

Analysis Of Organizational Culture And Work Environment On Employee Performance With Motivation As An Intervening Variable In The Disaster Management Agency Batu Bara Regency

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ABSTRAK

Employee performance is a key factor in supporting the effectiveness of public organizations, particularly the Regional Disaster Management Agency (BPBD) of Batu Bara Regency, which is required to work quickly, accurately, and responsively in providing disaster services. This study aims to analyze the influence of organizational culture and work environment on employee performance, as well as to examine the role of work motivation as an intervening variable. This study used a quantitative approach with a census method on 81 employees of the BPBD of Batu Bara Regency. Data were collected through questionnaires and analyzed using the Partial Least Square (PLS) method. The results showed that organizational culture and work environment had a positive and significant effect on employee performance and work motivation. In addition, work motivation also had a positive and significant effect on employee performance. The indirect effect test proves that work motivation acts as an intervening variable in the relationship between organizational culture and work environment on employee performance. These findings confirm that strengthening organizational culture, creating a conducive work environment, and continuously improving work motivation are very important for improving the performance of BPBD employees in Batu Bara Regency.

ABSTRACT

Employee performance is a key factor in supporting the effectiveness of public organizations, particularly the Regional Disaster Management Agency (BPBD) of Batu Bara Regency, which is required to work quickly, accurately, and responsively in providing disaster services. This study aims to analyze the influence of organizational culture and work environment on employee performance, as well as to examine the role of work motivation as an intervening variable. This study used a quantitative approach with a census method on 81 employees of the BPBD of Batu Bara Regency. Data were collected through questionnaires and analyzed using the Partial Least Square (PLS) method. The results showed that organizational culture and work environment had a positive and significant effect on employee performance and work motivation. In addition, work motivation also had a positive and significant effect on employee performance. The indirect effect test proves that work motivation acts as an intervening variable in the relationship between organizational culture and work environment on employee performance. These findings confirm that strengthening organizational culture, creating a conducive work environment, and continuously improving work motivation are very important for improving the performance of BPBD employees in Batu Bara Regency.

INTRODUCTION

Employee performance is one of the most important factors in determining the success of an organization, especially in public organizations such as the Regional Disaster Management Agency (BPBD) of Batu Bara Regency, which has a major role in disaster management and community service. Therefore, BPBD requires employees who can work optimally, responsively, and skillfully in emergency situations. It is important to identify the factors that influence employee performance in this organization, especially internal factors that originate from organizational culture and work environment.

Organizational culture plays a very important role in determining employee behavior and performance. Organizational culture is a system of values, norms, and habits that apply within an organization that influence the way employees interact and work. Research by Sumitra et al. (2023) shows that an organizational culture that supports collaboration, open communication, and mutual respect can improve employee performance. In addition, a culture that encourages innovation and employee empowerment can also accelerate the achievement of organizational goals, especially in sectors that require speed and high responsiveness, such as disaster management. Research conducted by Fadilah & Kirana (2024) also found that an organizational culture that supports learning and adaptation has a positive impact on employee performance effectiveness in the public sector.

Apart from organizational culture, the work environment also plays an important role in influencing employee performance. A good work environment includes physical factors (such as comfortable facilities), social factors (relationships between coworkers), and psychological factors (feeling safe and

valued at work). Research by Rahman & Lataruva (2023) shows that a conducive work environment can increase work motivation and job satisfaction, which in turn contributes to employee performance. Conversely, an unsupportive work environment, such as a stressful atmosphere or a lack of adequate facilities, can reduce employee motivation and performance. Research conducted by Kurnia & Sitorus (2022) also suggests that work environment factors, such as work-life balance, have a direct impact on employee performance in the public sector.

Work motivation serves as an intervening variable in the relationship between organizational culture, work environment, and employee performance. Motivated employees tend to be more proactive, highly committed, and more productive in carrying out their duties. This is in line with the findings of Vo et al. (2022), who stated that work motivation is influenced by a supportive work environment and a positive organizational culture. In addition, research by Luthans (2021) shows that giving rewards and recognition in line with organizational cultural values can strengthen employee motivation and improve their performance. Thus, work motivation becomes an important link between organizational factors and employee performance.

