The Mediating Role of Locus of Control in the Relationship Between Financial Knowledge, Risk Perception, and Investment Decisions Among Indonesian Investors

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Abstract. This study investigates the mediating role of locus of control in the relationship between financial knowledge, risk perception, and investment decisions in the capital market. Data were collected from 60 investors of PT Phillip Sekuritas Indonesia using an online questionnaire. Partial Least Square - Structural Equation Modeling (PLS-SEM) was employed to analyze the data. The findings reveal that locus of control significantly mediates the effects of both financial knowledge and risk perception on investment decisions. Moreover, locus of control has a direct and significant impact on investment decisions. The study highlights the importance of considering psychological factors, such as locus of control, in understanding investors' decision-making processes. The findings have implications for investors, financial advisors, and policymakers in promoting informed and effective investment decisions in the capital market. However, the study's limitations, such as the small sample size and the specific context of Indonesian investors, should be acknowledged, and future research should aim to validate the findings in other settings and with larger samples.

Keywords: locus of control, financial knowledge, risk perception, and investment decisions

1. Introduction

Organized crime poses a significant threat to economic growth, and even high-income countries are not immune to its impact on economic development (Forgione & Migliardo, 2023). In investing a certain amount of funds at a particular time that has been planned with the hope that it can generate profits or profits, investors need essential information to make the right investment choices (Blankespoor et al., 2020). Specifically, investment can be interpreted as capital investment (Crouzet & Eberly, 2019). One form of investment that is often used is investment in the capital market. Investment decisions can be viewed from 2 (two) aspects, namely from an external perspective and an internal perspective. First, investment decisions can be viewed externally through purchasing and selling securities on the stock exchange designed to allocate and increase capital. From this perspective, investment decisions from an internal perspective. It makes investment decisions through internal corrections to optimize the company's value through making investment decisions. Decision-making to invest is complex because it involves the company's future and contains doubts and risks, so investment actors must be able to make the best alternative decisions, called rational decisions (Brunsson, 2019).

Indonesia is now attracting all the attention of investors to invest massively and quickly. The rapid growth of business is directly proportional to the intense business competition in today's modern era. Business competition can be fierce, especially in markets with aggressive competitors (Cho, 2024). Businesses must be able to manage and stand out from competitors, which is crucial for success. They must redesign business models and seek more significant advantages to maintain or improve their position, thereby improving performance. Share price is the relative value and proportional value of a company. A company with a high value can attract the attention and trust of investors. A high stock price reflects the company's value (Sukesti et al., 2021). According to (Carpenter et al., 2021), in an efficient capital market, stock prices reflect all relevant information, and the market will react if there is a change in stock prices. Fundamentals and technical factors influence stock prices. Earnings affect how investors value the company, but other indicators are used to predict stock prices. Investor expectations, attitudes, and sentiments influence stock prices.

Efficient execution of investment decisions is essential for most companies, as it facilitates sustainable growth and maximizes shareholder wealth. This work combines methods to determine a firm's financial flexibility and assess its investment efficiency, which was not done in previous work on flexibility. The issue of corporate investment efficiency is of great interest to scholars and researchers due to its relevance and practicality. However, most of the current research provides insight into how flexibility affects the investment level, the equity payout volume, and the firm's value. Previous research results suggest that financially flexible firms make more optimal investment decisions (by reducing excess and shortage of funds) (Bolton et al., 2019).

Effective asset utilization or investment will increase firm value, while ineffective asset utilization will reduce firm value. Company growth can benefit managers rather than shareholders (Tang & Zhang, 2020). Investment in the capital market is an alternative to investing with easy access to be used by the wider community. However, in various investment activities, this still needs to be introduced to the people of Indonesia. This is because, compared to other countries, Indonesia still needs to improve in making investments (Bawono, 2021). According to statistical data, the number of capital market investors in Indonesia continues to increase yearly. In October 2021, the number of capital market investors reached 6.6 million SID (single investor identification). This figure shows an increase of 71.42 percent, compared to the end of 2020 of 3.8 million people. The IDX noted that the number of investors is still concentrated in Java Island, which reaches 70%, and the asset value is IDR 3,347.41 trillion or 94.62% of the total capital market assets. Sumatra Island occupies the second position with 16.46% investors and total assets of IDR72.74 trillion, equivalent to 2.06%.

