

The Influence of Organizational Climate, Motivation and Leadership Style on Employee Performance in Research and Development Agency Ministry of Defense of the Republic Indonesia

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ABSTRACT

This research was conducted at the Research and Development Agency of the Ministry of Defense of the Republic of Indonesia. The purpose of this study was to examine and analyze descriptively and verification of leadership style, organizational climate, motivation and employee performance. The research sample amounted to 72 employees using stratified random sampling technique. Data collection techniques using a questionnaire. The research method uses descriptive and verification methods using path analysis. Descriptive research results prove that leadership style, organizational climate, motivation and performance are perceived as good but there are indicators that need to be improved. The results of the verification research prove that simultaneously leadership style, organizational climate and motivation have a positive and significant effect on performance. However, partially, only the organizational climate variable has no effect on performance.

Keywords: Performance, Motivation, Organizational Climate, and Leadership Style

1. Introduction

Research and development is an important aspect in the defense sector because it can produce new products or improve existing products that can be accounted for. These products can be in the form of hardware in the form of the main tool of the defense system (defense equipment) and software.

The Republic of Indonesia has a research and development agency in the field of defense, namely the Research and Development Agency of the Ministry of Defense of the Republic Indonesia. The Research and Development Agency of the Ministry of Defense of the Republic Indonesia is a technical implementing agency under the Ministry of Defense based on Minister of Defense Regulation Number PER/16/M/IX/2010 dated 27 September 2010.

The quality and quantity of the Research and Development Agency of the Ministry of Defense of the Republic Indonesia products need to be improved to support the Indonesian defense system. In improving the quality and quantity of its products, the Research and Development Agency of the Ministry of Defense of the Republic of Indonesia requires good cooperation from the five sub-organizations within it, namely the Center for research and development of defense strategies, the Center for Research and

Development of Defense Resources, the Research and Development Center for Defense Equipment, the Research and Development Center for Science and Technology and the Research and Development Agency Secretariat.

Table 1. R & D Results of Research and Development Agency

Work Unit	Total R&D results				
	2018	2019	2020	2021	2022
R&D Center for Science Technology	5	4	4	4	2
R&D Center for Defense Equipment	5	6	2	4	1
R&D Center for Defense Resources	6	7	4	3	2
R&D Center for Defense Strategy	6	6	6	5	2

Source: R and D Agency, processed by author, 2023

The facts show that the performance of the Research and Development Agency employees must be improved in order to get a better quantity and quality of products. In addition to these facts, according to Erna Agustyaningih (2011) that there is a decrease in the performance of the Research and Development Agency employees, which can be seen from the number of tasks that cannot be completed on time and the quality of the work that has decreased. As stated by Bernardin Russel (1993), that employee performance can be seen from several aspects, namely quality, quantity, speed,

effectiveness, level of efficiency, level of independence, level of cooperation, and compliance with rules.

One way to improve employee performance is how the application of leadership is implemented in an organization. Leaders must view the institution as a modern organizational system to achieve organizational goals in the long term by involving the active participation of its employees. Non-profit oriented organizations have not been fully led by leaders who have leadership qualities (Garten, 2001). High and low employee performance depends on whether or not the style and attitude of the leadership. Leadership style is one of the factors that can affect employee performance as stated by Ostroff (1992) that leadership style and attitude is one of the factors that affect the performance of subordinates. Each leader has a pattern that is different from one another. The difference is caused by the leadership style of each leader. Based on the observations, it was found that the leadership problem at the Research and Development Agency is a leadership style that is less accommodating, namely the leadership's strength in applying old habits and not due to the influence of changes in the strategic environment, but leaders are often fixated on the behavior they carry, less anticipating and adapting activities to rapid changes.

Another factor that affects performance is organizational climate. Watkin and Hubbard (2003) stated that high organizational performance because it has an organizational climate that can be measured by special characteristics. Organizational climate can make organizational performance different because it shows an indication of enthusiasm in the employee's work environment. Stinger (2002) also states that high performance is dependent on high commitment, where the organizational climate emphasizes employee pride, personal loyalty, and goal achievement.

Furthermore, Sedermayanti (2001) suggests that good performance can be influenced by the skills and motivation of each employee. Without high motivation, employee performance will not achieve maximum results. Based on the results of the study, Jones (2003) stated that workers who are less motivated at work will start their reaction with light actions, such as delays before switching to more severe actions, namely absence from work.

