

The Influence of Leadership, Training and Work Environment on Employee Performance at PT Bank Mandiri (PERSERO)

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Abstract

This research explores the influence of leadership, training, and work environment on employee performance at PT Bank Mandiri (Persero). Utilizing a survey approach, data was gathered from 68 respondents, selected through the Slovin Formula technique. A structured questionnaire, tested for validity and reliability, served as the primary data collection tool. Analysis was conducted using SPSS Version 27, incorporating validity and reliability tests, correlation analysis, multiple linear regression, and classical assumption tests. The results reveal that leadership, training, and work environment significantly impact employee performance. The coefficient of determination (R^2) is 0.527, indicating that these three factors explain 52.7% of the variance in employee performance, while the remaining 47.3% is attributed to other factors beyond this study. These findings underscore the critical role of strong leadership, effective training, and a conducive work environment in enhancing employee performance.

Keywords: Leadership, Training, Work Environment, Employee Performance.

INTRODUCTION

The global banking sector is experiencing significant changes driven by swift technological progress and economic globalization (Lund et al., 2017). The emergence of digital banking and fintech integration has reshaped financial services, adapting to the increasing complexity and evolving demands of customers. In line with this global shift, Indonesia's banking sector has embraced digital innovation, revolutionizing the way financial services are delivered. From mobile banking to fintech-driven solutions and digital lending, Indonesian banks are enhancing accessibility, expanding their market reach, and redefining customer experiences in an increasingly interconnected economy (Gancarczyk et al., 2022).

The rapid evolution of the banking industry, driven by technological advancements and fierce competition, has made employee performance a key determinant of organizational success (Nguyen et al., 2024). To stay ahead, companies must continuously adapt to shifting market dynamics and innovation. This study focuses on PT Bank Mandiri Tbk, one of Indonesia's largest and most influential banks. With an extensive nationwide network, Bank Mandiri offers a diverse range of services, including retail and corporate banking, investment, and treasury solutions. Committed to innovation, expansion, and operational excellence, Bank Mandiri aspires to be

Indonesia's leading financial institution and a trusted partner for its customers, serving as a key driver of the nation's economic growth (Jameaba, 2024a).

This study explores the impact of leadership, training, and the work environment on employee performance at PT Bank Mandiri, offering valuable insights into the banking sector (Jameaba, 2024b). In a fast-changing industry, ongoing skill enhancement is crucial for employees to keep up with shifting demands. Julie Beardwell and Tim Claydon (2025) highlight that well-designed training programs not only strengthen individual capabilities but also promote teamwork and collaboration. By equipping employees with the necessary knowledge and skills, effective training boosts confidence, efficiency, and overall organizational performance, making it a critical factor in sustaining competitiveness in the banking industry.

In the face of increasingly fierce competition, it is very important for the Company to optimize human resource management in order to support employee productivity and performance (Agustian et al., 2023). Therefore, in this study, one of the important aspects to be explored is how leadership, training, and work environment collectively affect the performance of PT Bank Mandiri (Persero) Tbk employees, in formulating more effective strategies to strengthen the company's competitive position in the market.

RESEARCH METHODS

This research adopts a quantitative approach with an associative framework, grounded in the philosophy of positivism. By utilizing numerical data, the study seeks to test predefined hypotheses and analyze variable relationships in a structured manner. Data is collected from a targeted population or sample through standardized research instruments, ensuring consistency and reliability. The analysis employs statistical techniques, allowing for an objective and systematic examination of the interconnected factors influencing employee performance.

The population in this study were all PT Bank Mandiri employees at the Head Office, totaling 200 people. The sampling technique in this study uses formulas from experts, the sumus used in sampling uses the formula written by Slovin, as follows:

Description:

N = Number of samples

N = Total population = 200 people

$d2$ = Precision (set at 10%) with 95% confidence level)

The variables analyzed in this study are based on research conducted at the designated location. The research focuses on employees of PT Bank Mandiri (Persero) Tbk as the study's object. The data used consists of primary sources, which are directly collected by researchers in the field through the distribution of questionnaires.

