

# The Influence of Cognitive Dissonance Bias, Overconfidence Bias, and Herding Bias on the Investment Decisions of West Kalimantan Society in the Indonesia Stock Exchange

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This study examines the influence of cognitive dissonance bias, overconfidence bias, and herding bias on investment decisions in stocks listed on the Indonesia Stock Exchange. The study employs a questionnaire method as a data collection technique, involving a sample of 150 respondents, all of whom are residents of West Kalimantan who invest in stocks on the Indonesia Stock Exchange. The data analysis techniques used include multiple linear regression analysis, multiple correlation coefficient (R), coefficient of determination ( $R^2$ ), simultaneous test (F-test), and partial test (t-test). The results of the study indicate that cognitive dissonance bias, overconfidence bias, and herding bias have a positive and significant influence on investment decisions. This suggests that these three types of behavioral biases play an important role in the individual investment decision-making process. In other words, when investors experience a mismatch between their beliefs and new information, exhibit excessive self-confidence, or tend to follow the decisions of the majority, they are more likely to make investment decisions without thoroughly considering rational analysis. These findings highlight the importance of understanding investor psychology and financial literacy in minimizing the impact of cognitive biases. Proper education and enhanced awareness of financial behavior are expected to help investors make more objective and rational decisions, thereby reducing potential losses and improving the quality of investment decisions in the capital market.

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## 1. Introduction

### 1.1 Background

Investment decision is a decision to allocate funds at present with the expectation of obtaining greater returns in the future than the amount initially invested (Putra & Cipta, 2022). Investors' attitudes in making investment decisions can be classified into two types: rational and irrational attitudes. A rational attitude is the characteristic of an investor who thinks using logic and common sense, while an irrational attitude refers to an investor's way of thinking that is not based on logical reasoning.

Currently, investment has become one of the options for individuals to grow their money, with varying levels of risk. In 2014, the Indonesia Stock Exchange (IDX) reduced the number of shares in one lot from 500 to 100, making it easier for investors to invest. This change was one of the reasons

for the significant increase in the number of Investor Identification Numbers (SID), as investors no longer needed to invest large amounts of capital.

Investor interest in investing in companies listed on the Indonesia Stock Exchange (IDX) is also reflected in the increase in stock trading value. According to data published by the IDX, the total stock trading value in 2021 was IDR 3,262.46 trillion and increased in 2022, reaching IDR 3,617.90 trillion. However, in 2023, there was a decline in the trading value, which dropped to only IDR 2,568.33 trillion.

Stock trading data in the West Kalimantan Province from 2021 to 2023 recorded a total of 17 listed companies. The trading volume in West Kalimantan in 2021 was 67,603.57 million with a trading value of IDR 20,575.86 billion. In 2022, the trading volume decreased to 63,656.34 million with a trading value of IDR 18,044.30 billion. Finally, in 2023, both the trading volume and trading value experienced a significant decline to 39,432.84 million and IDR 11,864.24 billion, respectively.

The decline in trading volume and value over the past three years indicates challenges or unfavorable market conditions in the region. Factors such as global and regional economic situations, regulations, and local investor interest may have contributed to this downward trend. This, in turn, affects investors' ability to buy or sell shares easily without impacting market prices.

Cognitive dissonance bias is the mental conflict experienced by an investor when faced with facts that contradict their beliefs or assumptions Fitriani (Fitriani, Puspita & Yuliari, 2023). An individual exhibiting cognitive dissonance bias will experience mental discomfort caused by the emergence of new information that conflicts with previous information, leading to doubt about the decision to be made due to the potential for negative consequences. As a result, the investor will reconsider the possible gains and losses that may arise.

Cognitive dissonance bias is the mental conflict experienced by an investor when faced with facts that contradict their beliefs or assumptions (Fitriani, Puspita & Yuliari, 2023). Overconfidence bias leads investors to place excessive trust in the accuracy of their own analytical abilities, even though this confidence is merely an illusion and can result in investment losses.

Overconfidence bias is a behavior in which an individual is overly confident in their abilities and predictive skills, believing they will always succeed (Theressa & Armansyah, 2022). This behavior is considered irrational, as investors do not base their investment decisions on available information or the fundamental value of a company, but rather on the actions of other investors or market noise. Investors engage in herding behavior due to the lack of clear information, which drives them to follow the actions of other investors or a previously formed consensus.