The above phenomenon shows that the performance of the Research and Development Agency employees is still relatively not optimal, as well as the leadership style is not in accordance with the expectations of employees and the

organizational climate is not optimal to support employees to excel and the motivation of employees is not high. Based on this description, the authors are interested in conducting more in-depth research on this problem.

2. Literature Review

Leadership Style

Siagian (1999) states that leadership is an activity to influence the behavior of others to work together toward a particular goal that they want together. According to James et. al. (1996) that leadership styles are various patterns of behavior favored by leaders in the process of directing and influencing workers. Meanwhile, Tampubolon (2007) suggests that leadership style is behavior and strategy as a result of a combination of philosophies, skills, traits, attitudes that are often applied by a leader when he tries to influence the performance of his subordinates.

Organizational Climate

Davis and Newstrom (2013) define organizational climate as the environment in which employees of an organization perform their work. Meanwhile, according to Gibson, et al (2000) that organizational climate is the nature of the work environment or psychological environment in the

organization that is felt by workers or members of the organization and is considered to be able to influence workers' attitudes and behavior towards their work. In addition, Davis and Newstrom (2013) view organizational climate as the personality of an organization that distinguishes it from other organizations which leads to the perception of each member in viewing the organization.

Motivation

According to Moekijat (2001), motivation is the drive, effort and desire that exists in humans that activates, empowers and directs behavior to carry out tasks well within the scope of work. Mullins (2010) also states that motivation is a driving factor in a person's individual self that results in efforts to achieve goals in order to meet needs or expectations. Meanwhile, Jonathan and Tylor (2010) stated that employees who have higher motivation to perform moral obligations to serve the public.

Performance

Performance is the results of the activities of a person or group in an organization that is influenced by various factors to achieve organizational goals within a certain period of time as stated by Tika (2006). According to Hakim (2006) that performance is the result of work achieved by an individual that is adjusted to the role or task of the individual in an

organization at a certain time period associated with a measure of value or a certain standard of the organization in which the individual works. Bambang Guritno and Waridin (2004) argue that performance is a comparison of the work achieved by employees with predetermined standards.

3. Research Method

The research method used is descriptive and verification. Descriptive analysis is explained about the independent variables and the dependent variable which is the basis of the theory in the study which contains the theories of the variables studied. Verificative analysis to test the truth of a hypothesis which is carried out through data collection in the field about the variables to be studied. The influence model is analyzed using path analysis and the form of the test is causality, namely the independent variable/independent variable influencing the dependent variable/dependent variable through intervening variables at the Research and Development Agency of the Ministry of Defense of the Republic of Indonesia with a conceptual framework can be seen in the figure 1.

