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The Influence Of Financial Behavioral Bias In Investment Decisions Of Generation Z Investors In The Capital Market: The Moderating Role Of Financial Self-Efficacy (A Study Of Generation Z Investors In Yogyakarta)

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ABSTRACT

Technological advances make various information more accessible, including information about investment. However, investment usually involves large funds so that investors must be careful and capable, and for years various generations have contributed to investment. Of the various generations, Generation Z (born 1997 - 2012) is dominated because this generation is considered very skilled with technology, making it very easy for them to access the information. However, there are various obstacles that arise, such as their lack of skill in making decisions in investors to psychological factors and investment behavior (availability bias, loss aversion bias, and confirmation bias). Although these factors can be overcome with self-efficacy from several existing references, this still needs to be proven further. With these problems, a quantitative study using the SEM-PLS analysis method was conducted to determine the direct effect of availability bias, loss aversion bias, and confirmation bias on investment decisions and the moderating effect of self-efficacy of Generation Z investors in the Special Region of Yogyakarta (DIY). The research findings are that only loss aversion and confirmation bias have a positive and significant direct effect on investment decisions of Gen Z investors in the DIY capital market. While the three types of behavioral bias (availability, loss aversion, and confirmation bias) only show a positive but insignificant effect on investment decisions when moderated by self-efficacy.

INTRODUCTION

As time goes by, awareness of investment is increasing. Investors make decisions based on analysis of existing information, one of which is technology that causes abundant information so that filtering is very necessary. Given that investment involves large funds, investors analyze carefully before making decisions. In addition, investors tend to avoid risk and prefer short-term investments (Kuerzinger & Stangor, 2024). Investing in the capital market is increasingly popular, especially among the younger generation, such as Generation Z who are familiar with digital technology, which allows them to make investments through easily accessible digital platforms. However, in practice, investment decisions are often not only based on rational analysis, but are also influenced by psychological and behavioral factors (Mahmood et al., 2024; Mittal, 2022).

Behavioral biases such as overconfidence, herding, anchoring, and risk aversion are phenomena that are often found in investment decision making. These factors indicate that the capital market is not completely efficient because investor decisions are often influenced by emotions and subjective perceptions alone (Fateye et al., 2024). In addition to the biases mentioned, there are three types of behavioral financial biases that affect investment decisions: availability bias, loss aversion bias, and confirmation bias. Availability bias occurs when investors make decisions based on information that is easily remembered rather than considering all relevant information (Salman et al., 2020). Meanwhile, loss aversion bias shows that investors are more afraid of experiencing losses than getting profits of the same value (Gächter et al., 2022). On the other hand, confirmation bias refers to the tendency of investors to seek out and give more weight to information that supports their beliefs, while ignoring information that contradicts them (Costa at al., 2017; Shukla et al., 2024). Furthermore, indicators that measure availability bias are: the tendency to choose investment in local companies because of more information, using information from close people for investment decisions, and information on the level of return obtained from acquaintances (Ahmad et al., 2020). Availability bias occurs when companies are less transparent to investors. So investors tend to choose the obvious option (high information transparency) (Zhang et al., 2020).

Previous research has shown a relationship between these aspects. Such as research from Nizar & Daljono (2024) which explains that availability bias has a strong influence on investment decisions, in other words, limited understanding of information will limit decision making. Thus, the limited information of Gen Z investors has an impact on the quality of investment decisions and results in the possibility of wrong investment decisions being made (Kurniana et al., 2023). If information is limited, it will result in bias for investors due to a lack of knowledge regarding the investment to be made, so investors will tend to have sufficient information available (Sumantri et al., 2024). This shows that if availability bias has no influence on the decisions taken by investors, then what? Because investors still seek detailed and comprehensive information before making investment decisions (Dumohar et al., 2022). Based on the results of the research that has been conducted, it is interesting to see the influence of availability bias on investment decisions of Gen Z in Yogyakarta.

