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THE EFFECT OF FINANCIAL LITERACY, EDUCATION LEVEL ON INVESTMENT DECISIONS IN GENERATION Z SMEs.

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ABSTRACT

This study aims to examine the effect of financial literacy, level of education on the investment decisions of generation Z SMEs, and the mediating effect of financial literacy on the relationship between educational level and investment decisions of Gen Z. The data in this study were obtained by distributing questionnaires to Generation Z in Jambi city using purposive sampling. The data is processed using the Smart-PLS software to test the model and hypothesis. This study found that financial literacy and level of education can influence investment decisions in Generation Z MSME actors. Financial literacy can mediate education level variables and investment decisions in Generation Z MSME actors.

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INTRODUCTION

In the era of globalization and the rapid development of information technology, the Micro, Small and Medium Enterprises (MSMEs) sector has a very important role in the economy of a country (Faizah, 2019). In Indonesia, MSMEs are the backbone of the economy by making a significant contribution to economic growth, job creation, and income distribution (Wulansari & Anwar, 2022). Therefore, the development and growth of MSMEs is the main focus of the government in achieving sustainable economic development goals.

In facing global challenges and increasingly fierce competition (Ayodya, 2020), Widyastyti (2023), Generation Z MSMEs, who are young people who are active and have potential, must have adequate knowledge and skills to manage finances wisely. Financial literacy and education level are very relevant factors in helping Generation Z MSMEs in making smart and sustainable investment decisions (Nirwana, 2023) (Saputra, et all 2023).

Financial literacy refers to one's understanding and knowledge of financial concepts, including investment, financial management, financial planning, and making wise decisions related to money and assets. Generation Z MSMEs who have a high level of financial literacy will be able to understand the concept of investment, risk and potential return associated with various investment instruments (García, 2023). So that Gen Z can make better investment decisions and potentially provide more profitable results.

In addition to financial literacy, education level also has an important role in shaping one's knowledge and understanding of investment. A good formal education can provide a broader knowledge base, develop analytical skills, and increase critical abilities in understanding and evaluating investment opportunities. A high level of education can also help Generation Z MSMEs in accessing relevant information and resources, including existing financial markets and investment instruments.

This study aims to examine the effect of financial literacy and educational level on investment decisions in Generation Z MSME actors. Understanding the factors that influence investment decisions, this research is expected to provide valuable insights for Generation Z MSME actors, the government, and related parties in developing appropriate financial literacy and education programs, as well as supporting the growth and sustainability of MSMEs in Indonesia. By deepening knowledge about the factors that influence investment decisions in Generation Z MSMEs, it is hoped that this research can provide relevant policy recommendations and strategies for developing financial literacy that can support the growth and sustainability of Generation Z MSMEs in Indonesia.

THEORITICAL REVIEW

Financial Literacy

Financial literacy is a measure of the extent to which a person understands key financial concepts and has the ability and confidence to manage personal finances through making appropriate short-term decisions and sound long-term financial planning, paying attention to life events, and changing economic conditions (Remund, 2010). According to the OECD (2020) financial literacy is a combination of financial awareness, knowledge, skills, attitudes, and behaviors needed to make sound financial decisions and ultimately achieve individual financial well-being. Warmat and Zimmerman (2019) define financial literacy as a combination of three different indicators, which reflect three domains of knowledge: the psychomotor component, (financial skills), the affective component (self-efficacy), and the cognitive component (explicit knowledge of finance). Therefore, it can be concluded that financial literacy refers to one's understanding and knowledge of financial concepts, including investment, financial management, financial planning, and wise decision-making related to money and assets.

Level of education

The level of education refers to the formal level of education that has been achieved by individuals, such as primary, secondary, higher education, or other further education. Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 concerning the National Education System explains that education is a conscious and planned effort to create a learning atmosphere and learning activities so that students can actively develop their potential in terms of religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by individuals, society, nation, and state.

According to Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 concerning the National Education System, measurement of the level of formal education is divided into four categories, namely:

1. The level of education is very high, which requires individuals to have a minimum of higher education.
2. Higher education level, which includes senior secondary education (SMA) or equivalent.
3. Moderate level of education, which includes junior secondary education (SMP) or equivalent.
4. Low education level, which includes primary education (SD) or equivalent

Investation decision

According to Jogiyanto (2014), investment is defined as delaying current consumption to be used in efficient production for a certain period of time. According to Sutrisno (2012: 5), investment decisions are a matter of how financial managers should allocate funds into forms. According to Putri & Rahyuda (2017), in investing, there are five indicators that influence investment decisions, namely investment security, investment risk, investment return, time value of money and liquidity level. By using these factors, investors will determine the best investment decision among the available alternatives.

