

## Implications of Financial Literacy, Illusion of Control and Overconfidence Through Emotional Maturity on People's Investment Decisions during a Pandemic

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### Abstract

This study aims to: (1) Find out how much influence financial literacy has on people's emotional maturity during a pandemic; (2) Knowing how much influence the illusion of control has on the emotional maturity of the people during a pandemic; (3) Knowing how much influence overconfidence has on people's emotional maturity during a pandemic; (4) Find out how much influence financial literacy directly and indirectly has on people's investment decisions during a pandemic; (5) Find out how much influence the illusion of control directly and indirectly has on people's investment decisions during a pandemic; (6) Find out how much influence overconfidence directly and indirectly has on people's investment decisions during a pandemic; (7) Knowing how much influence emotional maturity has on people's investment decisions during a pandemic. This type of research is quantitative research. The object of this research is the people in Talamuta District who are involved in investment. The sampling technique in this study used the cluster sampling method. Data collection was carried out through a survey method using a questionnaire which was distributed directly to the people in Mohungo Village who were involved in investment activities. The results of this study indicate that (1) Financial literacy has a negative but not significant effect on emotional maturity in the people of Mohungo Village, Talamuta District, (2) Illusion of control has a positive but not significant effect on emotional maturity in the people of Mohungo Village, Talamuta District, (3) Overconfidence has a positive effect not significant to emotional maturity in the Mohungo Village community, Talamuta District, (4) Financial literacy has an indirect positive and significant effect on investment decisions through emotional maturity in the Mohungo Village community, Talamuta District, (5) Illusion of control has an indirect negative effect but not significant on investment decisions through the emotional maturity of the community in Mohungo Village, Talamuta District, (6) Overconfidence has an indirect and significant negative effect on investment decisions through the emotional maturity of the community in Mohungo Village, Talamuta District, (7) Kematan Emotional ganism has a negative and significant effect on investment decisions in the Mohungo Village community, Talamuta District. With mandatory output in the form of an accredited national journal.

**Keywords:** Financial Literacy, Illusion of Control, Overconfidence, Emotional Maturity, Investment Decision



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### INTRODUCTION

Economic conditions amid the uncertain corona virus pandemic have encouraged many people to seek additional sources of income, one of which is through investment and trading. Investment is one option for managing finances both short and long term. Planning an investment in personal financial management is crucial for every individual today, this is because investing is also a learning process for managing finances in the present and the future<sup>1</sup>. In making an investment, it takes the right decision where each of these decisions can affect the return on investment. Making decisions in this investment is an effort that must be done carefully and through careful and in-depth consideration for every investor, because if not

there will be the potential to lose opportunities or even experience losses. In determining a decision, individuals will behave rationally and irrationally, depending on the information they obtain. Someone with good financial literacy tends to have better control in determining a variety of investments because they have a lot of financial information. On the other hand, if feelings and emotions are put forward in making decisions, then the decision results tend to lead to irrational behavior due to the influence of psychological biases (overconfidence and illusion of control). People with low financial literacy will usually make investments based on momentary euphoria. Apart from financial literacy, illusion of control and overconfidence also play an important role in making this investment decision. People who have the illusion of control tend to believe that they can control or at least influence outcomes that they clearly cannot. Likewise, overconfidence tends to make people overestimate their knowledge which can cause them to take greater risks in making investment decisions.

The phenomenon of the rise of people in Gorontalo Province flocking to make illegal investments during 2021 with a tempting offer in the form of 30% interest indicates low financial literacy and a high psychological bias in society which is inversely proportional to the level of emotional maturity so that investing is based on momentary euphoria. . As a result, thousands of people spread across several districts in Gorontalo Province, including Boalemo Regency, suffered losses of up to billions of rupiah and even sold their productive assets for investment (tatiye.id). Seeing the large number of people who have become victims of illegal investments made researchers feel interested in participating in studying investment decision making in Boalemo Regency, so researchers conducted a study entitled "Implications of Financial Literacy, Illusion of Control and Overconfidence Through Emotional Maturity on Community Investment Decisions During a Pandemic" . This study is intended to determine the magnitude of the influence of financial literacy, illusion of control and overconfidence through emotional maturity on investment decisions

## **RESEARCH METHODS**

This study uses a quantitative approach (quantitative approach), which is an approach that emphasizes testing theories or concepts through variable measurements and carrying out data analysis procedures with statistical tools and aims to test hypotheses. The data collection method in this study was carried out using 3 stages: the first stage was field observation, the second stage was distributing questionnaires and the third stage was conducting data analysis and literature study. The population in this study were all people in Boalemo Regency and the samples in this study were all people involved in investing in Tilamuta District with a sampling technique using cluster sampling.

### **Data Analysis Method**

1. Descriptive Statistical Test. Descriptive statistics are statistical analysis that provide a general description of the characteristics of each research variable as seen from the mean, maximum, and minimum values.
2. Path Analysis. Path analysis is used to determine the direct or indirect effect of a set of independent (exogenous) variables on the dependent (endogenous) variable. The equation in this model consists of two stages, namely:

Equation 1

$$Y1 = PY1,X1 X1 + PY1,X2 X2 + PY1,X3 X3 + e1$$

Persamaan 2

$$Y2 = PY2, X1 X1 + PY2, X2 X2 + PY2,X3 X3 + PY2, Y1 Y1 + e2$$

3. Statistical Test t. The t statistical test basically shows how far the influence of one independent variable individually explains the dependent variable by looking at its significance value.
4. Test R2. The next step is to find the partial determination coefficient (R2) of each independent variable. The variation in the dependent variable that is determined or explained by the variation in the independent variable<sup>15</sup>.

