

THE INFLUENCE OF EDUCATION AND TRAINING ON IMPROVING EMPLOYEE PERFORMANCE THROUGH WORK MOTIVATION AS AN INTERVENING VARIABLE AT THE MEDAN MAIMUN DISTRICT OFFICE

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Abstract

In the era of globalization and increasingly fierce competition, every organization is required to improve the performance of its employees in order to achieve the goals that have been set. Organizations/agencies that are established always have the hope that in the future they will experience good development within the scope of the agency and want to create effective performance in their field of work. Low work motivation, whether caused by awards, a less conducive work environment, or limited career development opportunities, can hinder the improvement of employee performance even though they have received training. The formulation of the research problem is 1) How much influence does education have on improving the performance of employees at the Medan Maimun District Office?, 2) How much influence does training have on improving the performance of employees at the Medan Maimun District Office?, 3) How much influence does education have on work motivation at the Medan Maimun District Office?, 4) How much influence does training have on work motivation at the Medan Maimun District Office?, 5) How much influence does work motivation have on improving the performance of employees at the Medan Maimun District Office?, 6) How much influence do education and training have on improving the performance of employees at the Medan Maimun District Office?, 7) How big is the influence of education and training on work motivation in the Medan Maimun Sub-district Office?, 8) How big is the influence of education and training on improving employee performance through work motivation in the Medan Maimun Sub-district Office?. The research method used is quantitative with a sample of 54 people. The results of the study show that education has a positive and significant effect on employee performance in the Medan Maimun Sub-district Office. Training has a positive and significant effect on employee performance in the Medan Maimun Sub-district Office. Education has a positive and significant effect on employee work motivation in the Medan Maimun Sub-district Office. Training has a positive and significant effect on employee work motivation in the Medan Maimun Sub-district Office. Work motivation has a positive and significant effect on employee performance in the Medan Maimun Sub-district Office. Education and training

together have a positive and significant effect on employee performance in the Medan Maimun Sub-district Office. Education and training have a positive and significant effect on employee work motivation in the Medan Maimun Sub-district Office. Education and training have a positive and significant effect on employee performance through work motivation as an intervening variable in the Medan Maimun Sub-district Office.

Keywords: Education, Employee Performance, Training, Work Motivation.

A. INTRODUCTION

Human resources (HR) are one of the main factors in determining the success of an organization. Resources are defined as instruments for achieving goals or as capabilities for generating benefits through proper management. Organizations or institutions that have been established always expect to develop positively in the future within their respective environments and seek to create effective performance in their fields of work. In every government institution, human resources constitute a highly important and influential aspect for the continuity and success of the institution, as noted by Suci Ramadhania (2020). Institutions and employees are two interdependent parties. Employees are valuable assets of an institution because human resources serve as the driving force that enables the institution to continue carrying out its work activities. In order to obtain high-quality human resources, it is necessary to strengthen discipline among all personnel within an institution so that the quality of human resources can be improved and no gap arises between employees' capabilities and the standard competencies required by the institution.

Education and training are important instruments for improving employees' skills, knowledge, and work attitudes. Through appropriate education and training, employees can develop better abilities in carrying out their duties and responsibilities, thereby making an optimal contribution to the organization. Hasibuan (2023) argues that education and training are processes aimed at improving the theoretical, conceptual, and moral competencies of employees, and that employees who receive education and training tend to work more skillfully than those who do not. However, the success of education and training in improving employee performance does not depend solely on the programs provided, but is also influenced by other factors, such as work motivation. Motivation and performance are two constructive and correlated elements. Both are mutually dependent and cannot be separated from one another. Work motivation plays an important role in bridging the relationship between education and training and the improvement of employee performance. Employees with high work motivation are more likely to apply the skills and knowledge they have acquired during training to their work. Conversely, without sufficient work motivation, the effectiveness of education and training in improving employee performance may become less than optimal. Kadarisman (2012) defines work motivation as the driving force within an individual that encourages them to behave and work diligently and properly in accordance with the duties and responsibilities assigned to them. Motivation may also be understood as a factor that encourages people to act in a certain way. Therefore, maintaining employee motivation is essential to support employee performance, because performance refers to the qualitative and quantitative results achieved by an employee in carrying out tasks in accordance with the responsibilities assigned to them (Mangkunegara, 2020).

