21i3.1663

Odean, T. (1999). Do investors trade too much? *American Economic Review*, *89*(5), 1279–1298. https://doi.org/10.1257/aer.89.5.1279

Odean, T., Strahilevitz, M. A., & Barber, B. M. (2010). Once burned, twice shy: How naïve learning, counterfactuals, and regret affect the repurchase of stocks previously sold. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.611267

Pahlevi, R. W., & Oktaviani, I. I. (2018). Determinants of individual investor behaviour in stock investment decisions. *AFRE (Accounting and Financial Review)*, *1*(2). https://doi.org/10.26905/afr.v1i2.2427

Pak, O., & Mahmood, M. (2015). Impact of personality on risk tolerance and investment decisions. *International Journal of Commerce and Management*, *25*(4), 370–384. https://doi.org/10.1108/ijcoma-01-2013-0002

Park, J. H., Konana, P., Gu, B., Kumar, A., & Raghunathan, R. (2010). Confirmation bias, overconfidence, and investment performance: Evidence from stock message boards. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1639470

Pelster, M., & Hofmann, A. (2018). About the fear of reputational loss: Social trading and the disposition effect. *Journal of Banking & Finance*, *94*, 75–88. https://doi.org/10.1016/j.jbankfin.2018.07.003

Polit, D. F., & Beck, C. T. (2006). *Essentials of nursing research: Methods, appraisal, and utilization*. Lippincott Williams & Wilkins.

Portney, L. G., & Watkins, M. P. (2015). *Foundations of Clinical Research: Applications to Practice* (3rd ed.). F.A. Davis Company.

Raut, R. K. (2020). Past behaviour, financial literacy, and investment decision-making process of individual investors. *International Journal of Emerging Markets*, *15*(6), 1243–1263. https://doi.org/10.1108/ijoem-07-2018-0379

Rehan, R., & Umer, I. (2017, December). *Behavioural biases and investor decisions*. https://kiet.edu.pk/marketforces/index.php/marketforces/article/view/341

Richards, L. (2015). *Handling Qualitative Data: A Practical Guide* (3rd ed.). SAGE.

Robert, C. H. (2015). *Behavioral finance: Its history and its future - Southeastern University*. https://firescholars.seu.edu/cgi/viewcontent.cgi?article=1030&context=honors

Roger, P. (2009). Does the consciousness of the disposition effect increase the equity premium? *Journal of Behavioral Finance*, *10*(3), 138–151. https://doi.org/10.1080/15427560902904628

Samsuria, A., Ismiyantib, F., & Narsac, I. M. (2019). *Effects of Risk Tolerance and Financial Literacy to Investment Intentions*. International Journal of Innovation, Creativity and Change. https://www.ijicc.net/images/vol10iss9/10904_Samsuri_2019_E_R.pdf

Sashikala, V., & Chitramani, P. (2018). The impact of behavioural factors on investment intention of equity investors. *Asian Journal of Management*, *9*(1), 183. https://doi.org/10.5958/2321-5763.2018.00028.8

Sawyer, S. F. (2009). Analysis of variance: The Fundamental Concepts. *Journal of Manual & Manipulative Therapy*, *17*(2). https://doi.org/10.1179/jmt.2009.17.2.27e

Schmidt, N. (2010). What Drives Investments into Mutual Funds? Applying the Theory of Planned Behaviour to Individuals' Willingness and Intention to Purchase Mutual Funds. *CiteSeerX*, 1–39. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.2836&rep=rep1&type=pdf.

Securities Commission Malaysia. (2023). Malaysia National Strategy for Financial Literacy. Retrieved from https://www.sc.com.my/resources/publications-and-research/fen

Sedgwick, P. (2012). Pearson's correlation coefficient. *BMJ*, *345*(jul04 1). https://doi.org/10.1136/bmj.e4483

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (7th ed.). JOHN WILEY & Sons.

Setyorini, N., & Indriasari, I. (2020). Does millennials have an investment interest? theory of planned behaviour perspective. *Diponegoro International Journal of Business*, *3*(1), 28–35. https://doi.org/10.14710/dijb.3.1.2020.28-35

Shanmugham, R., & Ramya, K. (2012). Impact of social factors on individual investors' trading behaviour. *PsycEXTRA Dataset*. https://doi.org/10.1037/e582862013-008

Shayfull, Z., Fathullah, M., Nasir, S. M., Squaib, N. A., & Abdul Manan, M. S. (2012). Warpage Analyses on Thin Plate in Three-Plate Mold by Taguchi Method and Analysis of Variance (ANOVA) for PC, ABS and PC/ABS. *International Review of Mechanical Engineering (I.RE.M.E.)*, *6*, 1–8.

Shuttleworth, M. (2009, April 26). *Internal consistency reliability*. Internal Consistency Reliability - Internal Compatibility Test. https://explorable.com/internal-consistency-reliability

Sincero, S. M. (2012, October 16). *Online Surveys*. Online Surveys - Pros and cons of web-based questionnaires. https://explorable.com/online-surveys

Sloman, K. N. (2010). Research trends in descriptive analysis. *The Behavior Analyst Today*, *11*(1), 20–35. https://doi.org/10.1037/h0100686

Stevens, S. S. (1946). *On the theory of scales of measurement* (Vol. 103). Bobbs-Merrill, College Division. Retrieved August 3, 2022, from https://psychology.okstate.edu/faculty/jgrice/psyc3214/Stevens_FourScales_1946.pdf.

Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3205035

Tan, V. (2020, July 16). *COVID-19 lockdown stimulates Malaysia's retail investor boom.* https://www.channelnewsasia.com/asia/malaysia-covid-19-lockdown-retail-investor-boom-share-trading-642116

Tan, W. (2018). *Research methods: A practical guide for students and researchers*. World Scientific.

Tanuwijaya, K., & Setyawan, I. R. (2021). Can financial literacy become an effective mediator for investment intention? *Accounting*, *7*(7), 1591–1600. https://doi.org/10.5267/j.ac.2021.5.011

The Edge Markets. (2020). *New CDS accounts opened in January to July soared 125% to 218,000 — Bursa.* https://www.theedgemarkets.com/article/new-cds-accounts-opened-january-july-soared-125-218000-%E2%80%94-bursa

The Edge Markets. (2022, August 4). *Trends: Unit trust remains No 1 capital market product among youth.* https://www.theedgemarkets.com/article/trends-unit-trust-remains-no-1-capital-market-product-among-youth

Twycross, A., & Shields, L. (2004). Validity and reliability – what's it all about? *Paediatric Nursing*, *16*(10), 36–36. https://doi.org/10.7748/paed.16.10.36.s22

Value of global equity trading worldwide from 1st quarter 2017 to 1st quarter 2022. (2022, July 5). https://www.statista.com/statistics/242745/volume-of-global-equity-trading/

Vergura, S., Acciani, G., Amoruso, V., Patrono, G. E., & Vacca, F. (2009). Descriptive and inferential statistics for supervising and monitoring the operation of PV Plants. *IEEE Transactions on Industrial Electronics*, *56*(11), 4456–4464. https://doi.org/10.1109/tie.2008.927404

Waweru, N. M., Mwangi, G. G., & Parkinson, J. M. (2014). Behavioural factors influencing investment decisions in the Kenyan property market. *Afro-Asian J. of Finance and Accounting*, *4*(1), 26. https://doi.org/10.1504/aajfa.2014.059500

Welman, J. C., Kruger, F., & Mitchell, B. (2005). *Research methodology*. Oxford University Press.

Xiao, J. J. (2008). Applying behavior theories to financial behavior. *Handbook of Consumer Finance Research*, 69–81. https://doi.org/10.1007/978-0-387-75734-6_5

Yang, M., Mamun, A. A., Mohiuddin, M., Al-Shami, S. S., & Zainol, N. R. (2021). Predicting stock market investment intention and behavior among Malaysian working adults using partial least squares structural equation modeling. *Mathematics*, *9*(8), 873. https://doi.org/10.3390/math9080873

Zamri, A., Ibrahim, H., & Tuyon, J. (2017). Qualitative Research in Financial Markets. *Asian Review of Accounting, 181.* https://doi.org/10.1108/ara.2010.34118aaa.002

Zikmund, W. G., & Carr, G. (2008). *Business Research Methods*. *Academia* (8th ed.). Dryden Press. https://www.academia.edu/33978482/Business_Research_Method_Zikmund_8th_edition_pdf.

Zikmund, W. G., Babin, B. J., Carr, J. C., Adhikari, A., & Griffin, M. (2013). *Business research methods*. *Document Pub*. Cengage Learning. https://dokumen.pub/business-research-methods-9thnbsped-8131518515.html.

APPENDICES

Appendix 2.1

Summary Table of Past Studies Results

Author	Year	Theory	Title	Variables and Result	Others
Ahmed, Z., Rasool, S., Saleem, Q., Khan, M. A., & Kanwal, S.	2022	Behavioural Finance Theory	Mediating Role of Risk Perception Between Behavioral Biases and Investor's Investment Decisions	- Herding behaviour (Insignificant) - Disposition effect (Significant positive)	Risk perception was taken as a mediating role.
Arsyad, I., Tayasri, I., Im, L. C., & Sahban, M.A.	2021	Theory of Planned Behaviour	Perceived Risk and Theory of Planned Behaviour	- Perceived risk (Significant negative) - Subjective norms (Significant positive) - Perceived behavioural control (Significant positive)	This study successfully extended theory of planned behaviour by adding attitudinal factor which is perceived risk.

Ilyas, M., Moeljadi, & Djawahir, A. H.	2021	Theory of Reasoned Action	The effect of financial knowledge and financial well-being on investment intention mediated by financial attitude: A study on youth generation and Gen Z in Malang City	- Financial Knowledge (Significant positive) - Financial Attitude (Significant positive) - Financial Well-being (Significant negative)	N/A
Adil, M., Singh, Y., & Ansari, M. S.	2021	Behavioural Finance Theory	How financial literacy moderate the association between behaviour biases and investment decision?	- Overconfidence bias (Significant positive for males, insignificant for females) - Herding bias (Significant Negative) - Disposition effect (Insignificant) - Risk-aversion bias (Significant Negative) - Financial literacy (Significant)	Anticipate the moderation/interaction effect of financial literacy amongst male and female investors.