However, things are different in Maluku province. Many people still need the intention to invest. They tend to think that investment is complex and requires significant capital to carry it out (Phillips & Johnson, 2021). Maluku Province, with its archipelagic characteristics, is a challenge for the government in realizing the welfare of the Maluku people. Some areas still need to be more remote, isolated, and developed. This condition makes it difficult for local governments to optimize the utilization of available natural resources.

On the other hand, the availability of development funds is still relatively limited. The opening of opportunities for the national and foreign private sectors to participate in the development process continues to be encouraged by providing ease of investment. Awareness of the importance of investment in the economy is increasing, so local governments are issuing investment policies to attract investors, including foreign investors. Investment is an activity that can accelerate and stimulate production activities because it increases production capacity and expands employment opportunities. Investment is an activity that can accelerate and stimulate production capacity and expands employment opportunities, which in turn occurs economic growth. Investment created in specific economic sectors can make these sectors develop faster. Through the linkage effect, other sectors can also develop. The sector can become a growth center for other economic sectors. Through the trickling-down effect, the spreading process creates simultaneous and sustainable economic growth (Ramly et al., 2023).

According to statistical data on the Ambon City stock SID, the number of capital market investors in Ambon City in the last 3 years has continued to increase. In 2019, the number of SID shares in Ambon City reached 1,574 SID (single investor identification). This figure shows an increase of 748 SID investors, which in 2020 reached a total of 2,322 SID investors. After that, in 2021, the number of investors in Ambon City will increase by reaching 4,089 SID. Phillip Sekuritas Indonesia has been a trusted securities company in Indonesia since 1994. Phillip Sekuritas Indonesia is part of the Phillip Capital Group, a global network in 16 countries. Since 1975, Phillip Capital has developed as an integrated Asian Financial Institution and generally offers a wide range of quality and innovative services for retail, corporate, and institutional customers. Phillip Sekuritas is Indonesia's best online trading system, with many investment types, such as gold, property, stocks, and mutual funds. PT Phillip Sekuritas Indonesia, in this case, makes it very easy and accessible to invest and is committed to educating and inviting people to invest.

The online trading system at Phillip Sekuritas is also among the best online systems for investing stocks and mutual funds online, and all of them are included in one online trading system called POEMS (Phillip's Online Electronic Mart System). POEMS is an intuitive trading platform designed to provide all investors with various conveniences in conducting stock and mutual fund transactions.

The Indonesia Stock Exchange (IDX) has collaborated with several securities companies to provide a system or means to bring together investors to bid for and buy securities. Since the opening of the Indonesia Stock Exchange, this form of investment is an alternative investment easily accessible to the broader community. One of the securities companies that cooperates with the Indonesia Stock Exchange (IDX) is PT Phillip Sekuritas Indonesia.\

Financial knowledge is an action in managing and adjusting finances that must be informed. Financial knowledge can also be a person's mastery of things dominated by the financial world. Financial knowledge has a strong influence on starting to invest; it also influences every investment decision (Maharani & Saputra, 2021). Financial knowledge is also very influential on an investor who will decide to invest; one's financial knowledge strongly influences future investment planning (Akhtar & Das, 2019). Therefore, education about financial knowledge has a very positive impact on those who have plans to make future investments, and investment decisions must be accompanied by good financial knowledge (Raut, 2020).

The investor risk perception factor is also significant for investors to continue to be considered because someone with a high-risk perception will continue to be careful when making decisions in investing. In contrast, someone with a low-risk perception will be brave in making investment decisions. Risk perception is a person's behavior at the risk he will do during the investment period. Someone with

a high-risk perception will have a long time deciding to invest. Risk perception is an essential aspect of investment decision-making, which relates to how individuals perceive and evaluate the risk associated with an investment. Researchers such as (Bronfman et al., 2020) have investigated risk perception and highlighted its multifaceted nature, which is influenced by various factors. These factors include individual characteristics, market conditions, and cognitive biases. By considering the influence of behavioral finance biases on risk perception, behavioral finance highlights the complexity of investors' decision-making process. It emphasizes that objective factors do not solely determine individual risk perception but are also influenced by biases and heuristics that may deviate from rational decisionmaking. Thus, studying risk perception within a behavioral finance framework provides valuable insights into understanding the cognitive and psychological mechanisms behind investment decisions. The mediating role of risk perception suggests that the relationship between behavioral finance and investment decision-making can be explained by how investors perceive and evaluate risk (Ahmed et al., 2020). For example, overconfident investors may perceive risky investments as less risky than they are, maIDng them more likely to make investments that do not match their risk profile. Alternatively, loss-averse investors may perceive low-risk investments as riskier than they are, leading to missed opportunities for investment gains (Mrkva et al., 2020).

