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The Effect of Overconfidence, Availability Bias and Risk Perception on Generation Z's Investment Decisions Moderated by Financial Literacy

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ABSTRACT

Technological advances have an impact on several sectors, including investment use. There are several factors that can influence investment decisions. The purpose of this study is to analyze the factors of Overconfidence, Availability bias, and risk perception and financial literacy as a moderation of stock investment decisions in generation Z in Surabaya City. This study uses a quantitative approach with a sample in this study, namely generation Z from Surabaya City with an age range of 17 to 27 years, totaling 141 respondents. Data collection in this study was carried out by distributing questionnaires and then the data analysis technique used was using Partial Least Square (PLS). This study found that (1) Overconfidence contributes to stock investment decision making. (2) Availability bias contributes to stock investment decision making. (3) risk perception cannot contribute to stock investment decision making. (4) financial literacy can moderate the relationship between overconfidence and stock investment decision making. (5) financial literacy cannot moderate the relationship between availability bias and stock investment decision making. (6) financial literacy can moderate the relationship between risk perception and stock investment decision making.

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INTRODUCTION

The contemporary epoch of globalization has been precipitated by the advancement of technology and the development of the Internet of Things (IoT). Currently, technology is entering the 4.0 era which is a technology that is centered on the development of information technology, namely the development of information data management and storage to be larger, making it very easy to get or receive the desired information (Weriframayeni et al., 2022). Through this development, it provides a very broad effect, especially in the economic sector. Someone who wants to increase their wealth and welfare can do so in one way, namely through investment (Litvinova YA & Berezhnaya A. S, 2022). Based on data published by the Indonesian Central Securities Depository (KSEI), the number of Indonesian capital market investors recorded based on Single Investor Identification (SID) or individual investors has consistently increased every year from 2018 to 2023, with a very sharp increase in 2021. This growth recorded up to 12,168,061 investors until December 2023. As for the island of Java, there was a significant increase in SID from 996,574 at the end of 2021, and continued to increase by 14.64% to 1,142,505 SID on April 28, 2022. At the end of 2021, there were 360,414 SID in East Java, and among them Surabaya was the largest SID contributor, namely 98,142 SID(Falah & Haryono, 2023). At the end of the 2022 period, the number of SID in the city of Surabaya was 137,660 (Saputro & Wikartika, 2023).

Contemporary technological advancements have resulted in a shift, with Generation Z now comprising the majority of investors on the Indonesia Stock Exchange (IDX). The growth of investment among this generation shows that there is a change in the way of looking at financial management and investment, especially supported by technological advances and easy access to information (Armansyah et al., 2023). According to research Paseru et al., (2023) found that ease of access to information through technology and the influence of social media play an important role in investment decisions among generation Z in Surabaya, which is one of the largest cities in Indonesia, has great potential in influencing people's mindsets and economic behavior, especially among generation Z. As per the report of the Indonesian Central Securities Depository (KSEI) in 2023, it is evident that stock investors in Indonesia were predominantly composed of individuals under the age of 30, constituting 56.34% of the total investor base. The important factors in encouraging increased investment in generation Z in Surabaya to invest in stocks are adequate financial and technological literacy, as well as the influence of social media as a platform that provides access to education about investment. Investment workshops and training conducted with the support of OJK and the Indonesia Stock Exchange also contribute to increasing the knowledge and interest of generation Z in investing in stocks (Andriani et al., 2022). Investment activities involve placing funds or capital for a certain period of time, so that investors gain profits or an increase in the value of their investments in the future (Yuwono & Altiyane, 2023). The success of an investment for an investor is determined by how precise the decisions taken are and the ability to determine correctly and well the type and timing of investment that has a greater probability of obtaining the expected profit or return (Fikri et al., 2022).

Price volatility in stocks fluctuates over time. Volatility affects the movement of stock prices over a period of time, Investors who invest in stocks in Indonesia can invest online. However Stock investment has market uncertainty and high risk that can lead to irrational decisions. This is caused by psychological factors such as overconfidence and availability bias. This psychological aspect will determine investors in perceiving risk and expected returns (Pertiwi et al., 2019). In addition, there is a cognitive aspect, namely that financial literacy can improve investment decision making (Hidayat & Pamungkas, 2022). Investment decisions are activities carried out to invest capital in one or more assets in order to gain profits in the future or a way for investors to allocate funds into various forms of investment with the aim of gaining profits in the future (Fikri et al., 2022). Investment decisions are a process of selecting alternatives from various existing alternatives to make investments that can provide profits or returns that are in accordance with the investor's expectations (Istiana & Nur, 2020).