Fear of loss makes investors more careful in making decisions. The greater this fear, the more complicated the investment decisions taken (Ingalagi & Mamata, 2024). Loss aversion can positively influence investment decisions, because investors tend to hold on to investments that may fall to avoid losses, so they wait for prices to rise again (Chandna, 2024). This bias can lead to inappropriate decisions, because investors often miss the time to sell falling stocks, even though it is not certain that the price will rise again (Yiwen, 2022). The rate of decision errors increases as the fear of loss increases (Rahawarin, 2023). Another opinion, according to Zhou (2023) shows no influence between loss aversion bias on investment decisions, but previous opinions indicate a relationship. Therefore, this study is one of them to confirm the relationship in generation Z in Yogyakarta.

Apart from loss aversion bias, there is also confirmation bias, according to Costa et al., (2017) This is the least studied cognitive bias. Therefore, this study wants to find out more about its influence on investment decisions. There are several studies that have found that confirmation bias has a positive influence on decisions taken by investors. Because the higher the confirmation that investors get regarding their beliefs, the higher the likelihood that investors will make investment decisions (Upashi & Kadakol, 2023). Investors tend to have high confidence in making decisions, especially if they get support related to their beliefs. This proves that there is a positive influence of confirmation bias on decisions taken (Elfahmi, Astutik, & Andayani, 2022). Research result (Gulo & Cahyonowati, 2024) shows that confirmation bias does not affect investor decisions, because decisions are based on other factors such as funds, market conditions, and prospects. With this research, it will confirm the relationship between confirmation bias and investment decisions made by investors, especially Gen Z in Yogyakarta.

In addition to the previous aspects, financial literacy also plays an important role in improving an individual's ability to make rational investment decisions. Findings (Shah et al., 2024) shows that individuals with high levels of financial literacy are better able to manage risk and make informed decisions. But financial literacy alone is not always enough to overcome the influence of behavioral bias. This is confirmed by the findings (Khan, 2020; Mahmood et al., 2024), which shows that financial literacy often fails to significantly moderate the relationship between behavioral bias and investment decisions. To address this, the concept of financial self-efficacy becomes relevant. Financial self-efficacy refers to an individual's belief in their ability to manage personal finances. According to the finding (Lone & Bhat, 2024), Self-efficacy can help individuals overcome behavioral biases and make more rational investment decisions. For example, individuals with high levels of self-efficacy tend to be more confident in managing their investments and are less easily influenced by market sentiment or social pressure (Tang, 2021). Financial self-efficacy has been shown to strengthen the relationship between financial literacy and strengthen the relationship of habitual bias with investment decisions made by vocational high school students in Surabaya and students at Islamic Universities in Central Java (Handayani & Muthohar, 2024; Lestiani & Bahtiar, 2024). Financial efficacy and literacy strengthen the relationship between habitual bias and investment decisions by investors (Hasanudin et al., 2022). Based on the findings of the research that has been conducted, it is proven that there is a moderating role in financial efficacy. This study will look at the moderating effect of financial efficacy on the relationship between availability bias, loss aversion bias, and confirmation bias on investment decisions made by Gen Z in Yogyakarta.

Generation Z, as a generation that is in the early stages of their participation in the capital market, faces various challenges in making investment decisions. Research in various countries shows that this generation tends to be more susceptible to behavioral biases than older generations (Gonzalez-Igual et al., 2021). Lack of experience and exposure to financial education from an early age is one of the main causes of this vulnerability (Hong et al., 2023; Sconti., 2024). In Italy, for example, financial education applied to high school students was shown to increase consistency in their financial decision-making (Sconti et al., 2024). These findings indicate the importance of integrated financial education in the formal education system, especially for the younger generation.

This study will focus on Gen Z investment decisions, there is a growing trend in their interest in investing in the capital market. Based on various sources in 2024, 55.07% of capital market investors in Indonesia are Gen Z, increasing from almost 6 million investors in 2023. The high interest of young people, especially Gen Z, in investing shows good financial analysis skills. Despite inflation due to Covid-19, Gen Z continues to invest and can analyze stock market conditions in Indonesia. They see fluctuations and uncertainties as challenges that must be faced. Gen Z's investment interest has increased compared to 2023, reflecting strong characteristics in responding to economic challenges. Based on various existing explanations, it is interesting to see investment decisions made by Gen Z which are based on availability bias,

loss aversion bias, confirmation bias, and self-efficacy. This study will focus on Gen Z investors in the Special Region of Yogyakarta (DIY).