Locus of control is a way to control one's behavior in making certain decisions. Locus of control influences investment decision-making. Suppose someone with a high locus of control must have a significant way of control, while someone with a low locus of control must have a small or limited control. Therefore, self-control (Locus of control) is essential in making investment decisions because good self-control will also lead to good decision-making. However, investors' weak confidence and self-control will cause investors to be indecisive in planning investment decisions-the influence of a person in Locus of control when investing is also very important. Someone with strong beliefs and high self-confidence will determine the decisions taken in the future, and they will determine what they get later. Locus of control is also very influential when it becomes a mediating variable. Therefore, financial knowledge and risk perception influence investment decisions through Locus of control as a mediating variable. Researchers conducted this research because, according to regional distribution data, the number of investors on Maluku Island, especially the ones who invest their capital in PT Phillip Sekuritas Indonesia in Ambon City, is arguably the least compared to other large islands in Indonesia. Therefore, researchers are interested in conducting research with the investors' criteria from PT Phillip Sekuritas Indonesia. Therefore, this study aimed to analyze the role of Locus of control in mediating financial knowledge on investment decisions in the capital market.

2. Literature Review

2.1. Investment Decisions in the Capital Market

Investment decision is an action or policy taken in investing in one asset in the hope of generating profitable returns in the future (Johnson & Lee, 2013). This investment decision is based on two things, namely portfolio and profitability (profit). The portfolio itself is a purchase of stocks with price momentum at the same time ignoring the principle of supply and demand (McMillan et al., 2011). By and large, the main purpose of a person investing is none other than to maximize utility to increase their satisfaction (Aral et al., 2020). According to (Bodie et al., 2017), Investment Decisions are decisions in allocating or placing a certain amount of funds into certain types of investments to generate profits in the future with a certain period. Some of the reasons someone invests include meeting family needs, developing wealth, reducing inflationary pressures, saving taxes and wanting to get a more decent life in the future. Individual investment decisions are decisions to allocate a certain amount of funds made by individuals (not institutions) to get profits in the future. The individual will learn how to manage welfare of a monetary nature for himself. Welfare is measured by the sum of income owned with current value with future income (Aitken, 2019). According to (Malkiel & Ellis, 2021), investment is essentially

the placement of a number of funds at this time in the hope of obtaining profits in the future. Basically, the purpose of people investing is to generate high returns.

2.2. Financial Knowledge

Etymologically, the word knowledge comes from English which means "knowledge" or "content of the mind". While the word financial comes from English, namely "finance" which means "finance". Financial knowledge is one of the most important contributors to financial success. Good knowledge will affect good behavior. Without good financial knowledge in financial management, it will be difficult for investors to make effective and wise decisions about the use of their money to achieve success and prosperity both now and in the future (Rahmawati & Marcella, 2023).

Financial knowledge is knowledge that includes banking checks and savings, insurance, family welfare, credit, taxes, and investments. This knowledge can be acquired through a variety of strategic variations, including accidental combinations of strategies in life. Financial knowledge can also be obtained from media such as television, radio, magazines, and others (Sabri & Aw, 2019). Knowledge of existing financial institutions should be able to enable individuals to make more effective loan decisions.

2.3. Risk Perception

Risk perception is an assessment made by a person of a risky situation, the assessment depends on the psychological characteristics and circumstances of the person (Siegrist & Árvai, 2020). Risk Perception is a person's assessment of risky situations, where the assessment is highly dependent on the psychological characteristics and circumstances of the person (Grima et al., 2021). Risk perception plays an important role in human behavior, especially related to decision making in uncertain circumstances. A person tends to define a risky situation if he experiences losses due to poor decisions, especially if those losses have an impact on his financial situation. Several people when faced with the same decision-making situation will take different decisions depending on each person's perception and understanding of the risks and their effects.

