



# The Influence of the Work Environment and Work Discipline in Improving Employee Performance at the Makassar Maritime Science Polytechnic

Aisyah Nur Ramadhani<sup>1</sup>, M. Hidayat<sup>2</sup> and Irwan Abdullah<sup>3</sup>

Management Study Program, Faculty of Economics and Business, Muhammadiyah University of Makassar

Email: [aisyahnurramadhani@gmail.com](mailto:aisyahnurramadhani@gmail.com)

## ARTICLE INFO

**Keywords**  
organizational effectiveness; workplace conditions; employee productivity; institutional performance; human resource management

**Manuscript Submission**  
Story ID 521

Submitted on June 23, 2025, the manuscript underwent a revision (April 2, 2026) and peer review (April 25, 2026). Following the editor's decision on the same day, it was published on April 30, 2026.]

## ABSTRACT

Employee performance has become a critical factor in determining organizational effectiveness and service quality within higher education institutions, particularly in maritime education organizations that emphasize professionalism and operational discipline. This study aimed to analyze the influence of work environment and work discipline on employee performance at the Makassar Maritime Science Polytechnic. The research employed a quantitative explanatory approach using saturated sampling techniques involving all 40 employees of the institution as respondents. Primary data were collected through structured questionnaires measured using a five-point Likert scale, while data analysis was conducted using descriptive statistics, validity and reliability tests, multiple linear regression, t-tests, F-tests, and coefficient of determination analysis with SPSS software. The findings revealed that the work environment had a negative and insignificant effect on employee performance, indicated by a regression coefficient of -0.068 and a significance value of 0.543. In contrast, work discipline demonstrated a positive and significant effect on employee performance with a regression coefficient of 0.911 and a significance value of 0.000. Simultaneously, work environment and work discipline significantly influenced employee performance, with an  $R^2$  value of 0.823, indicating that 82.3% of employee performance variation was explained by the two variables. The study contributes to human resource management literature by emphasizing the strategic importance of work discipline in improving employee performance within specialized educational institutions.

## 1. Introduction

In the era of globalization and increasingly intense competition, employee performance has become one of the most crucial determinants of organizational success, including within educational institutions. Higher education institutions are required not only to provide quality education but also to maintain organizational effectiveness and sustainability in an increasingly competitive environment. Educational institutions that focus on professional and technical training, such as maritime education institutions, face additional challenges because they are expected to produce competent human resources capable of meeting global industry standards. Consequently, the quality of employee performance significantly affects institutional

effectiveness, service quality, and organizational competitiveness. Recent studies have emphasized that employee performance represents a strategic organizational asset because it directly influences productivity, institutional reputation, and long-term sustainability (Al-Omari & Okasheh, 2021; Pradhan & Jena, 2022; Nguyen et al., 2023).

Human resources are widely recognized as the most valuable organizational resource because organizational achievement largely depends on employees' ability to perform their duties effectively and efficiently. Employee performance reflects the extent to which employees can accomplish organizational objectives through quality work outcomes, responsibility, discipline, and adaptability. In educational institutions, employee performance

becomes even more essential because it influences not only internal administrative efficiency but also the quality of educational services delivered to students. Previous studies have shown that organizations with high-performing employees tend to achieve better institutional outcomes, stronger organizational commitment, and greater service effectiveness (Kim & Park, 2021; Ahmed et al., 2022; Hassan et al., 2024).

One of the factors that significantly influences employee performance is the work environment. The work environment consists of physical and non-physical conditions surrounding employees while carrying out their duties, including workplace facilities, lighting, temperature, noise levels, organizational climate, communication patterns, and interpersonal relationships. A conducive work environment can create comfort, improve concentration, reduce stress, and encourage employees to work more productively. Conversely, an unfavorable work environment may decrease employee motivation and hinder productivity. According to Sedarmayanti, the work environment includes all tools, materials, surroundings, methods, and work arrangements encountered by employees in performing their duties. Recent empirical studies indicate that supportive workplace conditions positively influence employee satisfaction, engagement, and performance across various organizational sectors (Yusuf et al., 2021; Tran & Nguyen, 2022; Kurniawan et al., 2023).

The physical work environment plays an important role in shaping employees' psychological and emotional conditions. Adequate workplace facilities, proper workspace design, and a comfortable atmosphere can improve employee morale and operational efficiency. Several studies conducted between 2021 and 2026 found that workplace comfort and supportive organizational climates significantly contribute to employee productivity and organizational effectiveness (Sari et al., 2022; Putra & Dewi, 2023; Al-Hazmi et al., 2025). Furthermore, non-physical aspects of the work environment, such as teamwork, communication quality, and leadership support, also influence employees' emotional well-being and job performance. Employees who perceive their work environment positively are more likely to demonstrate commitment, creativity, and

responsibility toward organizational goals (Rahman et al., 2021; Wijaya et al., 2024).

Besides the work environment, work discipline is another important factor affecting employee performance. Work discipline refers to employees' awareness and willingness to comply with organizational rules, procedures, and standards. Employees with high discipline generally demonstrate punctuality, responsibility, consistency, and accountability in carrying out their tasks. According to Budi et al. (2006), discipline reflects employees' awareness and willingness to obey all organizational regulations and prevailing social norms. Discipline is considered one of the foundations of organizational success because it ensures operational orderliness and organizational stability. Recent studies have confirmed that work discipline significantly influences employee productivity, work quality, and organizational performance (Mulyani et al., 2021; Saputra & Lestari, 2022; Hidayat et al., 2024).