This study employs two data collection techniques: observation and questionnaires. Observation, as a data collection method, possesses unique characteristics that differentiate it from techniques like interviews and surveys. According to Sutrisno Hadi, observation is a complex

process involving various biological and psychological elements. This technique is particularly useful when research focuses on human behavior, work processes, natural phenomena, or when the number of observed respondents is relatively small (Mohajan, 2020).

RESULT AND DISCUSSION

Descriptive data provides an overview of the characteristics of the sample or population under study. Through the use of statistics such as mean, median, and standard deviation, descriptive data helps in understanding the distribution and variability of data (Cooksey & Cooksey, 2020). This analysis is important to illustrate existing patterns and trends before conducting further analysis.

Characteristics of Respondents

Table 1. Based on Education

		EDUCATION			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SMA/SMK	8	11,9	11,9	11,9
	DIPLOMA (D3)	27	40,3	40,3	52,2
	SARJANA	29	43,3	43,3	95,5
	ACADEMIC	3	4,5	4,5	100,0
	Total	67	100,0	100,0	

Source: SPSS 27

Based on the data in Table 1, respondents with a high school or vocational high school education accounted for 8 individuals (11.9%), those with a Diploma D3 were 27 individuals (40.3%), respondents with a Bachelor's degree totaled 29 individuals (43.3%), and those with a Postgraduate degree comprised 3 individuals (4.5%). Therefore, it can be concluded that the majority of respondents in this study, based on their educational background, held a Bachelor's degree, totaling 29 individuals or 43.3%.

Table 2. Based on Age

		AGE			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-25 YEARS	6	9,0	9,0	9,0
	25-30 YEARS	40	59,7	59,7	68,7
	30-40 YEARS	20	29,9	29,9	98,5
	>40 YEARS	1	1,5	1,5	100,0
	Total	67	100,0	100,0	

Source: SPSS 27

Based on the data in table 2 above, it can be seen that respondents aged 20-25 years totaled 6 people or 9.0%, those aged 25-30 years totaled 40 people or 59.7%, those aged 30-340 years totaled 20 people or 29.9% and those aged > 40 years totaled 1 person or 1.5%. So, it can be

concluded that the majority of respondents based on age in this study were 25-30 years old, namely 40 respondents or a percentage of 59.7%.

Table 3. Based on Gender

		GENDER TYPE			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BOYS	48	71,6	71,6	71,6
	WOMEN	19	28,4	28,4	100,0
	Total	67	100,0	100,0	

Source: SPSS 27

Table 3 show the results of data processing regarding the characteristics of respondents according to gender, the number of male employees is 48 people or 71.6% and the number of female employees is 19 people or 28.4%. So, it can be concluded that the majority of respondents based on gender in this study were men, namely 48 respondents or a percentage of 71.6%.

Table 4. Based on Length of Service

		LENGTH OF WORK			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 YEAR	1	1,5	1,9	1,9
	1-3 YEARS	28	41,8	53,8	55,8
	3-5 YEARS	23	34,3	44,2	100,0
	Total	52	77,6	100,0	
Missing	System	15	22,4		
Total		67	100,0		

Source: SPSS 27

Based on the data in Table 4, respondents with a work tenure of less than one year accounted for 1 person (1.5%), those with a tenure of 1-3 years totaled 28 individuals (41.8%), and those with a tenure of 3-5 years comprised 23 individuals (34.3%). Therefore, it can be concluded that the majority of respondents in this study had a work tenure of 1-3 years, totaling 28 individuals or 41.8%.

Description of Research Variables

Based on the results of the interval range, the criteria for construct measurement results can be arranged in Table 5 as follows:

Table 5. Research Variable Score Criteria

Score Value	Variable Criteria
1,00 - 1,80	Strongly Disagree
>1,80 - 2,60	Disagree

Score Value	Variable Criteria
>2,60 - 3,40	Neutral
>3,40 - 4,20	Agree
>4,20 - 5,00	Strongly Agree

Source: Sugiyono (2019)

The measurement criteria in this study are based on the average value calculated from the respondents' responses. The higher the average value obtained, the more positive the respondent's perception of the statement items and variables measured. This value reflects the respondents' views on the factors studied, namely Leadership, Training, Work Environment, and Employee Performance (Pawirosumarto et al., 2017).