## *1.2 Problem Statement*

Investment in the capital market, particularly in the form of stocks on the Indonesia Stock Exchange (IDX), is increasingly gaining interest from the public, including the people of West Kalimantan. This trend is driven by rising financial literacy, easier access to investment information, and technological support that allows individuals to invest more conveniently. However, in practice, investment decisions made by the public are not always based on rational and logical considerations. Many investors are influenced by various psychological biases that affect how they assess risks and opportunities. Observations of investor behavior in West Kalimantan reveal the tendency of several

biases that influence investment decisions, namely cognitive dissonance bias, overconfidence bias, and herding bias. Cognitive dissonance bias occurs when investors experience mental conflict between their existing beliefs and market realities, making it difficult for them to accept new information that contradicts their previous assumptions. Meanwhile, overconfidence bias is reflected in investors' excessive confidence in their analytical and predictive abilities, often leading them to ignore existing risks. On the other hand, herding bias is seen in the tendency of investors to follow the decisions or actions of the majority without conducting personal analysis, especially when market information is unclear.

### *1.3 Objectives and Scope*

The purpose of this study is to determine the effect of cognitive dissonance bias, overconfidence bias, and herding bias on investment decisions in stocks on the Indonesia Stock Exchange.

## **2. Literature Review**

### *2.1 Related Work*

1. Cognitive dissonance is a state of imbalance that occurs when one's cognition is inconsistent. It is a condition or situation in which conflict arises because the information obtained differs from previously accepted understanding. This situation, where a person feels uncomfortable with the new information they receive, can create doubt about the initial understanding they had.
2. Overconfidence is defined as an excessive sense of self-confidence that leads to poor outcomes or decisions in investment. This condition is considered normal and reflects a person's high level of confidence in predicting success. Actions that are not based on rationality cause an investor to overestimate their knowledge and abilities without considering the potential risks they may face.
3. Herding bias can trigger the formation of asset bubbles, where the price of an asset rises drastically above its fundamental value due to a large number of investors following the trend and buying in. When prices fall, this can result in significant losses for investors. In social psychology theory, herding is also explained through the concept of conformity, where individuals tend to follow the group to avoid social pressure or to feel psychologically safe.
4. Investment decision is a decision to allocate funds at the present time with the expectation of obtaining greater returns in the future than the amount initially invested.

The study conducted by Fitri and Hariyanto (2023), entitled *The Impact of Social Media, Herding Bias, Gambler's Fallacy, and Framing Effect on Investment Decisions among Gen Z Investors in Pontianak City*, shows that social media and the framing effect have a positive and significant influence on investment decisions. Meanwhile, herding bias and the gambler's fallacy have a negative and significant influence on investment decisions.

The study conducted by Pertiwi and Panuntun (2023), entitled *The Influence of Herding Behavior, Cognitive Bias, and Overconfidence Bias on Investment Decisions*, shows that herding behavior, cognitive bias, and overconfidence bias have a positive and significant effect on investment decisions.

The study conducted by Afriani and Halmawati (2019), entitled *The Influence of Cognitive Dissonance Bias, Overconfidence Bias, and Herding Bias on Investment Decision-Making*, shows

that cognitive dissonance bias and overconfidence bias have a positive and significant effect on investment decision-making, while herding bias has a negative and significant effect on investment decision-making.

## 2.2 Research Gap

Research on investor behavior has been widely conducted, particularly those examining the influence of psychological biases such as cognitive dissonance, overconfidence, and herding bias on investment decisions. Most of these studies have focused on investors in major urban areas such as Jakarta, Surabaya, and Bandung, or have been carried out in the context of institutional investors and younger generations such as Gen Z. Moreover, the majority of these studies emphasize the direct relationship between psychological biases and investment decisions without taking into account geographical or cultural factors that shape investor characteristics.

## 3. Methodology

### 3.1 Data Collection

This study uses an associative approach by utilizing primary and secondary data. Primary data is obtained through the distribution of questionnaires, while secondary data comes from literature, company data, and internet sources relevant to the study.