This study aims to analyze the influence of organizational culture and work environment on employee performance at BPBD Batu Bara Regency, as well as to examine the role of work motivation as an intervening variable in this relationship. This study is expected to provide deeper insights into the factors that can improve employee performance at BPBD Batu Bara Regency, as well as provide recommendations for increasing employee motivation and performance through strengthening organizational culture and improving the work environment.

LITERATURE REVIEW

Employee Performance

According to Mangkunegara (2021), employee performance refers to the work results achieved by employees in carrying out their duties and responsibilities within the organization. Performance is measured based on how well the employee meets the work standards set by the organization. Employee performance includes not only the results achieved but also the process of achieving those results, which covers aspects of efficiency, effectiveness, and quality.

Work Motivation

According to Robbins & Judge (2022), work motivation is a process that explains the intensity, direction, and persistence of individuals in achieving a goal. So, in the context of motivation, teachers are internal and external forces that encourage teachers to carry out their educational duties—whether in teaching, educating, guiding, or carrying out other professional responsibilities—with enthusiasm, consistency, and a focus on achieving educational goals at school.

Work Environment

Saefullah (2022) states that the work environment is everything that surrounds workers and can influence them in performing their jobs.

Work Environment Indicators

According to Saefullah (2022), the work environment can be measured through the following indicators:

- 1) Physical Work Environment
This indicator focuses on the physical conditions of the workspace that affect employee comfort, thereby increasing focus and productivity.
- 2) Non-Physical Work Environment
This includes psychological and social factors in the workplace, such as a good social atmosphere that promotes the psychological well-being of employees.
- 3) Leadership Support
Supervisors have a strong influence on the quality of the work environment, such as supportive leaders increasing motivation and work enthusiasm.
- 4) Work Facilities
Adequate facilities are crucial for smooth operations; good facilities enhance work efficiency and effectiveness.

Organizational Culture

According to Ridwan et al. (2020), organizational culture consists of values, norms, habits, and behavior patterns that grow and develop within an organization, serving as guidelines for employees in their actions and work. A good organizational culture creates a conducive work environment, increases a sense of belonging, and encourages employees to work more disciplined and productively in achieving organizational goals.