Risk perception is a person's assessment of risky situations, the assessment is highly dependent on the psychological characteristics and circumstances of the person (Siegrist & Árvai, 2020). An investor if he has a high level of risk perception will be careful in making investment decisions, while an investor who has a low level of risk perception will dare to make decisions because he already has enough experience about investment. Risk perception is an individual's perspective on the risks he will face. Individuals who have a high risk perception will decide thoughtfully and vice versa.

2.4. Locus Of Control

Locus of control is a person's perspective on an event whether he can or cannot control the events that occur to him (Francis, 2020). Locus of control is defined as a person's perception or perspective on things that trigger success or failure in doing their work (Arkorful & Hilton, 2022). Locus of control is a form of self-control over existing events. Someone who has an internal locus of control is very likely to believe in the name of talent that is possessed determines the outcome. However, in contrast to people whose external locus of control believes more in the destiny that is the result. This locus of control is related to prospect theory where this theory assumes that psychology is a picture of individual behavior when making financial decisions between more than one option. According to (Tagini et al., 2021), locus of control is one of many reasons that affect people's psychology. The locus of control has an influence on decision making when investing, if someone has a large locus of control, of course, has great confidence as well.

The locus of control is a psychological concept regarding a person's beliefs about the extent to which they control the events that affect them. So it can be said that someone who has good financial knowledge will form a good locus of control as well. The person will control themselves to always make the right and careful decisions according to their knowledge. So if the higher the level of financial knowledge owned by a person, the higher the level of locus of control owned. Locus of control is a person's perspective on an event whether one can control the events that occur or not. Locus of control is an individual's belief about the source of the causes of the events experienced in his life (Wang & Lv, 2020). A person can also have confidence that he is able to manage his life, or that someone else is the one who manages his life, it can also be believed that fate, luck, or chance factors that have a great influence on his life.

3. Methods

This research was conducted at PT Phillip Sekuritas Indonesia Ambon Branch. The research conducted by researchers is a type of quantitative research using primary data, namely the survey method. According to (Pandey & Pandey, 2021), survey research takes a sample of one population and uses a questionnaire as the main data collection tool. Apart from primary data, this study uses secondary data, which directly takes data from a particular institution such as the IDX (Indonesia Stock Exchange). The method of analysis of this research is classified as quantitative research, namely research that uses tests of research hypotheses with statistical test tools.

Based on the title "The Mediating Role of Locus of Control in the Relationship Between Financial Knowledge, Risk Perception, and Investment Decisions Among Indonesian Investors". Then, there are five variables, namely: 1) Financial knowledge as an independent variable (X1); 2) Risk perception as an independent variable (X2); 3) Locus of control as a mediating variable (Z); 4) Investment Decision in the Capital Market as the dependent variable (Y).

A population is a complete group of elements, usually in the form of people, objects, transactions, or events where we are interested in studying them or becoming objects of research (Pandiangan et al., 2022). In this study, the population is PT Phillip Sekuritas Indonesia. The number of investors who became the population of this study was 308 SID, with details of the number of investors registered at PT Phillip Sekuritas Indonesia as of 2019 (152 SID), 2020 (112 SID), and 2021 (44 SID) investors.

A sample is a portion of the population with relatively the same characteristics and represents the population. The sample is part of the population's number and characteristics to be studied. The determination of the sample in this study was carried out using the non-probability sampling method. Non-probability sampling is used for samples that cannot be selected randomly, and not all elements or elements of the population have the same opportunity to be selected as a sample. Therefore, this study takes several determining criteria for the sampling process, including investors actively investing in stocks and registered with PT Phillip Sekuritas Indonesia. Thus, the number of samples in this study was 60 SIDs. The sample size to be analyzed is 60 respondents, this is done to meet the minimum standard of sampling criteria. This is in accordance with the sample size in PLS with the following estimates (Purwanto, 2021): 1). Ten times the number of formative indicators (ignoring reflexive indicators) 2). Ten times the number of structural paths in the inner model 3). Small sample size 30 – 50 or large sample more than 200.

The sampling technique in this study is to use several determining criteria. The criteria to become a sample are 1) Investors who are actively investing in stocks and have registered with PT Phillip Sekuritas Indonesia Ambon Branch; 2) Investors who already have a stock account at PT Phillip Sekuritas Indonesia Ambon Branch; 3) Investors who have invested for the last 3 years at PT Phillip Sekuritas Indonesia Ambon Branch. The flow of this research can be shown in Figure 1.