## RESEARCH RESULTS AND DISCUSSION

### Research Result

#### 1. Substructure Testing 1

##### a. Substructure Regression Coefficient Analysis 1

Based on the results of the analysis using the SPSS version 24 program, the regression results were obtained between the financial literacy (X1), illusion of control (X2) and overconfidence (X3) variables on emotional maturity (Y1).

**Table 1. Substructure Regression Coefficient 1**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	46.758	10.209		4.580	.000
	TFL	-.080	.187	-.054	-.429	.069
	TIOC	.179	.134	.164	1.334	.007
	TOC	.143	.218	.082	.654	.016

Source: Processed Raw Data, 2022

Based on the table above, it can be seen that the estimation results are shown in the influence value of the financial literacy, illusion of control and overconfidence variables as follows:

- 1) The regression coefficient of financial literacy (b1) is -0.080 and is negative. This means that the value of the variable Y1 will decrease by 0.080 if the value of the variable X1 decreases by one unit and the other independent variables have a fixed value. The coefficient with a negative sign indicates that there is an opposite relationship between the financial literacy variable (X1) and the emotional maturity variable (Y1). The better the community's financial literacy does not guarantee the emotional maturity of the community, the better it will be.
- 2) The illusion of control regression coefficient (b2) is 0.179 and is positive. This means that the value of variable Y1 will increase by 0.179 if the value of variable X2 increases by one unit and the other independent variables have a fixed value. The coefficient is positive indicating that there is a direct relationship between the illusion of control variable (X2) and the emotional maturity variable (Y1). The better the community's illusion of control indicates that the community's emotional maturity is also getting better.
- 3) The regression coefficient of overconfidence (b3) is 0.143 and is positive. This means that the value of variable Y1 will increase by 0.143 if the value of variable X3 increases by one unit and the other independent variables have a fixed value. The coefficient with a positive sign indicates that there is a direct relationship between the overconfidence variable (X3) and the emotional maturity variable (Y1). The better the community's overconfidence indicates that the emotional maturity of the community is also getting better.

- 4) The results of the regression coefficient obtained show that the illusion of control factor ( $b_2 = 0.179$ ) is a more dominant factor in influencing the emotional maturity of the people in Mohungo Village.

**b. Substructural Path Analysis 1**

Based on testing the correlation coefficient and the determinant coefficient above, it can be analyzed by path analysis for sub structure 1 presented in the following calculation:

- 1) Effect of Financial Literacy (X1) on Emotional Maturity (Y1)

**Table 2. Calculation of the Direct and Indirect Effects of Variable X1 on Y1**

The direct influence of X1 on Y	$X1 \rightarrow Y$	P (a1)	$\rho_{YX1} \times \rho_{YX1}$	$-0,080 \times -0,080 = 0,0064 = 0,64\%$
Indirect influence through variable X2	$X1 \rightarrow X2 \rightarrow Y$	P (a2)	$r_{X1X2} \times \rho_{YX2}$	$-0,052 \times 0,179 = -0,0093 = 0,93\%$
The total effect of variable X1 on Y		P1	$P(a1) + P(a2)$	$0,0064 - 0,0093 = -0,0029 = 0,29\%$

Source: Processed Raw Data, 2022

- 2) The Effect of Illusion of Control (X2) on Emotional Maturity (Y1)

**Table 3. Calculation of the Direct and Indirect Effects of Variable X2 on Y1**

The direct influence of X2 on Y	$X2 \rightarrow Y$	P (b1)	$\rho_{YX2} \times \rho_{YX2}$	$0,179 \times 0,179 = 0,0320 = 3,20\%$
Indirect influence through variable X1	$X2 \rightarrow X1 \rightarrow Y$	P (b2)	$r_{X1X2} \times \rho_{YX1}$	$0,027 \times 0,143 = 0,0039 = 0,39\%$
The total effect of variable X2 on Y		P2	$P(b1) + P(b2)$	$0,0320 + 0,0039 = 0,0359 = 3,59\%$

Source: Processed Raw Data, 2022

- 3) The Effect of Overconfidence (X3) on Emotional Maturity (Y1)

**Table 4. Calculation of the Direct and Indirect Effects of Variable X3 on Y1**

The direct influence of X2 on Y	$X3 \rightarrow Y$	P (b1)	$\rho_{YX2} \times \rho_{YX2}$	$0,143 \times 0,143 = 0,0205 = 2,05\%$
Indirect influence through variable X1	$X3 \rightarrow X1 \rightarrow Y$	P (b2)	$r_{X1X2} \times \rho_{YX1}$	$0,075 \times -0,080 = -0,006 = 0,6\%$
The total effect of variable X2 on Y		P2	$P(b1) + P(b2)$	$0,0205 - 0,006 = 0,0145 = 1,45\%$