Conceptual Framework

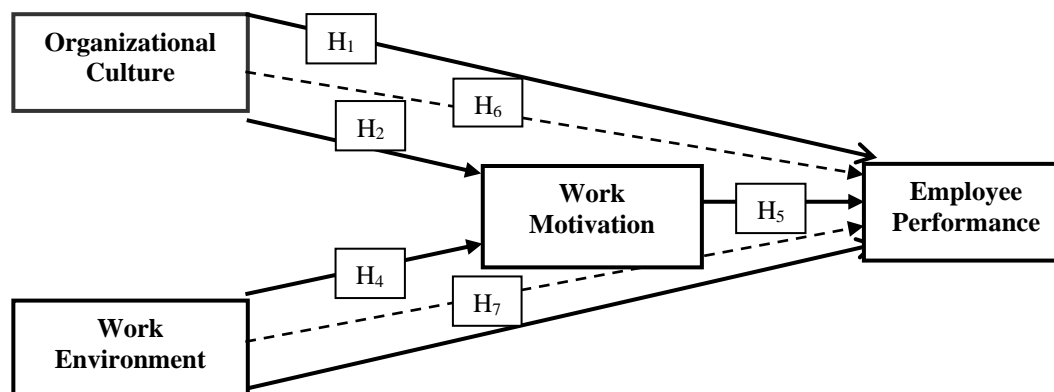


Figure 1. Conceptual Framework

Research Hypothesis

- H₁: Organizational culture has a positive and significant effect on employee performance at the Regional Disaster Management Agency of Batu Bara Regency.
- H₂: Organizational culture has a positive and significant effect on work motivation at the Regional Disaster Management Agency of Batu Bara Regency.
- H₃: The work environment has a positive and significant effect on employee performance at the Regional Disaster Management Agency of Batu Bara Regency.
- H₄: The work environment has a positive and significant effect on work motivation at the Regional Disaster Management Agency of Batu Bara Regency.
- H₅: Work motivation has a positive and significant effect on employee performance at the Regional Disaster Management Agency of Batu Bara Regency.
- H₆: Organizational culture has a positive and significant effect on employee performance through work motivation at the Regional Disaster Management Agency of Batu Bara Regency.
- H₇: The work environment has a positive and significant effect on employee performance through work motivation at the Regional Disaster Management Agency of Batu Bara Regency.

RESEARCH METHOD

Type of Research

The type of research used by the researcher is quantitative research. According to Sugiyono (2010), quantitative research can be defined as a method based on positivism philosophy, used to study a specific population or sample, with sampling techniques generally conducted randomly, data collection using research instruments, and quantitative/statistical data analysis with the aim of testing predetermined hypotheses. This type of quantitative research was conducted to create a study aimed at adjusting a study and analyzing organizational culture and work environment on employee performance with work motivation as an intervening variable at the Regional Disaster Management Agency of Batu Bara Regency.

RESULTS AND DISCUSSION

Validity Test

Table 1. Outer Loadings Values

	Employee Performance	Organizational Culture	Work Environment	Work Motivation
X1.1		0.751		
X1.2		0.823		
X1.3		0.868		
X1.4		0.807		
X1.5		0.793		
X1.6		0.828		
X2.1			0.822	
X2.2			0.885	
X2.3			0.815	
X2.4			0.885	
Y.1	0.660			
Y.2	0.862			
Y.3	0.804			
Y.4	0.780			
Y.5	0.857			
Y.6	0.876			
Z.1				0.845
Z.2				0.815
Z.3				0.840

Source: Smart PLS Output, 2025

Based on the values in Table 1 above, which show the results of outer model testing through loading factor/outer loadings values, all indicators in each variable have a loading value ≥ 0.60 . This indicates that each indicator is measured validly and strongly. Therefore, it can be concluded that all items in the questionnaire have met the validity criteria, as shown in the following figure.

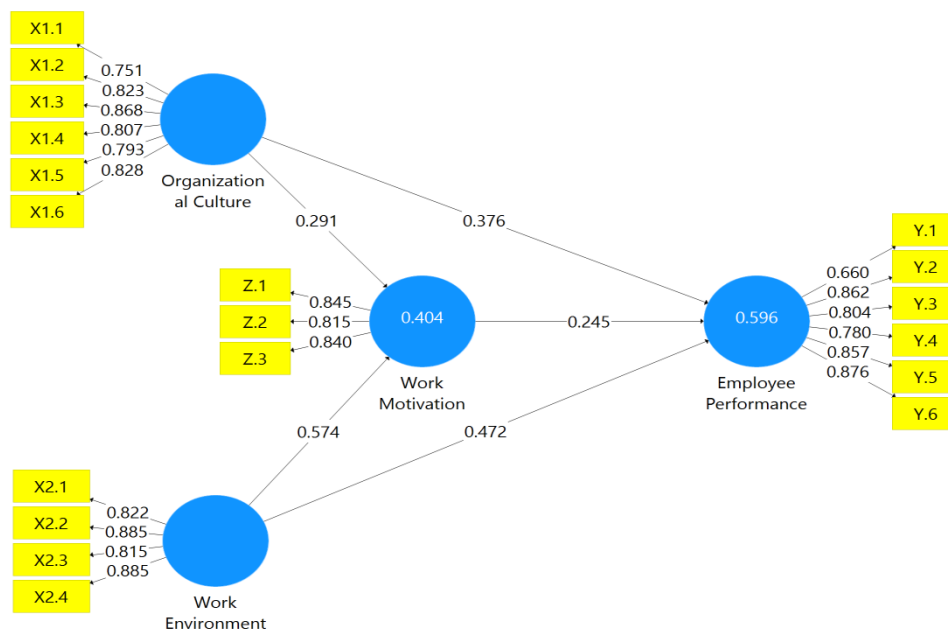


Figure 2 Outer Loading

In this study, there is an equation, and that equation consists of two substructures for substructure 1:

$$Z = \beta_1 X_1 + \beta_2 X_2 + e_1$$

$$Z = 0.291X_1 + 0.574X_2 + e_1$$

For substructure 2:

$$Y = \beta_2 X_1 + \beta_3 X_2 + \beta_3 Z + e_2$$

$$Y = 0.376 X_1 + 0.472 X_2 + 0.245 Z + e_2$$

Reliability Test

Table 2. Construct Reliability and Validity Test

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Employee Performance	0.894	0.909	0.919	0.656
Organizational Culture	0.897	0.903	0.921	0.660
Work Environment	0.874	0.882	0.914	0.727
Work Motivation	0.781	0.785	0.872	0.694

Source: Smart PLS Output, 2025

From Table 2 above, the reliability test results show that the Cronbach's Alpha and Composite Reliability values for all constructs are above 0.70. This indicates that all indicators have high internal consistency and are reliable in measuring their respective constructs. Thus, the research instrument is declared reliable and suitable for use in structural model testing.

Coefficient of Determination (R^2)

In assessing the model with PLS, we begin by looking at the R-square for each dependent latent variable. The table below shows the R-square estimation results using SmartPLS.

Table 3. R Square Results

	R Square	Adjusted R-Square
Work Motivation	0.404	0.389
Employee Performance	0.596	0.580

Source: Smart PLS, 2025

Table 3 shows the R-squared values for both dependent variables. For the work motivation variable, the R-squared value is 0.404, meaning that the influence of organizational culture and work environment is 0.404 or 40.4%, with the remainder attributable to other variables outside the model. The R-square value for employee performance is 0.596, meaning that organizational culture, work environment, and work motivation account for 0.596 or 59.6%, with the remainder attributable to other variables outside the model.

Direct Effect Between Variables

The direct effect between variables can be seen in the *path coefficients*. The data analysis results show the direct effect values in the following table.

Table 4. Path Coefficients (Direct Effects)

	Original Sample	T Statistics	P Values	Conclusion
Organizational Culture -> Employee Performance	0.376	4.680	0.000	Accepted
Organizational Culture -> Work Motivation	0.291	4.366	0.000	Accepted
Work Environment -> Employee Performance	0.472	5,247	0.000	Accepted
Work Environment -> Work Motivation	0.574	9,996	0.000	Accepted
Work Motivation -> Employee Performance	0.245	2,390	0.017	Accepted

Source: Smart PLS Output, 2025

The results in Table 4 show the following direct influence values:

1. Organizational culture has a positive and significant effect on employee performance with a t-statistic value of 4.680 above 1.96 and a significance of 0.000 below 0.05, meaning that organizational culture has a real effect on employee performance because the significance value is below 0.05. The results of this study are in line with previous studies, which found that organizational culture has a positive and significant effect on employee performance (Rousita et al., 2026).
2. Organizational culture has a positive and significant effect on work motivation, with a t-statistic value of 4.366 above 1.96 and a significance of 0.000 below 0.05, meaning that organizational culture has a significant effect on work motivation because the significance value is below 0.05. The results of this study are in line with previous studies, namely that organizational culture has a positive and significant effect on work motivation (Fajrin & Mesra, 2024).
3. The work environment has a positive and significant effect on employee performance with a t-statistic value of 5.247 above 1.96 and a significance of 0.000 below 0.05, meaning that the work environment has a real effect on employee performance because the significance value is below 0.05. The results of this study are in line with previous studies, namely that the work environment has a positive and significant effect on employee performance (Hulu & Farida, 2025).
4. The work environment has a positive and significant effect on work motivation with a t-statistic value of 9.996 above 1.96 and a significance of 0.000 below 0.05, meaning that the work environment has a real effect on work motivation because the significance value is below 0.05. The results of this study are in line with previous studies, namely that the work environment has a positive and significant effect on work motivation (Wirandono & Indrawan, 2023).
5. Work motivation has a positive and significant effect on employee performance, with a t-statistic value of 2.390 above 1.96 and a significance of 0.017 below 0.05, meaning that job satisfaction has a significant effect on employee performance because the significance value is below 0.05. The results of this study are consistent with previous studies, which found that work motivation has a positive and significant effect on employee performance (Handoko et al., 2023; Fajrin & Mesra, 2024).