The population used in this study is the people of West Kalimantan who invest in stocks on the Indonesia Stock Exchange, with a total of 77,947 investors in 2023. The sampling technique uses a non-probability sampling method, namely purposive sampling. Purposive sampling is the determination of samples based on certain criteria, namely:

- a. Investors who use a Single Investor Identification (SID).
- b. People in West Kalimantan who invest in stocks listed on the Indonesia Stock Exchange.

The sample size is determined using the Slovin formula:

$$n = \frac{N}{1 + N e^2}$$

$$n = \frac{77.947}{1 + 77.947 (0,10)^2}$$

$$n = \frac{77.947}{774,97}$$

Based on the above calculation, the sample size (n) obtained is 150 respondents from the community in West Kalimantan who invest in stocks on the Indonesia Stock Exchange.

### 3.2 Analysis Techniques

The data analysis techniques used in this study include descriptive analysis, validity test, reliability test, normality test, linearity test, multicollinearity test, multiple linear regression analysis, R square determinant test, simultaneous test (F test), and partial test (t test).

### 3.3 Validation

The method used in this study includes three main stages:

#### 1. Validity Test

Validity is a test of research questions aimed at determining the extent to which respondents understand the questions posed by the researcher (Sahir, 2021). This validity test is conducted using the criterion that if the obtained value is positive and the calculated  $r$  ( $r$ -count)  $\geq r$ -table, then the tested item is declared valid. Conversely, if the  $r$ -count  $\leq r$ -table, then the item is declared invalid (Aunillah, 2021).

#### 2. Reliability Test

Reliability is the process of testing the consistency of respondents' answers. To measure the reliability of research data, the Cronbach's Alpha test is used (Sahir, 2021). This reliability test is conducted using the criterion that if the result obtained is less than 0.6, the item is considered less reliable or not good (Aunillah, 2021).

#### 3. Normality Test

Normality test is used to determine whether the independent and dependent variables are normally distributed or not (Sahir, 2021). The criteria used are as follows if the significance value or probability value is  $> 0.05$ , then the hypothesis is accepted because the data is normally distributed, and if the significance value or probability value is  $< 0.05$ , then the hypothesis is rejected because the data is not normally distributed.

#### 4. Linearity Test

The linearity test aims to show that the means obtained from the sample data groups lie along straight lines (Sahir, 2021). The basis for decision-making is as follows if the significance value of deviation from linearity is  $> 0.05$ , then there is a linear relationship, and if the significance value of deviation from linearity is  $< 0.05$ , then there is no linear relationship.

#### 5. Multicollinearity Test

The multicollinearity test is used to determine whether there is a high correlation between independent variables (Perdana, 2016). If the VIF value is around  $< 10$  and the Tolerance value is  $< 0.10$ , then it is said that there is no multicollinearity problem, and if the VIF value is around  $> 10$  and the Tolerance value is  $\geq 0.10$ , then it is said that there is no multicollinearity problem.

#### 6. Multiple Linear Regression Analysis

Multiple regression is an analysis method that consists of more than two variables, namely two or more independent variables and one dependent variable (Sahir, 2021).

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Explanation:

Y : Investment Decision

$X_1$  : Cognitive Dissonance Bias  
 $X_2$  : Overconfidence Bias  
 $X_3$  : Herding Bias  
 $a$  : Constant  
 $b_1, b_2, b_3$  : Regression Coefficients  
 $e$  : *Error*

#### 7. Correlation Coefficient (R)

The correlation coefficient is a number that indicates the strength of the relationship between two or more variables, or it can be used to determine the direction of the two (Tyastirin and Hidayati, 2017).

#### 8. Coefficient of Determination Test ( $R^2$ )

The coefficient of determination, often symbolized by  $R^2$ , essentially measures the extent of the influence of independent variables on the dependent variable (Sahir, 2021)

#### 9. Simultaneous Test (F Test)

The F test is used to determine whether there is a simultaneous influence of the independent variables on the dependent variable (Sahir, 2021).

#### 10. Partial Test (t test)

The partial test or t-test is a test of the regression coefficients individually, to determine the partial significance of each independent variable on the dependent variable (Sahir, 2021).