Source: Processed Raw Data, 2022

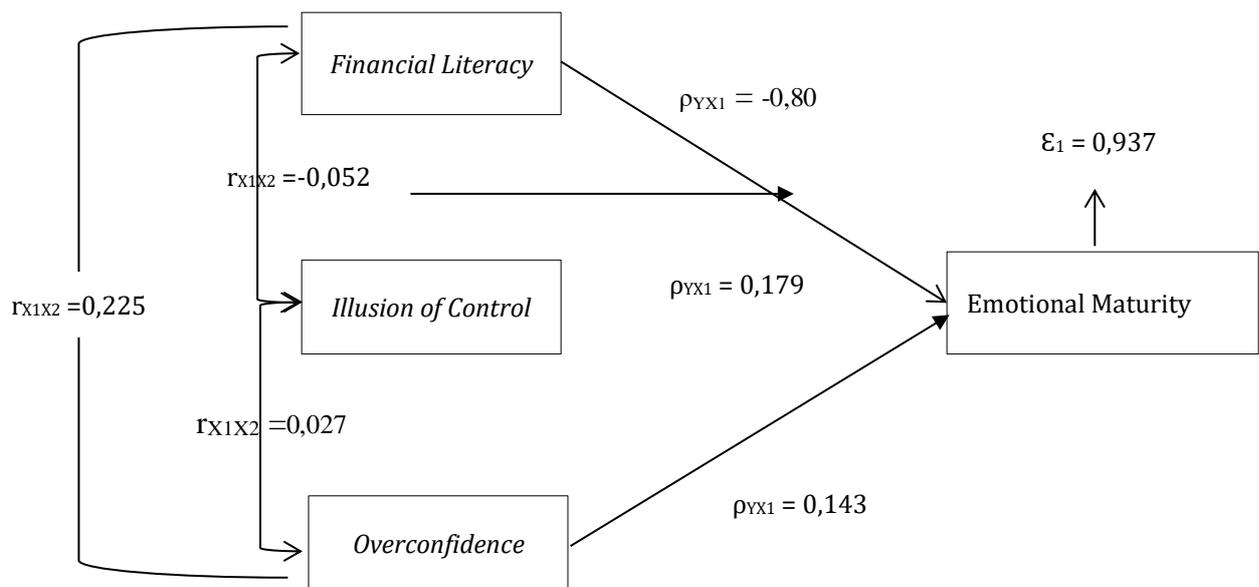
- 4) The effect of total financial literacy (X1), illusion of control (X2) and overconfidence (X3) on emotional maturity (Y1) is as follows:

The total effect of Y, X1, X2, X3 =  $P_1 + P_2 + P_3$   
 Total effect of Y, X1, X2 =  $-0.0029 + 0.0359 + 0.0145$   
 Total influence Y, X1, X2 =  $0.0475 = 4.75\%$

- 5) Total Effect of Other Variables Outside the Research

$\rho \epsilon_1 = 1 - R^2$   
 $\rho \epsilon_1 = 1 - 0.065$   
 $\rho \epsilon_1 = 0.935 = 93.5\%$

Based on the calculation data of the sub-structural path analysis 1 above, so that it can be seen clearly, it is presented in the path diagram image as follows:



**Figure 1. Substructure Path Coefficient 1**

Source: Processed Raw Data, 2022

Based on the path model image above, sub structure 1 regarding the effect of X1, X2 and X3 on Y1 the structural equation is obtained as follows:

$$Y = \rho_{YX1}X_1 + \rho_{YX2}X_2 + \rho_{YX3}X_3 + \epsilon_1$$

$$Y = -0.080 + 0.179 + 0.143 + 0.935$$

Furthermore, based on the calculations above, it can be calculated how much direct or indirect influence there is on substructure 1, so the summary results are as follows:

**Table 5. Summary of Calculation of Direct and Indirect Effects of Substructure 1**

Variable	Direct influence on KE (Y <sub>1</sub> )	Indirect influence via			Total Impact
		X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	
Financial Literacy (X <sub>1</sub> )	0,64%	-	-0,93%	-	0,29%
Illusion of Control (X <sub>2</sub> )	3,20%	-	-	0,39%	3,59%
Overconfidence (X <sub>3</sub> )	2,05%	-0,6%	-	-	1,45%

Source: Processed Raw Data, 2022

## 2. Substructure Testing 2

### a. Substructure Regression Coefficient Analysis 2

Regression coefficient analysis is used to see how much the exogenous variable (X) influences the endogenous variable (Y) which is expressed as a percentage. The percentage of the role of all independent variables shown on the value of the independent variables is indicated by the magnitude of the regression coefficient as shown in the following table:

**Table 6. Substructure Regression Coefficient 2**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	32.221	7.164		4.497	.000
	TFL	.061	.114	.068	.533	.096
	TIOC	-.032	.083	-.049	-.389	.069
	TOC	-.076	.133	-.073	-.571	.070
	TKE	-.048	.076	-.079	-.625	.034

Source: Processed Raw Data, 2022

Based on table 6 it is known that the estimation results are shown in the influence value of the financial literacy, illusion of control, overconfidence and emotional maturity variables described as follows:

- 1) The regression coefficient of financial literacy (b1) is 0.061 and is positive. This means that the value of variable Y2 will increase by 0.061 if the value of variable X1 increases by one unit and the other independent variables have a fixed value. The coefficient with a positive sign indicates that there is a direct relationship between financial literacy (X1) and the investment decision variable (Y2). The higher the community's financial literacy, the better the investment decision.
- 2) The illusion of control regression coefficient (b2) is -0.032 and is negative. This means that the value of the Y2 variable will decrease by 0.032 if the X2 variable increases by one unit and the other independent variables have a fixed value. The coefficient is negative indicating that there is an opposite relationship between the illusion of control (X2) and the investment decision variable (Y2). The higher the community's illusion of control, the lower the community's investment decisions.
- 3) The regression coefficient of overconfidence (b3) is -0.076 and is negative. This means that the value of variable Y2 will decrease by 0.076 if the value of variable X3 increases by one unit and the other independent variables have a fixed value. The coefficient is negative indicating that there is an opposite relationship between overconfidence (X3) and the investment decision variable (Y2). The better the community's overconfidence, the lower the investment decision.
- 4) The regression coefficient of emotional maturity (b4) is -0.048 and is negative. This means that the value of the Y2 variable will decrease by 0.048 if the value of the Y1 variable increases by one unit and the other independent variables have a fixed value. The coefficient is negative indicating that there is an opposite relationship between emotional maturity (Y1) and the investment decision variable (Y2). The more mature the people's emotions, the lower the investment decision.
- 5) The results of the regression coefficient obtained show that the overconfidence factor (b3 = -0.076) is the dominant factor influencing the investment decisions of the Mohungo village community.

**b. Substructural Path Analysis 2**

Based on testing the correlation hypothesis and the coefficient of determination above, it can be analyzed by path analysis for sub-structure 2 which is presented in the following calculation:

- 1) Effect of Financial Literacy (X1) on Investment Decisions (Y2)

**Table 7. Calculation of the Direct and Indirect Effects of Variable X1 on Y2**

The direct influence of X1 on Y2	$X_1 \rightarrow Y_2$	P (c1)	$\rho_{ZX1} \times \rho_{ZY1}$	$0,061 \times 0,061 = 0,0037 = 0,37\%$
Indirect influence through variable X2	$X_1 \rightarrow X_2 \rightarrow Y_2$	P (c2)	$\Gamma_{X1X2} \times \rho_{ZX2}$	$-0,052 \times -0,032 = 0,0017 = 0,17\%$
Indirect influence through the variable Y1	$X_1 \rightarrow Y_1 \rightarrow Y_2$	P (c3)	$\rho_{YX1} \times \rho_{ZY}$	$-0,080 \times -0,076 = 0,0061 = 0,61\%$
The total effect of variable X1 on Y2		P3	$P (c1) + P (c2) + P (c3)$	$0,0037 + 0,0017 + 0,0061 = 0,0115 = 1,15\%$

Source: Processed Raw Data, 2022

2) The Effect of Illusion of Control (X2) on Investment Decisions (Y2)

**Table 8. Calculation of the Direct and Indirect Effects of Variable X2 on Y2**

The direct effect of X2 on Y2	$X_2 \rightarrow Y_2$	P (d1)	$\rho_{ZX2} \times \rho_{ZX2}$	$-0,032 \times -0,032 = 0,0010 = 0,10\%$
Indirect influence through variable X1	$X_2 \rightarrow X_3 \rightarrow Y_2$	P (d2)	$r_{X1X2} \times \rho_{ZX1}$	$0,027 \times -0,076 = -0,0021 = 0,21\%$
Indirect influence through the variable Y1	$X_2 \rightarrow Y_1 \rightarrow Y_2$	P (d3)	$\rho_{YX2} \times \rho_{ZY}$	$0,179 \times -0,076 = -0,0136 = 1,36\%$
The total effect of variable X2 on Y2		P4	$P (d1) + P (d2) + P (d3)$	$0,0010 - 0,0021 - 0,0136 = -0,0147 = 1,47\%$

Source: Processed Raw Data, 2022

3) Effect of Overconfidence (X3) on Investment Decisions (Y2)

**Table 9. Calculation of the Direct and Indirect Effects of Variable X3 on Y2**

The direct effect of X2 on Y2	$X_3 \rightarrow Y_2$	P (d1)	$\rho_{ZX2} \times \rho_{ZX2}$	$-0,076 \times -0,076 = 0,0058 = 0,58\%$
Indirect influence through variable X1	$X_3 \rightarrow X_1 \rightarrow Y_2$	P (d2)	$r_{X1X2} \times \rho_{ZX1}$	$0,225 \times 0,061 = 0,0137 = 1,37\%$
Indirect influence through the variable Y1	$X_3 \rightarrow Y_1 \rightarrow Y_2$	P (d3)	$\rho_{YX2} \times \rho_{ZY}$	$0,143 \times -0,076 = -0,0109 = 1,09\%$
The total effect of variable X2 on Y2		P5	$P (d1) + P (d2) + P (d3)$	$0,0058 + 0,0137 - 0,0109 = 0,0086 = 0,86\%$

Source: Processed Raw Data, 2022

4) The Effect of Emotional Maturity (Y1) on Investment Decisions (Y2)