Description of All Research Variables

Based on the results of the research data processing in the tables above, it shows that each research variable has an average (mean) value of 4 or more, this indicates that respondents tend to give responses that support the increase in Leadership, Training, and Work Environment at PT Bank Mandiri (Persero).

Table 6. Description of all research variables

No.	Variables	Average
1.	Leadership (X1)	4.07
2.	Training (X2)	4.02
3.	Work Environment (X3)	4.06
4.	Employee Performance (Y)	4.09

Source: Processed Questionnaire Data, (2024)

Validity Test

The validity test aims to assess whether a questionnaire effectively measures the intended variables. In this study, validity was evaluated by comparing the computed *r*-value (*r*count) with the critical *r*-value (*r*table) at a 5% significance level. Given a significance level of 0.05 and a sample size of 65 (67-2), the *r*table value is determined to be 0.240.

The criteria for evaluating validity are as follows:

- a) If $r_{count} > r_{table}$, the instrument is considered valid.
- b) If $r_{count} < r_{table}$, the instrument is considered invalid.

Reliability Test

A measuring instrument is considered reliable if it produces consistent and stable results. Reliability is assessed through a single measurement and statistical testing. In this study, reliability is evaluated using Cronbach's Alpha analysis. According to Ghazali (2019), the classification of Cronbach's Alpha values is as follows:

- a) If the Cronbach's Alpha value is greater than 0.60, the instrument is deemed reliable.

b) If the Cronbach's Alpha value is less than 0.60, the instrument is considered unreliable.

Table 7. Reliability Test Results of Independent and Dependent Variables

Variables	Cronbach Alpha	Standard Cronbach Alpha	Description
Leadership (X1)	0,626	0,600	Reliable
Training (X2)	0,689	0,600	Reliable
Work Environment (X3)	0,661	0,600	Reliable
Employee Performance (Y)	0,655	0,600	Reliable

Source: Data processed by SPSS Version 27

Classical Assumption Test

Simple Correlation Coefficient Analysis

Table 8. Simple Correlation Coefficient Test

		Correlations			
		LEADERSHIP	TRAINING	WORK ENVIRONMENT	EMPLOYEE PERFORMANCE
LEADERSHIP	Pearson Correlation	1	,658**	,532**	,539**
	Sig. (2-tailed)		,000	,000	,000
	N	67	67	67	67
TRAINING	Pearson Correlation	,658**	1	,558**	,550**
	Sig. (2-tailed)	,000		,000	,000
	N	67	67	67	67
WORK ENVIRONMENT	Pearson Correlation	,532**	,558**	1	,688**
	Sig. (2-tailed)	,000	,000		,000
	N	67	67	67	67
EMPLOYEE PERFORMANCE	Pearson Correlation	,539**	,550**	,688**	1
	Sig. (2-tailed)	,000	,000	,000	
	N	67	67	67	67

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Data processed by SPSS Version 27

Table 8 indicates that X1, X2, and X3 each have a significance value of 0.000, which is less than 0.05. Additionally, Table 8 shows that the correlation interval between the independent and dependent variables falls within the range of 0.60 to 0.799, signifying a strong and significant correlation.

Multiple Linear Regression Analysis

Multiple linear regression analysis is employed to develop the most appropriate regression model that accurately represents each factor, allowing for the assessment of the impact of variables X1, X2, and X3 on the dependent variable Y.

Table 9. Multiple Linear Regression Analysis

Coefficients ^a						
	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10,703	5,003		2,139	,036
	LEADERSHIP	,179	,132	,162	1,353	,181
	TRAINING	,154	,119	,157	1,292	,201
	WORK ENVIRONMENT	,577	,121	,514	4,750	,000

a. Dependent Variable: EMPLOYEE PERFORMANCE

Source: Data processed by SPSS Version 27

Based on table 9 above, the regression equation $Y = 10.703 - 0.179 X_1 + 0.154 X_2 + 0.577 X_3$ is obtained.

