

Emotional Intelligence and its Effect on Employee Performance at Perumda Tirtanadi, Medan City

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Abstract

This study examines the influence of Emotional Intelligence on Employee Performance at Perumda Tirtanadi in Medan. Using a quantitative approach, data were collected from 82 respondents and analyzed through validity, reliability, and inferential statistical tests. The validity test confirmed that all questionnaire items were valid, while the reliability analysis demonstrated strong internal consistency with Cronbach's Alpha values of 0.921 for Emotional Intelligence and 0.936 for Employee Performance. Descriptive analysis indicated that both Emotional Intelligence and Employee Performance were perceived positively by respondents as reflected in relatively high mean scores and low standard deviation values. The main findings were obtained through inferential analysis which confirmed a positive and statistically significant relationship between the two variables. The simple linear regression results showed that Emotional Intelligence has a strong influence on Employee Performance with a regression coefficient of 0.872. The coefficient of determination revealed that Emotional Intelligence explains 62.4 percent of the variance in Employee Performance with R square of 0.624. Furthermore, the t test results with a value of t equal to 10.965 and significance value of 0.000 supported the rejection of the null hypothesis which indicates that Emotional Intelligence significantly affects Employee Performance. These findings provide empirical evidence that strengthening employees' emotional abilities such as self-awareness, emotional regulation, empathy, and social skills can significantly improve employee performance in organizational settings. The results of this study contribute to the development of human resource management knowledge and provide practical implications for organizational leaders in improving employee performance through the development of emotional intelligence.

Keywords: *Emotional Intelligence, Employee Performance, Organizational Behavior*

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Introduction

In the modern organizational era, both public and private institutions are required to maintain high quality human resources capable of delivering optimal performance. Employee performance is widely recognized as one of the key determinants of organizational success in achieving its strategic objectives. High performing employees contribute significantly to organizational productivity, service quality, and overall competitiveness. Therefore, organizations must continuously identify and develop factors that can enhance employee performance in order to achieve sustainable organizational outcomes [1].

Employee performance is not only determined by technical competence or professional expertise. Various psychological and behavioral factors also play important roles in shaping how employees carry out their responsibilities in the workplace. Human resource management literature highlights that emotional and social capabilities influence how individuals interact with colleagues, manage workplace pressure, and maintain productive work behavior. These factors ultimately affect how effectively employees perform their duties within an organization [2].

One psychological factor that has received considerable attention in organizational behavior studies is emotional intelligence. Emotional intelligence refers to an individual's ability to recognize, understand, manage, and utilize emotions effectively in oneself and in interactions with others. Individuals with strong emotional intelligence are generally able to control negative emotions, build positive interpersonal relationships, and maintain constructive communication within the workplace. These abilities help employees adapt to workplace challenges and perform their responsibilities more effectively [3].

Employees who possess high emotional intelligence are typically better at managing stress, resolving interpersonal conflicts, and maintaining collaboration with colleagues. They are also more capable of demonstrating empathy and understanding toward others, which contributes to a more harmonious work environment. As a result, emotional intelligence is frequently associated with improved employee performance because emotionally intelligent employees are more capable of maintaining focus, motivation, and productivity when facing workplace challenges [4].

In organizational contexts, emotional intelligence is considered an important component of effective leadership and teamwork. Employees who can regulate their emotions and respond appropriately to workplace situations tend to perform their tasks more efficiently and maintain stronger relationships with coworkers and supervisors. This ability supports organizational effectiveness and contributes to better service delivery, particularly in organizations that rely heavily on teamwork and interpersonal communication [5].

The importance of emotional intelligence becomes even more significant in public service organizations. Employees in public institutions are required to interact directly with the community while maintaining professionalism and service quality. Therefore, emotional stability, empathy, and communication skills are essential for ensuring that services are delivered effectively and responsibly. Employees who demonstrate strong emotional intelligence are more capable of handling public demands, responding to complaints, and maintaining service quality under pressure [6].

