

DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

The Influence of Leadership and Work Environment on The Performance of Employees of the Ministry of Transportation Through Work Motivation at The Class I Semarang Railway Engineering Center.

¹Tuana Resmin Florentina Simanjuntak; ²Fajar Cahyo Utomo ; ³Muhammad Harri ^{1,2,3} Master of Management Study Program, Krisnadwipayana University

Email Corespondent : tuana.florentina@gmail.com

ABSTRACT:

In this study, the researchers focused on examining how leadership, work environment, and work motivation affect the performance of Ministry of Transportation employees at the Semarang Class I Railway Engineering Center. They used probability sampling with a simple random sampling technique to select 137 individuals as respondents for the questionnaire. The study used descriptive research statistics and quantitative analysis to analyze the data. The results show that there is a positive and significant relationship between leadership and work environment on both work motivation and employee performance. Additionally, work motivation has a direct positive and significant impact on employee performance. The study further confirms the direct positive and significant influence of leadership and work environment on employee performance. These findings highlight the importance of effective leadership, conducive work environment, and high motivation in enhancing employee performance in the transportation sector.

Key word: Leadership; Work Environment; Work Motivation; Employee Performance; Path Analysis

INTRODUCTION

Developments in the current era of globalization, human resource issues are the foundation for companies that primarily maintain the work productivity of the employees themselves. Due to the changing dynamics of the environment, the company's need to maintain and manage quality human resources is increasing. Productive human resources are considered to have high work productivity, can achieve predetermined goals or targets, and can be responsible for completing tasks in a timely manner. Employee work production is very important as a measure of business success because increasing employee productivity indicates an increase in company profits and productivity.

One of the factors that influence productivity is leadership. Leadership is an important aspect for a leader, because a leader must act as an organizer of his group to achieve what has been set. Leadership can be defined as a process to direct and influence activities related to the assignment of company employees in order to achieve company goals (Pudjiyogyanti, 2011: 143). C. Turney in Martinis Yamin and Maisah (2013: 74) suggests that leadership as a group process carried out by someone in managing and inspiring a number of jobs to achieve organizational goals through a system of management techniques.

Another factor that affects employee work productivity besides leadership is the work environment. The work environment is the environment where employees do their daily work. If employees feel comfortable in their workplace, they will be more at home to do things that make their time used effectively and increase their confidence about their performance. This work environment includes working relationships between employees, relationships between superiors and subordinates, and the physical environment where employees work (Sunny &



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

Kristanti, 2012: 69).

Good leadership and work environment supported by attractive compensation will lead to job satisfaction. High job satisfaction will help employees become more loyal and disciplined towards work and will increase the work efficiency of these employees. Hasibuan (2019: 202) shows that job satisfaction is very important in realizing the emotional attitude of employees so that employees have a sense of pleasure and are happy with their work. Morale, discipline, and work performance reflect this perspective. Job satisfaction is enjoyed both on the job and outside of work. If the job satisfaction felt by employees is low, it will have a negative impact on the company because the employee's work productivity will decrease and as a result the company's goals will be disrupted.

The Semarang Class I Railway Engineering Center was established in 2014 based on the Minister of Transportation Regulation PM No.63 of 2014 concerning the Institution and Work Procedure of the Railway Engineering Center. The Semarang Class I Railway Engineering Center oversees the implementation of traffic, transportation, and railway safety as well as improving and supervising infrastructure. Semarang Class I Railway Engineering Center is a Technical Implementation Unit of the Ministry of Transportation that is responsible to the Director General of Railways.

Consideration of the existence of the Railway Engineering Center agency is to improve the efficiency of the implementation of infrastructure improvements, training facilities and technical supervision, and coordination of the implementation of rail transportation operations and traffic operations. The main task is to carry out improvement and supervision of infrastructure, as well as supervision of the implementation of facilities, traffic and railway safety.

In connection with the work performance of employees of the Railway Engineering Center Class I Semarang, all employees have good professional abilities and skills to complete each assigned task. Each employee strives to achieve work results with high work enthusiasm. However, the problem is that employees feel enough with what they have achieved so far and do not want to learn more to face future work challenges.

Leadership in the Railway Engineering Center Class I Semarang has been running well, where the leadership has been able to direct each subordinate to work in accordance with the main tasks and functions of each employee. However, the problem that occurs is that leaders do not have a good ability to motivate employees, so that employees further improve their abilities and skills both to face greater challenges in the future or provide ideas or ideas in carrying out tasks to be more effective and efficient. A good leader will always control direct and continue to sympathize with the work situation of employees both externally and internally so that employees feel more comfortable and enthusiastic at work.