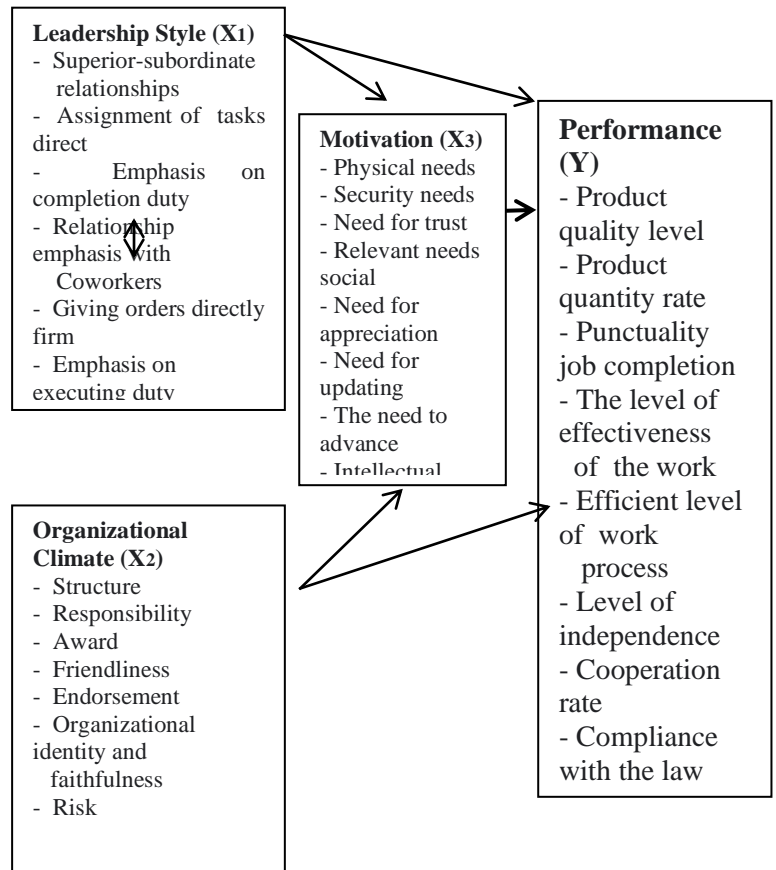


Figure 1. Research Conceptual Framework

Source: processed by author, 2023

Sources of data used in this study are primary data and secondary data. Primary data were collected by researchers based on questionnaires distributed to respondents. Secondary data in research includes literature, documentation or reports related to the object of research and guidelines issued by the Indonesian Ministry of Defense Research and Development Agency.

The research population is the employees of the Indonesian Ministry of Defense Research and Development Agency totaling 253 people. Calculation of the

sample using the Slovin formula with an error rate ($e = 5\%$) obtained 72 people. The sampling technique used stratified random sampling.

testing using Cronbach's Alpha formula. Classical assumption test on the collected data, namely normality test, heteroscedasticity, multicollinearity and autocorrelation.

Descriptive analysis was carried out on descriptive data of research variables using descriptive statistics. Verificative analysis to test the hypothesis using statistical methods with path analysis.

Table 2. Definition of Variable Operational

The research variables are independent variables including leadership style variables (X_1), organizational climate variables (X_2), intervening variables namely motivation (X_3) and employee performance variables (Y) as the dependent variable. The definition and operationalization of the research variables can be seen in the table 2.

Research data collection is done through a questionnaire. Testing the validity of the instrument using the Pearson product moment correlation formula through SPSS software. Reliability

Variable	Definition and operationalization of variable	Scale
Leadership Style (X1)	Leadership style is a pattern of leader behavior in directing, influencing, encouraging and controlling his subordinates to be able to do some work on his consciousness and voluntarily in achieving a certain goal. With the superior-subordinate relationship indicator (X1.1), assigning tasks direct (X1.2), emphasis on task completion (X1.3), emphasis on relationships with coworkers (X1.4), Strictly giving orders (X1.5) and emphasis on carrying out task (X1.6).	Ordinal
Organizational Climate (X2)	Organizational climate is the perceptions, expectations, impressions, feelings and desires of members regarding the organization and the organizational environment that affect the behavior of members in carrying out their work. With indicators: structure (X2.1), responsibility (X2.2), reward (X2.3), friendliness (X2.4), support (X2.5), organizational identity and loyalty (X2.6) and risk (X2.7)	Ordinal
Motivation (X3)	Motivation is a driving factor from within individuals to achieve goals in order to meet needs or expectations to carry out tasks well. With indicators: physical needs (X3.1), security needs (X3.2), trust needs (X3.3), social needs (X3.4), esteem needs (X3.5), actualization needs (X3.6), the need to progress (X3.7) and intellectual challenge (X3.8)	Ordinal
Performance (Y)	Performance is a comparison of the work achieved by employees with predetermined standards or the results achieved by a person, both quantity and quality in an organization in accordance with their responsibilities. With indicators: product quality level (Y1), product quantity level (Y2), timeliness of work completion (Y3), work effectiveness level (Y4), work process efficiency level (Y5), independence level (Y6), cooperation level (Y7) and compliance with law (Y8)	Ordinal

Source: processed by author, 2023

Simultaneous Hypothesis Test

Equation of sub structure 1

$$X_3 = p_{x_3x_1} X_1 + p_{x_3x_2} X_2 + p_{x_3\epsilon_1}$$

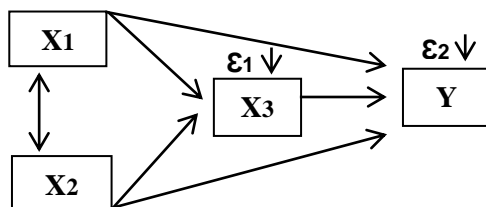


Figure 2. Structural Equation Path Model

Source: Author results, 2023

Equation of sub structure 1

$$X_3 = p_{x_3x_1} X_1 + p_{x_3x_2} X_2 + p_{x_3\epsilon_1}$$

Equation of sub structure 2

$$Y = p_{y_1x_1} X_1 + p_{y_1x_2} X_2 + p_{y_1x_3} X_3 + p_{y_1\epsilon_2}$$

Statistical hypothesis:

$H_0 : p_{x_3x_1} = p_{x_3x_2} = p_{x_3\epsilon_1} = 0$; Leadership

Style and Organizational Climate

simultaneously does not have

significant

effect on motivation.