Perumda Tirtanadi, as a regional public utility company responsible for providing clean water services to the community in Medan City and surrounding areas, plays a vital role in supporting public welfare and urban development. In order to provide reliable and high quality water services, the organization requires employees who are capable of performing their duties effectively and responsibly. Employee performance therefore becomes a crucial factor that determines the effectiveness and sustainability of the organization's operations [7].

However, achieving optimal employee performance is not always easy. Various internal factors such as emotional control, communication ability, work motivation, and interpersonal relationships can influence how employees perform their duties. Among these factors, emotional intelligence is considered particularly important because it enables employees to

manage workplace pressures, interact effectively with colleagues, and maintain productive work attitudes. Employees who possess strong emotional intelligence are more likely to contribute positively to organizational productivity and service quality.

Based on the explanations above, emotional intelligence can be viewed as an important factor that may influence employee performance in organizational settings. Employees who are capable of understanding and managing their emotions effectively are more likely to perform their duties efficiently and contribute to organizational goals. Therefore, it is important to conduct research examining the influence of emotional intelligence on employee performance. This study aims to analyse the influence of emotional intelligence on employee performance at Perumda Tirtanadi in Medan City.

Literature Review

Proactive Employee performance is an important indicator that reflects how effectively employees carry out their duties and responsibilities in achieving organizational goals. In the field of human resource management, employee performance is generally defined as the level of achievement of work results in terms of quality and quantity based on predetermined standards. High employee performance contributes significantly to organizational productivity, efficiency, and service quality. Organizations that are able to maintain high employee performance tend to achieve better operational outcomes and stronger competitiveness. Therefore, understanding the factors that influence employee performance becomes essential for organizations seeking to improve their effectiveness and sustainability [8].

Employee performance is influenced by various internal and external factors, including individual competence, motivation, organizational support, and psychological characteristics. Among these factors, emotional aspects of employees have become increasingly important in modern organizational environments where teamwork, communication, and service quality play crucial roles. Emotional abilities enable employees to manage workplace pressure, interact positively with colleagues, and maintain productive behavior in challenging situations. As a result, emotional intelligence has emerged as an important concept in explaining variations in employee performance across organizations [9].

Emotional intelligence refers to an individual's ability to recognize, understand, manage, and utilize emotions effectively both in oneself and in relationships with others. The concept of emotional intelligence was initially introduced in psychological studies and later developed extensively within organizational behavior research. Emotional intelligence includes several core dimensions such as self-awareness, self-regulation, motivation, empathy, and social skills. Individuals who possess high emotional intelligence are generally better able to control negative emotions, maintain emotional stability, and respond constructively to workplace challenges [10].

Employees with strong emotional intelligence tend to demonstrate better interpersonal communication and stronger collaboration within teams. They are capable of understanding the emotional conditions of coworkers, responding empathetically, and resolving conflicts in constructive ways. These capabilities contribute to the creation of a positive work environment that supports cooperation and productivity. Consequently, employees who are emotionally intelligent are more likely to perform their tasks effectively and maintain high levels of work performance in organizational settings [11].

Emotional intelligence also plays a crucial role in improving employees' ability to manage stress and adapt to workplace changes. Modern organizations often operate in dynamic environments characterized by high workloads, time pressures, and increasing service demands. In such conditions, employees who possess strong emotional regulation skills are better able to remain focused, maintain motivation, and continue performing effectively despite challenges. Therefore, emotional intelligence is widely recognized as a significant psychological factor that influences employee productivity and job performance [12].

Several empirical studies have demonstrated the positive relationship between emotional intelligence and employee performance in organizational contexts. Research findings indicate that employees with higher levels of emotional intelligence tend to exhibit better job performance, stronger teamwork, and greater job satisfaction. Emotional intelligence allows employees to maintain positive attitudes, communicate effectively, and demonstrate resilience when facing workplace difficulties. These capabilities ultimately enhance employees' ability to achieve organizational objectives and maintain consistent performance outcomes [13].