Generation Z

Generation Z (Gen Z) is the youngest generation who has just entered the workforce, often referred to as the Internet generation. Gen Z has a higher social connection thanks to advances in cyberspace. From an early age, Generation Z has been given extensive education about technology and has a high level of skill in using smartphones. Gen Z is known as a creative generation and tends to be interested in startup companies, has multitasking skills, is enthusiastic about technology, and is skilled in running and operating technology. Gen Z has concern for the environment and is susceptible to being influenced by the surrounding environment regarding products and brands. In addition, they also have good intellectual abilities and are able to receive information quickly (The Generation Guide, 2015).

RESEARCH METHODS

Types of research

This study conducted an analysis of primary data obtained through a survey of a number of Generation Z MSMEs in various sectors in Jambi City. The data will be processed and analyzed using the Smart PLS statistical method to test the research hypothesis.

Population and Sample

The population in this study is Generation Z SMEs in Jambi City, while the sample in this study used a purposive sampling technique with the following criteria:

1. Gen Z SMEs in Jambi City
2. Have been doing business activities for more than 2 years
3. Business management already uses digitization

Variable Measurement Dimensions

Variable	Indicator	Measurement Scale
Investation decision	1. Investment Security, 2. investment Liquidity, 3. Investment time 4. Rate of Return 5. Risk Amount.	Likert scale
Financial Literacy	1. Financial Knowledge 2. *Financial Behavior* 3. Financial Attitudes	Likert scale 1-5
Level of education	1. Educational level	• SD = 1 • Junior High School = 2 • SMA = 3 • S-1 = 4 • S-2 = 5
	1. Non-Formal Education is Important 2. Have strong knowledge in setting up a business 3. Have special skills in running a business. 4. High learning motivation	Likert scale 1-5

Data analysis method

1. Building Models
   a. Create a structural model by defining the relationship between latent variables using the SmartPLS interface.
   b. Enter data into SmartPLS and set model settings such as estimation method, bootstrapping method, and total literacy.
2. Model Evaluation:
   a. Perform model validation to check the suitability of the data with the model with Validity and Reliability tests.
3. Hypothesis test:
   a. Perform hypothesis testing to check whether the relationship between latent variables is statistically significant.
   b. Using the p-value generated from the bootstrapping analysis to determine whether the hypothesis is accepted or rejected
   c. Analyze SmartPLS output results such as path diagrams, path coefficients, and R-square values.
   d. Interpret the relationships and influences between the variables in your model based on the analysis results.

RESULTS

Characteristics of Respondents

Based on the results of distributing questionnaires that have been carried out, the characteristics of the respondents based on gender are dominated by women, namely with a total of 63 people, equivalent to 63%. Based on marital status, the majority of Gen Z respondents were single or unmarried with a total of 62 respondents or 62% of the total research respondents. Based on the type of business or business the respondents of this study were mostly engaged in trading or selling products with a total of 55 respondents, Home Industry totaling 30 Respondents and continued with the Service business as many as 15 Respondents. The next criterion is that the length of business for the most respondents is the business range of 2-3 years with 54 respondents or 54%.

Table 1. Characteristics of Respondents

Characteristics	Criteria	Frequency	Percentages (%)
Gender	Male	63	63
	Female	37	37
	Total	100	100
Marital status	Married	38	38
	Single	62	62
	Total	100	100
Type of business	domestic industry	30	30
	Service	15	15
	Trade	55	55
	Total	100	100
Length of business.	2-5 years	54	54
	>5 years	46	46
	Total	100	100

Source: Processed data

Outer Model Testing

Testing the model (outer model) is used to determine the specification of the relationship between latent variables and their indicators. This test includes convergent validity, discriminant validity, and reliability.