### 4. Results and Discussion

#### 4.1 Key Findings

##### 1. Validity Test

The validity test is conducted by correlating the score of each statement or question item with the total score of all items. The test result (r-count) is then compared with the r-table value. The r-table value is obtained using the formula  $df = n - 4 = 150 - 4 = 146$  with a significance level of 0.05, resulting in an r-table value of 0.1614.

**Table 1**  
**Validity Test Results *Bias Cognitive Dissonance* ( $X_1$ )**

Nomor Butir Pertanyaan	Pearson Corelation ( $r_{hitung}$ )	$r_{tabel}$	Kriteria
X.1	0,870	0.1614	Valid
X.2	0,766	0.1614	Valid
X.3	0,829	0.1614	Valid
X.4	0,712	0.1614	Valid
X.5	0,870	0.1614	Valid
X.6	0,745	0.1614	Valid

X.7	0,766	0.1614	Valid
X.8	0,713	0.1614	Valid
X.9	0,596	0.1614	Valid

Source: Primary data, processed by the researcher, 2025

The results of the validity test in Table 1 show that all items (statements) in the cognitive dissonance bias variable ( $X_1$ ) are valid, because the r-count (Pearson correlation) values are greater than the r-table value (0.1614).

**Table 2**  
**Validity Test Results *Bias Overconfidence* ( $X_2$ )**

<b>Nomor Butir Pertanyaan</b>	<b>Pearson Corelation (<math>r_{hitung}</math>)</b>	<b><math>r_{tabel}</math></b>	<b>Kriteria</b>
X.1	0,338	0.1614	Valid
X.2	0,434	0.1614	Valid
X.3	0,674	0.1614	Valid
X.4	0,766	0.1614	Valid
X.5	0,653	0.1614	Valid
X.6	0,703	0.1614	Valid
X.7	0,576	0.1614	Valid
X.8	0,782	0.1614	Valid
X.9	0,607	0.1614	Valid

Source: Primary data, processed by the researcher, 2025

The results of the validity test in Table 2 show that all items (statements) in the overconfidence bias variable ( $X_2$ ) are valid, because the r-count (Pearson correlation) values are greater than the r-table value (0.1614).

**Table 3**  
**Validity Test Results *Bias Herding* ( $X_3$ )**

<b>Nomor Butir Pertanyaan</b>	<b>Pearson Corelation (<math>r_{hitung}</math>)</b>	<b><math>r_{tabel}</math></b>	<b>Kriteria</b>
X.1	0,735	0.1614	Valid
X.2	0,704	0.1614	Valid
X.3	0,746	0.1614	Valid
X.4	0,553	0.1614	Valid
X.5	0,685	0.1614	Valid
X.6	0,730	0.1614	Valid
X.7	0,376	0.1614	Valid
X.8	0,484	0.1614	Valid
X.9	0,358	0.1614	Valid

Source: Primary data, processed by the researcher, 2025



The results of the validity test in Table 3 show that all items (statements) in the herding bias variable ( $X_3$ ) are valid, because the r-count (Pearson correlation) values are greater than the r-table value (0.1614).

**Table 4**  
**Validity Test Results Investment Decision (Y)**

Nomor Butir Pertanyaan	Pearson Correlation ( $r_{hitung}$ )	$r_{tabel}$	Kriteria
Y.1	0,362	0.1614	Valid
Y.2	0,706	0.1614	Valid
Y.3	0,386	0.1614	Valid
Y.4	0,670	0.1614	Valid
Y.5	0,719	0.1614	Valid
Y.6	0,581	0.1614	Valid
Y.7	0,728	0.1614	Valid
Y.8	0,366	0.1614	Valid
Y.9	0,386	0.1614	Valid

Source: Primary data, processed by the researcher, 2025

The results of the validity test in Table 4 show that all items (statements) in the investment decision variable (Y) are valid, because the r-count (Pearson correlation) values are greater than the r-table value (0.1614).