The Railway Engineering Center Class I Semarang prioritizes a comfortable and safe work environment to ensure optimal productivity. However, there are issues related to the non-physical work environment where fairness is lacking, leading to competition and strained relationships among employees. The Ministry of Transportation has implemented a performance allowance system to improve the overall conditions of the Class I Semarang Railway Engineering Center. However, there are problems with this system as employees are



DOI

Submitted: 1 March 2025 Reviwed: 15 March 2025 **Approved**: 23 March 2025 Published: 26 March 2025

not receiving their performance-based bonuses in a timely manner. This has resulted in feelings of unfairness and dissatisfaction among the employees. Furthermore, there is a lack of cooperation between sections, leading to occasional conflicts at the Office of the Class I Semarang Railway Engineering Center. These issues need to be addressed to improve job satisfaction and create a harmonious work environment.

Literature Review

Wahjosumidjo (2015:17) states that leadership is translated into terms of traits, personal behavior, influence on others, patterns, interactions, inter-role cooperation relationships, the position of an administrative position, and persuasive, and perceptions of others about the legitimacy of influence. Leadership can be interpreted as the process of influencing and directing employees to perform the tasks that have been given to their employees Mintorogo (2017: 12).

Leadership is an important aspect for a leader, because a leader must act as an organizer of his group to achieve what has been set. Leadership can be defined as a process to direct and influence activities related to the assignment of company employees in an effort to achieve company goals (Pudjiyogyanti, 2011: 143).

Sedarmayanti (2012: 78) defines the work environment as the overall tools and materials at hand, the surrounding environment in which a person works, his work methods and his work arrangements both as an individual and as a group. Sutrisno in Aruan (2015: 144) defines the work environment as all work facilities and infrastructure around employees who are doing work that can affect the implementation of work. This work environment includes the workplace, work facilities and tools, cleanliness, lighting, and quietness, as well as working relationships between employees.

Performance is the result of a process that refers to and is measured over a certain period of time based on predetermined conditions or agreements. According to Sutrisno (2016: 172) "Performance is the result of employee work seen from the aspects of quality, quantity, work time, and cooperation to achieve the goals set by the organization." According to Mangkunegara (2017: 67) "Performance is the quality and quantity of work achieved by an employee in carrying out his duties in accordance with the responsibilities given to him."

According to Fahmi (2017: 188) "Performance is the result of a process that refers to and is measured over a certain period of time based on predetermined provisions or agreements." According to Torang (2014: 74) "Performance is the quantity or quality of the work of an individual or group in the organization in carrying out the main tasks and functions that are guided by norms, standard operating procedures, criteria and measures that have been determined or that apply in the organization. From the theories known above, the researcher concludes that performance is a process or result of work produced by employees through several aspects that must be passed and has stages to achieve it and aims to improve the performance of the employees themselves.



DOI :

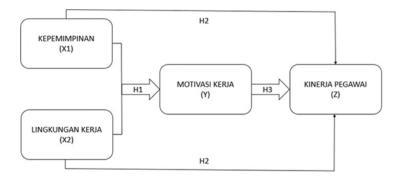
Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

According to Winardi (2018: 2) Motivation is the result of a number of processes both internal and external to an individual so as to create an attitude of enthusiasm and enthusiasm in carrying out certain activities. As for the understanding of other motivations.

According to Sumardjo and Priansa (2018: 202) Work motivation is the behavior and factors that influence employees to show individual intensity, direction, and perseverance as an effort to achieve organizational goals. Afandi (2018: 23) Motivation is a desire that arises from within a person or individual because he is inspired, encouraged, and encouraged to carry out activities with sincerity, pleasure and sincerity so that the results of the activities he does get good and quality results.

METHOD

Research design is a very important part of a study. This research uses a quantitative approach, this method is used to research on certain populations or samples, data collection using research instruments, data analysis is quantitative / statistical, with the aim of testing predetermined hypotheses. This study wants to analyze the effect of leadership, work environment and compensation on employee productivity of the Class I Semarang Railway Engineering Center with job satisfaction as an intervening variable. In this study using an explanatory approach, namely research that explains the relationship between research variables and hypothesis testing that has been formulated previously. For more details, the research design is shown in the figure below. This can be designed with a mathematical function, namely:



Research Hypothesis

- H1: It is suspected that leadership and work environment have a direct effect that has a positive and significant direction on the work motivation of Ministry of Transportation employees at the Class I Semarang Railway Engineering Center.
- H2: It is suspected that leadership and work environment have a direct positive and significant effect on the performance of employees of the Ministry of Transportation at the Class I Semarang Railway Engineering Center.
 - H3: It is suspected that work motivation has a direct positive and significant direction on



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

the work performance of employees of the Ministry of Transportation at the Class I Semarang Railway Engineering Center.

H4: It is suspected that leadership and work environment indirectly have a positive and significant direction on the performance of employees of the Ministry of Transportation at the Class I Semarang Railway Engineering Center through work motivation.

According to Sugiyono (2013: 80) population is a generalization area consisting of: objects / subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions. The population in this study were all employees of the Class I Semarang Railway Engineering Center, totaling 208 employees.

The determination of the number of samples used in this study was determined using the Slovin formula. The size of the research sample with the Slovin formula is determined through the error rate value. Based on the calculation, the number of samples determined was 137 people. The number of respondents is considered representative to obtain writing data that reflects the state of the population.

Questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer. Observation is a complex process, a process composed of various biological and psychological processes. Two of the most important are the processes of observation and memory. In this study, data collection techniques used questionnaires and observations, where questionnaires were used to collect data from predetermined respondents related to leadership, work environment, work motivation and employee performance. Then for observation was carried out before the implementation of data collection, namely to observe the condition of leadership, work environment, work motivation and employee performance of the Class I Semarang Railway Engineering Center.

To get good research results, it is necessary to be supported by good data as well. Meanwhile, whether the data is good or not depends on the data collection instrument. A good data instrument must meet two important requirements, namely valid and reliable.so it is necessary to test validity and reliability. Furthermore, after the validity and reliability tests are carried out, the data obtained is transformed from the original ordinal scale to the interval scale.

RESULTS AND DISCUSSION

Descriptive statistical measurements should be taken to get an overview of the data with 137 sample observations (N). All variables analyzed are described in these measurements. These measurements include the mean, maximum, minimum, and standard deviation of each measurement of the leadership variable (X1) on attachment page 1, the work environment variable (X2) on attachment page 2, the work motivation variable (Y) on attachment page 3, and the employee performance variable (Z) on attachment page 4. The following frequency table shows the results of the descriptive statistical test, which includes 137 sample observations (N):



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

		Leadership (X1)	Work environtment (X2)	Work motivation (Y)	Performance employment (Z)
N	Valid	137	137	137	137
	Missing	0	0	0	0
Mear	n	49.93	47.54	47.22	53.31
Medi	ian	51.00	47.00	47.00	53.00
Std. I	Deviation	3.331	2.547	2.549	3.150
Mini	mum	42	41	40	46
Maxi	imum	61	55	55	61

Convergent validity test aims to determine the validity of each relationship between indicators and their constructs or latent variables. According to Imam Ghazali, (2016) convergent validity means that a set of indicators shows one latent variable and functions as its driver. The results of data processing on the Component Score Coefficient Matrix table on attachment page 15 can be obtained loading factor for the leadership variable has a score value of 0.878, the work environment variable has a score value of 0.694, the work motivation variable has a score value of 0.702, and the employee performance variable has a score value of 0.603. The results of this loading factor of the four variables can be declared valid because they have a value on each variable greater (>) than the Sig.0.50 value. Further evidence with the help of Excel software can be obtained:

No	λ	λ^2	€
1	0,878	0,770884	0,229116
2	0,694	0,481636	0,518364
3	0,702	0,492804	0,507196
4	0,603	0,363609	0,636391
Σ	2,877	2,108933	1,891067

N	4
AVE	0,527
Composit Reliabel	0,814

Description:

 λ = loading factor

 λ^2 = loading factor squared

€ = Espilon

 \sum = total variance

N = number of variables

From the results of the data processing above, the Average Variance Extracted (AVE) value is



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

0.527, which is greater (>) than the Sig.0.50 value, thus the results of this data processing are declared valid and can be continued.

Path Coefficient Model 1 Leadership and Work Environment Directly Affect Work Motivation of Ministry of Transportation Employees at the Class I Semarang Railway Engineering Center

For data processing on the path coefficient model 1 will explain the relationship (correlation) of leadership and work environment variables to the work motivation of the Ministry of Transportation at the Class I Semarang Railway Engineering Center, in the table below:

Model		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	16.616	4.266		3.895	.000
	Leadership (X1)	.116	.055	.152	2.105	.037
	Work environment (X2)	.522	.072	.521	7.223	.000

a. Dependent Variable: Motivation (Y)

Source: Processed with SPSS Version 22 year 2024

Table 1a. Dependent Variable: Work Motivation

Determination Test (RSquare)

To get the results of data processing in regression model 1 can be explained in the table below:

Mod el	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.552ª	.305	.295	2.141

a. Predictors: (Constant), Work enviorenment (X2), leadership (X1) Source: Processed with SPSS Version 22 year 2024



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

As a result of the RSquare value of 0.305 found in Table 4.4 Model Summary, it can be concluded that the effect of leadership variables (X1) and work environment (X2) on work motivation variables (Y) is 30.5%. Other variables not included in the study accounted for 64.7%. Meanwhile, the value of e1 can be found by the formula e1 = $\sqrt{(1-0.305)}$ = 0.833. Thus the model 1 path diagram is obtained, as follows:

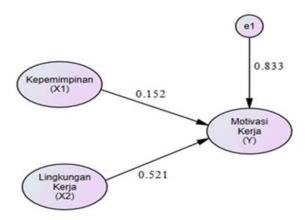


Table 2Data: Data processed with SPSS Version 22 in 2024

T Test (Partial)

To find out the value of the T test (T Test) must meet the requirements as below:

- 1. If the significant value is smaller (<) than the value of 0.05, or the value of Thitung is greater (>) than the value of Ttabel, then partially (individually) there is an influence of variable X on variable Y.
- 2. Using the formula to find Ttabel = $(\alpha; n-k)$. If the significant value is greater (>) than the value of 0.05, or the value of THitung is smaller (<) than the value of Ttabel, then there is no effect of variable X on variable Y.