Strong work discipline enables employees to manage their time effectively, reduce work-related errors, and maintain consistency in achieving organizational targets. On the other hand, weak discipline may result in absenteeism, reduced productivity, and inefficiency. Research conducted in various organizational settings indicates that disciplinary systems that are implemented fairly and effectively can enhance employee motivation and encourage better work performance (Fauzi et al., 2023; Chandra & Permatasari, 2025). In addition, work discipline contributes to organizational culture because disciplined employees tend to demonstrate professionalism and commitment to organizational values. Therefore, organizations must establish clear rules and create a balanced disciplinary system that promotes accountability without generating excessive workplace stress.

The relationship between work environment, work discipline, and employee performance has been extensively discussed in human resource management literature. Numerous studies have found that a supportive work environment combined with effective discipline can significantly improve employee performance and organizational effectiveness. Employees who work in conducive environments and experience appropriate disciplinary management are more likely to achieve higher productivity and demonstrate

greater organizational commitment (Nugroho et al., 2022; Abdullah et al., 2023; Santoso & Pratiwi, 2024). However, despite extensive studies on these variables, research specifically focusing on maritime educational institutions remains limited. Maritime institutions possess distinctive organizational characteristics due to their emphasis on discipline, technical competence, and operational precision. Therefore, examining these variables within the context of maritime education institutions provides important insights into human resource management practices in specialized educational sectors.

Politeknik Ilmu Pelayaran Makassar is one of Indonesia's maritime higher education institutions responsible for producing competent and professional human resources in the maritime sector. As a maritime educational institution, the organization is expected to maintain high educational standards and effective organizational management to support academic and administrative activities. Employee performance within the institution directly affects the quality of educational services, institutional operations, and organizational reputation. Therefore, understanding the factors influencing employee performance is essential for improving institutional effectiveness and achieving organizational objectives.

Based on preliminary observations conducted by the researcher, several issues related to the work environment and work discipline were identified at Politeknik Ilmu Pelayaran Makassar. Some employees reported inadequate workplace facilities and uncondusive working conditions, including excessive noise and limited workspace, which negatively affected concentration and productivity. In addition, rigid disciplinary systems and inflexible work procedures were perceived as sources of stress that reduced employees' morale and enthusiasm. These conditions potentially contribute to declining employee performance and may ultimately affect the quality of educational and administrative services provided by the institution.

In today's rapidly changing educational environment, improving employee performance has become a strategic necessity for educational institutions. Effective human resource management practices, including the creation of supportive work environments and the implementation of balanced disciplinary systems, are essential to achieving

institutional sustainability and competitiveness. Previous studies consistently emphasize that organizations capable of maintaining favorable workplace conditions and effective discipline tend to achieve better organizational outcomes, higher employee satisfaction, and stronger institutional performance (Prasetyo et al., 2025; Harahap & Lubis, 2026).

Therefore, this study aims to analyze the influence of work environment and work discipline on employee performance at Politeknik Ilmu Pelayaran Makassar. This research is expected to contribute theoretically to the development of human resource management literature and practically to provide recommendations for institutional management in improving employee performance through better workplace conditions and more effective disciplinary systems.

## 2. Literature Review

### 2.1 Human Resource Management

Human Resource Management (HRM) has become a strategic organizational function in responding to the challenges of globalization, digital transformation, and increasing institutional competition. Modern organizations are required not only to manage operational activities efficiently but also to optimize human resources as a key determinant of organizational sustainability and competitiveness. In educational institutions, particularly higher education organizations, human resources play a significant role in ensuring academic quality, administrative effectiveness, and institutional development. Recent studies emphasize that HRM contributes substantially to organizational performance through effective workforce planning, employee development, motivation, and performance management systems (Nguyen et al., 2022; Ahmed & Malik, 2023; Hassan et al., 2024).

Human Resource Management refers to the process of planning, organizing, directing, and controlling organizational human resources to achieve institutional objectives effectively and efficiently. According to Veithzal Rivai, HRM aims to optimize employee performance while ensuring organizational sustainability and employee welfare. Contemporary HRM practices are no longer limited to administrative functions but also focus on employee engagement, organizational culture,

leadership development, and strategic alignment between organizational goals and employee competencies. Research conducted between 2021 and 2026 indicates that organizations implementing effective HRM systems tend to demonstrate higher employee productivity, stronger organizational commitment, and improved institutional performance (Kim & Park, 2021; Alshammari et al., 2025).

The primary objective of HRM is to improve employee productivity and organizational effectiveness. Effective HRM practices involve workforce planning, recruitment, training, career development, compensation management, performance appraisal, and employee retention. In educational institutions, HRM also plays an important role in creating a professional academic environment that supports innovation, collaboration, and service quality. Studies have demonstrated that HRM practices significantly influence organizational adaptability and employee satisfaction, particularly in institutions operating in dynamic and competitive environments (Rahman et al., 2022; Putri & Nugroho, 2024).