The key to a person's ability to make better investments lies in the financial literacy possessed by the investor (Ateş et al., 2016, in Rosdiana, 2020). Financial literacy is the knowledge and skills possessed by investors in applying insight into a concept and risk, as well as the ability to make the right decisions regarding financial concepts (Nadhifah & Anwar, 2021). There are several factors that influence investors to make investment decisions, one of which is the psychological factor, namely overconfidence (Kumar & Prince, 2023). Meanwhile, from the cognitive aspect factors that influence investment decision making by investors, namely availability bias (Dhungana et al., 2022). In addition, there are risk perception factors based on psychological and demographic aspects, as well as on the understanding possessed by investors (Hidayat & Pamungkas, 2022).

Overconfidence is a deviation in the emotional condition of a person who believes that he has enough experience and information to make a decision (Sihotang & Pertiwi, 2023) and (Pinaring et al., 2023). In research conducted by Istiana & Nur, (2020) found that Overconfidence contributes to increasing investment decision making for generation Z (Students) at UPN "Veteran" East Java. Meanwhile,Mahardika & Asandimitra, (2023)found that Overconfidence has no influence on investment decisions of students (generation Z) in the city of Surabaya.

Availability bias is a decision made by a person based on the knowledge they have when the information is received at that time (Rasheed et al., 2018). Availability bias occurs because investors rely entirely on easily found information about the market and do not make the effort to collect and conduct research. So that the available information can cause errors in decision making (Tabassum et al., 2021). In the research conducted by Agustin & Lysion (2021) Availability bias affects the stock investment decision making of the younger generation (millennials) in Batam City. Meanwhile,Yuwono & Altiyane, (2023) found that availability bias did not have a significant effect on investment decisions among students (Generation Z) in Batam City.

Risk Perception is a process of seeing, assessing and interpreting by investors regarding the risks involved in an investment and influencing investment decisions (Irjayanti & Kurniawati, 2017 in Rosdiana, 2020). Perception of high or low risk is based on individual factors, investment products, situations, and cultural factors. If investors have a high risk perception, then investors will be more careful (Sihotang & Pertiwi, 2023). In research conducted by Dinarjito et al., (2023) found that risk perception has a significant influence on students' investment decisions (generation Z). Meanwhile, the research conducted (Mulyani et al., 2021) Risk perception does not influence investment decisions of beginners in West Sumatra. Financial literacy is an individual's ability to analyze, communicate and interpret their financial condition which can affect the individual's well-being (Prayudi & Purwanto, 2023). Financial literacy can play an important role in reducing the impact on investors who consider their knowledge and abilities to be higher, namely overconfidence in investment decisions and performance (Ahmad & Shah, 2022). According to Anifa & Soegiharto, (2023) suggests that financial literacy can moderate the relationship between risk perception and investment decisions, so that investors can make better and more informative decisions.

Through the phenomena and Research Gap found, and based on data from observation results. This study examines the factors that influence investor decision making in generation Z in capital market investment.

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The factors that researchers are interested in testing in this study are Overconfidence, Availability bias, and Risk Perception, as well as Financial Literacy as a moderating variable.

LITERATURE REVIEW

Behavioral Finance Theory

Behavioural finance theory constitutes a scientific framework that elucidates the behavioural tendencies of investors within financial markets, which are influenced by psychological factors (Ogunlusi & Obademi, 2021). The present theory elucidates the rationales underlying the influence of behavioral errors on investor decision-making processes and offers a comprehensive explanation for the phenomenon of market inefficiency (Outouzzalt et al., 2023). The objective of behavioral finance theory is to seek explanations and predictions of financial markets by focusing on the application of psychological and economic principles as a process of financial decision-making (Mahardhika & Asandimitra, 2023). Sabilla & Pertiwi, (2021) explains that behavioral finance is also a theory that studies the influence caused by psychological factors on decisions making when buying or selling on the stock market.