## 2. Reliability Test

**Table 5**  
**Reliability Test Results**

Variabel	Cronbach's Alpha	Standar Reliabilitas	Kriteria
<i>Bias Cognitive Dissonance</i> ( $X_1$ )	0,912	0,60	Reliabel
<i>Bias Overconfidence</i> ( $X_2$ )	0,767	0,60	Reliabel
<i>Bias Herding</i> ( $X_3$ )	0,806	0,60	Reliabel
Keputusan Investasi (Y)	0,716	0,60	Reliabel

Source: Primary data, processed by the researcher, 2025

Table 5 shows that the items (statements) in the Cognitive Dissonance Bias ( $X_1$ ), Overconfidence Bias ( $X_2$ ), Herding Bias ( $X_3$ ), and Investment Decision (Y) variables are reliable because they have Cronbach's Alpha values greater than 0.60.

## 3. Normality Test

**Table 6**  
**Normality Test Results**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		150
Normal Parameters <sup>a,b</sup>	Mean	.0000000



	Std. Deviation	1.35264857
Most Extreme Differences	Absolute	.044
	Positive	.036
	Negative	-.044
Test Statistic		.044
Asymp. Sig. (2-tailed)		.200
a. Test distribution is Normal.		
b. Calculated from data.		

Source: Primary data, processed by the researcher, 2025

Table 6 shows an Asymp.Sig (2-tailed) value of 0.200, which is greater than 0.05, thus it can be concluded that the tested data is normally distributed.

#### 4. Linearity Test

**Table 7**  
**Linearity Test Results of Cognitive Dissonance Bias and Investment Decision**

ANOVA Table							
			Sum of Squares	Df	Mean Square	F	Sig.
Bias_Cognitive_Dissonance* Keputusan_Investasi	Between Groups	(Combined)	2.096.977	26	80.653	112.337	.000
		Linearity	2.080.323	1	2.080.323	2.897.574	.000
		Deviation from Linearity	16.654	25	.666	.928	.567
	Within Groups		88.308	123	.718		
	Total		2.185.285	149			

Source: Primary data, processed by the researcher, 2025

The results of the linearity test in Table 7 show that the significance value of the deviation from linearity is 0.567, which is greater than the significance level of 0.05. Therefore, it can be concluded that there is a linear relationship between the cognitive dissonance bias variable and the investment decision.

**Table 8**  
**Linearity Test Results of Overconfidence Bias and Investment Decision**

ANOVA Table							
			Sum of Squares	Df	Mean Square	F	Sig.
Bias_overconfidence* Keputusan_Investasi	Between Groups	(Combined)	277.943	17	16.350	1.131	.331
		Linearity	99.112	1	99.112	6.859	.010
		Deviation from Linearity	178.831	16	11.177	.774	.713
	Within Groups		1.907.342	132	14.450		
	Total		2.185.285	149			

Source: Primary data, processed by the researcher, 2025

The results of the linearity test in Table 8 show that the significance value of the deviation from linearity is 0.713, which is greater than the significance level of 0.05. Therefore, it can be concluded that there is a linear relationship between the overconfidence bias variable and the investment decision.

**Table 9**  
**Linearity Test Results of Herding Bias and Investment Decision**

ANOVA Table							
			Sum of Squares	Df	Mean Square	F	Sig.
Bias_herding* Keputusan_Inv estasi	Between Groups	(Combined)	367.089	17	21.593	1.568	.082
		Linearity	121.759	1	121.759	8.840	.004
		Deviation from Linearity	245.330	16	15.333	1.113	.349
	Within Groups		1.818.197	132	13.774		
	Total		2.185.285	149			

Source: Primary data, processed by the researcher, 2025

The results of the linearity test in Table 9 show that the significance value of the deviation from linearity is 0.349, which is greater than the significance level of 0.05. Therefore, it can be concluded that there is a linear relationship between the herding bias variable and the investment decision.

## 5. Multicollinearity Test

**Table 10**  
**Multicollinearity Test Results**

Coefficients <sup>a</sup>				
Model		Collinearity Statistics		
		Tolerance	VIF	
1	Bias Cognitive Dissonance	.996	1.004	
	Bias Overconfidence	.339	2.948	
	Bias Herding	.339	2.952	
a. Dependent Variable: Keputusan Investasi				

Source: Primary data, processed by the researcher, 2025

The results of the multicollinearity test in Table 10 show that the Tolerance values for the cognitive dissonance bias, overconfidence bias, and herding bias variables are greater than 0.10, and the VIF values for these variables are less than 10. Therefore, it can be concluded that there is no indication of multicollinearity.