LITERATURE REVIEW

Investment Decisions

Investment decisions are defined as expenditures made now with the aim of gaining profits in the future (Virlics, 2013). This decision is influenced by various factors, both rational and irrational, including investor behavior and psychology (Khan et al., 2024). In making investment decisions, investors tend to be those who avoid risk, so investors tend to choose short-term investments (Kuerzinger & Stangor, 2024). Information regarding environmental activities carried out by the company is also important for investors so that it can be used as a consideration in making investment decisions (Aristei et al., 2024). Investment decisions cover various aspects, starting from decision making in selecting assets, determining the right time to invest, to evaluating investment performance after it is made (Teoh et al., 1998).

Availability Bias

Availability bias is a heuristic used by individuals to judge the frequency or probability of an event based on the relevant ease of recall (Tversky & Kahneman, 1973). In this context, individuals tend to rely on the most easily accessible information in their memory, which often does not reflect the actual frequency of the event. When faced with the difficult task of assessing probability or frequency, individuals use limited heuristics to simplify their judgments. For example, when positive news about a particular stock emerges, investors may be more likely to invest in that stock without considering deeper fundamental analysis (Fateye et al., 2024). The indicators used to measure availability bias are as follows: (a) the tendency to choose investment in local companies because there is more information available compared to international companies; (b) using information obtained from close people as the basis for making investment decisions; (c) as well as information regarding the rate of return obtained from acquaintances (Ahmad et al., 2020).

Loss Aversion Bias

Loss aversion bias refers to the tendency of individuals to perceive losses with greater intensity compared to equivalent gains (Kahneman et al., 1991). Losses have a stronger psychological impact than gains. Research shows that losses are often felt about two to three times more painfully than gains are felt pleasantly (Kahneman & Tversky, 1979). The indicators used to measure loss aversion bias are: (a) making investment decisions even though the rate of return is uncertain; (b) decisions taken are always accompanied by careful consideration; (c) in the financial sphere, risk is always present and can result in losses; (d) not hesitating to make risky decisions if the results obtained can be predicted; (e) the habit of predicting negative results from decisions taken (Souissi et al., 2020).

Confirmation Bias

Confirmation bias, based on a study by Wason (1960), defined as the tendency of individuals to search for, interpret, and remember information that supports existing beliefs or hypotheses, while ignoring or downplaying contradictory information. In the context of this study, Wason (1960) showed that many subjects were more likely to use confirming evidence (enumerative induction) than to seek evidence that could refute their hypotheses (eliminative induction). This causes them to often reach erroneous conclusions because they do not consider alternative possibilities that could explain the existing data. The more funds invested, the more careful investors will be about their assessments and will confirm first so that there are no mistakes in making decisions (Mohanty et al., 2023). The level of confirmation bias can be measured by looking at: (a) which opinions have the most support, (b) which opinions are not

supported by existing news about the capital market, and (c) which opinions have the most convincing support (Park et al., 2013).

Self-Efficacy

Self-efficacy refers to an individual's belief in their ability to achieve certain goals, which influences motivation, effort, and resilience in the face of challenges (Bandura, 1977). More concisely, self-efficacy is defined as an individual's belief in his or her ability to succeed in a particular situation or achieve a desired goal (Bandura & Wessels, 1997). Bandura (1977) identified four main sources that form self-efficacy, namely: (a) personal experience; (b) modeling (imitation); (c) verbal persuasion; (d) physiological conditions. Success or failure in previous experiences can strengthen or weaken self-efficacy (Bandura and Wessels, 1997). Self-efficacy should be seen as a process of thinking that continues to develop, not as a fixed trait that someone has, which means that this self-efficacy can change over time and experience (Cervone, 2000).

METHODS

The approach used in this study is a quantitative approach. Quantitative research is an approach to test a theory by examining the relationship between measurable variables. The report is structured starting from the introduction, literature and theory, methods, results, to discussion, with deductive writing (Cresswell, 2014).