Prospect Theory

Prospect theory is a theory developed by Kahneman and Traversky in 1974 which is based on economics and psychology as its basis for analyzing how a person behaves in making decisions when faced with several available choices (Pinaring et al., 2023). The objective of this theory is to facilitate decision-making processes that are meticulously deliberated, given that decisions are made in contexts characterized by risk, specifically in scenarios involving potential *loss* or *gain* Individuals confronted with such circumstances are strongly encouraged to make decisions expeditiously, despite the potential irrationality of the decisions that are made (Levy, 1992). The application of this theory uses a psychological approach in making decisions. This means that when an investor makes a decision, he will be influenced by psychological factors and ignore the utility value as a basis for consideration (Sudani & Pertiwi, 2022).

Investment Decision

Investment decisions are a series of processes for making investment decisions for an investor based on information that has been collected and analyzed (Herlina et al., 2020). Investors can be categorized into two distinct attitudes: the rational attitude, which is exhibited by investors who employ logical and reasonable thinking, and the irrational attitude, which is exhibited by investors who demonstrate illogical and unacceptable thinking (Nadhifah & Anwar, 2021). Investment decisions are determined by investors who use the information they receive as a basis for their analysis. Information is a critical component of investment selection and assessment, enabling investors to identify the most suitable investment from a range of alternatives (Sihotang et al, 2023).

Overconfidence

Overconfidence can be defined as an excessive feeling of self-confidence derived from one's own abilities, expertise, and judgment (Gill et al., 2018). Overconfidence has been demonstrated to influence an individual's propensity to exercise decisiveness with heightened self-assurance. Concurrently, this disposition tends to underestimate or altogether disregard the risks that are inherently associated with these decisions (Addinpujoartanto & Darmawan, 2020). Sewell, 2007 explains that behavioral finance is a decision making process that is influenced by psychological factors.

Overconfidence is a cognitive bias that arises from psychological factors in financial behavior. This bias occurs when an individual tends to overestimate their ability, knowledge, and accuracy regarding the information they possess, while disregarding information that is publicly available. According to Yuwono & Altiyane, (2023) Investors who are overconfident in their abilities tend to believe that they possess superior knowledge and skills in making investment decisions. Overconfident investors have the belief that their investment decisions will yield a higher return than those of other investors (Febriyanti & Yuniningsih, 2023).

Availability Bias

Availability bias is a bias on individual behavior that occurs when an investor places too much trust in information that tends to be easy to obtain or find from their estimates, so that it will significantly influence investment decisions (Yuwono & Altiyane, 2023). the concept of availability bias pertains to an investor's propensity to make decisions in a hasty manner, guided predominantly by immediate considerations and thoughts (Sachan & Chugan, 2020) In connection with prospect theory, according to Pinaring et al., (2023) explains that prospect theory developed by Kahneman and Traversky based on two disciplines, namely economics and psychology, which analyze individual behavior in making decisions.

Risk Perception

Risk perception is defined as the belief held by individuals, groups, or society regarding the likelihood of a risk occurring and the level, magnitude, and timing of its negative consequences (Dinarjito, 2023). Risk Perception is defined as the process by which an investor observes, assesses, and interprets the elements of risk in an investment to inform investment decisions (Irjayanti & Kurniawati, 2017). Risk perception and the level of trust of an individual in a type of investment instrument will be a consideration in choosing one of several types of investment instruments (Siburian & Nur, 2022). In connection with the prospect theory explained by Kahneman & Tversky, (1992) that prospect theory is a theory of decision making that arises when faced with risk.

Financial Literacy

Financial literacy is defined as a set of knowledge about financial fundamentals and concepts used as a reference in decision-making to achieve future well-being (Budiarto & Susanti, 2017). According to Fadila et al., (2022) Financial literacy has been demonstrated to facilitate superior decision-making skills in the context of investment selection due to its capacity to provide a comprehensive understanding of financial concepts. Consequently, an individual's financial literacy level is positively correlated with their ability to make informed decisions. Investors who possess strong financial literacy tend to exhibit effective financial management skills and demonstrate the capacity to avert potential financial challenges in the future (Mahardhika & Asandimitra, 2023).