## 6. Multiple Linear Regression Analysis

**Table 11**  
**Multiple Linear Regression Test Results**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.218	.151		8.041	.000
	Bias Cognitive Dissonance	.065	.020	.164	3.297	.001
	Bias Overconfidence	.229	.053	.365	4.288	.000
	Bias Herding	.304	.057	.453	5.319	.000
a. Dependent Variable: Keputusan Investasi						

Source: Primary data, processed by the researcher, 2025

Based on Table 11, the regression equation is as follows:

$$Y = 1.218 + 0,065 X_1 + 0,229 X_2 + 0,304 X_3$$

The multiple linear regression equation used in this study can be explained as follows:

- Based on the results of the multiple linear regression, the constant value is 1.218. This indicates that if the variables cognitive dissonance bias, overconfidence bias, and herding bias are equal to zero, then the investment decision variable is 1.218.
- Based on the results of the multiple linear regression, the coefficient value for cognitive dissonance bias is 0.065. This indicates that if the cognitive dissonance bias variable increases by one unit, the investment decision variable will increase by 0.065 units.
- Based on the results of the multiple linear regression, the coefficient value for overconfidence bias is 0.229. This indicates that if the overconfidence bias variable increases by one unit, the investment decision variable will increase by 0.229 units.
- Based on the results of the multiple linear regression, the coefficient value for herding bias is 0.304. This indicates that if the herding bias variable increases by one unit, the investment decision variable will increase by 0.304 units.

## 7. Correlation Coefficient (R)

**Table 12**  
**Correlation Coefficient (R) Test Results**

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801	.642	.635	1.36647
a. Predictors: (Constant), Bias Cognitive Dissonance, Bias Overconfidence, Bias Herding				
b. Dependent Variable: Keputusan Investasi				

Source: Primary data, processed by the researcher, 2025

Table 12 shows that the correlation coefficient (R) value obtained from the data processing is 0.801, which means that the variables cognitive dissonance bias, overconfidence bias, and herding bias have a very strong relationship with investment decisions, as the value falls within the interval of 0.80 – 1.000.

## 8. Coefficient of Determination Test (R<sup>2</sup>)

The results of the coefficient of determination (R<sup>2</sup>) test for the first sub-structural model can be seen in Table 12, showing that the R Square value is 0.642 or 64.2%. This means that the variables cognitive dissonance bias, overconfidence bias, and herding bias explain 64.2% of the influence on investment decisions, while the remaining 35.8% is explained by other variables outside the regression model.

## 9. Simultaneous Test (F Test)

**Table 13**  
**Simultaneous Test (F Test) Results**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	488.741	3	162.914	87.248	.000
	Residual	272.619	146	1.867		
	Total	761.360	149			
a. Dependent Variable: Keputusan Investasi						

b. Predictors: (Constant), Bias Cognitive Dissonance, Bias Overconfidence, Bias Herding

Source: Primary data, processed by the researcher, 2025

The results of the simultaneous test (F-test) in Table 13 show that the calculated F value is 87.248, which is greater than the F table value of 2.67. Therefore, it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted. In other words, the independent variables cognitive dissonance bias, overconfidence bias, and herding bias simultaneously have a significant effect on the dependent variable, which is investment decision.

#### 10. Partial Test (t test)

**Table 13**  
**Partial Test (t test) Results**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.218	.151		8.041	.000
	Bias Cognitive Dissonance	.065	.020	.164	3.297	.001
	Bias Overconfidence	.229	.053	.365	4.288	.000
	Bias Herding	.304	.057	.453	5.319	.000

a. Dependent Variable: Keputusan Investasi

Source: Primary data, processed by the researcher, 2025

The calculated t-value (tcount) will then be compared with the t-table value. The t-table value is 1.976. The results of the t-test (partial test) in Table 13 can be explained as follows:

- The t-value for the cognitive dissonance bias variable ( $X_1$ ) is 3.297, which is greater than the t-table value of 1.976. Therefore, it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, meaning that there is a significant partial effect of cognitive dissonance bias on investment decisions.
- The t-value for the overconfidence bias variable ( $X_2$ ) is 4.288, which is greater than the t-table value of 1.976. Therefore, it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, meaning that there is a significant partial effect of overconfidence bias on investment decisions.
- The t-value for the herding bias variable ( $X_3$ ) is 5.319, which is greater than the t-table value of 1.976. Therefore, it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, meaning that there is a significant partial effect of herding bias on investment decisions.

