The Role of Investment Risk Perception in Improving the Relationship of Gen Z Financial Literacy to Investment Decisions

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ABSTRACT

This study examines the role of investment risk perception in mediating the relationship between financial literacy and investment decisions among Generation Z in Indonesia. Financial literacy, encompassing financial knowledge, financial attitudes, and financial behavior, is widely recognized as a critical determinant of financial decision-making. However, previous research has produced inconsistent results, necessitating the inclusion of investment risk perception as a mediating variable. A quantitative research design was employed using survey data from 100 respondents selected through probability sampling. Path analysis with SPSS was applied to test the direct, indirect, and total effects between variables. The results reveal that financial attitude has a significant direct effect on investment decisions, while financial knowledge and financial behavior show no direct influence. Conversely, financial behavior significantly affects investment risk perception, which in turn positively influences investment decisions. Moreover, risk perception mediates the relationships between financial attitudes and behavior with investment decisions, but not financial knowledge. These findings highlight that Generation Z's investment decisions are strongly shaped by attitudes and behaviors when accompanied by an adequate understanding of investment risk. The study contributes to behavioral finance by demonstrating the importance of risk perception as a bridge between financial literacy and rational investment choices, offering insights for educators, policymakers, and financial institutions in fostering better investment practices among young investors.

1. Introduction

Financial literacy plays an important role in making investment decisions. According to Mandagie, Febrianti, and Fujianti (2020) financial literacy can help individuals avoid financial problems that novice investors such as students might face. In a study by Chairani, Bestari, and Hidayat (2021), it was stated that the lack of financial literacy in Indonesian society has caused many people to end up losing money because they fell into fraudulent investments carried out by irresponsible individuals.

A good understanding of financial concepts such as risk management, diversification, and investment analysis can help individuals minimize risk and optimize investment returns. Lack of financial literacy often leaves investors vulnerable to impulsive decisions, investment fraud, or investments that do not match their risk profile. Conversely, good financial literacy allows investors to evaluate risks more carefully, understand investment instruments, and take strategic steps based on accurate information.

Research shows that individuals with high levels of financial literacy tend to be better able to identify risks, build a diversified portfolio, and avoid high-risk investments without careful consideration. Therefore, improving the financial literacy of the community is a strategic step to reduce losses due to bad investments, while also encouraging economic growth through more informed investments.

1.1 Background

Good financial literacy enables investors to evaluate risks more carefully, understand investment instruments, and make strategic decisions based on accurate information. The following research questions can be addressed:

a. Does Financial Literacy (Financial Knowledge, Financial Attitude, and Financial Behavior) directly influence investment decisions?
b. Does Financial Literacy (Financial Knowledge, Financial Attitude, and Financial Behavior) influence investment risk?
c. Does investment risk play a role in enhancing the relationship between Financial Literacy (Financial Knowledge, Financial Attitude, and Financial Behavior) and investment decisions?

1.2 Problem Statement

The inconsistency of research results on the influence of financial literacy on investment decisions, gave rise to several problem-solving approaches, namely adding intermediary variables to the inconsistent relationship. The inconsistency of the results is based on a significant relationship between financial literacy and good financial behavior, while other studies found a weak or even insignificant influence.

1.3 Objectives and Scope

The objectives of this study are:

a. To examine the direct influence of financial literacy (financial knowledge, financial attitude, and financial behavior) on investment decisions.
b. To examine the influence of financial literacy (financial knowledge, financial attitude, and financial behavior) on investment risk.
c. To examine the role of investment risk in enhancing the relationship between financial literacy (financial knowledge, financial attitude, and financial behavior) and investment decisions

2. Literature Review

Summarize key findings from prior studies, theories, or methodologies relevant to your research. This section should build a strong foundation for your methodology by showing gaps or areas needing further exploration.

Financial literacy according to Huston (2010) is defined as the ability to use the knowledge and skills possessed to make effective financial decisions. The definition of financial literacy according to Remund (2010) is that financial literacy is a measure of a person's knowledge in understanding financial concepts, ability and confidence in managing their personal finances through decision making by paying attention to environmental events around them and changes in economic conditions.