Determination Coefficient Analysis (R²)

The coefficient of determination is used to assess the degree to which independent variables impact the dependent variable. The adjusted R-squared value, representing this coefficient, is presented in Table 10 below:

Table 10. Multiple Linear Regression Analysis

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,726 ^a	,527	,505	2,36737	2,123
a. Predictors: (Constant), WORK ENVIRONMENT, LEADERSHIP, TRAINING					
b. Dependent Variable: EMPLOYEE PERFORMANCE					

Source: Data processed by SPSS Version 27

Referring to Table 10, the R² value of 0.527 indicates that X₁, X₂, and X₃ collectively account for 52.7% of the variation in dependent variable (Y). The remaining 47.3% is influenced by other factors not included in this research model.

Hypothesis Test

Partial Hypothesis Test (t)

The t statistical test is conducted to evaluate the significant influence of each independent variable on the dependent variable within a regression model. The decision-making process relies on comparing the t-count value with the t-table value.

Table 11. Linear Regression Analysis for T Test (Leadership) X1

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	19,928	5,665		,001
	LEADERSHIP	,597	,116	,539	,000
a. Dependent Variable: EMPLOYEE PERFORMANCE					
Source: Data processed by SPSS Version 27					

Table 11 displays the results for variable X1, showing a Tcount value of 1.669 and a Ttable value of 3.518. The significance value (Sig.) for Leadership (X1) is $0.000 < 0.05$, indicating that H1 is accepted, meaning Leadership (X1) has a partial effect on Employee Performance (Y).

Table 12. Linear Regression Analysis for T Test (Training) X2

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	27,384	4,096		,000
	TRAINING	,540	,102	,550	,000
a. Dependent Variable: EMPLOYEE PERFORMANCE					
Source: Data processed by SPSS Version 27					

Table 12 presents the results for variable X2, indicating a Tcount value of 1.669 and a Ttable value of 5.314. The significance value (Sig.) for Training (X2) is $0.000 < 0.05$, leading to the acceptance of H1. This confirms that Training (X2) has a partial influence on Employee Performance (Y).

Table 13. Linear Regression Analysis for T Test (Work Environment) X3

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	17,721	4,116		,000
	WORK ENVIRONMENT	,771	,101	,688	,000
a. Dependent Variable: EMPLOYEE PERFORMANCE					
Source: Data processed by SPSS Version 27					

Table 13 displays the results for variable X3, showing a Tcount value of 1.669 and a Ttable value of 5.314. The significance value (Sig.) for the X3 is $0.000 < 0.05$, leading to the acceptance of H1. This confirms that the X3 has a partial influence on Employee Performance (Y).

Simultaneous Hypothesis Test (F)

To determine the Ftable value, the formula $df = (n - k - 1)$ is used, yielding $(67 - 2 - 1) = 64$, where Ftable is 2.39. The results are deemed significant if the Fcount value exceeds the Ftable value or if the p-value is below the 0.05 significance threshold. Based on these criteria and decision-making parameters, the following F-test results were obtained in this study:

Table 14. F test (simultaneous)

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	393,546	3	131,182	23,407	,000 ^b
	Residuals	353,081	63	5,604		
	Total	746,627	66			
a. Dependent Variable: EMPLOYEE PERFORMANCE						
b. Predictors: (Constant), WORK ENVIRONMENT, LEADERSHIP, TRAINING						

Source: Data processed by SPSS Version 27

As presented in Table 14, the test findings indicate that the calculated F value of 2.36 is greater than the Ftable value of 23.407, with a significance value of 0.000, which is below the 0.05 threshold ($\text{sig. } 0.000 < 0.05$). These findings confirm that leadership, training, and work environment collectively impact employee performance, leading to the acceptance of H4.