Nareswari, N., Salsabila Balqista, A., & Priyo Negoro, N.	2021	Behavioural Finance Theory	The Impact of Behavioral Aspects on Investment Decision Making	- Investor sentiment (Significant positive) - Overconfidence (Significant positive) - Salience (Significant positive) - Overreaction (Significant positive) - Herding (Significant positive)	Empirical studies prove that investors are not fully rational, but investment decisions are also driven by behaviour.
Tanuwijaya, K., & Setyawan, I. R.	2021	Theory of Planned Behaviour and Social Learning Theory	Can financial literacy become an effective mediator for investment intention?	- Financial socialization (Significant positive) - Financial experience (Significant positive) - Financial literacy (Significant positive)	N/A
Yang, M., Mamun, A. A., Mohiuddin, M., Al-Shami, S. S., & Zainol, N. R.	2021	Theory of Planned Behaviour	Predicting Stock Market Investment Intention and Behavior among Malaysian Working Adults Using Partial Least Squares Structural Equation Modeling	- Risk tolerance (Significant Positive) - Financial well-being (Insignificant) - Financial literacy (Insignificant) - Overconfidence bias (Significant positive)	This study argued the importance of risk tolerance and overconfidence bias as predictors of working adult's participation in the stock market through stock market investment intention.

				- Herding behaviour (Significant) - Social interaction (Significant)	
Ahmad, M., & Shah, S. Z.	2020	Behavioural Finance Theory	Overconfidence heuristic-driven bias in investment decision-making and performance: mediating effects of risk perception and moderating effects of financial literacy	- Overconfidence (significant negative) - Risk perception (significant positive) - Financial literacy (significant positive)	N/A

Mahardhika, A. S., & Zakiyah, T.	2020	Theory of planned behaviour	Millennials' Intention in Stock Investment: Extended Theory of Planned Behaviours	- Attitude toward behaviour (Positive) - Subjective norms (Positive) - Perceived behaviour control (Positive) - Risk tolerance (Insignificant)	Concluded that the theory of planned behaviour (TPB) approach can be applied empirically in explaining the behaviour of youth investors in investing in stocks
Setyorini, N., & Indriasari, I.	2020	Theory of planned behaviour	Does millennials have an investment interest? theory of planned behaviour perspective.	- Attitude (Insignificant) - Subjective norm (Significant Positive) - Perceived behaviour control (Positive)	N/A
Keswani, S., Dhingra, V., & Wadhwa, B.	2019	Prospect Theory and Heuristic Theory	Impact of behavioral factors in making investment decisions and performance: Study on investors of National Stock Exchange.	- Herding (Significant) - Representativeness - Overconfidence (Significant) - Anchoring - Gambler's fallacy - Availability bias - Loss aversion	N/A

Madaan, G., & Singh, S.	2019	Behavioural Finance Theory	An Analysis of Behavioral Biases in Investment Decision-Making	- Overconfidence (Significant positive) - Herding bias (Significant positive) - Disposition effect (Insignificant) - Anchoring (Insignificant)	When information is not fully available, evidence indicated repeated patterns of irrationality that appeared like the way individual investors arrive at decisions and choices when confronted with risk and uncertainty.
Samsuria, A., Ismiyantib, F., & Narsac, I. M.	2019	Theory of Planned Behaviour	Effects of Risk Tolerance and Financial Literacy to Investment Intentions	- Financial literacy (Significant Positive) - Risk tolerance (Significant)	N/A
Sri Hermuningsih, S., Kirana, K. C., & Kusumawardhan, R.	2018	Theory of Planned Behaviour	Determinant Of Potential Individual Investors in Decision Making of Share Investment in Indonesian stock Exchange	- Government support (positive) - Subjective norm (positive) - Self-efficacy (positive) - Attitude (positive)	N/A

Paramita, R. A. S., Isbanah, Y., Kusumaningrum, T. M., Musdholifah, & Hartono, U.	2018	Theory of Planned Behaviour	Young Investor Behavior: Implementation Theory of Planned Behavior	- Attitude (No effect) - Subjective norm (No effect) - Perceived behavioural control (No effect)	N/A
Metawie, M., & Elmosalamy, D. A.	2018	Theory of Planned Behaviour	Predictors of Investors' Participation in the Egyptian Stock Market: Application of Theory of Planned Behavior	- Subjective Financial Literacy (Positive) - POR (Positive) - Risk Avoidance (Negative) - PISO (Positive)	Other moderating factors (as change in interest rates, taxes, and transaction costs) can be examined to test the effect on SMP.
Akhtar, F., & Das, N.	2017	Theory of Planned Behaviour	Predictors of investment intention in India Stock Markets: Extending the theory of planned behaviour	- Financial literacy - Personality traits (Significant) - Attitude (Significant) - Subjective norms (Significant) - Financial self-efficacy (Significant)	Filled the gap on psychological aspect to be strengthened in order to create investment intentions

Antony, A., & Joseph, A. I.	2017	Behavioural Finance Theory	Influence of Behavioural Factors Affecting Investment Decision—An AHP Analysis	- Overconfidence bias (Greatest impact) - Representative bias - Regret aversion - Mental accounting - Herd behaviour (Less impact)	N/A
Fauzi, A. A. W., Husniyah, A. R., Fazli, S. M., & Amim, O. M.	2017	Theory of Planned Behaviour	Financial Risk Tolerance as a Predictor for Malaysian Employees' Gold Investment Behavior	- Investment Knowledge (Insignificant) - Financial Risk Tolerance (Significant positive) - Attitude (Significant) - Subjective Norms (Significant) - Perceived Behavioural Control (Significant Positive)	N/A
Ibrahim, Y., & Arshad, I.	2017	Theory of planned behaviour	Examining the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan	- Subjective norm (Significant) - Perceived behavioural control (Insignificant) - Product involvement (Significant)	N/A