**Table 10. Calculation of the Direct and Indirect Effects of Variable Y1 on Y2**

The direct influence of Y1 on Y2	$Y_1 \rightarrow Y_2$	P 6	$\rho_{ZY} \times \rho_{ZY}$	$-0,048 \times -0,048 = 0,0023 = 0,23\%$
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Source: Processed Raw Data, 2022

5) The effect of total financial literacy (X1), illusion of control (X2), overconfidence (X3) and emotional maturity (Y1) on investment decisions (Y2) is as follows:

The total effect of Z, Y, X1, X2, X3 = P3 + P4 + P5 + P6

The total effect of Z, Y, X1, X2, X3 = 0.0115 - 0.0147 + 0.0086 + 0.0023

The total effect of Z, Y, X1, X2, X3 = 0.0077 = 0.77%

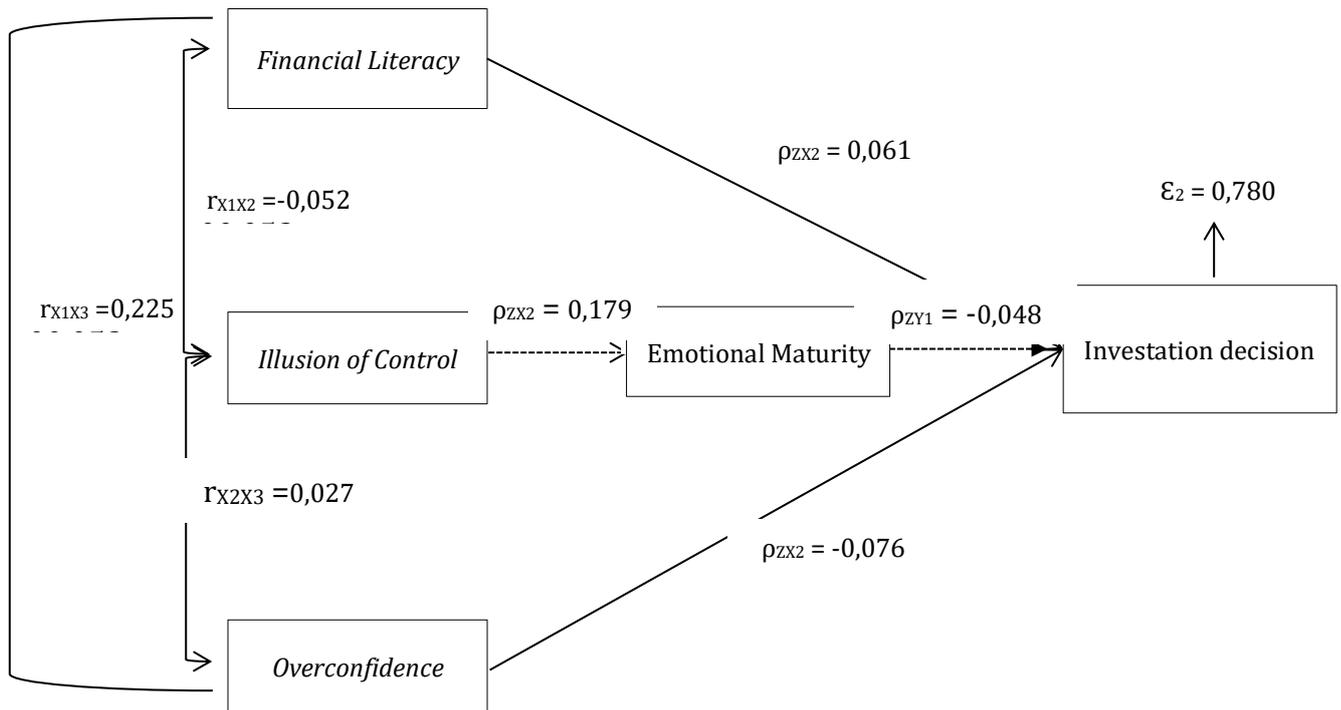
6) The total influence of other variables outside the research

$$\rho \epsilon_2 = 1 - R^2$$

$$\rho \epsilon_2 = 1 - 0.220$$

$$\rho \epsilon_2 = 0.780 = 78\%$$

Based on the calculation data of the sub-structure path analysis above, so that it can be seen clearly, it is presented in the path diagram image as follows:



**Figure 2. Substructure Path Coefficient 2**  
 Source: Processed Raw Data, 2022

Based on the path model image above, sub structure 1 regarding the effect of X1, X2 and Y1 on Y2 the structural equation is obtained as follows:

$$Y_2 = \rho_{ZX1} X_1 + \rho_{ZX2} X_2 + \rho_{ZX2} X_3 + \rho_{ZY1} Y_1 + \epsilon_2$$