RESEARCH METHOD

This research employs a quantitative approach with a correlational design.The analysis technique utilised in this study is factor analysis or SEM-PLS. This analysis technique is utilised to ascertain the impact of independent variables on dependent variables (Hasan, 1999:74). In this study, the independent variables are overconfidence, availability bias, risk perception, and financial literacy, while the dependent variable is investment decisions. The data processing stage employs the SmartPLS 4 program. This study utilised non-probability sampling, employing purposive sampling as the underlying sampling technique. The number of samples collected amounted to 141 respondents. The measurement of data employs two distinct measurement models: the reflective model and the structural model. The reflective measurement model employs validity and reliability tests. The structural measurement model is evaluated using r-squared, goodness of fit evaluation and hypothesis testing.

RESULTS AND DISCUSSIONS

Results

The study entitled "The Effect of Overconfidence, Availability Bias, Risk Perception on Generation Z’s Investment Decisions Moderated by Financial Literacy" distributed questionnaires to groups born between 1997 and the early 2000s or called Generation Z who live in Surabaya, with 141 respondents who met the criteria. The criteria are based on age, most recent education, and gender. The bulk of respondents (39.01%) were between the ages of 21 and 24, with the lowest percentage (25.53%) between the ages of 25 and 27. Those who responded based on last education were led by bachelors at 48.94%, and junior high school students contributing the smallest proportion at 7.09%. Furthermore, the majority of respondents (56.74%) are female, compared to male (43.26%).

This study adopts a reflective model measurement with research variables overconfidence, availability bias, risk perception, financial literacy, and investment decisions, all of which have loading factors more than 0.5, indicating that the indicators in this study have convergent validity.

Realibility and Validity Test

Table 1 Construct Reliability and Validity

Construct reliability and validity Overview	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
Availability bias (X2)	0.803	0.806	0.884	0.718
Investment Decision (Y)	0.779	0.736	0.786	0.586
Financial Literacy (Z)	0.722	0.736	0.811	0.565
Overconfidence (X1)	0.831	0.849	0.879	0.594
Risk Perception (X3)	0.735	0.754	0.831	0.553

Source: Outer Smart PLS, 2024

This study measurement is construct reliability and validity. In this study, it shows that the AVE value for the construct has a value greater than 0.5, indicating that it is valid. Construct reliability measured by the composite reliability value shows a value above 0.70, so all indicators are consistent in measuring their latent variables or reliable.

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Discriminant Validity Test

Table 2 Discriminant Validity

Discriminant Validity Fornell-Larcker Criterion	Availability bias (X2)	Investment Decision (Y)	Financial Literacy (Z)	Overconfidence (X1)	Risk Perception (X3)
Availability bias (X2)	0.847				
Investment Decision (Y)	0.532	0.697			
Financial Literacy (Z)	0.571	0.473	0.682		
Overconfidence (X1)	0.524	0.756	0.539	0.771	
Risk Perception (X3)	0.440	0.352	0.443	0.397	0.743

Source: Output Smart PLS, 2024

If the AVE root is greater than the correlation of the variable, discriminant validity is met. For example, the variable Availability Bias (X2) with indicators (X2.1 to X2.4) has a root AVE of 0.847, which is greater than the correlation value with other variables 0.532; 0.571; 0.524; 0.440, etc., so the variable Availability Bias (X2) meets the discriminant validity. Overall, it shows that all the research variables, namely Overconfidence, Availability Bias, Risk Perception, Financial Literacy, Investment Decision, have an AVE square root value greater than the value of their correlation with other variables, so that discriminant validity is met.