According to ASIC (2013: 6) regarding Financial Literacy which can open a person's eyes to be able to make better financial decisions for themselves and receive more benefits. OJK Regulation Number 76 of 2016 defines that financial literacy is knowledge, skills, and beliefs that direct people to behave and behave as well as possible in order to improve the quality of individuals in making decisions and managing finances in order to achieve goals, namely welfare (Muhammad & Novy, 2022).

According to Kojo Oseifuah (2010) there are three indicators of Financial Literacy, including 1) Financial Knowledge, namely having knowledge of financial terminology, such as stock markets, credit cards, interest rates, bankruptcy, stock markets, various banking services, understanding various sources of family income, etc. According to Chen and Volpe (1998) indicators that can be used to measure financial literacy are Basic knowledge of financial management, Credit management, Savings management, Investment, Risk management. Lack of financial literacy causes individuals to be more likely to have problems with debt, more involved with higher credit costs and less likely to plan for the future (Lusardi, de Bassa Scheresberg, & Avery, 2018). Financial knowledge can be used as a basis for a person's critical factor in making decisions. According to Chen and Volpe (1998) in their research, they explained that students who have low levels of Financial Literacy tend to have negative opinions about finance and make wrong decisions. By having good Financial Literacy, students will be able to make decisions for their lives and accept responsibility for their own actions. For example, one of the Financial Skills that is currently of concern is the use of credit cards by students. This is in line with the results of research showing that financial literacy Malgit and Jagongo (2017) has a significant influence on making the right investment decisions (Vimala & Alamelu, 2018), even across generations (N. Putri & Rahyuda, 2017). Financial literacy is also related to a broader set of financial decisions, such as stock market participation, portfolio diversification and the ability to over-indebtedness (Van Rooij, Lusardi, & Alessie, 2011). 2) Financial Attitudes, namely the drive to improve financial knowledge, implement government policies in terms of taxes, use banking services related to abroad, such as giro, L/C, clearing, etc. Financial Attitudes can be reflected by the following six indicators by Sohn, Joo, Grable, Lee, and Kim (2012) namely Obsession, Power, Effort, Inadequacy, Retention and Security. Financial Behavior, namely oriented towards spending and saving, planning financing for the future, keeping personal financial records, managing debt and credit according to the company's cash flow. 3) Financial Behavior studies how humans actually behave in financial decisions according to Wicaksono and Wafiroh (2022), namely how psychology influences financial decisions, how psychology influences companies, how psychology influences financial markets. According to Virigineni and Rao (2017), behavioral finance is the study of human psychology and rationality in making financial decisions which reduces traditional assumptions about maximizing expected utility in efficient markets. According to Ates, Coskun, Sahin, and Demircan (2016), the differences between traditional financial theory and behavioral finance include traditional financial theory viewing an investor as a rational individual, while behavioral finance views an investor as an irrational but normal individual in financial behavior. The purpose of behavioral finance theory is to systematically understand and analyze the implications on financial markets viewed from a person's psychological perspective. Behavioral finance is an alternative approach to standard finance with several differences (Sukandani, Istikhoroh, & Waryanto, 2019).

Investment risk perception in this study is related to the perception of investment decision risk. Risk perception is an individual's assessment of a problem that has a negative impact that raises concerns about the risk accepted. The sense of uncertainty and the desired outcome are two important aspects of risk awareness. According to Kunreuther (2002) risk perception focuses on the discrepancy between technical risk assessments and public perceptions of risk. He identified that although statistical data shows that some risks are low, the public tends to be more concerned about risks that appear more dramatic and immediate, such as plane crashes, even though the risk of car accidents is much higher. Kunreuther (2002) highlights the importance of clear and transparent risk communication from authorities to reduce this discrepancy. Some factors that influence risk perception include Personal Experience, Emotional Factors, Social and Cultural

Factors, Trust in Authorities and Information Sources. Risk perception is also influenced by how much individuals trust information provided by authorities, such as the government, media, or experts in their fields.