The population in this study were individuals from Generation Z (born between 1997 and 2012) who carried out investment activities and were domiciled in the Special Region of Yogyakarta. At the time this study was conducted, the age range of respondents was between 13 and 28 years. However, considering the minimum age limit for legal investment activities in Indonesia, the research subjects were focused on individuals aged at least 17 years and over. Meanwhile, the sampling in this study used the non-probability purposive sampling method. In this study, the Hair formula was used to calculate the number of samples needed, considering that the population of Gen Z investors in Yogyakarta is not known for certain. Based on the formula from Hair et al (2019), the minimum number of samples used in this study is as follows: number of samples = number of indicators x 5 meaning the number of indicators in this study is 21 after that multiplied by 5, so that the minimum sample in this study is 105 people/respondents.

The data collection method in this study used a questionnaire with a Likert scale of 1 to 5 (5 = strongly agree; 4 = agree; 3 = neutral; 2 = disagree; 1 = strongly disagree), the following is a grid of the instrument presented.

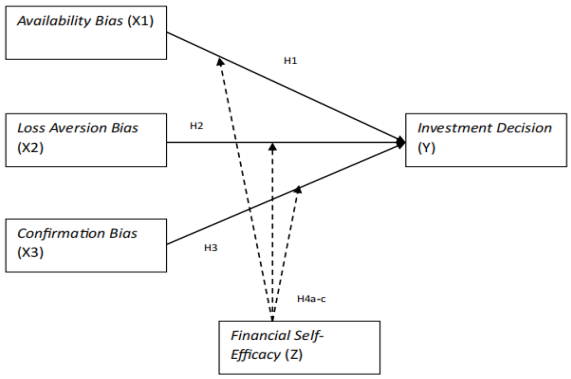
Table 1 Instrument Grids

Research Variables	Indicators	References	Items
Investment Decision (Y)	Trust in conscience; Based on feelings; Decisions based on instinct; Decisions using feelings rather than rational; Decisions using intuition.	(Nizar & Daljono, 2024)	5
Availability Bias (X1)	The tendency to choose investment in local companies because there is more information available compared to international companies; Using information obtained from close people as a basis for making investment decisions; Information on the rate of return obtained from acquaintances.	(Ahmad et al., 2020)	3

Loss Aversion Bias (X2)	Making investment decisions even though the rate of return is uncertain; Decisions taken are always accompanied by careful consideration; In the financial sphere, risks are always present and can result in losses; Not hesitating to take risky decisions if the results obtained can be predicted; The habit of predicting negative results from decisions taken.	(Soussi et al., 2020)	5
Confirmation Bias (X3)	What opinions have the most support; What opinions are not supported by existing news about the capital market; What opinions have the most convincing support.	(Park et al., 2013)	3
`*Self-Efficacy* (Z)	Ability to make investment decisions; Confidence in the ability to make investment decisions; Lack of confidence in the ability possessed; Using information to make investment decisions is an ability possessed; Previous experience increases confidence in making investment decisions.	(Montford & Goldsmith, 2016)	5
Number of Items	**21**		

Partial Least Square Structural Equational Model (PLS-SEM) analysis is a data analysis technique in this study with the following steps; 1) Internal Measurement which includes: (a) R2 value has the following categories: 0.67 is in the substantial category, 0.33 is in the moderate category, and above 0.7 is in the strong category; (b) The f2 value has the following categories: 0.15 is considered to have sufficient influence in the structural order, 0.35 is considered to have a strong influence in the structural order, 0.02 is considered to have a weak influence in the structural order; (c) Q2 and q2 values have explanations: if the value is more than zero (0) then the observation value has been reconstructed properly, if the value is less than zero (0) then the observation value has not been reconstructed properly. While the q2 value is used to see the effect of the structural model on the endogenous latent variable; and 2) Formative Model Measurement which includes: (a) nomological validity, to see the relationship between latent variables and formative indices in a particular model path; (b) external validity, the formative index is expected to provide an explanation of most of the variance in the reflective measurement of the related latent variables; (c) weight significance, where the weight of the formative measurement model estimate must be significant; and (d) multicollinearity, the VIF value of all indicators contained in the formative block must be greater than 10 (Hidayat, 2018). The following is the Conceptual Framework and research hypothesis.

Figure 1 Conceptual Framework and Hypothesis



Hypothesis 1 to 3 (H1 - H3)

Do availability, loss aversion, and confirmation bias influence Gen Z's investment decisions in the capital market of the Special Region of Yogyakarta?