Inner Model

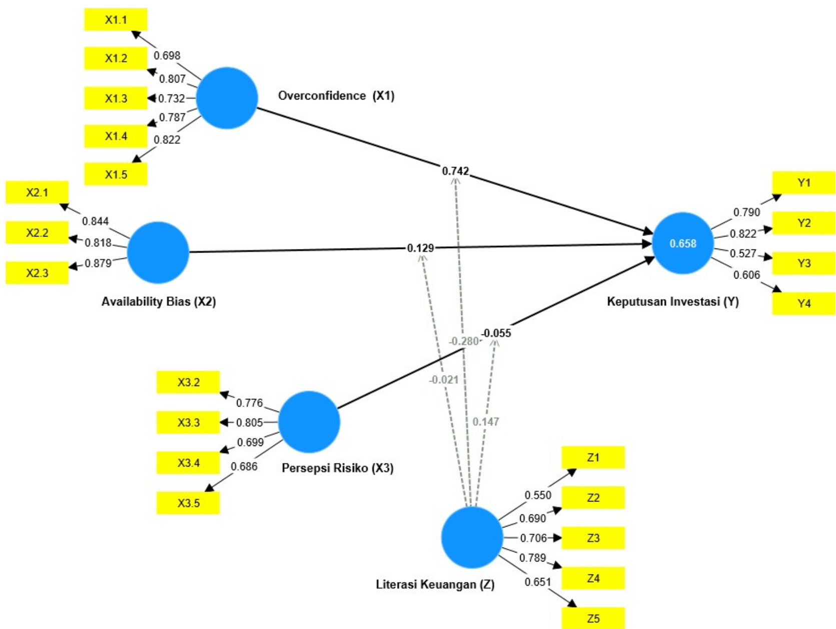

Figure 1 Path Diagram (Inner Model)

R-square Test

Table 3 R-Square

R-square Overview	R-square	R-square adjusted
Investment Decision (Y)	0.658	0.640

Source: Output Smart PLS, 2024

The next measurement is the measurement of the structural model which is seen from the R-square value in the latent variable equation. R2 value (Investment Decision) = 0.658. This can be interpreted that the model is

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able to explain the phenomenon/problem of Investment Decision by 65.80%. While the rest (34.20%) is explained by other variables (other than Overconfidence, Availability Bias, Risk Perception, and Financial Literacy) that have not been included in the model and error. This means that Investment Decision is influenced by Overconfidence, Availability Bias, Risk Perception, and Financial Literacy, by 65.80% while 34.20% is influenced by variables other than Overconfidence, Availability Bias, Risk Perception, and Financial Literacy.

Hypothesis Test

Tabel 4 Hypothesis test

Hipotesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (|O/STDEV|)	P-Values
Overconfidence (X1) -> Keputusan Investasi (Y)	0,742	0,766	0,091	8,178	0,000
Availability Bias (X2) -> Keputusan Investasi (Y)	0,129	0,122	0,064	2,025	0,045
Persepsi Risiko (X3) -> Keputusan Investasi (Y)	0,055	-0,044	0,069	0,749	0,427
Moderasi-1 (Z*X1) -> Keputusan Investasi (Y)	-0,280	-0,248	0,134	2,087	0,037
Moderasi-2 (Z*X2) -> Keputusan Investasi (Y)	-0,021	-0,021	0,081	0,260	0,795
Moderasi-3 (Z*X3) -> Keputusan Investasi (Y)	0,147	0,136	0,071	2,054	0,040

Source: Outer Smart PLS, 2024

Based on hypothesis testing, the causality test can be interpreted as follows:

H1: Overconfidence has a significant positive effect on stock investment decisions with a path coefficient of 0.742 where the p-value = 0.000 is less than α = 0.05 (5%).

H2: Availability Bias has a significant positive effect on stock investment decisions with a path coefficient of 0.129 where the p-value of 0.045 is smaller than the α value of 0.05 (5%).

H3: Risk Perception does not significantly affect stock investment decisions with a path coefficient of 0.055 where the p-value of 0.427 is greater than the α value of 0.05 (5%).

H4: Financial literacy moderates the relationship between overconfidence and stock investment decisions with a path coefficient of -0.280, where the p-value of 0.037 is less than the α value of 0.05 (5%).

H5: Financial literacy does not moderate the relationship between availability bias and stock investment decisions with a path coefficient of -0.021 where the p-value = 0.795 is greater than α = 0.05 (5%).

H6: Financial literacy moderates the relationship between risk perception and stock investment decisions with a path coefficient of 0.147, where the p-value of 0.040 is smaller than the α value of 0.05 (5%).

Discussion

Overconfidence on Investment Decision

Overconfidence has been shown to influence stock investment decision-making. The higher an investor's confidence, the more likely they are to make investment decisions on stocks. Based on the study, the majority of respondents were aged 21-24 years (39.01%), indicating that the younger generation is more open to risk and has a high curiosity. However, lack of experience and knowledge can trigger overconfidence, which has the potential to result in less optimal on investment decisions.

The majority of respondents were graduated from bachelor’s degree (48.94%), indicating that higher education levels provide better access to stock investment information. Education can improve analytical skills and self-confidence, but can also lead to overconfidence. In addition, the majority of female respondents (56.74%) indicated that women are now more active in stock investment, supported by higher education and broad access to information, although women tend to be moderate towards risk.