Investment Decisions in the context of behavioral finance study how psychological and emotional factors influence investor behavior in making investment decisions. Unlike traditional financial theory that assumes investors act rationally, behavioral finance argues that investment decisions are often influenced by bias, emotions, and cognitive errors. The following is an explanation of investment decisions according to experts in the field of behavioral finance, accompanied by relevant references. According to Kahneman (2011), in investment decisions, two systems of thinking are introduced, system 1 (fast and intuitive thinking) and system 2 (slower and more rational thinking). Investment decisions are often influenced by System 1, which is a fast and instinctive decision-making process. Although this system is useful for fast decision-making under certain conditions, it is also susceptible to biases and errors, such as confirmation bias or excessive optimism. In the context of investment, investors often make investment decisions based on feelings or quick intuition, such as buying stocks after seeing good reports even though their fundamental analysis is inadequate. Decisions like this are often not based on thorough evaluation and can lead to losses

2.1 Related Work

Describe relevant studies that others have conducted in this area, noting similarities and differences to your work.

2.2 Research Gap

Research shows that individuals with high levels of financial literacy tend to be better able to identify risks, build a diversified portfolio, and avoid high-risk investments without careful consideration. Therefore, improving the financial literacy of the community is a strategic step to reduce losses due to bad investments, while also encouraging economic growth through more informed investments.

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3. Methodology

The research design used in this study is quantitative research using a survey method using a questionnaire. The research data is primary data obtained from distributing questionnaires to respondents

3.1 Data Collection

The research sample used a probability sampling technique with a total of 100 observations of Generation Z respondents. Generation Z according to Schroth (2019) is a generation born between 1997 and 2012. They have unique characteristics, such as flexibility, inclusiveness, and high social awareness. They also demand transparency and clear values from institutions or companies. Data was obtained from the results of a questionnaire distributed to 100 respondents who met the sample criteria

3.2 Analysis Techniques

Explain the analytical methods, models, or tools used to process the data.

The data analysis tool used in this study is using the Path Analysis Model with the IBM SPSS software program to estimate the causal relationship between variables (causal model) that has been previously determined based on the theory Ghazali (2011) The equation model built in this study is as follows:

R = b1 FK + b2 FA + b3 FB + e1 .... (1)

KI = b1 FK + b2 FA + b3 FB + b4 R + e2 .... (2)

In each relationship between research variables, there is a variation in the influence of variables that cannot be explained by variables in the model called Unexplained Variance. In this research model, there are 2 (two) unexplained variances, namely e1 (Investment Risk Perception variance that cannot be explained by other variables). And e2 (Investment Decision variance that cannot be explained by other variables). The value of the variance can be calculated using the following formula (Ghozali, 2006):

$$e_n = \sqrt{(1 - R^2)}$$

3.3 Validation

The influence between variables in the path analysis model can be explained as follows:

a. Direct Influence
- FK → KI = P1.1
- FA → KI = P1.2
- FB → KI = P1.3

b. Indirect Influence
- FK → R → KI = P2.1 x P3
- FK → R → KI = P2.1 x P3
- FK → R → KI = P2.1 x P3

c. Total Influence
- FK Correlation → KI = P1.1 + (P2.1 x P3)
- FA Correlation → KI = P1.2 + (P2.1 x P3)
- FB Correlation → KI = P1.3 + (P2.1 x P3)

In each relationship between research variables, there is variation in the influence of the variable that cannot be explained by the variables in the model, called Unexplained Variance. In this research model, there are two unexplained variances: e_1 (variance in Investment Risk Perception that cannot be explained by other variables) and e_2 (variance in Investment Decision that cannot be explained by other variables). The value of the variance can be calculated using the following formula

4. Results and Discussion

Present the findings of the study. Use tables, charts, and figures to effectively display data (if applicable). Describe the results in text form, highlighting trends or patterns.