Hypothesis 4 to 6 (H4 – H6)

Does financial self-efficacy moderate the relationship between availability, loss aversion, and confirmation bias on Gen Z investment decisions in the capital market of the Special Region of Yogyakarta?

RESULTS

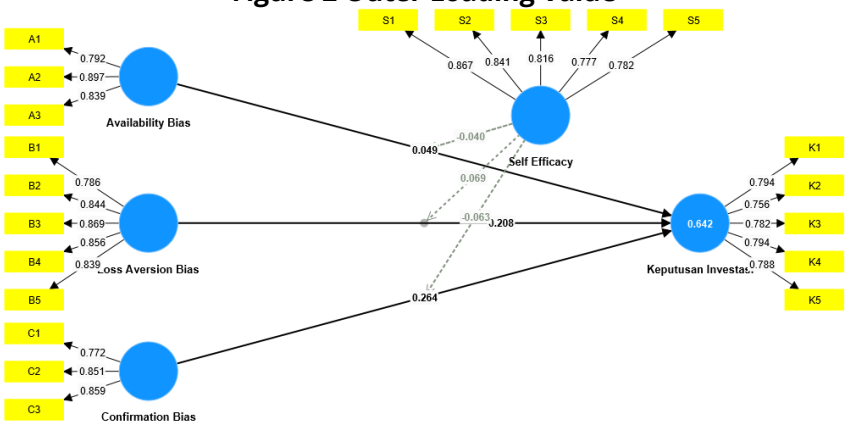
A total of 300 respondents were found, of which 289 respondents met the criteria as Generation Z investors domiciled in the Special Region of Yogyakarta and had invested for at least six months at the time the study was conducted, so that the respondents used in this study were 289 respondents. The respondents used in this study were individuals who were in the age range of 17 to 28 years and had experience of investing for at least six months. The characteristics of the respondents in this study include age and investment experience. Of the 289 respondents, the general group was dominated by respondents born in 2005 with a frequency of 53 (18%). Judging from the characteristics of investment experience, of the total 289 respondents, there were 116 (40.14%) respondents who had invested for at least 6 months and 173 (59.86%) respondents had invested for more than 6 months. This data shows that most respondents have investment experience of more than six months.

Evaluation of Measurement Model

Validity Test

This test, if an indicator is declared valid then the loading factor value is above 0.60 so that if there is a loading factor below 0.60 then it will be dropped from the model (Hair et al., 2019). Measurement with reflective indicators shows a change in an indicator in a construct if other indicators in the same construct change (or are removed from the model). The image below is still from the validity test with the outer loading values of all variables and indicators.

Figure 2 Outer Loading Value



Based on the image above, it is known that all variable items are valid. This is because the loading factor value is above 0.60. In addition to the Loading Factor value, to analyze the validity of research data, the Average Variance Extracted (AVE) value can be used. The following are the results of the validity test using the AVE value.

Table 2 AVE Value

Variable	Average variance extracted (AVE)
Availability Bias	0,712
Confirmation Bias	0,686
Investment Decisions	0,613
Loss Aversion Bias	0,704
Self-Efficacy	0,668

Reliability Test

Reliability indicates the accuracy, consistency, and precision of a measuring instrument in making measurements (Hair et al., 2019). If a study is reliable, then the research data has been tested for reliability and consistency of the research results. Reliability testing in PLS can use 2 methods, namely Cronbach's alpha and Composite reliability. The results of the study showed that all constructs in the study were declared Reliable because the Composite Reliability value for all constructs was above 0.70 as well as for the Cronbach's Alpha value because all constructs were above 0.60 (as shown in the table below

Table 3 Reliability Results

Variable	Uji Composite Reliability (rho_c)	Uji Cronbach Alpha
Availability Bias	0,881	0,796
Confirmation Bias	0,867	0,770
Investment Decisions	0,888	0,842
Loss Aversion Bias	0,922	0,895
Self-Efficacy	0,909	0,875

Structural Model Evaluation (Inner Model)

Coefficient of Determination Test (R^2)

After the estimated model meets the Outer Model criteria, the researcher then tests the Structural Model (Inner Model). Based on the test results, the Adjusted R-Square value for the investment decision variable is 0.634. This means that the model has a strong level of goodness-fit model. This also means that the variability of investment decisions can be explained by independent variables by 63.4%.