B. LITERATURE REVIEW

Education

According to Ahmad, as cited in Hasbullah (2017), education is the conscious guidance or direction provided by educators toward the physical and spiritual development of learners in order to shape their personality. Meanwhile, Edwin, as cited in Hasibuan (2017, p. 69), states that education is an indicator reflecting a person's ability to complete their work. Education is a conscious and planned effort to create learning conditions and activities, both formal and informal, with the essential aim of developing the potential inherent in human beings.

Training

According to Benyamin (2011), training refers to providing the skills needed by new or existing employees to carry out their work. Nawawi (2011) states that training is a process of providing assistance to workers so that they can master specific skills or improve their deficiencies in performing their jobs. Its main focus is to enhance employees' work capabilities in meeting the demands of the most effective ways of working in the present time. Training is therefore an educational process for employees aimed at closing the gap between job demands and employees' capabilities, so that work targets can be achieved and performance outcomes can subsequently be improved more effectively and efficiently.

Performance

Hasibuan (2017) explains that performance is a combination of three important factors, namely an employee's ability and interest, the employee's understanding and acceptance of task delegation and roles, and the employee's level of motivation. If the performance of each individual or employee is good, then the performance of the organization is also expected to be good. Performance is the result of work achieved by employees, both qualitatively and quantitatively, in carrying out their duties in accordance with the responsibilities assigned by the organization. These work results are measured against the expected outcomes of the organization through the performance criteria or standards that apply within the organization.

Work Motivation

Edy Sutrisno (2016) states that motivation is something that generates an individual's drive to work in order to achieve maximum performance. Every activity carried out by a person is certainly influenced by a factor that encourages that activity. Work motivation is a condition in the form of an inner drive that moves employees to participate in achieving the goals established by the organization or in attaining personal job satisfaction.

C. RESEARCH METHODOLOGY

The method used in this study is a quantitative approach, which relies on numerical data as the primary basis for analysis. The data obtained were analyzed using the Statistical Package for the Social Sciences (SPSS) version 29.

D. RESULT AND DISCUSSION

Validity and Reliability Test

Table 1. Validity test results

Education Variable (X1)			
Statement	r_{count}	r_{table}	Validity
P1	0,748	0,268	Valid
P2	0,660	0,268	Valid
P3	0,675	0,268	Valid
P4	0,571	0,268	Valid
P5	0,695	0,268	Valid
P6	0,637	0,268	Valid
P7	0,572	0,268	Valid
P8	0,407	0,268	Valid
Variabel Pelatihan (X2)			
Statement	r_{count}	r_{table}	Validity
P1	0,661	0,268	Valid
P2	0,678	0,268	Valid
P3	0,802	0,268	Valid
P4	0,639	0,268	Valid
P5	0,495	0,268	Valid
P6	0,432	0,268	Valid
P7	0,652	0,268	Valid
P8	0,367	0,268	Valid
P9	0,623	0,268	Valid
P10	0,564	0,268	Valid
Employee Performance Variable (Y)			
P1	0,828	0,268	Valid
P2	0,624	0,268	Valid
P3	0,385	0,268	Valid
P4	0,667	0,268	Valid
P5	0,791	0,268	Valid
P6	0,686	0,268	Valid
P7	0,746	0,268	Valid
P8	0,766	0,268	Valid
P9	0,619	0,268	
P10	0,623	0,268	
Work Motivation Variable (Z)			
P1	0,670	0,268	Valid
P2	0,680	0,268	Valid
P3	0,646	0,268	Valid
P4	0,764	0,268	Valid
P5	0,757	0,268	Valid
P6	0,768	0,268	Valid
P7	0,819	0,268	Valid
P8	0,648	0,268	Valid
P9	0,667	0,268	Valid

P10	0,672	0,268	Valid
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Source: Processed by Researchers, 2026

Table 1 shows that all statement points for the variables education (X1), training (X2), employee performance (Y) and work motivation (Z) have a calculated r value that is greater than the table r value, so it can be concluded that all statements for each variable are declared valid.

Table 2. Reliability Test Results

Variable	Cronbach Alpha	Constant	Reliability
Education variable (X1)	0,764	0,6	Reliable
Training variable (X2)	0,786	0,6	Reliable
Employee performance variable (Y)	0,864	0,6	Reliable
Work motivation variable (Z)	0,886	0,6	Reliable

Source: Processed by Researchers, 2026

Classical Assumption Test

Figure 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual	
N		54	
Normal Parameters ^{a,b}	Mean	.0000000	
	Std. Deviation	1.71913209	
Most Extreme Differences	Absolute	.084	
	Positive	.082	
	Negative	-.084	
Test Statistic		.084	
Asymp. Sig. (2-tailed) ^c		.200 ^d	
Monte Carlo Sig. (2-tailed) ^e	Sig.	.437	
	99% Confidence Interval	Lower Bound	.425
		Upper Bound	.450

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.
- e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: Processed by Researchers, 2026

From the normality test processing in Figure 1. above, it can be seen that the significance results are > 0.05 , which means that the data entered in this study is normally distributed.