The results of data processing in table 4.2 T test coefficients can be explained for the partial relationship (correlation) referred to above, as follows:

- a) Referring to the model 1 regression output in table 4.2, the coefficient can be seen that the significant value of the two variables, namely X1 = 0.037 and X2 = 0.000, is smaller (<) than the Sig.0.05 value. This result gives the conclusion that regression model 1, namely the leadership variable (X1) and the work environment (X2) has a significant effect on the work motivation variable (Y).
 - b) Based on the formula TTabel = $(\alpha; n-k)$, the result is (0.05: 137-4) = 1.65639. Referring to



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

the regression output of model 1 in table 4.2, the coefficient can be seen that the Thitung value for X1 = 2.105 and X2 = 7.223 has a value greater (>) than the Ttable value of 1.65639, meaning that partially (individually) variable X can affect variable Y.

For data processing on the path coefficient model 1 will explain the relationship (correlation) of leadership and work environment variables to the work motivation of the Ministry of Transportation at the Class I Semarang Railway Engineering Center, in the table below:

Model		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		В	Std. Error	Beta		Č
1	(Constant)	16.616	4.266		3.895	.000
	leadership (X1)	.116	.055	.152	2.105	.037
	Work environment (X2)	.522	.072	.521	7.223	.000

b. Dependent Variable: work motivation (Y)

Source: Processed with SPSS Version 22 year 2024

The results of data processing in table 4.3 of the T test coefficient can be explained for the partial relationship (correlation) referred to above, as follows:

- a. Referring to the model 1 regression output in table 4.2, the coefficient can be seen that the significant value of the two variables, namely X1 = 0.037 and X2 = 0.000, is smaller (<) than the Sig.0.05 value. This result gives the conclusion that regression model 1, namely the leadership variable (X1) and the work environment (X2) has a significant effect on the work motivation variable (Y).
- b. Based on the formula TTabel = $(\alpha; n-k)$, the result is (0.05: 137-4) = 1.65639. Referring to the regression output of model 1 in table 4.2, the coefficient can be seen that the Thitung value for X1 = 2.105 and X2 = 7.223 has a value greater (>) than the Ttable value of 1.65639, meaning that partially (individually) variable X can affect variable Y. This means that in this research model that the 1st hypothesis can be accepted.

F Test (Simultaneous)

To determine the results of the F test, the following requirements must be met:

- 1. If the significance value is less than (<) 0.05, there is a simultaneous (collective) influence of variable X on variable Y.
- 2. Use the formula to find Ftabel = (k-1;n-k). If the significance value is greater than (>) 0.05, there is no simultaneous (collective) influence of variable X on variable Y.

The results of the F test data processing for regression model 1 can be explained based on the table below:

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	-------------------	----	----------------	---	------



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

1	Regression	269.457	2	134.728	29.405	.000 ^b
	Residual	613.974	134	4.582		
	Total	883.431	136			

a. Dependent Variable: work motivation (Y)

Source: Processed with SPSS Version 22 year 2024

Table 4.4 Anova above explains the results of data processing in this research model obtained as follows:

- a) It has a significance value of 0.000 which is less (<) than the Sig.0.05 value, meaning that the leadership variable (X1) and the work environment variable (X2) have a simultaneous (together) relationship (correlation) with work motivation (Y).
- b) Using the formula to find Ftabel = (k-1;n-k), the result is (4-1:137-4) = (3:133) = 2.67. Referring to regression output model 1 in table 4.3 Anova, it can be seen that the Fcount value is 29.405 which is greater (>) than the Sig.0.05 value, meaning that simultaneously (together) variable X can affect variable Y.

Model Coefficient Model 2 Leadership and Work Environment Directly Affect the Performance of Employees at the Ministry of Transportation in the Class I Railway Engineering Center Semarang

1) Determination Test (RSquare)

The results of the determination test data analysis on model 2 regression are shown in the table below:

Mod el	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652a	.425	.412	2.416

a. Predictors: (Constant), work motivation (Y), leadership (X1), work environment (X2)

Source: Processed with SPSS Version 22 year 2024

The influence of leadership variable (X1) and work environment (X2) on work motivation variable (Y) is 42.5%, with an RSquare value of 0.425 found in Table 4.5 Model Summary. Meanwhile, the value of e2 can be found using the formula $e2 = \sqrt{(1-0.425)} = 0.758$.