$$Y_2 = 0,061 X_1 - 0,032 X_2 - 0,076 Y_1 - 0,048 + 0,780$$

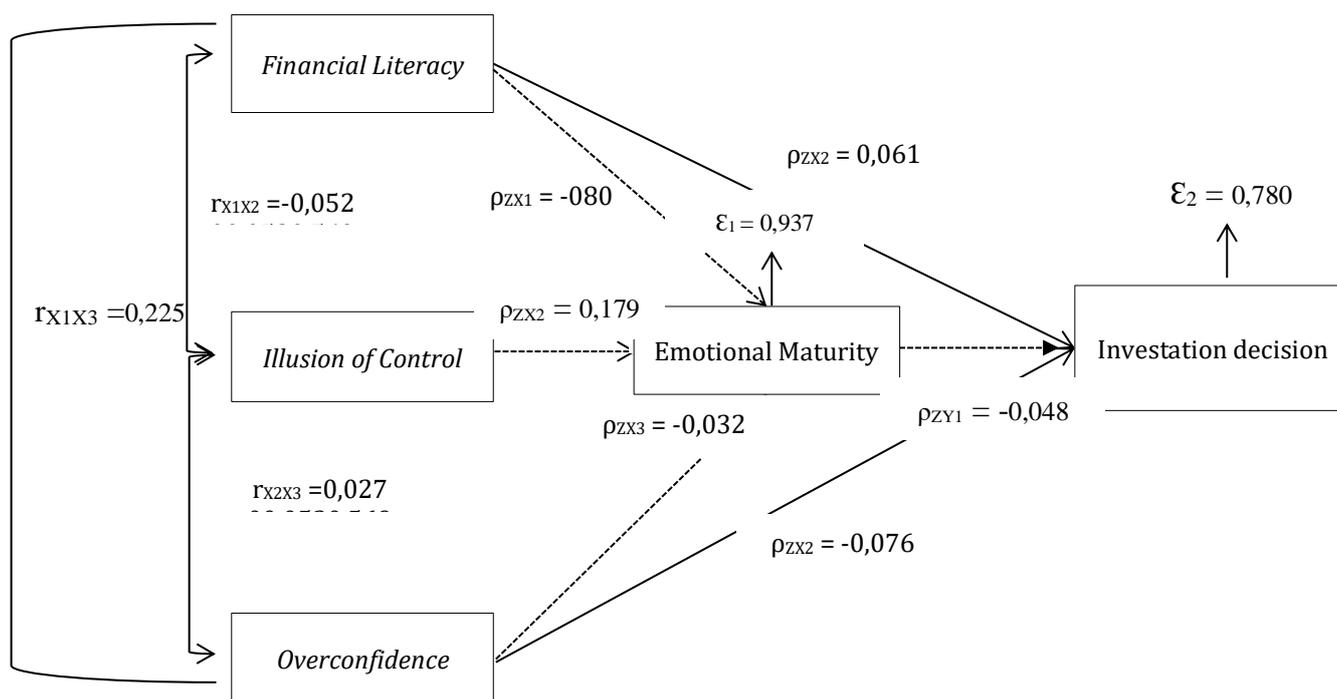
Furthermore, based on the calculations above, it can be calculated how much direct or indirect influence there is on substructure 2, so the summary results are as follows:

**Table 11. Summary of Calculation of Direct and Indirect Effects of Substructure 2**

Variable	Direct influence on KI (Y <sub>2</sub> )	Indirect influence via			Total Impact
		X <sub>1</sub>	X <sub>2</sub>	Y <sub>1</sub>	
Financial Literacy (X <sub>1</sub> )	0,37%	-	0,17%	0,61%	1,15%
Illusion of Control (X <sub>2</sub> )	0,10%	0,21%	-	1,36%	1,47%
Overconfidence (X <sub>3</sub> )	0,58%	1,37%	1,09%	-	0,86%
Emotional Maturity (Y <sub>1</sub> )	0,23%	-	-	-	0,23%

Source: Processed Raw Data, 2022

Based on the calculation above, if it is described in the overall path analysis model, it is as follows:



**Figure 3. Overall Path Coefficient**  
 Source: Processed Raw Data, 2022

### 3. Hypothesis Testing (t test)

Based on table 1 and table 6 above, the results of hypothesis testing can be presented in the following table:

**Table 12. T-Test Results**

No	Variable	Influence Weight		Signification $\alpha = 0.05$			Information	
		t hitung	>/<	t tabel	pvalue	>/<		Sig.
1	Financial Literacy	-.429	<	1.977	.096	>	0.05	H1 Rejected
2	Illusion of Control	1.334	<	1.977	.069	>	0.05	H2 Rejected
3	Overconfidence	.654	<	1.977	.070	>	0.05	H3 Rejected
4	Financial Literacy	.061	<	1.977	.034	<	0.05	H4 Accepted
5	Illusion of Control	-.032	<	1.977	.069	>	0.05	H5 Rejected
6	Overconfidence	-.076	<	1.977	.007	<	0.05	H6 Accepted
7	Emotional Maturity	-.048	<	1.977	.016	<	0.05	H7 Accepted

Source: Processed Raw Data, 2022

### Discussion

#### 1. The Effect of Financial Literacy on Emotional Maturity

The results showed that financial literacy had no significant negative effect on emotional maturity in the Mohungo Village community, Tilamuta District. This shows that the level of community financial literacy does not guarantee the emotional maturity of the community. Financial literacy relates to an individual's ability to manage the funds they have so that they can develop for a more prosperous life in the future. Meanwhile, emotional maturity is an important part of the decision-making process. So not everyone who has good financial literacy will also have good emotional maturity. Although wise or not one's financial management is closely related to one's ability to understand financial concepts, so it can be said that emotional maturity makes an important contribution to success or failure in

managing finances, but this does not fully guarantee the condition that people who have good emotional maturity will have good financial literacy skills as well.