Figure 2. Multicollinearity Test Results

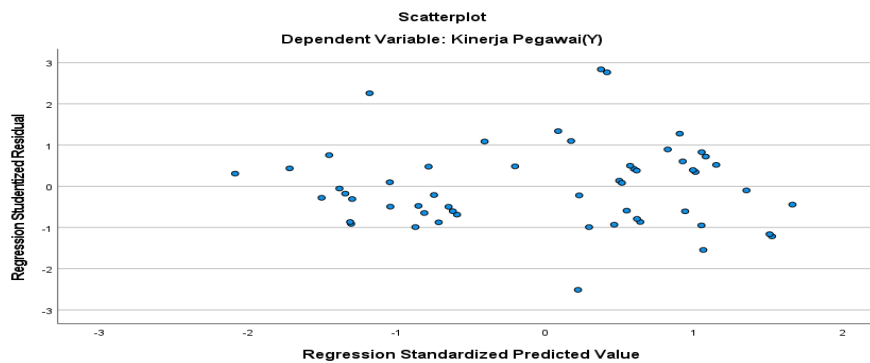
Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.398	2.132		-.656	.515		
	Pendidikan (X1)	.084	.067	.069	1.254	.216	.669	1.496
	Pelatihan (X2)	.091	.059	.086	1.528	.133	.639	1.564
	Motivasi Kerja (Z)	.881	.061	.856	14.407	<.001	.570	1.755

a. Dependent Variable: Kinerja Pegawai(Y)

Source: Processed by Researchers, 2026

Table 3. Heteroscedasticity Test Results



Source: Processed by Researchers, 2026

The Influence of Education on Employee Performance

The t-test results indicate that the education variable (X1) significantly influences employee performance (Y). This is evidenced by the calculated t-value of 5.087, which is greater than the t-table value of 2.007. Furthermore, the significance value of 0.001, which is lower than the $\alpha = 0.05$ level, strengthens the evidence for a significant relationship between education and employee performance. Therefore, the first hypothesis (H₁), which states that education influences employee performance, is accepted.

These results align with research conducted by Yogiana Widya Sari (2023), which found that education has a positive and significant effect on employee performance. This finding suggests that higher levels of education tend to improve employees' cognitive abilities, task understanding, and skills in carrying out their responsibilities. Education provides a foundation of knowledge and basic skills essential for completing work more effectively and efficiently.

The Effect of Training on Employee Performance

Based on the statistical analysis, the calculated t-value was 5.536, while the table t-value was 2.007 at a significance level of 5% ($\alpha = 0.05$) and with a certain number of degrees of freedom. Since the calculated t-value (5.536) is greater than the table t-value (2.007), this result can be concluded as statistically significant. This is further supported by the significance value of 0.001, which is much lower than the critical limit used ($0.001 < 0.05$). Thus, the second hypothesis is accepted, meaning the training variable (X2) has a significant effect on the employee performance variable (Y).

These results indicate that the training program provided to employees has a positive impact

on improving their performance. Effective training can improve employees' skills, knowledge, and understanding of their duties and responsibilities, ultimately improving work quality and productivity (Titin Maidarti et al., 2022).

The Influence of Education on Work Motivation

The results of the statistical test indicate that the education variable (X1) has a significant influence on work motivation (Z). This is indicated by the calculated t-value of 4.708, which is greater than the t-table of 2.007. Furthermore, the significance value of 0.001, which is much lower than the established limit ($\alpha = 0.05$), strengthens the conclusion that the relationship between education and work motivation is significant. Thus, the third hypothesis, stating that education influences work motivation, is accepted.

This research aligns with research conducted by Yogiana Widya Sari (2023), which found that education has a positive and significant influence on employee work motivation. Employees with higher education are more likely to adapt to the demands of their jobs and technological developments. Education motivates employees to maximize their abilities in their work. Therefore, organizations need to consider the educational aspect in their human resource development strategies, both through recruiting workers with appropriate educational backgrounds and by providing training and continuing education to existing employees.