2) Test T (Partial)

The table below shows the relationship between leadership variables and the work environment and work motivation of the Ministry of Transportation at the Class I Railway Engineering Office in Semarang, processed from the 2 path coefficient model data:

Model	Unstandardized Coefficients		Standardize d Coefficients	t	Si g.
	В	Std. Error	Beta		

b. Predictors: (Constant), work environment (X2), leadership (X1)



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

1	(Constant)	5.232	5.080		1.03	.3 05
	leadership (X1)	.458	.063	.485	7.23 9	.0 00
	Work environment (X2)	.326	.096	.263	3.39	.0 01
	Work motivation (Y)	.206	.097	.166	2.11	.0 37

The results of the data processing in table 4.6 for the T test coefficient can be explained for the relationship (correlation) partially referred to above, as follows:

- a) The output of regression model 2 shown in table 4.6 indicates that the significant values of the two variables, namely X1 = 0.000 and X2 = 0.001, are below (<) the significance level of 0.05. This result shows that the leadership variable (X1), work environment (X2), and work motivation variable (Y) have a significant influence on the employee performance variable (Y).
- b) The result is (0.05:137-4) = 1.65639, based on the formula TTabel = $(\alpha;n-k)$. By looking at the output of regression model 2 in table 4.6 coefficients, we find that the t-value for X1 = 7.239 and X2 = 3.390 is greater (>) than the TTabel value of 1.65639, which indicates that partially (individually) the leadership variable (X1) and the work environment variable (X2) affect the employee performance variable (Z). This means that in this research model, the second hypothesis can be accepted.
 - 3) Test F (Simultaneous)

The table below shows the results of the F-test data processing for model 2, as follows:

	N. 11	g cg	16	M	Б	G.
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	573.483	3	191.161	32.763	.000b
	Residual	776.021	133	5.835		
	Total	1349.504	136			

- a. Dependent Variable: performance employment (Z)
- a. Predictors: (Constant), work motivation (Y), leadership (X1), work environment (X2)

Source: Processed with SPSS Version 22 year 2024

For the simultaneous (together) relationship (correlation), the data processing results shown in table 4.7 Anova can be explained as follows:

- a) It has a significance value of 0.000 which is less than (<) the Sig.0.05 value, meaning that the leadership variable (X1) and the work environment variable (X2) have a simultaneous (together) relationship (correlation) with employee performance (Z).
- b) By using the formula to find FTabel = (k-1;n-k), the result is (4-1:137-4) = (3:133) = 2.67. There is evidence that the FHitung value is 32.763 which is greater than (>) the FTabel value of 2.67, based on the regression output of model 2 found in table 4.7 Anova. This indicates that the



DOI

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

independent variables (X) affect the endogenous variable (Z) simultaneously (together).

Model Coefficient Path 3 Work Motivation Directly Affects Employee Performance at the Ministry of Transportation in the Class I Semarang Railway Engineering Center

1) Uji T (T Test)

Table 4.6 coefficients above show the partial relationship between the work motivation variable (Y) and the employee performance variable (Z) of the Ministry of Transportation at the Class I Railway Engineering Center in Semarang. This relationship is indicated by the path coefficient model data 3. The regression output of model 2 shown in table 4.6 coefficients indicates that the significance value for both variables, namely Y = 0.037, is below (<) the Sig. 0.05 value. This result indicates that the work motivation variable (Y) has a positive and significant influence on the employee performance variable (Y)

Explaining that the variables of leadership and work environment significantly influence employee work motivation has strong significance and a positive impact. This indicates that the better the leadership and work environment, the higher the employee work motivation. This conclusion supports the importance of improving these factors to enhance organizational performance. These results provide strong support for the leadership and work environment of the Ministry of Transportation at the Class I Railway Engineering Office in Semarang, which together play an essential role in increasing employee work motivation. The implication is that efforts to improve or optimize these factors can result in significant improvements in organizational performance. The existence of a determinancy influence of 30.5% means explaining the extent to which the independent variables (X) account for variations in the dependent variable (Y). This shows that leadership and work environment do have a substantial impact on the level of work motivation at the Ministry of Transportation at the Class I Railway Engineering Office in Semarang.

The findings that leadership variables (X1) and work environment (X2) have a significant influence on employee performance (Y) indicate that these factors play an important role in shaping work conditions that support productivity and employee satisfaction. The significant values for both variables suggest that the relationship between leadership variables, work environment, and employee performance is not merely coincidental, but there is a strong statistical basis to assert that this relationship is significantly real. With a high F-value, it can be assured that the leadership variable (X1) and work environment (X2) not only have partial influence (individually), but also simultaneously (together) provide a significant contribution to employee performance. This underscores that the regression model as a whole can be used to explain variations in employee performance significantly within the Ministry of Transportation at the Class I Railway Engineering Center. The coefficient of determination can show that the leadership variable (X1) and work environment (X2) together can explain about 42.5% of the variation in work motivation (Y). Semarang. This finding can assist management in designing strategies to enhance employee work motivation. Focusing on developing effective leadership and improving conducive work environments can significantly increase work motivation. This may include implementing training programs, improvements in organizational communication, or recognition of work achievements to create an environment that supports high motivation within the Ministry of Transportation at the Class I



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

Railway Engineering Center.

Work motivation (Y) directly affects employee performance (Z), indicating that a high level of motivation among employees can enhance their performance. This has important implications for human resource management. Management can consider strategies to increase work motivation, such as recognizing achievements, career development, or providing a supportive work environment. Strategies such as developing motivation programs, offering appropriate incentives, and enhancing organizational communication can be key to improving overall employee performance within the Ministry of Transportation at the Class I Railway Engineering Center. It is important to understand that work motivation is not just a one-way factor, but requires continuous attention and ongoing efforts from management. Monitoring motivation levels regularly and responding to changes in the work environment can help organizations maintain or improve employee performance in the long term.