1. Convergent Validity
   Convergent validity aims to measure the suitability between indicators of variable measurement results and theoretical concepts that explain the presence of indicators from the variable test. Convergent validity relates to the principle that indicators from a construct should be highly correlated. The convergent validity test can be evaluated in two stages, namely by looking at the outer loadings and average variance extracted (AVE). Outer loadings are tables containing loading factors to show the correlation between indicators and latent variables. The loading factor value must be greater than 0.7, so it is said to be valid. Outer loadings output can be obtained from PLS Algorithm Report SmartPLS.
2. Discriminant Validity
   Discriminant validity is the level of differentiation of an indicator in measuring the instrument constructs. Test discriminant validity can be done by examining cross loading, namely the correlation coefficient of the indicator to the associated construct (loading) compared to the correlation coefficient to other constructs (cross loading).
3. Reliability Test
   The next test is also the construct reliability test which is measured by the criteria of composite reliability of the indicator block that measures the construct. The construct is declared reliable if the composite reliability value is above 0.7.

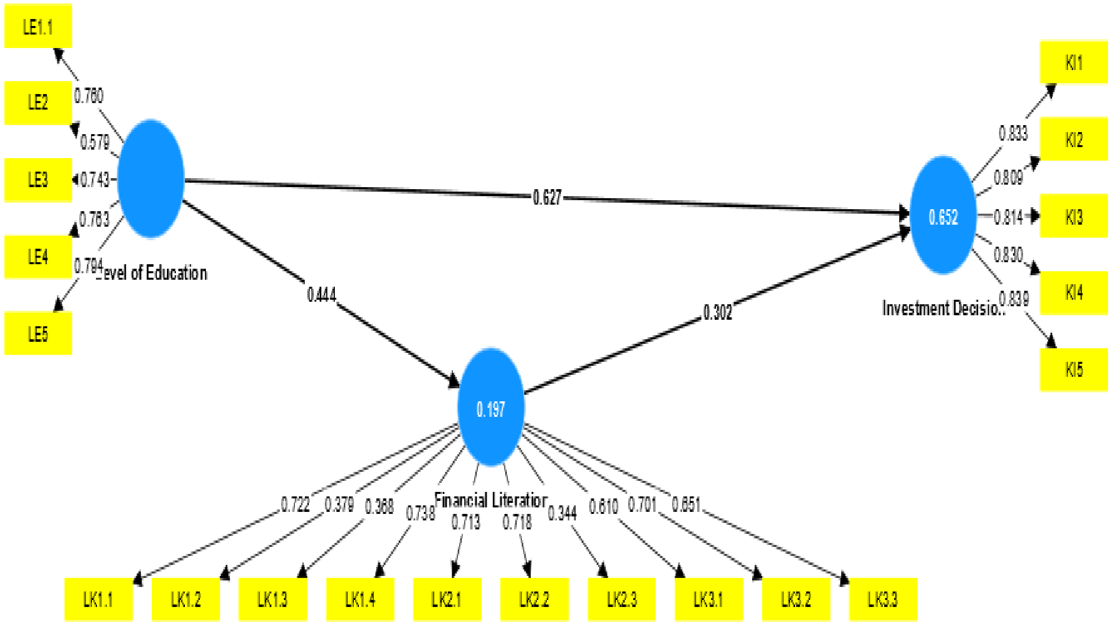

Figure 1. Outer Model

Based on the output results in Figure 1, there are still indicators that are still below 0.7, so it is necessary to eliminate the Financial Literacy indicators LK1.2, LK1.3, LK2.3 and LK3.3, for the educational level variable, the LE2 indicator is carried out elimination while the investment decision variable for all indicators has a value above 0.7.

Validity and Reliability Test

The reliability test was carried out to test the precision, consistency, and accuracy of the instrument in measuring constructs using composite reliability (CR). The rule of thumb that is commonly used to assess construct reliability is that the CR value must be greater than 0.6. Convergent validity is the principle that the number construct (manifest variable) must be highly correlated (Hair et al., 2018). The rule of thumb that is usually used to assess convergent validity is that the loading factor value must be more than 0.7 for confirmatory research. The loading value between 0.6-0.7 for exploratory research is still acceptable and the Average Variance Extracted (AVE) value must be greater than 0.5. Based on the results, the CR value was greater than 0.6, so the instruments in this study were reliable. The convergent test with AVE has been fulfilled because it has a greater value of 0.5. This means that all indicators on each latent variable have met convergent validity. The results of the Validity and Reliability tests can be seen in the following table:

Table 2. Validity and Reliability Test

Variable	Indicators	Loading Factor	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Financial Literacy	Financial Knowledge	0.746	0.824	0.838	0.875	0.584
		0.716				
	Financial Behavior	0.769				
		0.829				
	Financial Attitudes	0.758				
Level of Education	Educational level	0.766	0.774	0.776	0.855	0.596
	Strong knowledge in setting up a business	0.743				
	Special ability in designing business.	0.763				
	High learning motivation	0814				
Investment decisions	Investment Security,	0.833	0.883	0.883	0914	0.681
	investment Liquidity,	0.810				
	Investment time	0.816				
	Rate of Return	0.830				
	Risk Amount	0837				

Source: Processed data

Inner Model Test

Table 3. R-Square

	R-square	R-square adjusted
Financial Literacy	0.415	0.406
Investment decisions	0.759	0.752

Source: Processed data

The coefficient of determination (R Square) is a way to assess how much an endogenous construct can be explained by an exogenous construct. The value of the coefficient of determination (R Square) is expected to be between 0 and 1. Chin provides criteria for R Square values of 0.67, 0.33, and 0.19 as strong, moderate, and weak (Chin, 1998). Based on the R-Square value, the relationship between financial literacy and education level has a moderate category relationship because it has a value of 0.406 or the equivalent of 40.60%. The relationship between financial literacy, education level, and investment decisions has a strong relationship with an R-Square value of 0.752.

Hypothesis Test

Table 4. Output Direct Effects

	Original sample (O)	Standard deviation (STDEV)	T statistics	P values	Conclusion
Financial Literacy -> Investment decisions	0.280	0.068	4.143	0.000	accepted
Level of Education -> Financial Literacy	0.339	0.109	3,098	0.002	accepted
Level of Education -> Investment decision	0.673	0.081	8,340	0.000	accepted

Source: Processed data

Based on table 4, the results obtained from financial literacy and education level have a significant influence because the p-value is below 0.05. The effect of education level on financial literacy is significant because it has a p-value below 0.05. So, it can be concluded that the hypothesis in this study is accepted.

Table 5. Output Indirect Effects

	Original sample (O)	Standard deviation (STDEV)	T statistics	P values	Conclusion
Level of Education -> Financial Literacy -> Investment decision	0.095	0.041	2,341	0.019	accepted

Source: Processed data

Based on Table 5, the results obtained from financial literacy can mediate the level of education on investment decisions, which has a significant influence because the p-value is below 0.05.

Based on the results of the hypothesis testing, the coefficient values and p-values for each variable were below 0.05, so it can be concluded that all variables in this study were accepted and had a significant effect. The path relationship image can be seen in the following Figure 2:

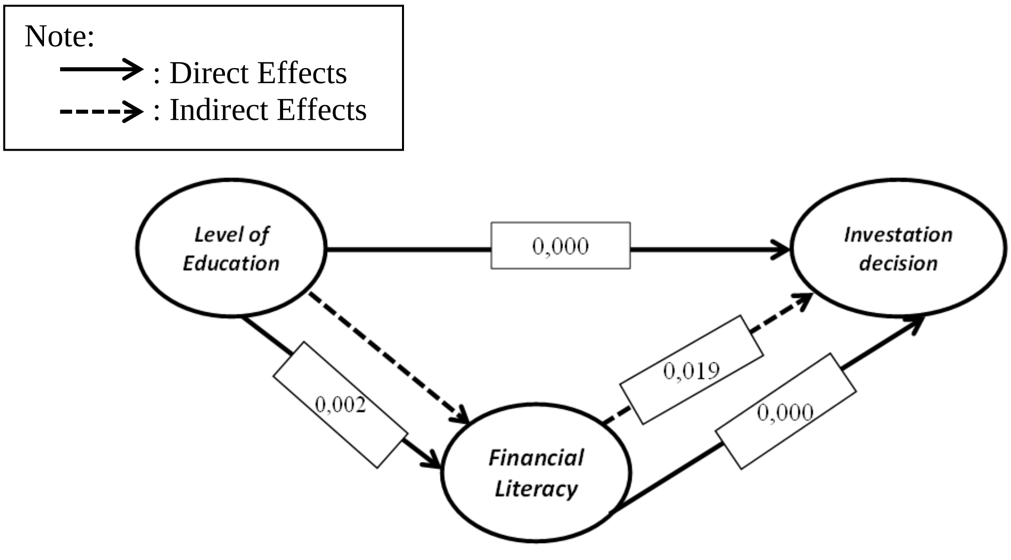

Figure 2. Model

DISCUSSION

Level of Education and Financial Literacy

Higher education levels provide greater access to financial knowledge and information (Goyal, K., Kumar, S. (2021). Through formal education, individuals can learn basic financial concepts and principles, such as budget management, investing, loans, and financial planning (Compen & Schelfhout, 2019). With better knowledge, individuals tend to have a deeper understanding of financial aspects and are able to make wiser decisions.