4.1 Key Findings

The results of this study began with testing the validity and reliability of the instrument. The results of the Instrument Validity Test can be concluded that the question items in each research variable have a Corrected item-total correlation value greater than the Alpha value of 0.05, so that the question items are declared Valid. While the Results of the Instrument Reliability Test can be concluded that the question items in each research variable have a Cronbach Alpha value greater than the Alpha value of 0.05, so that the question items are declared Reliable

4.2 Interpretation of Results

The results of testing Model Equation 1, namely testing the influence between FK, FA and FB on R. The calculation results obtained are shown in Table 1. The Influence of Financial Literacy on Investment Risk Perception (Model 1).

The results of the analysis based on table 1 can be explained as follows:

a. The coefficient value of Financial Knowledge is 0.139 with a significance value of 0.155, meaning that Financial Knowledge does not affect the Perception of Investment Risk. Statistically, the value of $P_{2.1} = 0.139$

b. The coefficient value of Financial Attitude is 0.083 with a significance value of 0.445, meaning that Financial

Attitude does not affect the Perception of Investment Risk. Statistically, the value of $P_{2.2} = 0.445$

c. The coefficient value of Financial Behavior is 0.501 with a significance value of 0.000, meaning that Financial Behavior has a positive and significant effect on the Perception of Investment Risk. Statistically, the value of $P_{2.3} = 0.501$

The results of testing the equation Model 2, namely the equation of influence between FK, FA and FB on KI through R. The results of the calculations obtained are shown in the following table 2 Table 2 The Influence of Financial Literacy on Investment Decisions Through Investment Risk Perception (Model 2).

The results of the analysis based on table 2 can be explained as follows:

a. The coefficient value of Financial Knowledge (FK) is 0.139 with a significance value of 0.109. Statistically, the value of P1.1 = 0.139
b. The coefficient value of Financial Attitude (FA) is 0.388 with a significance value of 0.000. Statistically, the value of P1.2 = 0.388
c. The coefficient value of Financial Behavior (FB) is 0.177 with a significance value of 0.071. Statistically, the value of P1.3 = 0.177
d. The coefficient value of Investment Risk Perception (R) is 0.177 with a significance value of 0.033. Statistically, the value of P3 = 0.177

The path analysis results of the calculations can be presented in Figure 1 below:

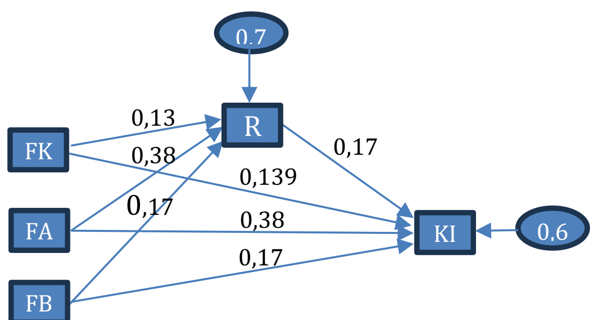

Figure 1. Path Analysis Results
Source: Data processing results (2025)

5. Discussion

The influence of financial knowledge on investment decisions of generation Z is seen based on the results of data analysis that has been carried out in this study, it was obtained that the Financial Knowledge coefficient value was 0.139 and the significance value was 0.109. This means that financial knowledge does not have a significant effect on investment decisions. Financial knowledge in Gen Z does not affect investment decisions, this can be because Gen Z is more familiar with the internet, smartphones, and social media so that their decision making is more based on existing trends and less using financial logic considerations. Gen Z prefers decisions that are taken instantly. According to research by Putri & Hidayat (2022), easy access through fintech makes Gen Z more impulsive in investing, often without in-depth analysis.

The Influence of Financial Attitudes on Generation Z Investment Decisions is seen based on the results of the data analysis that has been carried out in this study, it was obtained that the Financial Attitudes coefficient value was 0.388 and the significance value was 0.000. This means that financial attitudes have a positive and significant effect with a 5% error rate on investment decisions. The better the financial attitudes of Gen Z, the better the investment decisions taken by Gen Z. Gen Z tends to be a generation that is financially independent and wants to quickly achieve financial freedom, they tend to look for ways to make money passively, one of which is through investment. The better the financial attitudes of Gen Z in terms of saving, planning finances, and being careful in transactions, the wiser the investment decisions taken will be. In the theory of Planned Behavior Theory (Ajzen, 1991), attitudes towards a behavior influence intentions, which then influence actual behavior. Ramadhani's research (2022) explains that students with positive financial attitudes are more active in investing.