Bakar, S., & Yi, A. N.	2016	Behavioural Finance Theory	The Impact of Psychological Factors on Investors' Decision Making in Malaysian Stock Market: A Case of Klang Valley and Pahang	- Overconfidence (Significant positive) - Conservatism (Significant negative) - Herding (Insignificant) - Availability bias (Significant Positive)	It is also found that the psychological factors are dependent of individual's gender.
Adam, A. A., & Shauki, E. R.	2014	Theory of Planned Behaviour	Socially responsible investment in Malaysia: behavioural framework in evaluating investors' decision-making process	- Moral norm (Significant) - Subjective norm (Significant positive) - Perceived behavioural control (Insignificant) - Attitude (Significant positive)	It also has been discovered that investors' personal standards affect their investment intention and conduct.
Kafayat, A.	2014	Behavioural Finance Theory	Interrelationship of biases: effect investment decisions ultimately	- Self-attribution bias (Significant negative) - Overconfidence (Significant negative) - Overoptimism (Significant negative)	N/A

Appendix 3.1

Pilot Study Reliability Test Result

Variables	Cronbach's Alpha	N of Items	Information
Investment Intention	0.874	5	Reliable
Risk Tolerance	0.778	5	Reliable
Financial Well-Being	0.421	5	Not Reliable
Financial Literacy	0.711	5	Reliable
Overconfide nce Bias	0.879	5	Reliable
Social Interaction	0.784	5	Reliable
Herding Behaviour	0.896	5	Reliable
Disposition Effect	0.752	5	Reliable
Perceived Behavioural Control	0.877	5	Reliable

Appendix 3.2

Questionnaire

Linkage Between Behavioural Factors And Investment Intentions Among Youth In Malaysia

We are final year undergraduate students in Bachelor of Finance (Hons) from Universiti Tunku Abdul Rahman (UTAR) Kampar Campus. Please spare a few minutes of your time to answer this questionnaire voluntarily. This survey aims to examine the investment intentions of the youth (**among 18-30 years old**) in Malaysia. All information provided by the respondents will be kept confidential and will be used only for educational purpose.

The following questionnaire survey consists of 9 sections. Please answer **all** the questions listed in this questionnaire. The completion of this questionnaire will take you approximately **15** minutes.

The survey participation is completely voluntary, and you are free to withdraw from this study at any time without any consequences. There is no any potential risk of harm to you for participating in this research project. The data collected will be kept strictly **confidential** and will be used for research only.

This questionnaire consist of **English Language** & **Bahasa Melayu**.

If you have any inquiries or questions regarding this research, feel free to contact any of us:

Chia Wan Thing
Email: chiawt1025@1utar.my

Koh Kah Fong
Email: kohkahfong0000@1utar.my

Ng Wee Kit
Email: derrickng0714@1utar.my

Yap Zheng Hee
Email: yapzhee705@1utar.my

Your participation in this research is very much appreciated. Thank you.

* Required

1. Acknowledgement of Notice *

   Notis Penyataan

PERSONAL DATA PROTECTION STATEMENT

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

Notice:
1. The purposes for which your personal data may be used are inclusive but not limited to:-
   - For assessment of any application to UTAR
   - For processing any benefits and services
   - For communication purposes
   - For advertorial and news
   - For general administration and record purposes
   - For enhancing the value of education
   - For educational and related purposes consequential to UTAR
   - For the purpose of our corporate governance
   - For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

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

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

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

Consent:
1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

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

3. You may access and update your personal data by writing to us at chiawt1025@1utar.my.

Mark only one oval.

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

( ) I disagree, my personal data will not be processed.

Section A: Demographic Information (Bahagian A: Maklumat Demografi)

2. Age *
   Umur

   Mark only one oval.

   ( ) 18 - 21

   ( ) 22-24

   ( ) 25-27

   ( ) 28-30

3. Gender *
   Jantina

   Mark only one oval.

   ( ) Male (Lelaki)

   ( ) Female (Perempuan)

4.   Ethnicity *

Etnik

Mark only one oval.

○ Chinese (Cina)

○ Malay (Melayu)

○ Indian (India)

○ Other: _____

5.   Highest Education Level *

Tahap Pendidikan Tertinggi

Mark only one oval.

○ Secondary School Certificate (Sijil Sekolah Menengah)

○ Diploma / Technical School Certificate (Diploma / Sijil Persekolahan Teknik)

○ Bachelor Degree or Equivalent (Ijazah Sarjana Muda atau Setaraf)

○ Master and/or Doctoral Degree (Sarjana dan/atau Ijazah Kedoktoran)

6.   Occupation *

Pekerjaan

Mark only one oval.

○ Employed (Bekerja)

○ Self-employed (Bekerja Sendiri)

○ Businessman (Ahli perniagaan)

○ Student (Pelajar)

○ Unemployed (Menganggur)

7. Annual Income *
Pendapatan Tahunan

Mark only one oval.