From a managerial perspective, HRM functions are closely associated with planning, organizing, leading, and controlling organizational activities. Planning involves determining workforce needs and organizational goals, while organizing focuses on allocating human resources effectively. Leadership functions involve motivating employees and encouraging collaboration to achieve organizational objectives, whereas controlling refers to monitoring and evaluating employee performance to ensure alignment with organizational standards. These functions are essential for maintaining organizational efficiency and employee productivity in both public and private institutions (Wijaya et al., 2023; Santoso & Pratiwi, 2025).

In recent years, HRM literature has increasingly emphasized the importance of employee-centered management approaches. Organizations are encouraged to create supportive work environments, maintain transparent communication, and establish performance evaluation systems that promote employee growth and well-being. Such approaches are considered critical in improving employee engagement and organizational resilience. Consequently, HRM has

evolved into a strategic organizational instrument capable of influencing long-term institutional sustainability and competitiveness (Harahap et al., 2026).

## 2.2 Work Environment

The work environment is one of the most influential organizational factors affecting employee performance, motivation, and job satisfaction. A conducive work environment enables employees to perform their duties effectively while maintaining physical and psychological well-being. The work environment includes all physical and non-physical aspects surrounding employees during work activities, such as workplace facilities, lighting, temperature, workspace design, communication patterns, interpersonal relationships, and organizational climate. According to Sedarmayanti, the work environment encompasses all tools, materials, work procedures, and environmental conditions encountered by employees while carrying out their responsibilities.

Recent studies have shown that supportive work environments positively influence employee productivity, organizational commitment, and work satisfaction (Yusuf et al., 2021; Chandra & Permatasari, 2023; Abdullah et al., 2024). Employees who work in comfortable and supportive environments tend to demonstrate higher motivation, lower stress levels, and stronger engagement with organizational goals. Conversely, poor workplace conditions such as excessive noise, inadequate facilities, limited workspace, and weak interpersonal communication may reduce employee concentration and negatively affect work performance.

The work environment is generally categorized into physical and non-physical dimensions. The physical work environment includes tangible workplace conditions such as office layout, temperature, lighting, ventilation, cleanliness, and workplace safety. Physical workplace conditions significantly affect employees' comfort and productivity. Studies conducted in various organizational sectors reveal that comfortable workplace facilities and ergonomic office designs improve employee efficiency and reduce work fatigue (Sari et al., 2022; Al-Hazmi et al., 2025).

Meanwhile, the non-physical work environment refers to interpersonal and psychological conditions within the organization, including communication quality, leadership support, teamwork, organizational culture, and relationships among employees. Positive interpersonal relationships can create a sense of belonging and encourage collaborative behavior among employees. Research indicates that supportive organizational climates and effective communication systems significantly enhance employee morale and organizational commitment (Prasetyo et al., 2023; Fauzi et al., 2026).

A conducive work environment also contributes to reducing workplace stress and improving employee retention. Employees who perceive their workplace positively are more likely to remain loyal to the organization and demonstrate higher levels of performance. In educational institutions, a supportive work environment is particularly important because employees are expected to manage academic responsibilities, administrative duties, and institutional services simultaneously. Therefore, organizations must continuously improve workplace conditions to support employee productivity and institutional effectiveness.

### 2.3 Work Discipline

Work discipline is considered one of the fundamental elements in organizational management because it reflects employees' commitment to organizational rules, procedures, and standards. Work discipline refers to employees' awareness and willingness to comply with organizational regulations and responsibilities voluntarily. Employees with strong discipline tend to demonstrate punctuality, responsibility, consistency, and accountability in completing assigned tasks. According to Malayu S. P. Hasibuan, discipline represents employees' willingness to obey organizational rules and maintain organizational order.

Recent empirical studies have confirmed that work discipline significantly affects employee productivity and organizational effectiveness (Astuti & Rahardjo, 2021; Hidayat et al., 2024; Saputra & Lestari, 2025). Employees with high discipline levels generally perform their duties more effectively because they can manage time efficiently, maintain

work consistency, and minimize operational errors. Conversely, poor discipline may result in absenteeism, decreased productivity, and organizational inefficiency.

Several factors influence work discipline within organizations, including compensation systems, leadership example, organizational supervision, rule clarity, and management consistency in enforcing regulations. Leadership plays a particularly important role because employees often model their behavior after organizational leaders. Leaders who demonstrate discipline, fairness, and professionalism are more likely to encourage employees to follow organizational standards consistently. In addition, fair and transparent disciplinary systems contribute to employee trust and organizational stability (Rahman & Yusuf, 2022; Mulyani et al., 2024).

Discipline is also closely related to organizational culture. Organizations with strong disciplinary cultures tend to maintain operational efficiency and better employee coordination. In educational institutions, work discipline is particularly important because employees are expected to support academic schedules, administrative operations, and institutional services consistently. Therefore, organizations must establish clear regulations and provide continuous supervision to maintain employee discipline effectively.

Furthermore, work discipline benefits both organizations and employees. For organizations, discipline ensures operational orderliness, improved productivity, and organizational stability. For employees, discipline creates structured work conditions, increases professional responsibility, and promotes career development opportunities. Consequently, organizations that successfully maintain employee discipline are more likely to achieve sustainable organizational performance and institutional competitiveness.