F Square Test

The F-Square test is conducted to determine how much relative influence the independent latent variable has on the dependent latent variable. The following are the results of the F Square test described.

Table 4 F Square Results

Variable	F Square
Availability Bias -> Investment Decisions	0,002
Confirmation Bias -> Investment Decisions	0,050
Loss Aversion Bias -> Investment Decisions	0,030
Self-Efficacy -> Investment Decisions	0,123
Self-Efficacy x Availability Bias -> Investment Decisions	0,002
Self-Efficacy x Loss Aversion Bias -> Investment Decisions	0,006
Self-Efficacy x Confirmation Bias -> Investment Decisions	0,005

The table above obtained the F Square value for the investment decision variable of 0.002, 0.050, 0.030, 0.123, 0.002, 0.006 and 0.005. Therefore, it is concluded that the independent variables that influence the investment decision variable have a moderate influence.

Q Square Test

According to Ghozali & Latan (2014) Q-square predictive relevance is a test to evaluate the PLS model. The test conditions are if $Q^2 > 0$ shows the model has predictive relevance. Here are the test results.

Table 5 Q Square Results

Variable	SSO	SSE	Q^2 (=1-SSE/SSO)
Availability Bias	930,000	930,000	0,000
Confirmation Bias	930,000	930,000	0,000
Investment Decisions	1550,000	961,760	0,380
Loss Aversion Bias	1550,000	1550,000	0,000
Self-Efficacy	1550,000	1550,000	0,000

The table above shows the Q Square value on the investment decision variable of 0.380. Therefore, it can be concluded that the variables that influence investment decisions have a strong influence.

Significance Test (t)

The significance results of the parameter coefficients can be calculated from the dimensions of the variables that have been validated. Researchers want to know whether there is a positive or negative influence and significant or insignificant based on the calculation of P Values which must be below 0.05 and t statistics greater than or equal to 1.96. If the t statistics are greater than the t table (1.96) then both constructs are declared significant and vice versa.

Table 6 Significance Test (t) Results

Variable	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Conclusion
Availability Bias -> Investment Decisions (H1)	0,049	0,828	0,408	Positive but not significant influence (H1 rejected)
Loss Aversion Bias -> Investment Decisions (H2)	0,208	2,260	0,024	Positive and significant influence (H2 accepted)
Confirmation Bias -> Investment Decisions (H3)	0,264	3,254	0,001	Positive and significant influence (H3 accepted)
Self-Efficacy -> Investment Decisions	0,343	5,721	0,000	Positive and significant impact
Self-Efficacy x Availability Bias -> Investment Decisions (H4)	0,040	0,558	0,577	Positive but not significant influence (H4 rejected)
Self-Efficacy x Loss Aversion Bias -> Investment Decisions (H5)	0,069	0,964	0,335	Positive but not significant influence (H5 rejected)
Self-Efficacy x Confirmation Bias -> Investment Decisions (H6)	0,063	0,892	0,372	Positive but not significant influence (H6 rejected)

DISCUSSION

Based on the results of the analysis, it can be discussed as follows. Availability bias does not have a significant effect on investment decisions. Although the coefficient shows a positive relationship, the effect is not statistically strong enough. This indicates that Gen Z investors in Yogyakarta tend not to be too influenced by information that is easy to remember or available when making investment decisions. In the context of Yogyakarta, young investors who are technology and information literate appear to be more rational and critical in making investment decisions. Likewise, research (Salman et al., 2020) who found that availability bias has a significant influence on investors' investment decisions, there are significant differences in demographic characteristics between investors in the study and Gen Z investors in Yogyakarta. Gen Z has better access to financial information and education so they are less influenced by availability bias, they are more likely to do deeper analysis and not just rely on information that is easy to remember (Widjanarko et al., 2023). This study supports the findings of Willyanto et al., (2019) who found that availability bias has a positive but insignificant effect on the investment decisions of young investors.Loss aversion bias has a positive and significant effect on investment decisions. This means that Gen Z investors tend to consider the risk of loss and avoid it when making investment decisions. This finding is in line with behavioral finance theory, especially the concept of loss aversion which was first developed by Kahneman & Tversky (1979). This theory explains that individuals tend to give greater weight to losses compared to gains of equal value. This means that losses are felt twice as painful compared to the pleasure felt from gains of equal magnitude. As a result, investors tend to be more defensive in making investment decisions, especially when facing situations full of uncertainty. The results of this study are in line with findings from Schmidt & Zank (2005) which states that loss aversion is a form of cognitive bias that causes individuals to focus more on potential losses than profits, so that they often make irrational decisions, such as holding on to losing investments for too long or being reluctant to take potentially profitable risks.