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Ha : $\beta_1 \neq \beta_2 = \beta_3 \neq 0$; Leadership Style and Organizational Climate simultaneously have significant effect on motivation.

Equation of sub structure 2

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 \epsilon$$

Statistical hypothesis:

$$H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0 ;$$

Leadership Style, Climate Organization and motivation simultaneously does not

have significant effect on Performance

$$H_a : \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$$

Leadership Style, Climate Organization and motivation simultaneously have significant effect on Performance.

The test statistics used are

$$F = \frac{(n-k-1)R_{yX_k}^2}{k(1-R_{yX_k}^2)}$$

Reject H_0 , if $F_{count} > F_{table}$ and significance value $<$ probability value 0.05 ($sign < 0.05$).

Partial Hypothesis Test

Equation of sub structure 1

$$X_3 = \beta_1 X_1 + \beta_2 X_2 + \beta_3 \epsilon$$

Statistical hypothesis:

$H_0 : \beta_1 = \beta_2 = 0$; Leadership Style and

Organizational Climate partial does not have significant effect on motivation.

$H_a : \beta_1 \neq \beta_2 \neq 0$; Leadership Style and

Organizational Climate partial have

significant effect on motivation.

Equation of sub structure 2

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 \epsilon$$

Statistical hypothesis:

$$H_0 : \beta_1 = \beta_2 = \beta_3 = 0 ;$$

Leadership Style, Organizational Climate and Motivation partially does not have significant effect on Performance

$$H_a : \beta_1 \neq \beta_2 \neq \beta_3 \neq 0 ;$$

Leadership Style, Organizational Climate and Motivation partially have significant effect on Performance

The test statistics used are :

$$t_{x1} = \frac{\rho_{x1}}{se_{\rho_{x1}}}$$

Reject H_0 , if $t_{count} > t_{table}$ and probability value is $0.05 <$ probability value sig or ($0.05 < sig$).

4. Result and Discussion

Respondent Profile

Profile of respondents based on gender, age, education, and years of service of employees as shown in Table 3, Table 4, Table 5 and Table 6.

Table 3. Profile of Respondents Based on Gender

Gender	Percentage of Respondents (%)
Male	62,5
Female	37,5

Source: Author Calculation, 2023

Table 4. Profile of Respondents by Age

Age Group	Percentage of Respondents
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	(%)
26 - 30	9.7
31 - 35	15.3
36 - 40	13.9
41 - 45	20.8
46 - 50	23.6
51 - 55	16.7

Source: Author Calculation, 2023

Table 5. Profile of Respondents Based on Education

Education	Percentage of Respondents (%)
High School	25.0
Diploma	1.4
Bachelor	41.7
Postraduate	31.9

Source: Author Calculation, 2023

Table 6. Profile of Respondents Based on Years of Service

Years on Service	Percentage of Respondents (%)
1 - 5	36.1
6 - 10	18.1
11 - 15	23.6
16 - 20	9.7
21 - 25	5.6
26 - 30	6.9

Source: Author Calculation, 2023

Instrument Test Results

The results of the validity test on the questions in the questionnaire from the variables of leadership style, organizational climate, motivation, and employee performance showed that all question items were valid, because $r_{count} > r_{table}$ (0.1954). Based on the calculation results, the reliability test of the four variables showed reliable results because the Cronbach Alpha value > 0.6

The results of the normality test on the variables of leadership style, organizational climate, motivation, and

employee performance showed that the data were normally distributed because the Kolmogorov-Smirnov Z value was > 0.05 . The results of the heteroscedasticity test for the four variables showed that the data did not occur heteroscedasticity because the significance value was > 0.05 . The results of the multicollinearity test on the four variables showed that there was no multicollinearity in the data because the tolerance value was > 0.10 and the VIF value was < 10 . The results of the autocorrelation test on the four variables showed that there was no autocorrelation because the DW value of 2.291 was located between the upper limit (du) of 1.703 and $(4-du)$ of 2.297.

Descriptive Analysis Results

Analysis of the description of the research variables can be seen in Table 7 to Table 10.