### 2.4 Employee Performance

Employee performance refers to the quality and quantity of work outcomes achieved by employees in carrying out their responsibilities according to organizational standards and objectives. Employee performance is commonly associated with productivity, efficiency, responsibility, and work effectiveness. According to

Anwar Prabu Mangkunegara, employee performance reflects the extent to which employees achieve organizational targets and responsibilities effectively. Employee performance is widely recognized as a critical factor influencing organizational success because organizational achievement largely depends on employees' ability to perform their duties optimally.

Recent studies indicate that employee performance is influenced by both internal and external factors, including motivation, competencies, work environment, leadership, organizational culture, and work discipline (Rianto et al., 2021; Ibrahim et al., 2022; Nuruzzaman et al., 2024). Employees who possess strong competencies and work within supportive organizational environments tend to achieve better performance outcomes. In contrast, inadequate workplace conditions and weak organizational management may reduce employee productivity and organizational effectiveness.

Employee performance is also associated with employee motivation and organizational commitment. Employees who feel valued and supported by their organizations are more likely to demonstrate higher engagement and responsibility in carrying out organizational duties. In educational institutions, employee performance directly influences service quality, administrative effectiveness, and academic outcomes. Therefore, institutions must continuously evaluate and improve organizational factors affecting employee performance.

From an organizational perspective, employee performance provides various strategic benefits. High employee performance contributes to improved organizational productivity, stronger institutional competitiveness, enhanced service quality, and greater stakeholder satisfaction. For managers, performance evaluation helps identify employee strengths and weaknesses while supporting workforce development strategies. For employees, performance assessment provides opportunities for career development, recognition, and professional improvement.

Overall, the literature demonstrates that work environment and work discipline are significant determinants of employee performance. A supportive work environment creates comfort and motivation, while effective work discipline ensures

consistency and organizational order. Consequently, organizations that successfully manage these factors are more likely to achieve optimal employee performance and long-term organizational sustainability.

### 3. Research Methods

#### 3.1 Research Design

This study employed a quantitative research approach using a descriptive and explanatory design to analyze the influence of work environment and work discipline on employee performance at Politeknik Ilmu Pelayaran Makassar. Quantitative research is considered appropriate because the study aims to measure the relationship among variables objectively through statistical analysis. According to recent methodological studies, quantitative approaches are widely used in organizational and human resource management research because they allow researchers to test hypotheses, measure variable relationships, and generalize findings systematically (Creswell & Creswell, 2021; Saunders et al., 2022).

The descriptive approach was utilized to provide a comprehensive overview of employee perceptions regarding the work environment, work discipline, and employee performance within the institution. In addition, the explanatory aspect of the study was intended to examine the causal relationship between independent variables and the dependent variable through hypothesis testing. The study specifically investigated whether work environment and work discipline significantly influence employee performance. The research framework was developed based on human resource management theories and empirical findings from previous studies conducted between 2021 and 2026 related to organizational behavior and employee performance (Ahmed et al., 2022; Nguyen et al., 2023; Hassan et al., 2024).

#### 3.2 Research Location and Period

The study was conducted at Politeknik Ilmu Pelayaran Makassar, located on Jalan Tentara Pelajar No. 173, Makassar, South Sulawesi, Indonesia. The institution was selected as the research site because it represents a maritime higher education institution with organizational characteristics that emphasize discipline, professionalism, and operational effectiveness. These characteristics make the

institution suitable for examining the relationship between work environment, work discipline, and employee performance.

The research was conducted over a two-month period, from December 2024 to January 2025. During this period, the researcher carried out data collection, questionnaire distribution, observation, and documentation activities. The selected timeframe was considered adequate to obtain relevant and representative data from respondents.

### 3.3 Population and Sample

The population of this study consisted of all employees working at Politeknik Ilmu Pelayaran Makassar. Population refers to a group of individuals or objects possessing specific characteristics relevant to the research objectives (Sekaran & Bougie, 2021). The total population in this study comprised 40 employees.

Considering the relatively small population size, this study employed a saturated sampling technique, also known as total sampling, in which all members of the population were included as research respondents. According to methodological literature, saturated sampling is appropriate when the population size is limited and manageable because it allows researchers to obtain comprehensive data and minimize sampling bias (Sugiyono, 2022). Therefore, the sample of this study consisted of all 40 employees of the institution.

### 3.4 Types and Sources of Data

This study utilized both qualitative and quantitative data. Qualitative data were obtained in the form of descriptive information, observations, and institutional documentation related to organizational conditions and employee activities. Meanwhile, quantitative data were obtained through questionnaire responses measured using a Likert scale to evaluate respondents' perceptions regarding work environment, work discipline, and employee performance.

The study employed two primary sources of data, namely primary and secondary data sources. Primary data were collected directly from respondents through questionnaires and field observations. The questionnaire served as the main instrument for measuring employee perceptions

related to the research variables. Secondary data were obtained from institutional documents, organizational reports, books, academic journals, and previous studies relevant to the research topic. The use of both primary and secondary data enhanced the validity and comprehensiveness of the research findings.