The influence of financial knowledge on the Perception of Investment Risk of Generation Z is seen based on the results of data analysis that has been carried out in this study, it was obtained that the Financial Knowledge coefficient value was 0.139 and the significance value was 0.109. This means that financial knowledge does not have a significant effect on the Perception of Investment Risk. Even though Gen Z has financial knowledge (for example: knowing about stocks, mutual funds, inflation, etc.), it does not necessarily make them better able to manage or understand the Perception of Investment Risk. Gen Z knows in theory, but it is not stated in making investment decisions. They dare to take the Perception of Investment Risk because there are other factors, such as emotions, social influences, FOMO, and social media trends, not based on knowledge. In addition, the knowledge possessed by Gen Z is not deep enough to assess or measure risk maturely.

The influence of financial behavior on the Perception of Investment Risk in Generation Z is seen based on the results of data analysis that has been carried out in this study, it was obtained that the Financial Behavior coefficient value was 0.177 and the significance value was 0.000. This means that financial behavior has a positive and significant effect with a 5% error rate on the Perception of Investment Risk. The better the investment behavior of Gen Z, the more they will understand the investment risks they face. Good investment behavior includes diversification, rebalancing, and performance evaluation encouraging Gen Z to actively seek information and learn the concept of risk up to the concept of return. This process strengthens their understanding of the principle of high risk - high return, that the potential for high returns is usually accompanied by greater risk.

The Influence of Investment Risk Perception on Generation Z Investment Decisions is seen based on the results of data analysis that has been carried out in this study, it was obtained that the Investment Risk Perception Coefficient Value was 0.177 and the significance value was 0.033. This means that the investment risk perception has a positive and significant effect with a 5% error rate on Investment Decisions. The better the investment risk perception, the better the investment decisions made by Gen Z. A deep understanding of investment risk can help Generation Z make wiser and more informed investment decisions. Increasing investment risk perception through education and practical experience can help Generation Z make wiser investment decisions that are in accordance with their financial goals. Research by Ardiani & Dwiarti (2024) shows that risk perception has a significant positive effect on Generation Z's stock investment decisions in the Special Region of Yogyakarta. This indicates that the better an individual's understanding of investment risk, the wiser the investment decisions they make.

The Role of Investment Risk Perception in Influencing Financial Knowledge on Generation Z Investment Decisions is seen based on the results of data analysis that has been carried out in this study, it was obtained that the magnitude of the indirect influence of Investment Risk Perception in influencing financial knowledge on Investment Decisions is 0.025 with a significance level of 0.109. This means that investment risk perception does not play a role in mediating the relationship between financial knowledge and investment decisions.

The Role of Investment Risk Perception in Influencing Financial Attitudes on Investment Decisions of Generation Z is seen based on the results of data analysis that has been carried out in this study, it was obtained that the magnitude of the indirect influence of Investment Risk Perception in influencing financial attitudes on Investment Decisions was 0.079 with a significance level of 0.000. This means that investment risk perception plays a role in mediating the positive relationship between financial attitudes and investment decisions. A good financial attitude will influence investment decision making through a good understanding of investment risk. An individual's understanding of investment risk can strengthen the influence of a positive financial attitude on making wise investment decisions. In other words, even though someone has a good financial attitude, a deep understanding of investment risk is needed to translate that attitude into an effective investment decision. Without an adequate understanding of investment risk, a good financial attitude may not be enough to produce optimal investment decisions. Therefore, increasing risk perception through investment education and experience can help Generation Z, in making more rational investment decisions and in accordance with their financial goals.