This shows that the value of indirect influence is greater (>) than the value of direct influence. This result indicates that variable X1 has a positive and significant indirect influence on variable Z through the mediation (intervention) of variable Y on variable Z. This result also shows that the influence of variable Y is very large as a mediation (intervention) between variable X1 and variable Z. The finding that leadership (X1) and work environment (X2) have an indirect influence on employee performance (Z) through work motivation (Y) indicates that effective leadership and a conducive work environment can enhance employee work motivation. High work motivation, in turn, positively influences employee performance. Overall, understanding how leadership and work environment indirectly influence employee performance through work motivation provides a strong foundation for the Ministry of Transportation at the Class I Railway Engineering Center.

CONCLUSION

Modern management methods emphasize the psychological and social needs of employees to improve actual performance in order to enhance employee performance through improved leadership, creating a supportive work environment, and making plans to increase work motivation. One example is training for leadership, programs to enhance an inclusive organizational culture, or appropriate reward systems.

Leadership factors (X1) and work environment (X2) have a significant influence on employee performance (Z). This finding indicates that having good leaders and a good work environment is crucial to creating an ideal work environment for employee performance.

In addition, leadership and the work environment indirectly influence employee performance. High work motivation, which arises from good leadership and a supportive work environment, serves as an important mechanism linking these elements to an individual's performance. Although the results of this study provide important information, further research is needed to explore more about the variables that affect employee performance. Future research could consider additional variables that may mediate the relationship between leadership, work environment, work motivation, and employee performance in the Ministry of Transportation's Class I Railway Engineering Office in



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

Semarang.

REFERENCES.

Alamsyah, Bani Nur. 2015. Pengaruh Kompensasi Terhadap Produktivitas Kerja Karyawan dan Dampaknya Terhadap Loyalitas Kerja Karyawan Outsourching di PT Alih daya Indonesia. UIN Syarif Hidayatullah.

- Alimuddin, Wahyuni. 2012. Pengaruh Kompensasi Terhadap Produktivitas Karyawan Pada PT. Bakrie Telecom Area Makassar.
- Anggrainy, I. F., Darsono, N., & Putra, T. R. I. (2018). Pengaruh fasilitas kerja, disiplin kerja dan kompensasi terhadap motivasi kerja implikasinya pada prestasi kerja pegawai negeri sipil badan kepegawaian pendidikan dan pelatihan Provinsi Aceh. Jurnal Magister Manajemen, 1(1), 1–10.
- Arikunto, S. 2013. Prosedur Penelitian Suatu Pendekatan Praktik. Edisi Revisi. Jakarta: PT. Rineka Cipta
- Aruan, Quenerita Stevani dan Fakhry, Mahendra. 2015. "Pengaruh Lingkungan Kerja terhadap Kepuasan Kerja Karyawan Lapangan Departemen Grasberg Power Distribution PT Freeport Indonesia". MODUS Vol.27 no.2.
- As'ad, Moh. 2014. Psikologi Industri, Seri Ilmu Sumber Daya Manusia, Liberty. Jakarta.
- Asep Saepul Hamdi *dan E.* Bahruddin. 2015. Metode Penelitian Kuantitatif. Aplikasi Dalam Pendidikan. Yogyakarta: CV Budi Utama
- Aulia, Figur. (2017) Pengaruh Kepemimpinan Terhadap Produktivitas Kerja Pegawai Di Kantor Dinas Kesejahteraan Sosial Kota Samarinda. eJournal
- Bukhari dan Pasaribu, E. S. 2019. Pengaruh Motivasi, Kompetensi, dan Lingkungan Kerja terhadap Kinerja PDAM Tirta Tamiang Kabupaten Aceh. Jurnal Ilmiah Magister Manajemen. 2(1):1-12.
- Busro, Muhammad. 2018. Teori-Teori Manajemen Sumber Daya Manusia. Jakarta: Prenadameidia Group
- Butar-butar, Liat Farida. 2015. Pengaruh Stres Kerja Terhadap Produktivitas Karyawan Di PT. X. Skripsi. Medan: Universitas HKBP Nommensen.
- Davis, Keith. 1985. Perilaku Dalam Organisasi. Jakarta: Erlangga.
- Deden Misbahudin Muayyad. 2016. Pengaruh Kepuasan Kerja Terhadap Produktivitas Kerja Pegawai Bank Syariah X Kantor Wilayah II. Jurnal Manajemen dan Pemasaran Jasa Vol. 9 No.1. Universitas Trisakti
- Dunggio, Mardjan. 2013. Semangat dan Disiplin Kerja. Jurnal EMBA. 523. Vol.1 No.4 Desember 2013
- Elita Eka Meliza, Nova Mardiana dan Mahatma Kufepaksi. 2019. Pengaruh kompensasi dan lingkungan kerja terhadap kinerja karyawan serta peran kepuasan kerja dalam memperkuat pengaruh kompensasi dan lingkungan kerja terhadap kinerja karyawan pada PT. Gold Coin



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

Specialities

Febrianti, R., & Triono, J. (2020). Analisis Pengaruh Kepuasan Kerja dan Motivasi Terhadap Kinerja Karyawan Dengan Komitmen Organisasional Sebagai Variabel Intervening. Jurnal Ilmu Ekonomi Manajemen Dan Akuntansi, 1(2), 105–118.