### 3.5 Data Collection Techniques

Several data collection techniques were employed in this study to ensure the accuracy and completeness of the research data. First, observation was conducted to identify workplace conditions, employee interactions, and organizational activities within the institution. Observation enabled the researcher to gain direct insights into the work environment and employee behavior.

Second, questionnaires were distributed to all respondents as the primary instrument for collecting quantitative data. The questionnaire consisted of structured statements related to work environment, work discipline, and employee performance variables. Respondents were asked to indicate their level of agreement using a five-point Likert scale ranging from "strongly disagree" to "strongly agree." The Likert scale is widely used in social science research because it effectively measures attitudes, perceptions, and behavioral tendencies quantitatively (Hair et al., 2022).

Third, documentation techniques were used to obtain supporting information from institutional records, organizational documents, photographs, archives, and other relevant materials related to employee activities and institutional operations.

### 3.6 Operational Definition of Variables

This study consisted of two independent variables and one dependent variable. The independent variables were work environment (X1) and work discipline (X2), while the dependent variable was employee performance (Y).

The work environment variable referred to all physical and non-physical conditions surrounding employees during work activities that potentially influence their productivity and comfort. Indicators of the work environment included workplace facilities, office buildings, adequacy of work equipment, relationships among coworkers, and cooperation among employees. These indicators

were adapted from previous studies on organizational behavior and workplace management (Sedarmayanti, 2021; Yusuf et al., 2023).

The work discipline variable referred to employees' awareness and willingness to comply with organizational rules, procedures, and work standards. The indicators used to measure work discipline included attendance, obedience to organizational regulations, compliance with work standards, alertness, and ethical work behavior. These indicators were adapted from the discipline dimensions proposed by Malayu S. P. Hasibuan and supported by recent empirical studies on employee discipline and organizational effectiveness (Astuti & Rahardjo, 2021; Saputra & Lestari, 2025).

The employee performance variable referred to the quality and quantity of work achieved by employees according to their duties and responsibilities within the organization. Employee performance indicators included work quality, work quantity, reliability, initiative, and diligence. These indicators were adapted from performance management theories developed by Anwar Prabu Mangkunegara and contemporary human resource management studies (Rianto et al., 2021; Ibrahim et al., 2022).

### 3.7 Measurement Scale

The variables in this study were measured using a five-point Likert scale. Respondents were asked to indicate their level of agreement with each statement using the following scale: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). The Likert scale was selected because it provides a simple and effective method for measuring respondents' perceptions and attitudes quantitatively.

### 3.8 Data Analysis Technique

Data analysis was conducted using descriptive and inferential statistical methods with the assistance of the Statistical Package for Social Sciences (SPSS) software. Descriptive statistical analysis was used to summarize respondents' demographic characteristics and variable distributions through mean, frequency, percentage, and standard deviation analysis. Descriptive analysis provides an overview of respondents' perceptions regarding the work environment, work discipline, and employee performance variables.

Before conducting hypothesis testing, instrument testing was performed through validity and reliability tests. Validity testing aimed to determine whether the questionnaire items accurately measured the intended variables. An instrument was considered valid if the correlation coefficient exceeded the critical value at the significance level of 0.05. Reliability testing was conducted using Cronbach's Alpha coefficient to measure the internal consistency of the instrument. A Cronbach's Alpha value greater than 0.70 indicated acceptable reliability (Hair et al., 2022).

To examine the influence of work environment and work discipline on employee performance, this study employed multiple linear regression analysis. Multiple regression analysis is commonly used to evaluate the relationship between several independent variables and one dependent variable simultaneously. The regression model used in this study was formulated as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

where Y represents employee performance,  $a$  is the constant,  $\beta_1$  and  $\beta_2$  are regression coefficients,  $X_1$  represents work environment,  $X_2$  represents work discipline, and  $\varepsilon$  represents the error term.

Hypothesis testing was conducted using partial tests (t-test), simultaneous tests (F-test), and coefficient of determination analysis ( $R^2$ ). The t-test was used to determine the partial influence of each independent variable on employee performance, while the F-test was employed to examine the simultaneous effect of work environment and work discipline on employee performance. The coefficient of determination ( $R^2$ ) was used to measure the proportion of variance in employee performance explained by the independent variables. Statistical significance was determined at a 5% significance level ( $\alpha = 0.05$ ).

## 4. Results and Discussion

### 4.1 Research Results

#### Respondent Characteristics

This study examined the influence of work environment and work discipline on employee performance at Politeknik Ilmu Pelayaran Makassar using a sample of 40 employees. Respondent

characteristics were classified based on gender, age, educational background, length of employment, and employment status to provide a clearer overview of the research participants.

### Gender Distribution

The distribution of respondents based on gender is presented in Table 1.

Gender	Frequency	Percentage (%)
<b>Male</b>	34	85
<b>Female</b>	6	15
<b>Total</b>	40	100

Table 1 shows that the majority of respondents were male employees, accounting for 34 respondents (85%), while female employees accounted for only 6 respondents (15%). This finding indicates that the workforce composition at the institution is predominantly male, which is common in maritime-related educational institutions.

### Age Distribution

The distribution of respondents based on age is presented in Table 2.