Financial literacy is a measure of a person's understanding of financial concepts and has the ability, a confident attitude in managing personal finances through making decisions for financial planning in different time periods, both long term and short term by looking at economic conditions<sup>16</sup>. By having a high level of financial knowledge, someone will try to be able to minimize the risks they face so that decision making is done slowly and not in a hurry. In making financial decisions, good emotional maturity is needed so that good financial literacy skills can produce good decisions.

## 2. The Effect of Illusion of Control on Emotional Maturity

The results showed that illusion of control had no significant positive effect on emotional maturity in the Mohungo Village community, Tilamuta District. This shows that the higher the illusion of control in society does not reflect good emotional maturity. Illusion of control is a condition where a person has more confidence in the ability to predict or is more satisfying when a person has more involvement in it. Someone who has a high illusion of control will believe that it seems as if he can control his surroundings even though in reality he is not. In this study, the illusion of control has a positive effect on emotional maturity, but the effect is not significant because people who are emotionally mature tend to be careful.

The level of emotional maturity of each individual must be different so that it will also distinguish how the individual controls himself. Someone who is said to be emotionally mature is someone who can control himself well so that every decision he makes, he will release his emotions appropriately according to the circumstances at hand. With good emotional maturity someone will be able to assess the situation critically first before he acts emotionally. Individuals who are emotionally mature will have good self-control, be able to express their emotions appropriately according to circumstances so that they are better able to adapt and react appropriately according to the demands they face. Someone who is emotionally mature will tend to be able to control himself in his behavior. With controlled emotions, it will enable a person to think or behave in a more directed manner, be able to channel his inner impulses correctly and not deviate from the prevailing norms and be able to make better decisions. Therefore, someone who has high illusion of control does not describe emotional maturity. Even though emotional maturity and self-control are directly proportional, someone with good emotional maturity will not make decisions or do things excessively without good judgment.

## 4. The Effect of Overconfidence on Emotional Maturity

The results showed that overconfidence had no significant positive effect on emotional maturity in the people of Mohungo Village, Tilamuta District. This shows that the higher a person's overconfidence does not necessarily reflect the high emotional maturity. Overconfidence is a feeling of excessive self-confidence in terms of abilities or knowledge possessed<sup>17</sup>. Overconfidence will make a person overestimate the knowledge possessed by the person himself and underestimate the predictions made because they tend to overestimate their abilities. Thus, overconfidence will influence someone to take risks where this is in contrast to someone who has emotional maturity so that he acts more carefully by maximizing profits and minimizing risks in making a decision.

Emotional maturity can affect the ability to make decisions, whether the decisions taken are rational or emotional. The ability to make good decisions will be based on the

knowledge possessed, the potential possessed, the surrounding environment and the opinions of others. Vice versa, if emotional maturity is low, then the ability to make decisions will tend to be impulsive. So someone who has overconfidence behavior indicates a low level of emotional maturity. Because in making decisions, people who are overconfident trust their abilities excessively, so that if they are not accompanied by good emotional maturity, the decisions taken will not be constructive and realistic.

#### 5. The Indirect Effect of Financial Literacy on Investment Decisions Through Emotional Maturity

The results of the study show that financial literacy indirectly has a positive and significant effect on investment decisions through emotional maturity in the Mohungo Village community, Tilamuta District. Making an investment requires an appropriate decision where each decision can affect the return on investment. In making a decision, each individual will behave rationally and irrationally, depending on the information he gets. Someone with good financial literacy tends to have better control in determining a variety of investments because they have a lot of financial information. When an individual is going to plan for an investment, the individual must have good financial knowledge so that his financial decisions have a clear direction. Individuals with good financial literacy skills can also be used as individual considerations in making financial decisions and investment planning, but if individuals do not have good financial literacy it will result in mistakes in financial management, lack of planning for future savings and a lack of welfare for that person's life.

Financial literacy is a combination of awareness, knowledge, skills, attitudes, behavior and emotional maturity needed to make sound financial decisions in order to achieve individual financial well-being. Financial literacy plays an important role in making one's financial decisions so that one is more responsible in managing the money one has. Communities with a high level of financial literacy have the potential to provide higher productivity values. In addition, financial literacy needs to be applied more broadly to form a society that has higher competitiveness in realizing financial prosperity. The results of this study are supported by research conducted by Rikziana & Kartini (2017) which found that financial literacy can assist a person in making individual financial decisions including investment decisions<sup>18</sup>.

#### 6. Indirect Effect of Illusion of Control on Investment Decisions Through Emotional Maturity

The results of the study show that the illusion of control indirectly has no significant negative effect on investment decisions through the emotional maturity of the people in Mohungo Village, Tilamuta District. Illusion of control is seen as a dangerous thing for investors in decision making, because of the tendency to believe that they can control or at least influence outcomes that they clearly cannot. Illusion of control occurs when individuals misinterpret the degree of control they have over situations and outcomes. Investors who have an illusion of control attitude prefer stocks over bonds, because they have a high risk and they cannot control their behavior. When individuals (investors) experience illusion of control, they tend to feel capable of making optimal choices and often ignore the help of others in making decisions. In addition, investors who experience the illusion of control have the notion that everything can be done properly so as to eliminate the possibility of risk occurring. Therefore, someone who has a high illusion of control that is not accompanied by emotional maturity will tend to be impulsive in making investment decisions.