Fig.1: Research Flow

The indicators used to measure financial knowledge variability consist of 2 indicators, risk perception consists of 2 indicators, locus of control consists of 4 indicators and investment decisions consist of 3 indicators. The measurement scale used is to use the Likert Scale tip e 5 points. This study used an ordinal scale.

Partial Least Square (PLS) is a multivariate statistical technique that compares multiple dependent variables with multiple independent variables. PLS is designed to solve multiple regression with dataspecific problems, such as small sample size, missing data, and multicollinearity (Streukens & Leroi-Werelds, 2023). The purpose of PLS is to predict the effect of the independent variable on the dependent variable by explaining the theoretical relationship between the two variables. Some of the reasons for choosing the PLS model are as follows: 1) PLS can model many independent variables; this study uses 2 independent variables, namely financial knowledge and risk perception; 2) PLS is suitable for measuring latent variables, which are variables that can only be measured indirectly, namely through several indicators; 3) PLS can be used on data with different scale types, namely nominal scale, interval scale, and ordinal scale, while based on its use, namely dummy scale and Likert scale. Variant-based structural equation analysis (SEM) can test two models: the measurement and structural models. The measurement model consists of a convergent validity test, discriminant validity test, indicator reliability test, and internal consistency reliability test. In contrast, the structural model consists of the coefficient of determination test, path coefficients, model fit, and mediation test (Hair Jr et al., 2021). PLS is a powerful analysis method because it is not based on many assumptions such as data does not have to be normally distributed, samples do not have to be large. PLS can also be used to explain the presence or absence of relationships between latent variables. PLS can analyze at once constructs formed with reflexive and formative indicators (Adam, 2015).

4. Result and Discussion

4.1. General Description Of The Research Object

This research was conducted on investors who invested their shares in PT. Phillip Sekuritas Ambon Branch has a total population of investors starting in 2019 - 2021 of 308 investors, and for those sampled in this study, there are as many as 60 investors/respondents. The data for this study were obtained from primary data by collecting research questionnaires from PT. Phillip Sekuritas Indonesia was conducted online using Google forms distributed to investors who invested funds at PT. Phillip Sekuritas Indonesia, the characteristics of respondents can be shown in Tables 1 and 2.

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Gender	Total	Percentage
Male	24	40%
Female	36	60%

	Table	1.	Charac	teristics	of Res	pondents	Based	on	Gender
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Total	60	100%	

Table 2. Characteristics of Respondents Based on Investment Experience			
Investing Experience	Total	Percentage	
< 1 Year	45 Investors	75%	
1 - 3 Years	13 Investors	21,7%	
3 - 5 Years	2 Investors	3,3%	
> 5 Years	0 Investors	0%	
Total	60 Investors	100%	

4.2. Data Analysis

4.2.1. Outer Model



Fig.2: Original Outer Model

Figure 2 above shows that one indicator has a value < 0.7, namely ID2, which means the indicator is invalid and must be removed from the model and retested.



Fig.3: Modified Outer Model

Figure 3 above shows that after one invalid indicator is modified, a new outer model can be obtained with the following test value results:

4.2.2. Convergent Validity Test

Table.3. AVE Value				
Variables	Criteria	AVE		
Financial knowledge (X1)		0.728		
Risk perception (X2)	>0,5	0.792		
Locus of control (Z)		0.720		
Investment Decision (Y)		0.759		

Table 3 shows that the AVE has met the AVE value > 0.5 criteria, so the convergent validity test is fulfilled, and further testing can be carried out.