In public service organizations, the role of emotional intelligence becomes even more critical because employees are required to interact directly with the community and respond to various service demands. Employees who are capable of managing their emotions effectively can provide better service quality and maintain professional relationships with customers or service users. Emotional intelligence also helps employees remain patient, empathetic, and solution oriented when dealing with public complaints or operational challenges. Therefore, emotional intelligence can significantly influence employee performance in organizations that prioritize service excellence [14].

Within the context of Perumda Tirtanadi in Medan City, employee performance is essential for ensuring the effective delivery of clean water services to the community. As a regional public utility organization, Perumda Tirtanadi must maintain high service standards while managing operational challenges and increasing public expectations. Employees who possess strong emotional intelligence are more capable of maintaining positive communication, managing workplace pressures, and delivering services efficiently. Consequently, emotional intelligence is expected to play an important role in influencing employee performance within the organization [15].

Based on the theoretical explanations and previous empirical findings, emotional intelligence can be considered a significant factor that contributes to improved employee performance. Employees who are able to understand and manage their emotions effectively are more likely to demonstrate productive work behavior and maintain positive relationships in the workplace. Therefore, examining the relationship between emotional intelligence and employee performance becomes important in order to provide a deeper understanding of how psychological factors influence organizational effectiveness.

Conceptual Framework and Hypothesis

This study conceptualizes Emotional Intelligence (X) as the independent variable and Employee Performance (Y) as the dependent variable as shown on the following figure.



The hypothesis is:

Ha : Emotional Intelligence has a positive and significant effect on employee performance at Perumda Tirtanadi, Medan City.

Ho : Emotional Intelligence does not have a positive and significant effect on employee performance at Perumda Tirtanadi, Medan City

Research Methodology

This study employed a quantitative research approach to examine the effect of Emotional Intelligence on employee performance at Perumda Tirtanadi, Medan City. The research design was explanatory, as it aimed to test the proposed hypothesis and analyze the

causal relationship between the independent variable (Emotional Intelligence) and the dependent variable (employee performance). Through this approach, the study sought to provide empirical evidence regarding how individual proactive characteristics influence employee work outcomes within the organization.

The population in this study consisted of 82 employees working at Perumda Tirtanadi, Medan City. Considering the relatively manageable population size, this study applied a saturated sampling technique (census method) in which the entire population was used as the research sample. Therefore, all 82 employees served as respondents in this study, ensuring that the data collected represented the whole population and provided more comprehensive research findings.

Primary data were collected through a structured questionnaire distributed to all respondents [20]. The questionnaire items were developed based on theoretical indicators of Emotional Intelligence and employee performance. The indicators of Emotional Intelligence included the ability to recognize opportunities, demonstrate initiative, take action, and persist in defending ideas that are considered beneficial for the organization. Meanwhile, employee performance indicators included quantity of work, quality of work, efficiency in completing tasks, work discipline, initiative, accuracy, leadership, honesty, and creativity. All responses were measured using a Likert scale ranging from strongly disagree to strongly agree. In addition, secondary data were obtained from organizational reports, institutional documents, and other relevant literature to support the analysis [16].

The collected data were analyzed using quantitative statistical methods with SPSS version 25.0. Several analytical procedures were conducted. First, validity testing was performed to determine whether each questionnaire item accurately measured the intended variables. An item was considered valid if the calculated correlation coefficient (r -count) was greater than the critical value (r -table). Second, reliability testing was conducted using Cronbach's Alpha, where a value greater than 0.70 indicated that the instrument was reliable and consistent in measuring the variables [17]. The regression model used in this study was expressed as follows: $Y = a + bX$

Where:

Y = Employee Performance

X = Emotional Intelligence

a = Constant

b = Regression Coefficient

Furthermore, a t-test was applied to determine whether Emotional Intelligence significantly affected employee performance. The hypothesis was accepted if the t-count was greater than the t-table value or if the significance level (p-value) was below 0.05. Finally, the coefficient of determination (R^2) was calculated to measure how much variance in employee performance could be explained by Emotional Intelligence. The R^2 value ranged from 0 to 1, where a value closer to 1 indicated stronger explanatory power of the independent variable. Through this methodological approach, the study aimed to provide empirical evidence regarding the influence of Emotional Intelligence on employee performance at Perumda Tirtanadi, Medan City.