Ghozali, Imam. 2012. Aplikasi Analisis Multivariate dengan Program IBM SPSS 21. Undip Semarang

Hamali, Arif Yusuf. 2018. Pemahaman Sumber Daya Manusia. Yogyakarta: CAPS

Haryo, B. D., & W, H. D. (2018). Pengaruh Pelatihan Kerja, Motivasi Kerja dan Lingkungan Kerja terhadap Produktivitas Kerja Karyawan Bagian Produksi PT. Metec Semarang. Diponegoro Journal of Management, 1–6.

Hasibuan, H. Malayu S.P. 2019. Manajemen Sumber Daya Manusia, Edisi Revisi. Jakarta: Bumi Aksara.

Hendri, Edduar dan Rismansyah. 2016. Pengaruh Kepuasan Kerja dan Semangat Kerja Terhadap Produktivitas Kerja Karyawan Pada PT. Selapan Jaya

Husein. 2015. Penelitian bisnis dan manajemen menggunakan partial least squares (PLS) dengan smart PLS 3.0, Modul ajar jurusan manajemen fakultas ekonomi dan bisnis unversitas Brawijaya

I Wayan Senata, I Made Nuridja, dan Kadek Rai Suwena (2014) Pengaruh Lingkungan Kerja Terhadap Produktivitas Kerja Karyawan UD. Kembang Sari Kabupaten Badung Tahun 2012

Ilmu Pemerintahan, 2017, 5 (2): 593-604 ISSN 2477-2458(online), ISSN 2477-2631 (Print) ejournal.ipfisip-unmul.ac.id

Juliansyah. 2015. Metodologi Penelitian. Jakarta: Prenada Group

Kadarisman, M. 2012. Manajemen Kompensasi. Jakarta: PT. Raja Grafindo. Persada

Kamus Besar Bahasa Indonsesia. 2014. Pusat Bahasa. Jakarta: PT. Gramedia Pustaka Utama

Koesmono, H. Teman. 2015. Pengaruh Budaya Organisasi Terhadap Motivasi dan Kepuasan Kerja serta Kinerja Karyawan Pada Sub ektor Industri Pengolahan Kayu Skala Menengah di Jawa Timur. Jurnal. Jurusan Ekonomi Manajemen, Fakultass Ekonomi, Universitas Kristen Petra

Lukiyana dan Halima (2016) Pengaruh dari kompensasi dan lingkungan kerja terhadap kinerja karyawan yang diintervening oleh kepuasan kerja pada PT. Pacific Metro International Jakarta

Maludin, Panjaitan. 2017. Pengaruh Lingkungan Kerja Terhadap Produktivitas Kerja Karyawan". Jurnal Manajemen. Vol 3 Nomor 2.

Mangkunegara, A. A. Anwar Prabu. 2011. Manajemen Sumber Daya Manusia. Remaja Rosdakarya. Bandung.

Mangkuprawira, Sjafri. 2011. Manajemen Sumber Daya Manusia Strategik. Cetakan Ketiga. Jakarta: Penerbit Ghalia Indonesia.

Manullang, Marihot. 2013. Dasar-dasar Manajemen Bagi Pimpinan Perusahaan. Jakarta. Gajah Mada Press.

Martinis Yamin dan Maisah. 2013. Standarisasi Kinerja. Jakarta: Persada.

Mintorogo, A. 2017. Kepemimpinan dalam Organisasi, Yogyakarta: STIA LAN Prees, 2017, h.



DOI

Reviwed: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

12

Mirza Dwinanda Ilmawan, Dwi Setia Wulandari, dan Fatmala Fitriani. 2017. Pengaruh Gaya Kepemimpinan Dan Kompensasi Terhadap Kinerja Karyawan Melalui Kepuasan Kerja Sebagai Variabel Intervening

Notoatmodjo, Soekidjo. 2013. Pengembangan Sumber Daya Manusia. Cetakan. Keempat. Edisi Revisi. Jakarta: Rineka Cipta.

Panjaitan, M. (2018). Pengaruh Lingkungan Kerja Terhadap Produktivitas Kerja Karyawan. Jurnal Manajemen, 3(2), 1-5.

Parlinda, Vera. 2013. Pengaruh Kepemimpinan, Motivasi, Pelatihan dan Lingkungan Kerja terhadap Kinerja Karyawan.