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	Table 4. Cross Loading Value								
	Indicators	Financial	Risk	Locus of	Investment				
		Knowledge	Perception	Control	Decision				
	FK2	0.831	0.729	0.713	0.670				
	FK3	0.919	0.760	0.853	0.818				
	FK4	0.870	0.642	0.708	0.774				
	ID1	0.781	0.688	0.790	0.879				
	ID4	0.779	0.652	0.826	0.942				
	ID5	0.804	0.643	0.830	0.916				
	LOC4	0.774	0.766	0.882	0.785				
	LOC5	0.724	0.783	0.877	0.836				
	RP1	0.819	0.917	0.796	0.740				
_	RP2	0.570	0.862	0.627	0.587				

4.2.3. Discriminant Validity Test

The square root value of AVE in the financial knowledge variable (X1) is 0.831-919, greater than the construct correlation value in other latent variables. Likewise, the value of the square root of AVE in the risk perception variable (X2) is 0.862-917, the value of the square root of AVE in the locus of control variable (Z) is 0.877-882 and the value of the square root of AVE in the investment decision variable (Y) is 0.879-942, all of which are greater when compared to the value of construct correlation in other latent variables. This can prove that all research variables have met discriminant validity. For example, each indicator in the research variable that has been marked in the table has the largest cross loading value when compared to the cross loading value in other variable indicators. Therefore, it can be concluded that the indicators used in the study have met good discriminant validity in the preparation of each variable.

Table 5. Outer Loading Value				
Variables	Indicator	Criteria	Outer Loading	
	FK1	>0,7	0.825	
	FK2	>0,7	0.831	
Financial Knowledge	FK3	>0,7	0.910	
	FK4	>0,7	0.870	
	FK5	>0,7	0.827	
Risk Perception	RP1	>0,7	0.917	
	RP2	>0,7	0.862	
	LOC1	>0,7	0.831	
Locus of Control	LOC2	>0,7	0.899	
	LOC3	>0,7	0.745	
	LOC4	>0,7	0.883	
	LOC5	>0,7	0.877	
	ID1	>0,7	0.872	
Decision Investment	ID2	>0,7	0.650	
	ID3	>0,7	0.757	
	ID4	>0,7	0.917	
	ID5	>0,7	0.896	

4.2.4. Indicator Reliability Test

Table 5 shows one outer loading indicator value < 0.7, namely the ID2 indicator, so the indicator must be eliminated to continue this research because, later, the indicator is considered invalid. After the indicators that did not meet the criteria had been removed, the modified outer loading value was

obtained in the modified outer loading column. All modified outer loading values have met the criteria in the indicator reliability test, namely> 0.7, so that all indicators can be declared reliable.

4.2.5. Internal Consistency Reliability Test

The reliability consistency test is a test that uses an internal consistency reliability test, with the criteria that the Composite Reliability value must be > 0.60 so that it can be said to be reliable. Table 6. Composite Reliability Value

Table.0. Composite Kenability value			
Variables	Criteria	Composite Reliability	
Financial knowledge		0.930	
Risk perception	>0,60	0.884	
Locus of control		0.928	
Investment Decision		0.926	

Table.6 shows that the composite reliability value of each variable in this study is > 0.60, so it is concluded that the internal consistency reliability test criteria have been met and can be declared reliable.

4.3. Inner Model

4.3.1 Coefficient of Determination (R²)

The coefficient of determination test (R^2) assesses how much exogenous constructs can explain endogenous constructs with the value (R^2) expected between 0 -1. The criteria used are 0.1-0.3 (weak model), 0.3-0.6 (moderate model), and more significant than 0.6-0 (robust model).

Table 7. R-Square value		
Variables	R-Square	
Investment Decision	0.779	
Locus of control	0.793	

Based on table 7 shows that the investment decision variable and Locus of control each have an R-Square value of 0.779 and 0.793, so this research model is declared moderate, which means that the role of the mediating variable Locus of control can explain the financial knowledge and risk perception variables by 79.3%. The financial knowledge and risk perception variables can explain the investment decision variable by 78%.

4.3.2 Path Coefficients

The Path Coefficient is also used to measure the significance between variables. However, the criteria used in the Path Coefficients test are between -1 and +1; the closer to +1, the stronger the relationship between constructs.

Table 8.	. Value of Path Coefficient	S
Variables	Investment Decision	Locus of control
Financial knowledge		0.616
Risk perception		0.318
Investment Decision		
Locus of control	0.883	

Table 8 shows that some variables have moderate significance because the path coefficients of all variables are >0 and close to +1.

4.3.3 Model Fit

Model fit evaluation measures the model's fit using the Normed Fit Index (NFI) value. In this study, the result of the NFI value is 0.761, meaning that the fit of the model in this study reaches 76.1%. Mediation Test

The evaluation of indirect effects aimed to measure, determine, and analyze the strength of the relationship between mediating variables. It is known that the total sample of 60 respondents is 1,672.