5.1 Comparison with Prior Research

The influence of financial behavior (Financial Behavioral) on Generation Z Investment Decisions is seen based on the results of data analysis that has been carried out in this study, it was obtained that the Financial Behavior coefficient value was 0.177 and the significance value was 0.071. This means that financial behavior has a positive and significant effect with a 10% error rate on investment decisions. The better the behavior of Gen Z in managing finances, the better and wiser the investment decision-making will be. Gen Z, who has independent and critical characteristics, is not easily trusting and tends to verify the information obtained, including in financial matters. They seek information themselves before making decisions and prepare their financial needs well with financial management habits (saving, shopping, investing). Research by W. W. Putri and Hamidi (2019) explains that positive financial behavior (such as regular saving and personal budgeting) has a significant effect on investment decisions of Gen Z students.

The influence of financial attitudes on the perception of investment risk of generation Z is seen based on the results of the data analysis that has been carried out in this study, it was obtained that the Financial Attitudes coefficient value was 0.388 and the significance value was 0.445. This means that financial attitudes do not have a significant effect on investment risk perception. Perception of investment risk is often more influenced by emotional and psychological factors than rational financial attitudes. For example, fear of loss (loss aversion) or a tendency to follow trends (herding behavior) can affect the way Generation Z assesses investment risk, regardless of their financial attitudes. Research by Desiyanti, Islamiati, Fitria, Moreno, and Sari (2025) shows that financial attitudes have a significant effect on investment decisions, but not on perceptions of investment risk.

The Role of Investment Risk Perception in Influencing Financial Behavioral on Generation Z Investment Decisions is seen based on the results of data analysis that has been carried out in this study, it was obtained that the magnitude of the indirect influence of Investment Risk Perception in influencing financial behavior on Investment Decisions is 0.089. with a significance level of 0.071. This means that investment risk perception plays a role in mediating the positive relationship between financial behavior and investment decisions. good financial behavior will influence investment decision making through a good understanding of investment risk. Someone who has good financial behavior needs a deep understanding of investment risk to translate this behavior into effective investment decisions. Research by Ramadhan (2022) shows that risk perception has a positive and significant influence on financial behavior and investment decisions. This indicates that an individual's understanding of investment risk can strengthen the influence of good financial behavior on making wise investment decisions.

5.2 Limitations

Some of the limitations of this research include the fact that this research used a student sample so the results cannot be generalized to a wider population, apart from that Investment decision making is influenced not only by literacy and risk perception, there are other variables that influence investment decisions.

5.3 Future Research

Further research or improvements to the study design, are more general sample, not just students. Other variables that influence investment decisions, such as Cognitive biases (e.g., overconfidence, anchoring), emotional factors, social norms.

6. Conclusion

Based on the results of the analysis and discussion of the study, it can be concluded that the direct influence of financial literacy of Gen Z on investment decisions that has a significant influence is only the variable of financial attitude, while financial knowledge and financial behavior do not have a significant influence on investment decisions. The indirect influence of financial literacy of Gen Z on investment decisions that has a significant influence is the variable of financial attitude and financial behavior while financial knowledge does not have a significant influence on investment decisions. Simultaneously, Investment Risk Perception has a mediating role in increasing the influence of financial literacy on investment decisions. Investment risk perception plays an important role in bridging good financial literacy and wise investment decisions. Without an adequate understanding of investment risk, good financial literacy may not be enough to produce optimal investment decisions.

Risk perception influences investment decision-making in Generation Z. Individuals with high risk perception tend to be more cautious and reluctant to invest, while investors with balanced risk perception are more likely to make informed investment decisions. Individual understanding of investment risk can strengthen the influence of financial literacy on wise investment decision-making. Risk perception coupled with investment education and experience can help Generation Z make more rational investment decisions that are in line with their financial goals.

7. Recommendation

The implications of this study to the field.

a. Risk perception influences investment decision-making among Generation Z. Individuals with high risk perceptions tend to be more cautious and reluctant to invest, while investors with balanced risk perceptions are more likely to make informed investment decisions.
b. Individual understanding of investment risks can strengthen the influence of financial literacy on wise investment decision-making.
c. Risk perception, coupled with investment education and experience, can help Generation Z make more rational investment decisions that align with their financial goals.