Table 7. Results of the Description of Leadership Style Variables

Indicator		Respondents (%)	Description
No	Description		
X1.1	Relationship between superiors & subordinates	75 % 25 %	Good Not enough
X1.2	Direct assignment	65,3 % 34,7 %	Good Not enough
X1.3	Emphasis on task	87,5 % 12,5 %	Good Not

	completi on		enough
X1.4	Emphasis on relation ships with coworker s	91,7 % 8,3 %	Good Not enough
X1.5	Strictly giving orders	66,7 % 33,3 %	Good Not enough
X1.6	Emphasis on carrying out tasks	88,9 % 11,1 %	Good Not enough

Source: Author Calculation, 2023

Table 8. Result of Description of Organisation Climate Variables

Indicator		Respo n dent (%)	Description
No	Descripti on		
X2.1	Structure	75 % 25 %	Good Not enough
X2.2	Responsi bility	29,2 % 71,8 %	Good Not enough
X2.3	Reward	41,7 % 58,3 %	Good Not enough
X2.4	Friendlin ess	91,7 % 8,3 %	Good Not enough
X2.5	Support	93,1 % 6,9 %	Good Not enough
X2.6	Organizat ional identity and loyalty	88,9 % 11,1 %	Good Not enough
X2.7	Risk	52,8 % 47,2 %	Good Not enough

Source: Author Calculation, 2023

Table 9. Results Description of Motivation Variables

Indicator		Responde nts (%)	Descripti on
No	Descriptio n		
X3.1	Physical needs	91,7 % 8,3 %	Good Not enough
X3.2	Security needs	68,1 % 31,9 %	Good Not enough
X3.3	Trust needs	81,9 % 18,1 %	Good Not enough
X3.4	Social needs	97,2 % 2,8 %	Good Not enough
X3.5	Esteem needs	94,4 % 5,6 %	Good Not enough
X3.6	Actualizati on needs	88,9 % 11,1 %	Good Not enough
X3.7	The need to progress	73,6 % 26,4 %	Good Not enough
X3.8	Intellectua l challenge	77,8 % 22,2 %	Good Not enough

Source: Author Calculation, 2023

Table 10. Results Description of Performance Variables

Indicator		Respon dents (%)	Descripti on
N o	Description		
Y1	Product quality level	5,6 % 94,4 %	Good Not enough
Y2	Product quantity level	88,9 % 11,1 %	Good Not enough
Y3	Timeliness of work completion	87,5 % 12,5 %	Good Not enough
Y4	Work effective ness	84,7 % 15,3 %	Good Not

	level		enough
Y 5	Work process efficiency level	55,6 % 44,4 %	Good Not enough
Y 6	Independence level	68,1 % 31,9 %	Good Not enough
Y 7	Cooperation level	91,7 % 8,3 %	Good Not enough
Y 8	Compliance with law	93,1 % 6,9 %	Good Not enough

Source: Author Calculation, 2023

Verification Analysis Results

The results of the simultaneous hypothesis testing of structural equations 1. The influence of leadership style and organizational climate simultaneously on motivation. The results of the study as shown in table 11 and table 12

Table 11. Model Summary Structure 1

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.569 ^a	.324	.304	2.391

a. Predictors: (Constant), X2_Iklim_Organisasi, X1_Gaya_Kepemimpinan
Source: Author Calculation, 2023

Table 12. Anova Structure 1

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	188.981	2	94.491	16.534	.000 ^b
	Residual	394.338	69	5.715		
	Total	583.319	71			

a. Dependent Variable: X3_Motivasi_Kerja

b. Predictors: (Constant), X2_Iklim_Organisasi, X1_Gaya_Kepemimpinan

Source: Author Calculation, 2023

Simultaneous testing using F test statistics and significance value. The result of F-count is 16.534, while the value of F-table = $F[0.05 ; (2, 72-2-1)] = 3.1373$ and the significance value (sign) = 0.000. The rejection criteria are H_0 , if (Fcount > Ftable) and the sign value is < 0.05. From the above calculation results, then H_0 is rejected, meaning that leadership style and organizational climate simultaneously have a significant positive effect on motivation. The magnitude of the influence of leadership style and organizational climate simultaneously on motivation is 0.324 (32.4%). The remaining $1 - 0.324 = 0.676$ (67.6%) is influenced by other variables.

The results of the partial hypothesis test of structural equation 1. Partial influence of leadership style and organizational climate on motivation. The results of the study are as shown in table 13.