The results of this study are different from the results of research conducted by Syed and Mohsin (2014) who found that the illusion of control has a positive and significant effect on investment decisions<sup>20</sup>. However, research from Pradikasari and Yuyun (2018) supports the results of this study by stating that there is no relationship between illusion of control on investment decisions.

#### 7. The Indirect Effect of Overconfidence on Investment Decisions Through Emotional Maturity

The results showed that overconfidence indirectly had a negative and significant effect on investment decisions through the emotional maturity of the people in Mohungo Village, Tilamuta District. Overconfidence is an aspect of bias that will influence someone in making investment decisions. Overconfidence is defined as a feeling of excessive confidence in the abilities and knowledge possessed in making investments<sup>21</sup>. This overconfidence behavior will have bad consequences in making investment decisions, because irrational actions that make an investor estimate the knowledge and abilities possessed are too excessive without thinking about the risks that will be obtained later. An investor who has a high level of overconfidence will overestimate the knowledge he has, they estimate that he will get a greater profit in making an investment. Investors who have high overconfidence will often trade, while those who have low overconfidence will be more careful in making transactions in the capital market.

The results of this study are in accordance with the prospect theory where a person acts irrationally, thus making investors feel excessively confident, causing them to overestimate the knowledge they have and underestimate the risks that exist and not think about the risks that will be obtained later. This is because they feel that the investments they make are always profitable, their knowledge and abilities are better than others and they are confident in the investment choices they make. The results of this study are supported by the results of research conducted by Wulandari and Iramani (2014) who found that overconfidence has no significant effect on investment decisions<sup>22</sup>.

#### 8. The Effect of Emotional Maturity on Investment Decisions

The results showed that emotional maturity has a negative and significant effect on investment decisions in the Mohungo Village community, Tilamuta District. This indicates that not all individuals who have good emotional maturity will make good investment decisions either. In theory, emotions are an important part of the decision-making process, especially for decisions that have a high degree of uncertainty. However, based on research results, it shows that emotional maturity has a negative influence on investment decisions. Emotional factors are closely related to the process of making investment decisions. This relates to the existence of good emotions and bad emotions that can affect investors' decisions in investing. If investors are in a good mood, they can invest their funds appropriately and well. Investors who initially are not affected by other parties related to the investment they make can be affected when their emotions are bad or they are in a bad mood. Emotional investors before deciding to invest, they try to collect as much information as possible through the sources they have. However, they prefer information that tends to support the actions or opinions they have and will ignore unpleasant information. Another tendency is that emotional investors will ignore transactions that have risks that cannot be calculated and tend to prefer local stocks over foreign stocks. They also need a long time to realize the losses incurred due to market growth in a detrimental direction. In addition, emotional investors have a tendency to remain silent and only pay attention to losses that occur until they actually lose money.

The results of this study are in line with the results of research conducted by Kartini and Nuris (2015) which state that emotions have a negative effect on investment decisions. However, the results of this study are inversely proportional to the results of research conducted by Riaz and Haroon (2015) who obtained results that emotional bias has a positive effect on investment decision making<sup>23</sup>.

## **CONCLUSION**

Based on the results of data analysis and also testing the hypotheses that have been described in the previous chapter, the authors draw the following conclusions: Financial literacy has no significant negative effect on emotional maturity in the Mohungo Village community, Tilamuta District. This shows that the level of community financial literacy does not guarantee the emotional maturity of the community. Illusion of control has no significant positive effect on emotional maturity in the Mohungo Village community, Tilamuta District. This shows that the higher the illusion of control in society does not reflect good emotional maturity. Overconfidence has no significant positive effect on emotional maturity in the Mohungo Village community, Tilamuta District. This shows that the higher a person's overconfidence does not necessarily reflect the high emotional maturity. Financial literacy indirectly has a positive and significant effect on investment decisions through emotional maturity in the Mohungo Village community, Tilamuta District. Illusion of control indirectly has no significant negative effect on investment decisions through the emotional maturity of the people in Mohungo Village, Tilamuta District. Overconfidence indirectly has a negative and significant effect on investment decisions through the emotional maturity of the people in Mohungo Village, Tilamuta District. Emotional maturity has a negative and significant effect on investment decisions in the Mohungo Village community, Tilamuta District. This indicates that not all individuals who have good emotional maturity will make good investment decisions either.

Based on the results of the research and conclusions that have been stated above, the things that can be suggested in this study are as follows: It is expected that the government and related institutions as well as financial service institutions can be more proactive in socializing the importance of financial literacy and balancing the development of public financial literacy by developing investment products that make it easier for the community so that people can be more interested in making investments. For future researchers, it is hoped that they can add other variables such as confirmation bias or experienced regret in their research which are also part of psychological bias. Future researchers are also expected to be able to increase the number of respondents so that the results obtained can be more valid because in this study due to time constraints, they only took samples in one village.

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