Age (Years)	Frequency	Percentage (%)
<b>18–20</b>	1	2.5
<b>21–30</b>	5	12.5
<b>31–40</b>	14	35
<b>41–50</b>	20	50
<b>Total</b>	40	100

Based on Table 2, the majority of respondents were between 41 and 50 years old, representing 50% of the total respondents. Employees aged 31–40 years accounted for 35%, while employees aged 21–30 years represented 12.5%. Only one respondent (2.5%) was within the 18–20 age category. These findings indicate that most employees possess considerable work experience and organizational maturity.

### Educational Background

The educational background of respondents is shown in Table 3.

Education Level	Frequency	Percentage (%)
<b>Senior High School</b>	40	100
<b>Diploma (D3)</b>	0	0
<b>Bachelor's Degree</b>	0	0
<b>Total</b>	40	100

Table 3 demonstrates that all respondents possessed a senior high school educational background, accounting for 100% of the sample.

### Length of Employment

The distribution of respondents based on length of employment is presented in Table 4.

Length of Employment	Frequency	Percentage (%)
<b>1–5 Years</b>	1	2.5
<b>6–10 Years</b>	18	45
<b>11–15 Years</b>	15	37.5
<b>16–20 Years</b>	6	15
<b>Total</b>	40	100

Table 4 indicates that most respondents had worked at the institution for 6–10 years, representing 45% of the total sample. Employees with 11–15 years of work experience accounted for 37.5%, while 15% had worked for 16–20 years. Only one respondent (2.5%) had a working period of 1–5 years. These findings suggest that most respondents had substantial organizational experience.

### Descriptive Analysis of Research Variables Work Environment Variable (X1)

The work environment variable was measured using 12 statement items representing six indicators. The analysis revealed that respondents generally perceived the work environment positively. The average score for the work environment variable was 4.34, indicating a high level of agreement among respondents regarding workplace conditions at Politeknik Ilmu Pelayaran Makassar.

Among the statement items, the highest average score was obtained by item LK4, with a mean value of 4.67, indicating that respondents strongly agreed regarding the adequacy of workplace conditions and facilities. Meanwhile, the lowest mean score was found in item LK8, with an average of 3.92, although it still reflected a generally positive perception. Overall, the findings suggest that employees perceived the physical and non-physical work environment as supportive of their work activities.

### Work Discipline Variable (X2)

The work discipline variable was measured using 10 statement items representing five indicators. The overall mean score for the work discipline variable was 4.28, indicating that employees demonstrated a relatively high level of work discipline. The highest mean score was observed in item DK9, with an average value of 4.42, suggesting strong employee compliance with organizational standards and ethical work behavior. The lowest score was identified in item DK7, with an average value of 4.10, although respondents still generally agreed with the statement. These findings indicate that employees at the institution demonstrated good attendance, compliance with work regulations, and adherence to organizational standards.

### Employee Performance Variable (Y)

The employee performance variable was measured using 10 statement items representing five indicators. The analysis showed that respondents generally rated employee performance positively, with an overall mean score of 4.27. The highest average score was found in item KK10, with a mean value of 4.42, indicating strong employee reliability and responsibility in carrying out work tasks. Meanwhile, the lowest score was observed in item KK2, with a mean value of 4.10. Overall, the findings indicate that employees demonstrated satisfactory work quality, work quantity, initiative, diligence, and reliability.

### Instrument Testing

#### Validity Test

Validity testing was conducted to determine whether the questionnaire items accurately measured the intended variables. The validity test was performed by comparing the calculated correlation coefficient ( $r_{count}$ ) with the critical value of the correlation coefficient ( $r_{table}$ ) at a significance level of 5% with degrees of freedom ( $df = n - 2 = 38$ ). The obtained  $r_{table}$  value was 0.320.

The results showed that all statement items for the work environment, work discipline, and employee performance variables had  $r_{count}$  values greater than

$r_{table}$ . Therefore, all questionnaire items were considered valid and suitable for further analysis.

For the work environment variable, the  $r_{count}$  values ranged from 0.470 to 0.870. For the work discipline variable, the values ranged from 0.395 to 0.869. Meanwhile, the employee performance variable demonstrated  $r_{count}$  values ranging from 0.403 to 0.889. These results confirm that all research instruments met the validity requirements.

### Reliability Test

Reliability testing was conducted using Cronbach's Alpha to evaluate the internal consistency of the research instrument. A Cronbach's Alpha coefficient greater than 0.60 indicates acceptable reliability. The results of the reliability test are presented in Table 5.

Variable	Cronbach's Alpha	Interpretation
<b>Work Environment</b>	0.917	Reliable
<b>Work Discipline</b>	0.880	Reliable
<b>Employee Performance</b>	0.850	Reliable

The results indicate that all variables demonstrated Cronbach's Alpha values above 0.60, confirming that the questionnaire items were reliable and internally consistent.

### Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the influence of work environment and work discipline on employee performance. The regression analysis results are presented in Table 6.

Variable	B	Std. Error	Beta	t	Sig.
<b>Constant</b>	6.88	2.78	-	2.47	0.018
<b>Work Environment (X1)</b>	-0.11	0.09	-0.11	-1.22	0.228
<b>Work Discipline (X2)</b>	0.91	0.13	0.98	6.56	0.000

Based on the regression results, the regression equation is formulated as follows:

$$Y = 6.888 - 0.068X_1 + 0.911X_2$$

where  $Y$  represents employee performance,  $X_1$  represents work environment, and  $X_2$  represents work discipline.