Table 13. Coefficients Structure 1

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.300	2.994		5.111	.000
	X1_Gaya_Kepemimpinan	.406	.086	.502	4.716	.000
	X2_Iklim_Organisasi	.150	.113	.141	1.328	.188

a. Dependent Variable: X3_Motivasi_Kerja

Source: Author Calculation, 2023

Partial testing in this study used t-test statistics and significance values. The results of the t-count of the influence of leadership style on motivation of 4.716 and sign = 0.000 and t-count of the influence of

organizational climate on motivation of 1.328 and sign = 0.188, while the value of t-table = 1.995; Rejection criteria Ho if (t-count > t-table) and the sign value <0.05. From the results of the calculations above, the Ho leadership style is rejected, meaning that leadership style has a significant positive effect on motivation. As for the organizational climate, Ho is accepted, meaning that the organizational climate has no significant effect on motivation.

From the structural equation 1, it is found that the organizational climate variable (X2) has no significant effect on motivation (X3) so that the trimming method is carried out, namely not including the organizational climate variable (X2) into the structural framework 1 and then tested again. The results of comparisons and calculations before and after trimming are as in table 14, table 15 and table 16

Table 14. Model Summary Structure 1 Before and After Trimming

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.569 ^a	.324	.304	2.391
1	.554 ^b	.307	.297	2.404

a. Predictors: (Constant), X2_Iklim_Organisasi, X1_Gaya_Kepemimpinan
 b. Predictors: (Constant), X1_Gaya_Kepemimpinan

Source: Author Calculation, 2023

Table 15. Anova Structure 1 Before and After Trimming

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	188.981	2	94.491	16.534	.000 ^b
	Residual	394.338	69	5.715		
	Total	583.319	71			
1	Regression	178.898	1	178.898	30.965	.000 ^c
	Residual	404.421	70	5.777		
	Total	583.319	71			

a. model 1 predictors: (Constant, X2_Iklim_Organisasi, X1_Gaya_Kepemimpinan
 b. model 1 predictors: (Constant), X1_Gaya_Kepemimpinan,
 c. Dependent Variable: X3_Motivasi_Kerja

Source: Author Calculation, 2023

Table 16. Coefficients Structure 1 Before and After Trimming

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	15.300	2.994		5.111	.000
	X1_Gaya_Kepemimpinan	.406	.086	.502	4.716	.000
	X2_Iklim_Organisasi	.150	.113	.141	1.328	.188
1	(Constant)	17.610	2.450		7.187	.000
	X1_Gaya_Kepemimpinan	.449	.081	.554	5.565	.000

a. Dependent Variable: X3_Motivasi_Kerja

Source: Author Calculation, 2023

Based on the results of the analysis after the organizational climate variable (X2) was removed, the path coefficient value of Leadership Style (X1) on Work Motivation (X3) was 0.554. The determinant coefficient (Rsquare) is 0.307 and F count is 30.965 and the residual coefficient $\sqrt{1-0.307} = 0.832$. Thus the path diagram of structure one becomes:

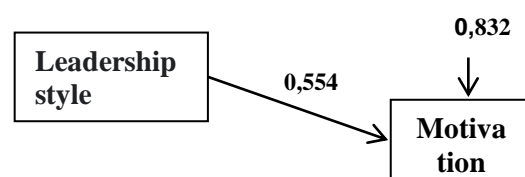


Figure 3. Structure Path Diagram 1
Source: Author Calculation, 2023

Structural equation 1

$$X_3 = \beta_{31}X_1 + \beta_{3e}$$

$$X_3 = 0.554 X_1 + 0.382$$

The results of the simultaneous hypothesis testing of structural equations 2. The influence of leadership style, organizational climate and motivation simultaneously on performance. The results of the study are as shown in table 17 and table 18.

Table 17. Model Summary Structure 2

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.624 ^a	.390	.363	2.758

a. Predictors: (Constant), X3_Motivasi_Kerja, X2_Iklm_Organisasi, X1_Gaya_Kepemimpinan

Source: Author Calculation, 2023

Table 18. Annova Structure
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	329.973	3	109.991	14.463	.000 ^b
	Residual	517.138	68	7.605		
	Total	847.111	71			

a. Dependent Variable: Y_Kinerja

b. Predictors: (Constant), X3_Motivasi_Kerja, X2_Iklm_Organisasi, X1_Gaya_Kepemimpinan

Source: Author Calculation, 2023

Simultaneous testing in this study used F test statistics and significance values. The result of F-count is 14,463, while the value of F-table = $F[0.05 ; (3, 72-3-1)] = 2.7578$ and the significance value (sign) = 0.000. The rejection criteria are H_0 , if (Fcount > Ftable) and the sign value is < 0.05. From the above calculation results, then H_0 is rejected, meaning that leadership style, organizational climate and

motivation simultaneously have a significant positive effect on performance. The magnitude of the effect is 0.390 (39.0 %). The remaining $1 - 0.390 = 0.610$ (61.0%) is influenced by other variables.