- ( ) Below RM21,000 (Bawah RM21,000)
- ( ) RM21,000 to RM24,000 (RM21,000 hingga RM24,000)
- ( ) RM24,001 to RM36,000 (RM24,001 hingga RM36,000)
- ( ) RM36,001 to RM48,000 (RM36,001 hingga RM48,000)
- ( ) Above RM48,000 (RM48,000 ke atas)

8. Year(s) of Investment Experience
**Definition: An investment is an asset (stock/equity) purchased at a cost with the
expectation of generating income or appreciating in value.**
Tahun Pengalaman Pelaburan
**Definisi: Pelaburan ialah aset (saham/ekuiti) yang dibeli pada kos dengan jangkaan menjana
pendapatan atau meningkat nilainya.**

Mark only one oval.

- ( ) No experience (Tiada Pengalaman)
- ( ) Below 1 year (Bawah 1 tahun)
- ( ) 1-3 years (1-3 tahun)
- ( ) 3.1-5 years (3.1-5 tahun)
- ( ) 5.1-7 years (5.1-7 tahun)
- ( ) Above 7 years (7 tahun ke atas)

Section B: Investment Intention (Bahagian B: Niat Pelaburan)

Section B consists of 5 statements.
Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you
disagree or agree with the statements below.

Bahagian B mengandungi 5 pernyataan.
Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda
tidak bersetuju atau bersetuju dengan pernyataan di bawah.

9. I will participate in stock market investments to earn side income. *
   Saya akan melibatkan diri dalam pasaran saham untuk memperoleh pendapatan sampingan.

   Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

10. I would like to advise my family and friends to invest in the stock market. *
    Saya ingin menasihati keluarga dan rakan-rakan saya untuk melabur dalam pasaran saham.

    Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

11. I'm going to start investing in stocks. *
    Saya akan mula melabur dalam pasaran saham.

    Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

12. I believe that the stock exchange is an effective investing channel. *

Saya percaya bahawa bursa saham adalah saluran pelaburan yang berkesan.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

13. When I have extra money, I plan to invest in stock market. *

Saya akan melabur dalam pasaran saham apabila saya mempunyai wang lebihan.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

Section C: Risk Tolerance (Bahagian C: Toleransi Risiko)

Section B consists of 5 statements.
Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you disagree or agree with the statements below.
––

Bahagian C mengandungi 5 pernyataan.
Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda tidak bersetuju atau bersetuju dengan pernyataan di bawah.

14. I would show my willingness to take risks in financial decisions. *

Saya akan menunjukkan kesanggupan saya untuk mengambil risiko dalam keputusan kewangan.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

15. If I unexpectedly received some money, I would surely invest them in any channel. *

Jika saya secara tidak dijangka menerima wang, saya pasti akan melaburkannya dalam mana-mana saluran.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

16. I would prefer to invest in stocks rather than to keep money in a bank account. *

Saya lebih suka melabur dalam saham daripada menyimpan wang dalam akaun bank.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

17.   I consider risk in investments as an opportunity. *
       Saya menganggap risiko dalam pelaburan sebagai satu peluang.

       Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

18.   I would not mind losing some money if some unfavourable situations happens
       throughout the investment process.
       Saya tidak kisah kehilangan sedikit wang jika beberapa situasi yang tidak menguntungkan berlaku
       sepanjang proses pelaburan.

       Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

Section D: Financial Literacy (Bahagian D: Celik Kewangan)

Section D consists of 5 statements.
Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you
disagree or agree with the statements below.
——

Bahagian D mengandungi 5 pernyataan.
Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda
tidak bersetuju atau bersetuju dengan pernyataan di bawah.

19. I have basic knowledge on investment. *

Saya mempunyai pengetahuan asas tentang pelaburan.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

20. I would check analyses before investing. *

Saya akan menyemak analisis sebelum melabur.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

21. I would consider time value of money in my investment.
Definition: The time value of money is a basic financial concept that holds that money in the present is worth more than the same sum of money to be received in the future.

Saya akan mempertimbangkan nilai masa wang dalam pelaburan saya.
Definisi: Nilai masa wang ialah konsep kewangan asas yang berpendapat bahawa wang pada masa kini bernilai lebih daripada jumlah wang yang sama yang akan diterima pada masa hadap

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

22. I would consider long-term investments.
Definition: Long-term investments are assets that an individual intends to hold for a period of more than one year.
Saya akan mempertimbangkan pelaburan jangka panjang.
Definisi: Pelaburan jangka panjang ialah aset yang individu ingin pegang untuk tempoh lebih daripada satu tahun.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

23. I know how to read trends, candle-stick charts, bid-ask prices, etc. *
Saya tahu cara membaca arah aliran, carta candlestick, harga bida ask, dsb.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

Section E: Overconfidence Bias (Bahagian E: Bias terlalu yakin)

Section E consists of 5 statements.
Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you disagree or agree with the statements below.
_____

Bahagian E mengandungi 5 pernyataan.
Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda tidak bersetuju atau bersetuju dengan pernyataan di bawah.

24. I feel confident to evaluate stock prices in my investment portfolio myself. *

Saya berasa yakin untuk menilai harga stok dalam portfolio pelaburan saya.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

25. My past profitable investments were mainly due to my specific investment skills. *

 Pelaburan menguntungkan masa lalu saya terutamanya disebabkan oleh kemahiran pelaburan khus
saya.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

26. I always believe that I would not fall into any investment scams. *

Saya sentiasa percaya bahawa saya tidak akan terjerumus dalam sebarang penipuan pelaburan.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

27. My investment decisions can mostly earn higher than average return in the market. *
Keputusan pelaburan saya kebanyakannya boleh memperoleh pulangan yang lebih tinggi daripada
purata pulangan dalam pasaran.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

28. I believe that my skills and knowledge of the market help me to outperform the market. *
Saya percaya bahawa kemahiran dan pengetahuan saya tentang pasaran membantu saya mengatasi
prestasi pasaran.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

Section F: Social Interaction (Bahagian F: Interaksi sosial)

Section F consists of 5 statements.
Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you
disagree or agree with the statements below.
——

Bahagian F mengandungi 5 pernyataan.
Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda
tidak bersetuju atau bersetuju dengan pernyataan di bawah.