Influence	T Statistics	P values
Financial knowledge \rightarrow Locus of control \rightarrow Investment Decision	6.569	0.000
Risk perception \rightarrow Locus of control \rightarrow Investment Decision	3.157	0.002
Locus of control \rightarrow Investment Decision	16.600	0.000

Table 9. T-Statistic value of direct effect and indirect effect

4.4 Discussion

Table 9 above shows that the value of the indirect effect of the financial knowledge variable on investment decisions through the Locus of the control variable is 6,569 > 1,672 and P_(values) of 0.000 < 0.05. It means that the Locus of the control variable can mediate the effect of the financial knowledge variable on the investment decision variable, and the value of T_statistics' indirect effect (X1 \rightarrow Z \rightarrow Y) is significant. It is similar to the case with the risk perception variable on the investment decision variable. Its value is 3.157 > 1.672 and P_(values) 0.002 < 0.05, meaning that the Locus of control variable can mediate the effect of the risk perception variable on the investment decision variable can mediate the effect of the risk perception variable on the investment decision variable can mediate the effect of the risk perception variable on the investment decision variable on the investment decision variable of T_statistics indirect effect (X2 \rightarrow Z \rightarrow Y) is significant. The next is testing the value of the direct effect of the Locus of control variable on the investment decision variable. The value is 16,600 > 1,672, and P_ (values) 0.000 < 0.05, meaning that the Locus of control variable has a significant effect because the value of T_statistics indirect effect (Z \rightarrow Y) is significant.

After analyzing the research data, the researcher will compile a discussion related to the research results, which will be compared with the theory and previous research that has been used as a reference in compiling the background and determining the research hypothesis so that it can be seen whether the research results will be in line or contrary to the theory and previous research that previous research that previous researchers have done.

4.4.1 The Role Of Locus Of Control (Z) On The Influence Of Financial Knowledge (X1) On Investment Decisions (Y)

Based on the test result value, the financial knowledge variable significantly affects the investment decision variable, with Locus of control as the mediating variable. It means that the Locus of Control can mediate the effect of financial knowledge on investment decisions at PT Phillip Sekuritas Indonesia within the scope of the Indonesian capital market. The financial knowledge of investors at PT Phillip Sekuritas Indonesia will significantly influence their investment decisions in the capital market when accompanied by a strong locus of control. With the existence of self-control to invest, a person will be more encouraged to control his behavior, not only limited to the procedure and return on investment decisions, but will be more critical and compare it with the concept of investment in the Indonesian capital market.

(Baptista, 2021) has conducted this research, which states that financial knowledge affects personal financial management behavior through the Locus of control. It shows that individuals must have good self-motivation to show excellent and responsible financial behavior in increasing Locus of control. In contrast, Locus of control is a psychological factor that can affect a person's financial behavior (Adiputra et al., 2021) Financial knowledge is inseparable from a person's life because financial knowledge helps make financial decisions. In big cities in Indonesia, for example, Jakarta, financial knowledge is still uneven; many people do not understand how vital financial knowledge is in improving their welfare in terms of financial satisfaction. The results of this study are supported by research conducted by (Farida et al., 2021) that shows the results of his research that financial literacy can affect financial satisfaction. Financial literacy is a positive behavior in decision-making because financial knowledge can determine financial satisfaction. Financial literacy is one of the things that can influence a person's thinking style toward financial management, which can change financial conditions for the better. In addition, it is also supported by research conducted by (Subaida & HaIDID, 2020),

stating that financial knowledge affects investment planning behavior with self-control as a moderating variable. The same results are also in this study. Financial knowledge of student investment decisions in the capital market through the locus of control significantly affects investment decisions. It means investment decision-making depends on how investment knowledge is coupled with an investor's self-control.

4.4.2 The Role Of Locus Of Control (Z) On The Influence Of Risk Perception (X2) On Investment Decisions (Y)

Based on the test result value, the risk perception variable significantly affects the investment decision variable, with Locus of control as the mediating variable. It means that Locus of Control can mediate the effect of risk perception on investment decisions at PT Phillip Sekuritas Indonesia within the scope of the Indonesian capital market.