Prafitri Kumalasari dan Sugito Efendi. 2022. Pengaruh kompensasi, lingkungan kerja, dan kepemimpinan terhadap kinerja karyawan melalui kepuasan kerja sebagai variabel intervening pada dinas pemadam kebakaran kota Depok. Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan. Vol. 4 No. 7 Februari 2022

Prasetiyo. 2014. Pengaruh Gaya Kepemimpinan dan Kompensasi terhadap Kinerja Karyawan dengan Kepuasan Kerja sebagai Variabel Intervening (Studi pada Hotel Berbintang di Yogyakarta). Yogyakarta: Thesis

Priansa, Donni Juni. 2014. Perencanaan dan Pengembangan Sumber Daya. Manusia. Bandung: Alfabeta.

Pudjiyogyanti, Clara Rosa. 2011. Pengantar Ilmu Manajemen, Jakarta: PT Gramedia Pustaka Utama.

Robbins, Stephen P dan Judge. 2013. Organizational. Behavior. Fifteenth Edition, Pearson. Boston.

Robbins, Stephen P. 2016. Perilaku Organisasi, PT Indeks, Kelompok Gramedia, Jakarta.

Santoni, Ni Putu Cindyana Claudia, I Wayan Suana. (2018). Pengaruh Kompensasi, Motivasi, Disiplin Kerja Terhadap Produktivitas Kerja Karyawan Divisi Sales di Honda Denpasar Agung. E- Jurnal Manajemen Unud. Volume 7, Nomor 10, Halaman 5379-5406.

Santoso, Budi dan Ashari. 2014. Analisis Statistik Dengan Microsoft Excel dan SPSS. Yogyakarta: Andi Offset.

Sedarmayanti, 2012. Sumber Daya Manusia dan Produktivitas Kerja. Mandar Maju: Bandung.

Sekaran, Uma. 2014. Metodologi Penelitian Untuk Bisnis. Jakarta: Salemba Empat

Sihombing, Gultom & Sidjabat, Sidjabat. 2015. Sumber Daya Manusia Edisi Revisi. IN MEDIA

Simamora. Henry. 2014. Manajemen Sumber Daya Manusia. Yogyakarta: SIE YKPN

Sinungan, Muchdarsyah. 2016. Manajamen Sumber Daya Manusia. Jakarta: Bumi Aksara

Situmorang dan Lutfi M. 2014. Untuk Riset Manajemen dan Bisnis. Medan: USU. Press.

Soetjipto, Budi W. 2012. Manajemen Sumber Daya Manusia: Sebuah Tinjauan Komprehensif (Bagian I). Penerbit Amara Books. Ghalia Indonesia

Subardjono. 2017. Pengaruh Kepemimpinan Terhadap Produktivitas Kerja Pegawai Pada Dinas Pendidikan Nasional dan Kebudayaan Kabupaten OKU Timur. Jurnal Aktual STIE Trisna Negara Volume 15 No 1 Juni 2017 Halaman 1-9

Sugiyono. 2013. Metode Penelitian Kuantitatif Kualitatif dan R&D. Cetakan Ke-13. Bandung:



DOI :

Submitted: 1 March 2025 Reviwed: 15 March 2025 Approved: 23 March 2025 Published: 26 March 2025

Alfabeta

Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatig, dan R&D, penerbit. Alfabeta, Bandung

Sumual. Tinneke Evie Meggy. 2017. Manajemen Sumber Daya Manusia. Surabaya: CV RA De.

Sunny, L., & Kristanti, S. 2012. Pengaruh Lingkungan Kerja dan Job Insecurity terhadap Motivasi Kerja dan Dampaknya pada Kinerja Karyawan Outsourcing Mall Lippo Cikarang. Binus Business Review, 61-69

Sutrisno, Edy. 2017. Manajemen Sumber Daya Manusia, Kencana, Jakarta.

Swandono, Sinaga. 2017 "Pengaruh Lingkungan Kerja Terhadap Produktivitas Kerja Karyawan Bagian Produksi Minyak Kelapa Sawit PT. Mitra Unggul Pusaka Segati Pelalawan Riau" Jurnal JOM FISIP 3, No. 2 2017.

Thoha, Miftah. 2015. Perilaku Organisasi, Konsep Dasar dan Aplikasinya. Jakarta: Raja Grafindo Persada

Timple, A. Dale. 2015. Memotivasi Pegawai, Seri Manajemen Sumber Daya. Manusia. Jakarta: Elex Media

Triton, PB. 2019. Manajemen Sumber Daya Manusia: Perspektif Partnership dan. Kolektivitas. Yogyakarta: Tugu.

Wahjosumidjo. 2015. Kepemimpinan yang Efektif. Yogyakarta: Balai Pustaka

Zainal, Veithzal Rivai. 2015. Peformance Appraisal: Sistem yang tepat untuk Menilai Kinerja Karyawan dan Meningkatkan Daya Saing Perusahan. Jakarta: PT. Raja Grafindo Persada.

Zuchri, Abdussamad (2014) Pengaruh Kompensasi Terhadap Produktivitas Kerja Karyawan pada PT Asuransi Jiwasraya Gorontalo