These results are in line with prospect theory, which states that investment decisions are not always rational. The study supports previous studies by Istiana & Nur, (2020) and Sabilla & Pertiwi, (2021), which concluded that overconfidence has a significant influence on investment decisions. Overconfident investors tend to be overly confident in their ability to predict the market, which can lead to overtrading and lack of portfolio diversification.

Availability Bias on Ivestment Decision

Availability bias has a significant influence on stock investment decision making. Research shows that the higher the bias towards the availability of information, the more likely investors are to make decisions based on information that is easy to find. The majority of respondents aged 21-24 years (39.01%) tend to be influenced by information available on social media, news, or recommendations from friends. Although actively seeking information, limited analytical skills make them susceptible to this bias.

Respondents with a bachelor's degree (48.94%) have good access to investment information. However, they tend to choose information that is easier to obtain without in-depth analysis, so that availability bias still influences their decisions. The majority of female respondents (56.74%) showed increased financial awareness, but their cautious nature often makes them rely on easily accessible information, which strengthens the influence of this bias.

In line with prospect theory, investors tend to fear losses more than they value gains. This bias can cause investors to focus on flashy information or bad experiences, which affects their decisions. Previous studies by Agustin & Lysion, (2021) and Sudani & Pertiwi, (2022) also support this finding, stating that availability bias makes investors more dependent on information from people around them or technology that facilitates access to information. This bias results in overestimation of stock performance, emotional decisions, and ignoring risks. When availability bias increases, investors tend to make decisions based on incomplete information without adequate fundamental analysis.

Risk Perception on Investment Decision

This study found that risk perception does not contribute significantly to stock investment decision-making in Generation Z in Surabaya City. Statistically, the influence of risk perception on investment decisions is not strong enough, indicating that there are other factors that are more dominant in influencing investment decisions. Generation Z, the majority aged 21-24 years, is in the early phase of adulthood, where they tend to be more willing to take risks and focus on short-term profits. As a result, their risk perception tends to be ignored in the investment decision-making process.

Most respondents have a bachelor's degree (48.94%), which should support a basic understanding of stock investment. However, limited experience and understanding of risk management, as well as the influence of information from social media or investment communities that emphasize quick profits, can cloud their risk perception. The majority of female respondents (56.74%) are also active on social media, but the information received is often not accompanied by a comprehensive understanding of risk, so that risk perception is not a primary consideration.

The present study aligns with the theoretical framework of behavioural finance, which posits that psychological factors, such as overconfidence and herd behaviour, exert a greater influence on investment decisions than risk perception. Investors, motivated by a pursuit of profit, demonstrate a propensity to disregard risk in the pursuit of financial gain. These results support the findings of (Zahida, 2021), who stated that risk perception is not significant to investment decisions, although it contradicts Rosdiana (2020), which found that investors are careful to consider risk.

Financial Literacy Moderates the Effect of Overconfidence on Investment Decision

This study found that financial literacy plays a significant role in moderating the relationship between overconfidence and stock investment decisions. With good financial literacy, investors are able to control overconfidence so that they can make more rational and analysis-based decisions.

The majority of respondents in this study were aged between 21 and 24 years (39.01%). This demographic's relative inexperience, typified by their youth, is a key factor in the overconfidence exhibited by respondents. However, financial literacy allows them to understand investment risks more deeply and reduces the tendency to make impulsive decisions. Respondents with a bachelor's degree (48.94%) showed the capacity to understand financial and investment concepts. However, formal education alone is not enough to prevent overconfidence. Financial literacy helps them manage risks more wisely. Most female respondents (56.74%) tend to be cautious in taking risks. However, they can still be influenced by overconfidence. Good financial literacy provides an understanding of portfolio diversification and risk management, thereby helping to reduce cognitive bias and support more rational decision making.

The findings of this study corroborate the tenets of prospect theory, which posits that financial literacy fosters heightened awareness of the risk of loss, mitigates the impact of overconfidence, and promotes rational stock investment decision-making. The present study aligns with the findings of Ahmad & Shah, (2022) and Prasetyo et al., (2023), which underscore the pivotal role of financial literacy in mitigating the adverse consequences of overconfidence.