The Effect of Training on Work Motivation

The results of the t-test analysis indicate that the training variable (X2) has a significant effect on work motivation (Z). This is evidenced by the calculated t-value of 5.055, which is greater than the t-table of 2.007. Furthermore, the p-value of 0.001 is much smaller than the significance level used, which is 0.05. Therefore, based on the t-test, it can be concluded that the fourth hypothesis is accepted, meaning that training has a positive and significant effect on employee work motivation. This means that the better or more effective the training provided by the organization, the greater the employee work motivation will be.

This research aligns with research conducted by Yogiana Widya Sari (2023) that found training has a positive and significant effect on work motivation. Effective training can increase employee job satisfaction and intrinsic motivation. Therefore, company management is advised to continue developing training programs tailored to employee needs and potential to encourage overall performance improvement.

The Influence of Work Motivation on Employee Performance

Based on the t-test results, the calculated t-value of 20.449 is greater than the t-table value of 2.007. Furthermore, the p-value of 0.001 is less than the established significance limit ($\alpha = 0.05$). Thus, these results indicate a significant influence between the work motivation variable (Z) and employee performance (Y).

This research aligns with research conducted by Yogiana Titin Maidarti et al. (2022) that found that motivation has a positive and significant effect on employee performance. The higher the level of work motivation an employee possesses, the higher their performance will be. Motivated employees tend to exhibit high loyalty, initiative, and a passion for achieving predetermined work targets.

The Influence of Education and Training on Employee Performance

Based on the results of the simultaneous regression analysis (F-test), the calculated F-

value was 23.698, while the F-table value was 3.179. Because the calculated F value $>$ F table ($23.698 > 3.179$) and the significance value is $0.001 < 0.05$, it can be concluded that the education and training variables simultaneously have a significant effect on employee performance.

This research aligns with research conducted by Putri Gustiningrum (2025), which found that simultaneously, the education and training variables have a positive and significant effect on performance at the Jambi Province Culture and Tourism Office. Employee development through education and training is a key factor in increasing employee effectiveness and productivity.

The Effect of Education and Training on Work Motivation at the Medan Maimun District Office

Based on the results of the simultaneous regression analysis (F test), the calculated F value was 19.262, while the F table value was 3.179. Because the calculated F value $>$ F table ($19.262 > 3.179$) and the significance value was $0.001 < 0.05$, it can be concluded that the education and training variables simultaneously have a significant effect on employee work motivation, with the conclusion H7 being accepted.

These results align with research conducted by Any Wahyu Mumpuni (2023) that education and training have a positive and significant impact on work motivation. Regression analysis shows that education and training have an impact on work motivation. High motivation is often viewed as an energy within an employee that drives them to devote all their attention and energy to achieving organizational goals, Muntaha & Mufrihah (2017).

The Influence of Education and Training on Employee Performance Through Work Motivation as an Intervening Variable

The direct influence of X1 and X2 on Z is $0.358 + 0.409 = 0.767$. Meanwhile, the indirect influence of X1 and X2 on Y through Z is $(0.069 + 0.086) \times 0.856 = 0.155 \times 0.856 = 0.133$. Based on these calculations, it can be seen that the direct influence value is greater than the indirect influence value, i.e., $0.767 > 0.133$, indicating a significant influence between education and training on employee performance, moderated by work motivation. The conclusion is that H8 is accepted.

This research aligns with research conducted by Yogiana Widya Sari (2023) that found education and training have a positive and significant influence on employee performance through work motivation as an intervening variable. The importance of motivation as a mediator of the influence of education on employee performance. This shows that education has a significant impact on employee performance if motivation mediates, meaning that employee performance depends on the level of employee motivation and education.

E. CONCLUSION

The conclusion of this study confirms that education and training are strategic factors that have a positive and significant influence on improving employee performance, both directly and indirectly through work motivation as an intervening variable. The analysis results show that the higher the level of education and the more effective the training program provided, the higher the employee's work motivation, which ultimately has an impact on optimal performance improvement. Work motivation has been shown to play a key role as a

mediating mechanism that strengthens the relationship between education, training, and employee performance, although the direct influence of education and training remains more dominant than the indirect influence through motivation. These findings indicate that the success of human resource development is not only determined by the aspect of improving technical competence, but also by the organization's ability to build and maintain employee work motivation. Therefore, agencies need to integrate education and training policies with work motivation improvement strategies to create sustainable employee performance that is aligned with organizational goals.

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