The Effect of Leadership (X1) on Employee Performance (Y)

Based on the analysis, the Leadership (X1) has a significant influence on employee performance at PT Bank Mandiri (Persero), because an effective leadership style can increase employee motivation, productivity, and loyalty in achieving company goals. Leaders who are able to provide clear direction, build good communication, and create a conducive work environment will encourage employees to work more optimally (Maidiyanto et al., 2021). In addition, inspirational and transformative leadership can increase employee engagement and encourage innovation in task completion. Empirical studies show that leadership based on trust, empowerment, and support for employee career development has a positive impact on improving individual and team performance, which ultimately contributes to the overall success of PT Bank Mandiri (Persero).

Effect of Training (X2) on Employee Performance (Y)

Based on the analysis, the Training (X2) has a significant impact on employee performance at PT Bank Mandiri (Persero), because an effective training programme can improve employees' skills, knowledge and competence in carrying out their duties. With continuous training,

employees can more easily adapt to technological developments, company policies, and the dynamics of the banking industry (Mogaji, 2023). In addition, targeted training can increase employee confidence, improve work efficiency, and encourage innovation in task completion. Empirical studies show that investment in employee training not only improves individual and team performance, but also contributes to increased productivity and overall company competitiveness. Therefore, PT Bank Mandiri (Persero) needs to continue to develop relevant training programmes to ensure the quality of human resources is superior and professional.

Effect of Work Environment (X3) on Employee Performance (Y)

Based on the analysis, the work environment (X3) has a significant influence on employee performance at PT Bank Mandiri (Persero), because a supportive work environment can enhance employee comfort, boost motivation, and improve productivity in performing their tasks. Factors such as adequate facilities, harmonious working relationships, and a positive organisational culture play an important role in creating a supportive work atmosphere (Wei et al., 2018). A healthy work environment can also reduce stress, increase job satisfaction, and strengthen employee loyalty to the company. Empirical studies show that when employees feel comfortable and valued in their work environment, individual and team performance levels increase significantly. Therefore, PT Bank Mandiri (Persero) needs to continue to pay attention and develop an optimal work environment to encourage better and sustainable employee performance (Utami & Dewi, 2024).

The Effect of Leadership (X1), Training (X2) and Work Environment (X3) on Employee Performance (Y)

Based on the analysis results, X1, X2, and X3 have a significant influence on Y variables at PT Bank Mandiri (Persero). Effective leadership can increase employee motivation, loyalty, and productivity through clear direction, good communication, and an inspiring work culture. Meanwhile, structured training programmes help improve employees' skills and competencies, so they are better prepared to face job challenges and adapt to changes in the banking industry. In addition, a conducive work environment plays a role in creating comfort and increasing job satisfaction, which in turn has an impact on improving individual and team performance (Raziq & Maulabakhsh, 2015). Empirical studies show that the combination of good leadership, effective training, and a supportive work environment together contribute to the productivity and success of the company. Therefore, PT Bank Mandiri (Persero) needs to continue optimising these three factors to ensure maximum and sustainable employee performance.

CONCLUSION

The conclusion of this research are: 1) The test results indicate that leadership significantly influences employee performance at PT Bank Mandiri (Persero). Leaders who provide clear direction, support employee development, and foster a positive work environment contribute directly to enhancing employee productivity. 2) The findings also confirm that training has a significant effect on employee performance. Training provides employees with essential skills and

knowledge, allowing them to carry out their tasks with greater effectiveness and efficiency. Employees who receive job-relevant training tend to be more confident and competent, which ultimately enhances their performance. Continuous skill development better prepares employees to handle challenges and make meaningful contributions to the company's success. 3) Additionally, the results show that a conducive work environment significantly impacts employee performance. A comfortable, supportive, and stress-free workplace allows employees to work optimally. Overall, the test results highlight that leadership, training, and work environment collectively have a significant impact on employee performance at PT Bank Mandiri (Persero). The integration of these three factors not only enhances employee performance but also plays a vital role in improving customer satisfaction.

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