In this study, risk perception can influence the Locus of control in investors who will invest in the capital market, especially at PT Phillip Sekuritas Indonesia. It is because self-control when investing has been formed, and one already has a sense of interest or pleasure in various things related to investing in the Indonesian capital market. Meanwhile, the role played by risk perception in this capital market sometimes makes novice investors constantly have to study the level of self-efficacy, such as one's emotional level in making investment decisions in the capital market, so that further research can look for other variables that can also have a significant effect on investment decisions through Locus of control as a mediating variable.

With a low locus of control, they tend to need better control over their finances. Someone who tends to have an exemplary locus of control character then has a good level of trust and awareness of their financial management. Someone will know the risks that may occur if they can make sound financial planning to achieve high financial satisfaction, avoid possible future risks, and make decisions quickly. The researchers have never found research that discusses the effect of Locus of control on financial satisfaction as the originality of this research. Research conducted by Botha & Dahmann (2024) examines the internal Locus of control, which results in the internal Locus of control being very influential in achieving large profits by believing in its strength. Locus of control is essential when taking risks that affect a person when making decisions. The two Locus of control studies above are more directed at investment behavior (Rambe et al., 2018). The financial behavior variable is an independent variable whose results financial satisfaction tends to increase little by little when the individual applies positive financial behavior; good financial behavior leads to the fulfillment of desires and goals with the fulfillment of one thing predetermined financial goals so that it will lead to financial satisfaction (Rahman et al., 2021). Individuals with good financial behavior will show a higher level of satisfaction because good financial behavior will encourage a person to control financial conditions better. The results of other research studies state a positive influence of risk perception on investment decisions (Halim & Pamungkas, 2023). In addition, financial self-efficacy has a direct effect on selfcontrol. High self-control is associated with better adjustment, better relationships and interpersonal skills, more secure attachments, and optimal emotional responses (Fred van Raaij et al., 2023).

4.4.3 The Effect of Locus of Control on Investment Decisions

The effect of Locus of control directly has a significant effect on investment decisions to be made by investors in the capital market. Based on the value of the Locus of control indicator statement items used in this study, it can be concluded that an investor will invest in the capital market if his inner and outer beliefs are confident in investing in the capital market. Locus of control in investing can also encourage a person's perspective on an event in investing or an experience related to someone who can or cannot control events that will happen to him. Locus of control measures the extent to which individuals believe they have control over every situation and event that occurs in their lives, with factors that are within and outside their control (Khumalo & Plattner, 2019). Locus of control is a way of looking at events, whether or not a person can control these events. Locus of control has a positive and significant effect on investment decisions. If the investor's Locus of control improves, the investment decision will also improve (Hirdinis & Haningsih, 2022). This study also shows that Locus of control is a person's perception or way of working in terms of triggering success or failure in doing his job, especially in terms of investing (Ahmad Sudrajat & Hartono, 2022). Locus of control is based on self-control from within a person to achieve a job. In other cases, this Locus of control is learned to exercise self-control in investing. Locus of control has a significant effect on investment decisions. It means that one's investment decision-making highly depends on how self-controlled an investor is (Paul et al., 2022).

5 Conclusion

In conclusion, this study provides empirical evidence for the mediating role of locus of control in the relationship between financial knowledge, risk perception, and investment decisions in the capital market. The findings highlight the importance of considering psychological factors, such as locus of control, in understanding investors' decision-making processes. Financial knowledge and risk perception influence investment decisions not only directly but also indirectly through their impact on locus of control. Moreover, locus of control emerges as a significant direct predictor of investment decisions, suggesting that investors' beliefs about their ability to control outcomes play a crucial role in shaping their investment choices. These findings have important implications for investors, financial advisors, and policymakers. Investors should be aware of the influence of their locus of control on their investment decisions and seek to develop a more internal locus of control to make more informed and effective choices. Financial advisors should consider clients' locus of control when providing investment advice and helping them manage risk. Policymakers should design financial education programs that not only enhance financial knowledge but also foster a sense of personal control and responsibility among investors. However, the limitations of the study, such as the small sample size and the specific context of Indonesian investors, should be acknowledged, and future research should aim to validate the findings in other settings and with larger samples. Additionally, future studies could explore other psychological factors that may influence investment decisions and investigate the potential moderating effects of demographic and socioeconomic variables on the relationships examined in this study.

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