29.   I was influenced by my friends when making investment decisions. *
      Saya dipengaruhi oleh rakan-rakan saya semasa membuat keputusan pelaburan.

      Mark only one oval.

                    1   2   3   4   5

      Stro ⃝   ⃝   ⃝   ⃝   ⃝ Strongly Agree (Sangat Setuju)

30.   I was influenced by my relatives when making investment decisions. *
      Saya dipengaruhi oleh saudara-mara saya semasa membuat keputusan pelaburan.

      Mark only one oval.

                    1   2   3   4   5

      Stro ⃝   ⃝   ⃝   ⃝   ⃝ Strongly Agree (Sangat Setuju)

31.   I have frequent communication with some investment gurus. *
      Saya kerap berkomunikasi dengan beberapa guru pelaburan.

      Mark only one oval.

                    1   2   3   4   5

      Stro ⃝   ⃝   ⃝   ⃝   ⃝ Strongly Agree (Sangat Setuju)

32.   I am very active in investment related conversation. *
       Saya sangat aktif dalam perbualan berkaitan pelaburan.

       Mark only one oval.

                    1   2   3   4   5

       Stro ◯ ◯ ◯ ◯ ◯ Strongly Agree (Sangat Setuju)

33.   I join investment clubs and invest with a group of people. *
       Saya menyertai kelab pelaburan dan melabur dengan sekumpulan orang.

       Mark only one oval.

                    1   2   3   4   5

       Stro ◯ ◯ ◯ ◯ ◯ Strongly Agree (Sangat Setuju)

       Section G: Herding Behaviour (Bahagian G: Tingkah Laku Penggembalaan)

       Section G consists of 5 statements.
       Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you
       disagree or agree with the statements below.
       ——

       Bahagian G mengandungi 5 pernyataan.
       Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda
       tidak bersetuju atau bersetuju dengan pernyataan di bawah.

34. My volume of investment also depends on others opinion (financial consultant, etc.). *

    Jumlah pelaburan saya juga bergantung pada pendapat orang lain (perunding kewangan, dll.).

    Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

35. I am confident about accuracy of investment decisions. *

    Saya yakin tentang ketepatan keputusan pelaburan.

    Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

36. I believe that information from friends is reliable. *

    Saya percaya bahawa maklumat daripada rakan-rakan boleh dipercayai.

    Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

37.   I believe that information from colleagues is reliable. *
       Saya percaya bahawa maklumat daripada rakan sekerja boleh dipercayai.

       Mark only one oval.

                 1   2   3   4   5

       Stro ◯ ◯ ◯ ◯ ◯ Strongly Agree (Sangat Setuju)

38.   I believe that information from relatives is reliable. *
       Saya percaya bahawa maklumat daripada saudara-mara boleh dipercayai.

       Mark only one oval.

                 1   2   3   4   5

       Stro ◯ ◯ ◯ ◯ ◯ Strongly Agree (Sangat Setuju)

Section H: Disposition Effects (Bahagian H: Kesan Disposisi)

Section H consists of 5 statements.
Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you
disagree or agree with the statements below.
——

Bahagian H mengandungi 5 pernyataan.
Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda
tidak bersetuju atau bersetuju dengan pernyataan di bawah.

39. I believe that selling my investment early is able to secure profits. *

Saya percaya bahawa menjual pelaburan saya lebih awal mampu memperoleh keuntungan.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

40. I believe that my losing investments will turn into profit in the future. *

Saya percaya bahawa pelaburan saya yang rugi akan bertukar menjadi keuntungan pada masa hadapan.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

41. I afraid that holding a profiting stock will turn into loss after all. *

Saya takut memegang saham yang untung akan bertukar menjadi kerugian.

Mark only one oval.

	1	2	3	4	5	
Stro	○	○	○	○	○	Strongly Agree (Sangat Setuju)

42. I am satisfied with profits on investments. *

Saya berpuas hati dengan keuntungan dari pelaburan.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

43. I prefer selling profiting investments rather than holding it. *

Saya lebih suka menjual pelaburan yang untung daripada memegangnya.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

Section I: Perceived Behavioural Control (Bahagian I: Kawalan Tingkah Laku yang Dipersepsikan)

Section I consists of 5 statements.
Choose the BEST answer on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) to what degree you disagree or agree with the statements below.
———

Bahagian I mengandungi 5 pernyataan.
Pilih jawapan TERBAIK pada skala 1 (Sangat Tidak Setuju) hingga 5 (Sangat Setuju) sejauh mana anda tidak bersetuju atau bersetuju dengan pernyataan di bawah.

44. I am very confident in my ability to invest in stock market. *

Saya yakin akan keupayaan saya untuk melabur dalam pasaran saham.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

45. I am competent in selecting stocks. *

Saya kompeten dalam memilih saham.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

46. I can simply track the trend of stocks. *

Saya boleh menjangka tren saham dengan mudah.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree (Sangat Setuju)

47. I know the platform to buy stocks. *

Saya tahu platform untuk membeli saham.