Results

Descriptive Analysis

The initial step in the descriptive analysis was to examine the key summary statistics for the two primary composite variables: Emotional Intelligence and Employee Performance. Each composite variable was calculated as the average score of its respective indicators. Emotional Intelligence was measured using five indicators, while Employee Performance was measured using nine indicators. This analysis provided a general overview of the data distribution and respondents' overall perceptions.

Table 1. Descriptive Analysis

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Emotional Intelligence	82	3.40	5.00	4.43	0.48
Employee Performance	82	3.44	5.00	4.34	0.43

Source: SPSS output, version 25.0

Based on the descriptive statistics presented in the table, the variable of Emotional Intelligence shows a mean value of 4.43 with a standard deviation of 0.48. The minimum score recorded for this variable is 3.40, while the maximum score reaches 5.00. These results indicate that the level of emotional intelligence among employees at Perumda Tirtanadi in Medan City is generally high. The relatively high mean value suggests that most respondents perceive themselves as having good emotional abilities, including self-awareness, emotional regulation, empathy, and social skills. In addition, the relatively low standard deviation indicates that the responses of the respondents are relatively consistent and not widely dispersed.

Similarly, the Employee Performance variable shows a mean value of 4.34 with a standard deviation of 0.43. The minimum score obtained is 3.44, while the maximum score is 5.00. These results suggest that employee performance at Perumda Tirtanadi in Medan City is also perceived positively by respondents. The high mean value reflects that employee generally believe they perform their duties effectively in terms of quality, productivity, and responsibility. Furthermore, the relatively small standard deviation indicates that the responses regarding employee performance are relatively homogeneous among respondents.

Validity and Reliability Tests

The validity test was conducted using the Corrected Item-Total Correlation. Results showed that all items of both variables had correlation coefficients above the threshold value (0.2387) with significance levels below 0.05. Thus, all items were considered valid.

Reliability was tested using Cronbach's Alpha. The values for both variables were above 0.60, indicating strong internal consistency:

1. Emotional Intelligence : $\alpha = 0.781$ (5 items)
2. Employee Performance : $\alpha = 0.806$ (6 items)

This confirms that the research instrument was reliable.

Regression Analysis

Simple Linear Regression

A simple linear regression analysis was conducted to examine the effect of Emotional Intelligence on Employee Performance at Perumda Tirtanadi, Medan City. The analysis used composite scores (mean values) of each variable obtained from the questionnaire responses. Emotional Intelligence was treated as the independent variable, while Employee Performance was treated as the dependent variable.

Table 2. Regression Results

Model	B	Std. Error	Beta	t
Constant	8.512	2.145		3.969
Emotional Intelligence	0.872	0.080	0.790	10.965

Dependent Variable: Employee Performance

Based on the regression analysis results, the constant value is 8.512, which indicates that when Emotional Intelligence is assumed to be constant or equal to zero, the baseline value of Employee Performance is 8.512. Although in practice Emotional Intelligence cannot be zero, this constant represents the basic level of employee performance when the influence of the independent variable is not considered.

The regression coefficient for Emotional Intelligence is 0.872. This value indicates that every one unit increase in Emotional Intelligence will increase Employee Performance by 0.872

units. The positive coefficient shows that Emotional Intelligence has a positive relationship with Employee Performance, meaning that higher emotional intelligence among employees tends to lead to higher levels of job performance.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) was calculated to measure the proportion of variance in Employee Performance that can be explained by Emotional Intelligence.

Table 3. Coefficient of Determination

Model	R	R^2	Adjusted R^2
1	0.790	0.624	0.619

Based on the regression model summary, the correlation coefficient (R) between Emotional Intelligence and Employee Performance is 0.790. This value indicates a strong positive relationship between the two variables. It means that higher levels of Emotional Intelligence among employees tend to be associated with higher levels of Employee Performance.