The results of the partial hypothesis test of structural equations 2. The effect of leadership style, organizational climate and motivation partially on performance. The results of the study as shown in table 19

Table 19. Coefficients Structure 2

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.630	4.055		2.621	.011
	X1_Gaya_Kepemimpinan	.288	.114	.295	2.522	.014
	X2_Iklm_Organisasi	-.119	.132	-.093	-.901	.371
	X3_Motivasi_Kerja	.533	.139	.443	3.840	.000

a. Dependent Variable: Y_Kinerja

Source: Author Calculation, 2023

Partial testing in this study used t-test statistics and significance values. The results of the t-count of the influence of leadership style on performance of 4.716 and sign = 0.014, t-count of the influence of organizational climate on performance of -0.901 and sign = 0.371, and t-count of motivation on performance of 0.3840 and sign = 0.000 while the value t-table = 1,995; Rejection criteria H_0 , if (t-count > t-table) and the sign value < 0.05. From the results of the calculations above, the H_0 leadership style is rejected, meaning that the leadership style has a significant positive effect on performance. Organizational climate H_0 is

accepted, meaning that organizational climate has no significant effect on performance. Motivation Ho is rejected, meaning that motivation has a significant positive effect on performance

From the structural equation 2, it is found that the organizational climate variable (X2) has no significant effect on performance (Y) so that the trimming method is carried out, namely not including the organizational climate variable (X2) into the structural framework 2 and then tested again. The results of comparisons and calculations before and after trimming are as in table 20, table 21 and table 22.

Table 20. Model Summary Structure 2 Before and After Trimming

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.624 ^a	.390	.363	2.758
1	.618 ^a	.382	.364	2.754

a. Predictors: (Constant), X3_Motivasi_Kerja, X2_Iklim_Organisasi, X1_Gaya_Kepemimpinan
 b. Predictors: (Constant), X3_Motivasi_Kerja, X1_Gaya_Kepemimpinan

Source: Author Calculation, 2023

Table 21. Anova Structure 2 Before and After Trimming

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	329.973	3	109.991	14.463	.000 ^b
	Residual	517.138	68	7.605		
	Total	847.111	71			
1	Regression	323.801	2	161.900	21.347	.000 ^b
	Residual	523.310	69	7.584		
	Total	847.111	71			

a. model 1 predictors: (Constant), X3_Motivasi_Kerja, X2_Iklim_Organisasi, X1_Gaya_Kepemimpinan
 b. model 1 predictors: (Constant), X3_Motivasi_Kerja, X1_Gaya_Kepemimpinan
 c. Dependent Variable: Y_Kinerja

Source: Author Calculation, 2023

Table 22. Coefficients Structure 2 Before and After Trimming

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.630	4.055		2.621	.011
	X1_Gaya_Kepemimpinan	.288	.114	.295	2.522	.014
	X2_Iklim_Organisasi	-.119	.132	-.093	-.901	.371
	X3_Motivasi_Kerja	.533	.139	.443	3.840	.000
1	(Constant)	9.147	3.701		2.472	.016
	X1_Gaya_Kepemimpinan	.264	.111	.270	2.379	.020
	X3_Motivasi_Kerja	.514	.137	.426	3.750	.000

a. Dependent Variable: Y_Kinerja

Source: Author Calculation, 2023

Based on the results of the analysis after the organizational climate variable (X2) was removed, the path coefficient value for leadership style (X1) on performance (Y) was 0.270 and the path coefficient for motivation (X3) on performance (Y) was 0.426. The coefficient of determinant (Rsquare) is 0.382 and F count is 21.347 and the residual coefficient $\sqrt{1 - 0.382} = 0.786$. Thus the structure path diagram 2 becomes:

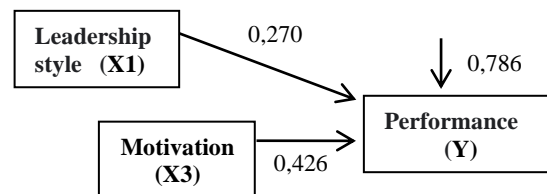


Figure 4. Structure Path Diagram 2
 Source: Author Calculation, 2023

Structural Equation 2

$$Y = \beta_{y1} X_1 + \beta_{y3} X_3 + \beta_{y\epsilon}$$

$$Y = 0.270 X_1 + 0.426 X_3 + 0.786$$

Contribution of Influence of Path Analysis Variables

The contribution of the influence of leadership style and motivation on performance simultaneously or partially assessed from the direct and indirect effects is shown in Figure 5 and Table 23.