Mark only one oval.

	1	2	3	4	5	
Stro						Strongly Agree (Sangat Setuju)

48. It is simple for me to find profitable stocks. *

Saya boleh mengesan sahm yang menguntungkan dengan mudah.

Mark only one oval.

	1	2	3	4	5	
Stro						Strongly Agree (Sangat Setuju)

Appendix 3.3

Origin of Questionnaire for Each Variable

Investment Intention

No.	Source
INT1	
INT2	
INT3	Adapted from Yang et al. (2021)
INT4	
INT5	Adapted from Schmidt (2010)

Risk Tolerance

No.	Source
RT1	
RT2	
RT3	Adapted from Yang et al. (2021)
RT4	
RT5	

Financial Literacy

No.	Source
FL1	Adapted from Yang et al. (2021)
FL2	
FL3	Constructed ourselves
FL4	Adapted from Yang et al. (2021)
FL5	Constructed ourselves

Overconfidence Bias

No.	Source
OB1	
OB2	
OB3	Adapted from Yang et al. (2021)
OB4	
OB5	

Social Interaction

No.	Source
SI1	
SI2	
SI3	Adapted from Yang et al. (2021)
SI4	
SI5	

Herding Behaviour

No.	Source
HB1	
HB2	
HB3	Adapted from Yang et al. (2021)
HB4	
HB5	

Disposition Effect

No.	Source
DE1	
DE2	
DE3	Adapted from Ahmed et al. (2022)
DE4	
DE5	

Perceived Behavioural Control

No.	Source
PBC1	
PBC2	Adapted from Schmidt (2010)
PBC3	
PBC4	Adapted from Raut et al. (2018)
PBC5	

Appendix 4.1

Frequency Table for Age

Age		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	18 - 21	115	28.7	28.7	28.7
	22-24	157	39.3	39.3	68.0
	25-27	79	19.8	19.8	87.8
	28-30	49	12.3	12.3	100.0
	Total	400	100.0	100.0	

Appendix 4.2

Frequency Table for Gender

Gender		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Male	220	55.0	55.0	55.0
	Female	180	45.0	45.0	100.0
	Total	400	100.0	100.0	

Appendix 4.3

Frequency Table for Ethnicity

Ethnicity					
		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Malay	258	64.5	64.5	64.5
	Chinese	116	29.0	29.0	93.5
	Indian	25	6.3	6.3	99.8
	Dayak	1	0.3	0.3	100.0
	Total	400	100.0	100.0	

Appendix 4.4

Frequency Table for Highest Education Level

Highest Education Level

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Secondary School Certificate	28	7.0	7.0	7.0
	Diploma / Technical School Certificate	48	12.0	12.0	19.0
	Bachelor's Degree or Equivalent	287	71.8	71.8	90.8
	Master and/or Doctoral Degree	37	9.3	9.3	100.0
	Total	400	100.0	100.0	

Appendix 4.5

Frequency Table for Occupation

Occupation		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Student	224	56.0	56.0	56.0
	Employed	154	38.5	38.5	94.5
	Businessman	13	3.3	3.3	97.8
	Self-employed	6	1.5	1.5	99.3
	Unemployed	3	0.8	0.8	100.0
	Total	400	100.0	100.0	

Appendix 4.6

Frequency Table for Annual Income

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Annual Income					
Valid	Below RM21,000	224	56.0	56.0	56.0
	RM21,000 to RM24,000	9	2.3	2.3	58.3
	RM24,001 to RM36,000	30	7.5	7.5	65.8
	RM36,001 to RM48,000	58	14.5	14.5	80.3
	Above RM48,000	79	19.8	19.8	100.0
	Total	400	100.0	100.0	

Appendix 4.7

Frequency Table for Year(s) of Investment Experience

Year(s) of Investment Experience

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	No experience	148	37.0	37.0	37.0
	Below 1 year	87	21.8	21.8	58.8
	1-3 years	86	21.5	21.5	80.3
	3.1-5 years	42	10.5	10.5	90.8
	5.1-7 years	23	5.8	5.8	96.5
	Above 7 years	14	3.5	3.5	100.0
	Total	400	100.0	100.0	

Appendix 4.8

Mean, Median, Mode, and Standard Deviation for Each Variable Items

Items	Mean	Median	Mode	Standard Deviation
DV – Investment Intention (INT) 1. I will participate in stock market investments to earn side income.	4.0100	4.0000	4.0000	0.99618
2. I would like to advise my family and friends to invest in the stock market.	3.4475	4.0000	5.0000	1.33668
3. I am going to start investing in stocks.	4.0125	4.0000	5.0000	1.07248
4. I believe that the stock exchange is an effective investing channel.	4.0975	4.0000	4.0000	0.90556
5. When I have extra money, I plan to invest in stock market.	4.2350	4.0000	5.0000	0.91754
IV1 – Risk Tolerance (RT) 1 I would show my willingness to take risks in financial decisions.	3.8150	4.0000	4.0000	1.17440
2. If I unexpectedly received some money, I would surely invest them in any channel.	4.0250	4.0000	4.0000	0.96525
3. I would prefer to invest in stocks rather than to keep money in a bank account.	3.8775	4.0000	4.0000	1.07255