The regression equation indicates that the work environment variable had a negative regression coefficient of -0.068, suggesting that a decrease in work environment quality would reduce employee performance by 0.068 units. However, this relationship was statistically insignificant. In contrast, work discipline demonstrated a positive regression coefficient of 0.911, indicating that an increase in work discipline would improve employee performance by 0.911 units.

### **Hypothesis Testing**

#### **Partial Test (t-Test)**

The t-test was conducted to examine the partial influence of each independent variable on employee performance. The critical value of  $t_{table}$  at a significance level of 5% with  $df = 38$  was 1.686.

The results revealed that the work environment variable had a  $t_{count}$  value of -0.614, which was lower than  $t_{table}$  (1.686), with a significance value of 0.543 greater than 0.05. Therefore, the work environment variable did not have a significant effect on employee performance.

Meanwhile, the work discipline variable demonstrated a  $t_{count}$  value of 6.565, which was greater than  $t_{table}$  (1.686), with a significance value of 0.000 lower than 0.05. This finding indicates that work discipline had a positive and significant effect on employee performance.

#### **Simultaneous Test (F-Test)**

The F-test was conducted to examine the simultaneous influence of work environment and work discipline on employee performance. The analysis showed an  $F_{count}$  value of 86.309, which exceeded the  $F_{table}$  value of 3.25, with a significance value of 0.001 lower than 0.05. Therefore, work environment and work discipline

simultaneously had a positive and significant influence on employee performance.

### **Coefficient of Determination ( $R^2$ )**

The coefficient of determination ( $R^2$ ) was used to measure the proportion of variance in employee performance explained by the independent variables. The analysis results revealed an  $R^2$  value of 0.907, indicating a very strong correlation between the independent variables and employee performance. Furthermore, the  $R^2$  value was 0.823, meaning that 82.3% of the variation in employee performance could be explained by work environment and work discipline variables, while the remaining 17.7% was influenced by other variables not included in the research model.

## **4.2 Research Discussion**

### **The Effect of Work Environment ( $X_1$ ) on Employee Performance ( $Y$ )**

The results of the hypothesis testing indicate that the work environment had a negative and insignificant effect on employee performance at Politeknik Ilmu Pelayaran Makassar. The regression coefficient for the work environment variable was -0.068 with a significance value of 0.543. Based on the results of the t-test presented in Table 4.13, the calculated t-value was 0.614, which was lower than the t-table value of 1.686 ( $0.614 < 1.686$ ). This finding indicates that the significance value of the work environment variable exceeded the 0.05 significance level, leading to the acceptance of the null hypothesis ( $H_0$ ) and rejection of the alternative hypothesis ( $H_a$ ). Therefore, the work environment variable did not significantly influence employee performance at Politeknik Ilmu Pelayaran Makassar.

The descriptive analysis of the work environment variable produced an average score of 4.34, indicating that employees generally perceived the work environment as conducive and supportive. The indicator with the highest score was workplace facilities and building conditions, which obtained an average score of 4.67. This finding suggests that respondents considered the physical workplace conditions relatively adequate and comfortable. However, the lowest score was observed in the coworker relationship indicator, with an average score of 3.92. Based on questionnaire responses, several employees expressed limited agreement

regarding participation in activities outside formal work responsibilities. Some employees appeared to prioritize work–life balance and personal time over organizational social activities conducted outside working hours. This finding suggests that interpersonal interaction beyond formal work activities was relatively limited among employees.

Although respondents generally perceived the work environment positively, the insignificant effect of the work environment on employee performance indicates that workplace conditions alone were insufficient to improve employee performance significantly. Several employees still perceived certain aspects of the work environment as needing improvement, indicating the possibility that other organizational factors may play a more dominant role in influencing employee performance. These findings imply that employee performance at the institution may be more strongly influenced by internal factors such as discipline, motivation, leadership, or organizational culture rather than physical workplace conditions.

The findings of this study contradict the argument proposed by Ramadhan et al. (2022), who stated that the work environment significantly affects employees in carrying out their responsibilities and contributes directly to work performance. However, the results are consistent with the study conducted by Sunarno (2021), which found that the work environment had an insignificant effect on employee performance at the West Bekasi District Office. Similarly, the study conducted by Sinollah and Amin (2021) revealed that the work environment did not significantly influence employee performance individually, although the work environment and work discipline simultaneously had a significant effect on employee performance at the Department of Industry and Trade of Malang Regency.

Nevertheless, the findings of this study differ from those reported by Rahman (2021), who found that both work environment and work discipline significantly influenced employee performance partially and simultaneously at the Department of Population and Civil Registration of Pandeglang Regency. These inconsistencies among studies suggest that the influence of the work environment on employee performance may vary depending on organizational context, institutional

culture, leadership systems, and employee characteristics.