Confirmation bias has a positive and significant effect on investment decisions. This shows that Gen Z investors tend to seek information that supports their previously made beliefs or decisions. Individuals who experience confirmation bias tend to focus on information that supports their beliefs and ignore or underestimate conflicting information, resulting in limited understanding of an issue and inhibiting the ability to consider alternative perspectives objectively (Peters, 2022). This study supports the findings of Runtuwene & Sibilang (2024) which shows that confirmation bias has a significant influence on Generation Z's investment decisions, due to their tendency to seek and trust information that is in line with their personal beliefs and the influence of social media algorithms that reinforce these views, thereby increasing the risk of making less rational decisions.

Three hypotheses regarding the moderating role of self-efficacy on the relationship between the three biases (availability, loss aversion, and confirmation) with investment decisions did not show a significant effect. This indicates that self-efficacy does not strengthen or weaken the relationship between cognitive bias and investment decisions. Although self-efficacy influences investment decisions, it has not been proven as a moderator variable. This finding indicates that self-efficacy has a direct effect but cannot strengthen or weaken the influence of cognitive bias on decisions. This result is different from several previous studies which stated that individuals with high self-efficacy tend to be more confident in making decisions, so they can reduce the influence of cognitive bias (Bandura, 1997; Chen et al., 2001). However, in the context of this study, self-efficacy was unable to act as a significant filter against biases that emerged in the investment decision-making process. One possible reason for the insignificance of this moderation effect is that self-efficacy, although important in influencing individual behavior, is not strong enough to neutralize cognitive biases that are automatic and unconscious. Biases such as availability and confirmation often operate outside of an individual's rational awareness

and can be more dominant in conditions of uncertainty, such as in investment decisions (Nickerson, 1998; Tversky & Kahneman, 1974). In addition, this finding is also in line with the view that the influence of cognitive bias on financial decisions is often not easily mitigated by just one psychological factor, such as self-efficacy. A more comprehensive approach involving financial education, market experience, and self-control training is needed to truly reduce the impact of cognitive bias on investment decisions (Pompian, 2006). This finding is supported by the results of research from Suade et al., (2024), which shows that financial self-efficacy improves students' financial well-being through positive financial behavior, but is not proven to control bias in investment decisions. Its effect on reducing cognitive bias is limited without further education or experience.

CONCLUSION

Based on the results of the analysis and discussion in this study, it can be concluded that: 1) Availability bias has a positive but insignificant effect on investment decisions of Gen Z investors in the capital market in Yogyakarta; 2) Loss aversion bias has a positive and significant effect on investment decisions of Gen Z investors in the capital market in Yogyakarta; 3) Confirmation bias has a positive and significant effect on investment decisions of Gen Z investors in the capital market in Yogyakarta; 4) The three types of behavioral bias, namely availability bias, loss aversion bias, and confirmation bias, show a positive but insignificant effect on investment decisions when moderated by self-efficacy.

LIMITATION

This study has several limitations that need to be considered in interpreting the results. First, the study was conducted only on Generation Z investors in the Special Region of Yogyakarta, so the results cannot be generalized to all Generation Z investors in Indonesia. Second, the study used a quantitative approach with an online questionnaire survey, which did not allow researchers to dig deeper into respondents' motivations. Third, this study has not included other significant variables such as financial literacy and investment experience. Finally, the use of a cross-sectional research design is limited to one point in time, while a longitudinal design was not applied due to time and budget reasons.

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