#### 4.2 Interpretation of Results

The findings of this research provide important insights into how cognitive dissonance bias, overconfidence bias, and herding bias influence investment decisions in stocks on the Indonesia Stock Exchange. Here are further interpretations:

- The findings indicate that cognitive dissonance bias has a positive and significant influence on investment decisions. This emphasizes that when investors experience a mismatch between their beliefs and actions, they tend to seek justification for their investment decisions, which ultimately strengthens their commitment to the investment choices they have made.
- The findings show that overconfidence bias has a positive and significant influence on investment decisions. This emphasizes that investors who are overly confident in their ability to analyze the market tend to make bolder investment decisions, as they believe that their knowledge and predictions are more accurate than the actual reality.

3. The findings show that herding bias has a positive and significant influence on investment decisions. This emphasizes that investors tend to follow the investment decisions of others or the majority, especially in uncertain market conditions, because they feel more secure by following collective actions rather than making decisions independently.

## **5. Discussion**

### *5.1 Comparison with Prior Research*

1. The results of the study using the cognitive dissonance bias variable are in line with the research conducted by Afriani and Halmawati (2019), which stated that cognitive dissonance bias has a significant influence on investment decision-making. This is supported by the research findings of Komara and Nugraha (2023), which stated that cognitive dissonance influences investment decisions.
2. The results of research using the overconfidence bias variable are in line with the study conducted by Pertiwi and Panuntun (2023), which stated that overconfidence bias has a positive and significant influence on investment decisions. This is supported by the research findings of Setiawan and Atahau (2018), which also stated that overconfidence bias has a positive and significant effect on investment decisions.
3. The results of the study using the herding bias variable are in line with the research conducted by Saja and Fauzihardani (2024), which stated that herding has a significant positive influence on investment decision-making. This is supported by the research findings of Tang and Asandimitra (2023), which stated that herding bias has a significant influence on investment decisions.

### *5.2 Limitations*

The limitation of the variables discussed further lies in measuring the extent to which each bias individually influences investors' decision-making, as well as the possibility of other factors beyond these three biases that may also play a role but were not included in this study.

### *5.3 Future Research*

Considering several limitations in this research, there are a few suggestions below that can be taken into consideration by various parties and for future research. It is hoped that future researchers can add other variables beyond those used in this study that may influence investment decisions, in order to produce more comprehensive results, or use different analytical tools. Furthermore, it is also expected that future research can increase the number of samples so that the research results become more accurate and can reflect investment decisions more realistically.

## **6. Conclusion**

This research analyzes how cognitive dissonance bias, overconfidence bias, and herding bias influence investment decisions in stocks on the Indonesia Stock Exchange using quantitative analysis techniques. The sample size was determined using the Slovin formula, totaling 150 respondents. The field constraint in this research was the time required to collect respondents to fill out the questionnaire.

The research results show that cognitive dissonance bias has a positive and significant influence on investment decisions, overconfidence bias has a positive and significant influence on

investment decisions, and herding bias also has a positive and significant influence on investment decisions. Simultaneously, these three independent variables have a significant influence on investment decisions.

## 7. Recommendation

The results of this research are expected to provide concrete suggestions that can be implemented, including:

1. The people of West Kalimantan need to understand that cognitive dissonance bias is the discomfort that arises when beliefs or actions are not aligned with new information. Education on cognitive dissonance bias through financial training or seminars is necessary to help the public recognize situations where this bias may occur.
2. The people of West Kalimantan need to be aware that being overly confident can lead to unnecessary risk-taking. Education on the negative impacts of overconfidence bias through financial literacy programs can help individuals recognize when they are being overly optimistic about their abilities or investment decisions.
3. The people of West Kalimantan should conduct in-depth analysis of investment opportunities. It is important to ensure that decisions are based on data and facts, not merely by following others. The public needs to realize that following market trends without proper analysis can increase the risk of losses.

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