A higher level of education will strengthen individual analytical skills (Pradana, 2022). Gen Z can develop the ability to analyze financial information, understand the risks and potential returns of various financial instruments, and see the long-term implications of financial decisions. The analytical skills acquired through education can assist individuals in managing their finances more effectively.

A high level of education can increase individual awareness of the importance of financial literacy and provide opportunities to access financial education resources and programs (Nasution & Fatira, 2019). Gen Z education can engage in financial training, seminars, and other educational programs that can enhance financial understanding and skills. This can provide individuals with greater opportunities to increase their financial literacy.

A high level of education can affect an individual's ability to make more rational financial decisions (Tanusdjaja, 2018). Individuals with higher education tend to be more critical and able to consider various factors before making financial decisions. They may be better able to evaluate risk, understand the long-term consequences of financial decisions, and make better decisions financially.

Financial Literacy and Investment Decisions

Good financial literacy allows Generation Z to have a better understanding of the different types of investment available, including stocks, bonds, mutual funds and cryptocurrencies (García, 2023). Generation Z can understand the risks and potential returns of each investment and make more informed investment decisions.

Good financial literacy increases understanding of risk management (Bannier & Schwarz, 2018). Generation Z, who have good financial literacy, can recognize risks in investments and implement portfolio diversification strategies to reduce risk. Generation Z can also understand the importance of self-protection through insurance and managing the risks associated with their investments.

Good financial literacy tends to be more aware of financial innovations and financial-related technological developments, such as fintech and online investment platforms (Cardak, & Martin, 2023). This allows Gen Z to be more open to using technology to manage their investments and take advantage of emerging investment opportunities. Financial literacy helps Generation Z to develop long-term financial planning habits.

Level of Education and Investment Decisions

This study found that the level of education and investment decisions have a significant positive relationship. Research by Lusardi and Mitchell (2014) found that individuals with higher levels of education tend to have better levels of financial literacy. Gen Z is more likely to make wiser investment decisions and achieve long-term financial goals.

A higher level of education is associated with better knowledge and understanding of investment in Generation Z. Gen Z who have higher education tend to choose investments that are more profitable and manage risk better (Zhou, & Gan, 2023). Higher education levels have a positive impact on individual investment decisions (Fitriaty, et all 2023). Generation Z with higher education tends to have a higher level of financial literacy, understands investment risks, and can make more informed investment decisions (Hasler, et all, 2023).

Formal education has a positive influence on the level of financial literacy and investment decisions in Generation Z. Individuals with higher education tend to have a better understanding of financial aspects and can optimize investment decisions (Corsini, L., & Giannelli, 2021).

Mediation of Financial Literacy on the Relationship between Education Level and Investment Decisions

A higher level of education provides Generation Z with wider access to investment-relevant knowledge and information (Dewi, et all, 2023). It includes an understanding of financial concepts, investment risk, portfolio diversification, market analysis and different investment instruments. Generation Z with higher education tends to have better knowledge and understanding of financial aspects, which can affect their ability to make smarter and more informed investment decisions.

Financial literacy also acts as a mediator between education level and investment decisions. Higher financial literacy gives Generation Z a better understanding of financial instruments and investment risks (Balasubramnian & Sargent, 2020). Gen Z can recognize lucrative investment opportunities, understand the risks involved, and make more rational investment decisions. With a strong understanding of financial and investment concepts, financial literacy acts as a bridge that connects education level with the investment decisions taken by Generation Z.

Financial literacy acts as a mediating variable that helps explain how educational level influences investment decisions (Gerrans, 2021). Financial literacy can mediate the relationship between education level and Generation Z investment decisions, with higher financial literacy providing an explanation for how education level influences investment decisions made by Generation Z.

CONCLUSION

This study found that financial literacy, and level of education can affect investment decisions in Generation Z MSME actors, which means that the higher the level of education and the better financial literacy can make decisions for Generation Z MSME actors. Financial literacy can mediate the variable level of education and investment decisions for Generation Z SMEs, meaning that even higher education with a good level of literacy will affect the efficiency of investment decisions taken by Generation Z.

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