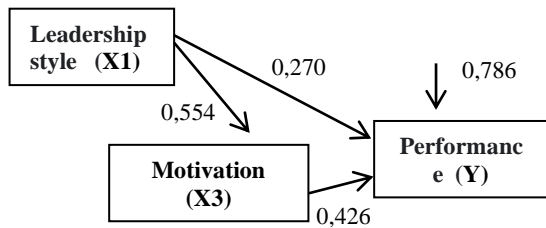


Figure 5. Causal Relationship between Research Variables

Source: Author Calculation, 2023

Table 23. Direct and Indirect Effects of Style Variables Leadership and Motivation on Performance

Variable	Direct Influence	Indirect Influence		Total
		Leadership style	Motivation	
Leadership style	7,29 %	-	23,6 %	30,89 %
Motivation	18,15 %	-	-	18,15 %
Total				49,04 %

Source: Author Calculation, 2023

Through data analysis, it can be seen that the total influence of leadership style and motivation variables on performance is 49.04%. While the remaining 50.96% is explained by other variables.

Discussion Description of Research Variables

The results of the descriptive analysis of the research variables stated

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that the variables of leadership style, organizational climate, motivation and descriptive performance were perceived as good. On the leadership style variable, the indicator of leadership emphasis in relations with co-workers has the highest value, namely 91.7% and the lowest is the indicator of direct assignment with a percentage of 65.3%. In the organizational climate variable, the indicator of support from fellow co-workers has the highest description of 93.1%, while the indicator of responsibility for making decisions has the lowest value of 29.2%. In the motivational variable, the indicator that is described the highest is the indicator of the need for social relations, happy to meet with colleagues at 97.2%, while the lowest is the indicator of security needs at 68.1%. In performance indicators, indicators of compliance with the law, punctual in attendance have a description value of 93.1%, while the indicator of the level of process efficiency with the lowest value is 55.6%.

Discussion of the Effect of Leadership Style and Organizational Climate on Motivation

Leadership style and organizational climate simultaneously have a significant influence on motivation at the Ministry of Defense Research and Development Agency. The total contribution given is 32.4%. The meaning of

the statistical test states that leadership style and organizational climate have a role of 32.4% in supporting the increase in employee motivation, while 67.6% is influenced by other variables. Partially, leadership style has a significant effect on motivation, while organizational climate has no effect on motivation. The results of the analysis after trimming by removing the organizational climate variable, the influence of leadership style on motivation is 30.7%. The results of this study are in accordance with the research of Takandjandji (2015) which state that leadership style has a significant influence on motivation.

Discussion of the Effect of Leadership Style, Organizational Climate and Motivation on Performance

Simultaneously leadership style, organizational climate and motivation affect performance. The total contribution given is 39.0%. The meaning of the statistical test states that leadership style, organizational climate and motivation have a role of 39.0% in supporting the improvement of employee performance, while 61.0% is influenced by other variables. Partially, leadership style and motivation have a significant effect on performance, while organizational climate has no effect on performance. Based on the results of the analysis after trimming by removing the organizational climate variable,

partially leadership style has a significant effect on performance by 30.89% and motivation has a significant effect on performance by 18.5%. So the total contribution of leadership style and motivation to performance is 49.04%. The results of this study are in accordance with research by Rambe and Isnaria (2018), Avrilianda (2018) and Naa'imah and Farida (2021) that leadership style and motivation variables have an influence on performance variables.

5. Conclusion

Leadership style, organizational climate, motivation and performance are perceived as good. The leadership style variable that needs to be improved is the direct assignment of tasks by the leadership. The organizational climate variable that needs to be improved is decision-making responsibility. The motivation variable that needs to be improved is the assurance of security needs. Meanwhile, the performance variable that needs to be improved is the level of process efficiency

Leadership style and organizational climate simultaneously have a significant effect on motivation with a contribution of 32.4%. However, partially organizational climate has no effect on motivation. After trimming, the influence of leadership style on motivation is 30.7%.

Simultaneously leadership style, organizational climate and motivation have a significant effect on performance with a total contribution of 39.0%. However, partially the organizational climate has no effect on performance. After trimming, the influence of leadership style and motivation on performance is 49.04%.

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