Indirect Influence Between Variables

The indirect effect between variables can be seen in the *specific indirect effect* value. The data analysis results show the indirect effect value in Table 5 below.

Table 5. Specific Indirect Effects (Indirect Effects)

	Original Sample	T Statistics	P Values	Conclusion
Organizational Culture -> Work Motivation -> Employee Performance	0.071	2.099	0.036	Accepted
Work Environment -> Work Motivation -> Employee Performance	0.140	2.283	0.023	Accepted

Source: Smart PLS, 2025

Table 5 shows the indirect influence between variables, namely:

1. Organizational culture has a positive and significant effect on employee performance through work motivation with a t-statistic value of 2.099 above 1.96 and a significance value of 0.036 below 0.05, meaning that work motivation acts as an intervening variable between organizational culture and employee performance.
2. The work environment has a positive and significant effect on employee performance through work motivation with a t-statistic value of 2.283 above 1.96 and a significance value of 0.023 below 0.05, meaning that work motivation acts as an intervening variable between the work environment and employee performance.

CONCLUSION

1. Organizational culture has a positive and significant effect on employee performance at the Regional Disaster Management Agency of Batu Bara Regency.
2. Organizational culture has a positive and significant effect on work motivation at the Regional Disaster Management Agency of Batu Bara Regency.

3. The work environment has a positive and significant effect on employee performance at the Regional Disaster Management Agency of Batu Bara Regency.
4. The work environment has a positive and significant effect on work motivation at the Regional Disaster Management Agency of Batu Bara Regency.
5. Work motivation has a positive and significant effect on employee performance at the Regional Disaster Management Agency of Batu Bara Regency.
6. Organizational culture has a positive and significant effect on employee performance through work motivation at the Regional Disaster Management Agency of Batu Bara Regency.
7. The work environment has a positive and significant effect on employee performance through work motivation at the Regional Disaster Management Agency of Batu Bara Regency.

RECOMMENDATIONS

1. Employee performance with the lowest score was "I produce work that meets the established standards." Therefore, the recommendation is to improve the quality of work to meet the established standards. The organization needs to strengthen the implementation of standard operating procedures (SOPs) through clear communication and conduct regular performance evaluations and feedback so that employees understand the shortcomings of their work and are encouraged to continue to improve the quality of their work.
2. Work motivation with the lowest score was "My work efforts are always directed towards achieving organizational goals." To ensure that employees' work efforts are always in line with organizational goals, leaders need to communicate the vision, mission, and work targets clearly and continuously, accompanied by the setting of measurable individual work targets so that each employee understands the direction of their contribution to the achievement of organizational goals.
3. Work environment with the lowest value statement "Organizational values guide me in my work." To increase management support in task implementation, leaders need to be more active in providing guidance, direction, and assistance when employees encounter work obstacles, as well as creating open communication so that employees feel supported and motivated to complete tasks optimally.
4. Organizational culture with the lowest value statement "I have the skills to support the implementation of work tasks". To strengthen the application of organizational values as work guidelines, leaders need to consistently socialize and set an example in applying these values, as well as integrate them into rules, performance appraisals, and work culture so that organizational values are truly understood and applied by all employees.

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