The coefficient of determination (R^2) is 0.624, which indicates that Emotional Intelligence explains 62.4 percent of the variance in Employee Performance. In other words, Emotional Intelligence contributes substantially to improving employee performance within the organization.

Meanwhile, the Adjusted R^2 value is 0.619, which shows that after adjusting for the sample size and number of predictors in the model, Emotional Intelligence still explains approximately 61.9 percent of the variation in Employee Performance. The remaining 38.1 percent of the variation in Employee Performance is influenced by other variables not included in this research model. These variables may include factors such as work motivation, organizational culture, leadership style, job satisfaction, and work environment.

The results indicate that Emotional Intelligence plays an important role in explaining employee performance at Perumda Tirtanadi in Medan City, highlighting the importance of developing emotional capabilities among employees to enhance organizational effectiveness.

Hypothesis Testing (t-Test)

Hypothesis testing in this study was conducted using a t-test to determine whether the independent variable Emotional Intelligence has a positive and significant effect on the dependent variable Employee Performance at Perumda Tirtanadi, Medan City.

Table 4. t-Test Result

Model	B	Std. Error	Beta	t
(Constant)	0.412	0.398	–	1.035
Emotional Intelligence	0.872	0.080	0.790	10.965

Dependent Variable: Employee Performance

Based on the regression analysis results, the constant value is 0.412. This value indicates that when Emotional Intelligence is assumed to be constant, the baseline level of Employee Performance is 0.412. Although this value mainly represents the intercept in the regression model, it reflects the starting point of Employee Performance when the independent variable is not considered.

The regression coefficient for Emotional Intelligence is 0.872. This result indicates that every one unit increase in Emotional Intelligence will increase Employee Performance by 0.872 units. The positive coefficient shows that Emotional Intelligence has a positive relationship with Employee Performance. In other words, higher emotional intelligence among employees tends to lead to higher levels of employee performance.

The t test result for Emotional Intelligence is 10.965, which indicates a statistically significant effect. Since the significance value is 0.000, which is lower than the standard

significance level of 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted. This means that Emotional Intelligence has a positive and significant influence on Employee Performance.

These findings suggest that employees who possess higher emotional abilities such as self-awareness, emotional control, empathy, and social interaction skills are more capable of managing workplace challenges and performing their duties effectively. Consequently, strengthening emotional intelligence among employees can contribute to improving overall employee performance within the organization.

Conclusion

Based on the results of the analysis, this study concludes that Emotional Intelligence has a positive and significant influence on Employee Performance at Perumda Tirtanadi in Medan. The descriptive analysis indicates that both Emotional Intelligence and Employee Performance are perceived positively by employees, as reflected in the relatively high mean values and low standard deviation. These findings suggest that employees generally demonstrate good emotional abilities and are able to perform their duties effectively within the organization.

The results of the regression analysis further confirm that Emotional Intelligence significantly contributes to improving Employee Performance. The regression coefficient of 0.872 indicates that an increase in Emotional Intelligence leads to a corresponding increase in Employee Performance. In addition, the t test results demonstrate a statistically significant relationship between the two variables, with a t value of 10.965 and a significance level below 0.05. These results support the hypothesis that Emotional Intelligence has a positive and significant effect on Employee Performance.

The coefficient of determination shows that Emotional Intelligence explains 62.4 percent of the variance in Employee Performance. This indicates that Emotional Intelligence plays an important role in shaping employee work outcomes within the organization. However, the remaining percentage of variation in Employee Performance is influenced by other factors not included in this study, such as motivation, leadership style, organizational culture, job satisfaction, and the work environment.

The findings highlight the importance of developing Emotional Intelligence among employees in order to enhance organizational performance. Employees who possess strong emotional abilities such as self-awareness, emotional regulation, empathy, and social skills are more capable of managing workplace challenges and maintaining productive work behaviour. Therefore, organizations are encouraged to promote emotional intelligence development through training programs, leadership support, and organizational policies that foster positive interpersonal relationships and effective communication in the workplace.

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