Financial Literacy Moderates the Effect of Availability Bias on Investment Decision

The findings of the study suggest that financial literacy does not offer a substantial contribution in moderating the relationship between availability bias and stock investment decisions. This suggests that financial literacy alone is insufficient to mitigate the impact of availability bias on Generation Z investors in Surabaya.

The majority of respondents were aged between 21 and 24 years (39.01%), which is an early adult age group with an active tendency in financial decisions, including stock investment. However, despite possessing a certain level of financial literacy, respondents in this group are still influenced by emotions, experiences, and social influences, meaning that availability bias still influences their decisions. The majority of respondents (48.94%) possess a bachelor's degree, which one might take as indicative of a certain level of financial literacy. Nevertheless, the absence of investment experience and the utilisation of readily available, popular information impede the efficacy of financial literacy in mitigating cognitive bias. The preponderance of female respondents (56.74%) suggests that gender bias may not be adequately addressed. The study demonstrates that preference for easily accessible information still influences investment decisions, even in individuals who possess financial literacy..

The present study lends support to the behavioural finance theory, which posits that investment decisions are frequently influenced by cognitive biases such as availability bias. Although financial literacy is expected to help, the results of this study are in line with Shahani & Ahmed, (2022), who found that financial literacy did not moderate availability bias. However, these results differ from Gulzar et al., (2024), who stated that financial literacy can prevent availability bias. Overall, a more in-depth approach is needed to reduce this bias, including more specific investment education.

Financial Literacy Moderates the Effect of Risk Perception on Investment Decision

The findings of the present study suggest that financial literacy exerts a moderating influence on the relationship between risk perception and stock investment decisions. The findings suggest that risk perception, which is defined as the process by which individuals interpret the risks they face, becomes more focused with high financial literacy. This heightened capacity for mature risk analysis enables investors to make more informed decisions regarding stock investment.

The majority of respondents are aged 21–24 years (39.01%), a group that tends to be brave in taking investment risks. With adequate financial literacy, they can improve their risk perception and make more optimal investment decisions. Furthermore, the majority of respondents (48.94%) possess a bachelor's degree, which fosters analytical skills essential for comprehending financial and investment concepts. This level of education facilitates the application of financial literacy in assessing risk and making stock investment decisions.

The majority of respondents were female (56.74%), indicating an increase in female interest in stock investment. Good financial literacy helps this group improve their risk assessment skills, despite being influenced by social or emotional factors, so they are able to make more rational investment decisions.

This study support to the behavioural finance theory, which based that psychological, emotional and cognitive factors exert an influence on the decision-making process. Investors with high financial literacy have been shown to possess the ability to understand risk objectively, reduce bias, and improve the quality of their decision-making processes. Investors who possess high financial literacy are better able to analyse risk and stock portfolios, thereby strengthening the relationship between risk perception and stock investment decisions.. This result differs from the findings of Anifa & Soegiharto, (2023), which stated that financial literacy does not moderate this relationship, but supports the importance of financial literacy in managing risk and improving the quality of investment decisions.

CONCLUSION

This study concludes that overconfidence contributes significantly to the stock investment decisions of generation Z in Surabaya, where investors tend to be confident in predicting stock price movements based on their experience and knowledge. Availability bias also influences investment decisions, because investors rely more on easily accessible information without conducting in-depth fundamental analysis. In contrast, risk perception does not have a significant influence on stock investment decisions because its influence depends on the investor's experience and knowledge, with decision making more influenced by overconfidence and profit orientation. Financial literacy is shown to moderate the relationship between overconfidence and investment decisions, helping investors control this bias so that the decisions taken are wiser. However, financial literacy does not moderate the relationship between availability bias and investment decisions, because investors still prioritize easily accessible information. In contrast, financial literacy is able to moderate the relationship between risk perception and investment decisions, improving investors' ability to analyze risk and make better decisions.

Investor it is recommended to control overconfidence by conducting an in-depth analysis of stock products to avoid potential losses. Moreover, it is imperative to enhance the financial literacy of Generation Z in Surabaya. This is essential for them to overcome cognitive bias and improve their ability to assess investment risks. This study can be a reference for further research by adding variables such as herding, disposition effect bias, representativeness, anchoring bias, gambler's fallacy, and loss aversion. Further research is also recommended to involve larger and more experienced respondents, such as brokers or investment managers, in order to obtain more comprehensive results

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