Appendix

Table 1 The Influence of Financial Literacy on Investment Risk Perception (Model 1)

Variable	Standardized Coefisien Beta	Sig	Information
FK	0,139	0,155	No effect
FA	0,083	0,445	No effect
FB	0,501	0,000	Effecting

[a] Dependent variable: R

Source: Data processing results (2025)

Table 2 The Influence of Financial Literacy on Investment Decisions Through Investment Risk Perception (Model 2)

Variable	Standardized Coefisien Beta	Sig	Information
FK	0,139	0,109	No Effect
FA	0,388	0,000	Effecting
FB	0,177	0,071	Effecting
R	0,177	0,033	Effecting

[a] Dependent variable: KI
Source: Data processing results (2025)

Table 3 Determination Coefficient of Model Equation 1 and 2

Model	Adjusted R Square
1	0.420
2	0,552

[a] Predictors: (Constan) FK, FA, FB
Source: Data processing results (2025)

Intervariable Influence Testing is done by testing the direct influence. Indirect influence and total influence. The results of the analysis of the Direct Influence of Financial Literacy on Investment Decisions can be explained based on the values of P1.1, P1.2 and P1.3. The direct influence of Financial Literacy on Investment Decisions is as follows:

a. The direct influence of $P_{1.1}$ (FK → KI) is 0.139
b. The direct influence of $P_{1.2}$ (FA → KI) is 0.388
c. The direct influence of $P_{1.3}$ (FB → KI) is 0.177

The results of the analysis of the Indirect Influence of Financial Literacy on Investment Decisions through Investment Risk Perception can be explained based on the results of the multiplication between P2 and P3. The indirect influence of Financial Literacy on Investment Decisions through Investment Risk Perception is as follows:

a. FK → R → KI = $P_{2.1}$ x P_3 ➔ 0,139 x 0,177 = 0,025
b. FA → R → KI = $P_{2.2}$ x P_3 ➔ 0,445 x 0,177 = 0,079
c. FB → R → KI = $P_{2.3}$ x P_3 ➔ 0,501 x 0,177 = 0,089

The results of the analysis of the Total Influence of Financial Literacy on Investment Decisions through Investment Risk Perception can be explained based on the results of the Sum of Direct Influences and Indirect Influences. The total influence of Financial Literacy on Investment Decisions through Investment Risk Perception is as follows:

a. FK → R → KI = $P_{1.1}$ + ($P_{2.1}$ x P_3) ➔ 0,139 + (0,139 x 0,177) = 0,164
b. FA → R → KI = $P_{1.2}$ + ($P_{2.2}$ x P_3) ➔ 0,388 + (0,445 x 0,177) = 0,467
c. FB → R → KI = $P_{1.3}$ + ($P_{2.3}$ x P_3) ➔ 0,177 + (0,501 x 0,177) = 0,266

In this research model, there are 2 (two) unexplained variances, namely e1 (Investment Risk Perception variance that cannot be explained by other variables). And e2 (Investment Decision variance that cannot be explained by other variables). The calculation of the unexplained variance value refers to the results of the calculation of the R2 value in each equation model. The R2 value can be presented in tables 3 Determination Coefficient of Model Equation 1 and 2.
The calculation of unexplained variance is as follows:

a. e_1 referring to equation 1 where $R^2 = 0{,}420$

$$e_1 = \sqrt{(1 - R^2)}$$
$$e_1 = \sqrt{(1 - 0{,}420)}$$
$$e_1 = \sqrt{0{,}580}$$
$$e_1 = 0{,}762$$

b. e_2 referring to equation 2 where $R^2 = 0{,}552$

$$e_1 = \sqrt{(1 - R^2)}$$
$$e_1 = \sqrt{(1 - 0{,}552)}$$
$$e_1 = \sqrt{0{,}448}$$
$$e_1 = 0{,}669$$

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