4. I consider risk in investments as an opportunity.	3.8500	4.0000	4.0000	1.10479
5. I would not mind losing some money if some unfavourable situations happens throughout the investment process.	3.3625	4.0000	4.0000	1.28461
IV2 – Financial Literacy (FL) 1. I have basic knowledge on investment.	3.6875	4.0000	4.0000	1.17187
2. I would check analyses before investing.	4.1175	4.0000	4.0000	0.99558
3. I would consider time value of money in my investment.	4.0500	4.0000	4.0000	0.87431
4. I would consider long-term investments.	4.1850	4.0000	5.0000	0.95028
5. I know how to read trends, candle-stick charts, bid-ask prices, etc.	3.4250	4.0000	5.0000	1.39974
IV3 – Overconfidence Bias (OB) 1. I feel confident to evaluate stock prices in my investment portfolio myself.	3.3175	3.0000	5.0000	1.30804
2. My past profitable investments were mainly due to my specific investment skills.	3.1775	3.0000	4.0000	1.36222
3. I always believe that I would not fall into any investment scams.	3.9125	4.0000	5.0000	1.20768

4. My investment decisions can mostly earn higher than average return in the market.	3.0950	3.0000	3.0000	1.26093
5. I believe that my skills and knowledge of the market help me to outperform the market.	3.2700	3.0000	3.0000	1.29278
IV4 – Social Interaction (SI) 1. I was influenced by my friends when making investment decisions.	2.9500	3.0000	2.0000	1.32737
2. I was influenced by my relatives when making investment decisions.	3.0675	3.0000	4.0000	1.37757
3. I have frequent communication with some 'investment gurus'.	3.0725	3.0000	5.0000	1.51756
4. I am very active in investment related conversation.	3.2700	4.0000	4.0000	1.35709
5. I join investment clubs and invest with a group of people.	2.7625	2.0000	1.0000	1.60703
IV5 – Herding Behaviour (HB) 1. My volume of investment also depends on others opinion (financial consultant, etc.).	3.6175	4.0000	5.0000	1.25704
2. I am confident about accuracy of investment decisions.	3.4250	4.0000	4.0000	1.23823

3. I believe that information from friends is reliable.	3.0925	3.0000	2.0000	1.27594
4. I believe that information from colleagues is reliable.	2.5400	2.0000	1.0000	1.37409
5. I believe that information from relatives is reliable.	3.0475	3.0000	4.0000	1.31131
IV6 – Disposition Effects (DE)				
1. I believe that selling my investment early is able to secure profits.	4.0000	4.0000	5.0000	1.02353
2. I believe that my losing investments will turn into profit in the future.	3.5225	4.0000	4.0000	1.24433
3. I afraid that holding a profiting stock will turn into loss after all.	3.9150	4.0000	5.0000	1.12068
4. I am satisfied with profits on investments.	3.8800	4.0000	5.0000	1.02383
5. I prefer selling profiting investments rather than holding it.	3.8200	4.0000	5.0000	1.09114
IV7 – Perceived Behavioural Control (PBC) 1. I am very confident in my ability to invest in stock market.	3.4300	4.0000	5.0000	1.28227
2. I am competent in selecting stocks.	3.3300	4.0000	5.0000	1.35488
3. I can simply track the trend of stocks.	3.3200	3.0000	5.0000	1.31603
4. I know the platform to buy stocks.	3.8675	4.0000	5.0000	1.21599

5. It is simple for me to find profitable stocks.	3.2400	3.0000	4.0000	1.33298
Overall Results (Average)				
DV – INT	3.9605	4.0000	4.6000	1.04569
IV1 – RT	3.7860	4.0000	4.0000	1.12032
IV2 – FL	3.8930	4.0000	4.4000	1.07836
IV3 – OB	3.3545	3.2000	4.0000	1.28633
IV4 – SI	3.0245	3.0000	3.2000	1.43732
IV5 – HB	3.1445	3.2000	3.2000	1.29132
IV6 – DE	3.8275	4.0000	4.8000	1.10070
IV7 – PBC	3.4375	3.6000	4.8000	1.30043

Appendix 4.9

Table of Multicollinearity Test's Result

	VIF	TOL
RT	3.152	0.317
FL	3.063	0.326
OB	4.828	0.207
SI	2.273	0.440
HB	2.231	0.448
DE	2.925	0.342
PBC	4.656	0.215

a. Dependent Variable: INT

Appendix 4.10

Table of Predicted Regression Result (Multiple Regression Analysis)

	Beta	Standard error	T-statistic	P-value
Constant	0.037	0.156	0.240	0.810
RT	0.196**	0.046	4.232	<0.001

FL	0.432**	0.054	8.070	<0.001
OB	-0.189**	0.049	-3.847	<0.001
SI	0.077*	0.036	2.151	0.032
HB	0.033	0.039	0.853	0.394
DE	0.296**	0.053	5.619	<0.001
PBC	0.192**	0.044	4.330	<0.001
R^2	0.719			
Adjusted R^2	0.714			
Standard error	0.48344			

Note: ** Indicates significance at 0.01 level

* Indicates significance at 0.05 level

Appendix 4.11

Table of ANOVA Result

	Sum of Squares	df	Mean Square	F	Significance
Regression	234.439	7	33.491	143.299	$<0.001^b$
Residual	91.617	392	0.234		
Total	326.056	399			

a. Dependent Variable: INT

b. Predictors: (Constant), PBC, HB, RT, SI, DE, FL, OB