### **The Effect of Work Discipline (X2) on Employee Performance (Y)**

The results of the hypothesis testing demonstrate that work discipline had a positive and significant effect on employee performance at Politeknik Ilmu Pelayaran Makassar. The regression coefficient for work discipline was 0.911 with a significance value of 0.000. Based on the partial significance test (t-test) presented in Table 4.13, the calculated t-value was 6.565, which exceeded the t-table value of 1.686 ( $6.565 > 1.686$ ). Since the significance value was lower than 0.05, the null hypothesis ( $H_0$ ) was rejected and the alternative hypothesis ( $H_a$ ) was accepted. This finding confirms that work discipline had a positive and statistically significant influence on employee performance.

The positive regression coefficient indicates that an increase in work discipline leads to an improvement in employee performance. In other words, employees who demonstrate stronger discipline tend to achieve higher levels of work effectiveness, productivity, and responsibility. This finding highlights the importance of discipline as a critical organizational factor in maintaining operational efficiency and improving institutional performance.

The descriptive analysis revealed that the highest score among the work discipline indicators was ethical work behavior, with an average score of 4.37. This finding indicates that employees generally demonstrated professional attitudes and ethical behavior in carrying out their duties. Meanwhile, the lowest score was identified in the high-alertness indicator, with an average score of 4.10. This result suggests that some employees were less responsive in reacting quickly to unexpected situations such as emergencies or workplace accidents. In organizational settings, particularly within maritime educational institutions, rapid responsiveness and alertness are important because they contribute to workplace safety, operational continuity, and institutional stability.

The findings suggest that employee discipline and compliance with organizational regulations significantly contribute to employee performance improvement. Employees who maintain punctuality, comply with work standards,

and fulfill organizational responsibilities consistently tend to perform more effectively and complete their duties efficiently. Therefore, strengthening employee discipline can become an important managerial strategy for improving organizational performance at the institution.

This study is consistent with the findings reported by Zaenulloh and Sinollah (2021), who found that work discipline had a positive and significant influence on employee performance at the Department of Industry and Trade of Malang Regency. The results also support the argument proposed by Rosalina and Wati (2020), who defined discipline as employees' willingness to comply with organizational regulations in order to achieve organizational goals effectively and efficiently.

However, the findings of this study differ from those reported by Mufida et al. (2021), who found that work discipline did not partially influence employee performance among employees of Karoseri Meizam Body Repair. These differing results indicate that the impact of work discipline on employee performance may vary across organizations depending on management systems, leadership practices, organizational culture, and employee characteristics.

### **The Simultaneous Effect of Work Environment (X1) and Work Discipline (X2) on Employee Performance**

The findings of this study demonstrate that work environment and work discipline simultaneously had a positive and significant effect on employee performance at Politeknik Ilmu Pelayaran Makassar. The coefficient of determination ( $R^2$ ) obtained in this study was 0.823, indicating that 82.3% of employee performance variation could be explained by the combined influence of work environment and work discipline variables.

Based on the F-test results presented in Table 4.14, the calculated F-value was 86.309, which exceeded the F-table value of 3.25 ( $86.309 > 3.25$ ), with a significance value of 0.001 lower than 0.05. Therefore, it can be concluded that work environment and work discipline simultaneously exerted a positive and significant influence on employee performance.

The descriptive analysis of the employee performance variable showed that the initiative

indicator obtained the highest average score of 4.32. This finding indicates that employees actively attempted to develop new ideas and improve work efficiency within the institution. Employee initiative reflects proactive behavior and organizational commitment, both of which are important factors in supporting institutional effectiveness and service quality.

Meanwhile, the quality of work indicator obtained the lowest average score of 4.10. This finding suggests that some employees were not fully focused on customer satisfaction and service quality in carrying out their work responsibilities. If not addressed properly, this condition may negatively affect institutional service quality and employee performance in the long term.

The findings of this study support the results reported by Andi Hasryningsih Asfar and Rita Anggraeni (2020), who found that work environment and work discipline simultaneously influenced employee performance through motivation as an intervening variable at the Transportation Department of Serang Regency. Similarly, the results are consistent with the study conducted by Vernandes et al. (2022), which concluded that work environment and work discipline simultaneously had a positive and significant influence on employee performance at PT Pos Indonesia in Padang City.

Overall, the findings indicate that although the work environment did not significantly influence employee performance individually, the combination of a supportive work environment and strong employee discipline contributed significantly to improving organizational performance. Therefore, organizational management should focus not only on improving workplace conditions but also on strengthening employee discipline and organizational commitment to achieve optimal employee performance.

## **5. Conclusion**

### **5.1 Conclusion**

This study examined the influence of work environment and work discipline on employee performance at Politeknik Ilmu Pelayaran Makassar using a quantitative approach involving 40 employees as research respondents. The findings indicate that the work environment variable had a negative and insignificant effect on employee

performance. Although employees generally perceived the workplace environment as conducive and supportive, the statistical analysis demonstrated that the work environment alone was insufficient to significantly improve employee performance. This finding suggests that other organizational factors may play a more dominant role in shaping employee productivity and effectiveness within the institution.

In contrast, work discipline was found to have a positive and significant effect on employee performance. Employees with higher levels of discipline, including punctuality, compliance with organizational regulations, ethical behavior, and responsibility, tended to demonstrate better work performance. The results confirm that work discipline represents a critical factor in improving employee productivity and organizational effectiveness. Employees who consistently comply with institutional standards and operational procedures contribute positively to achieving organizational objectives.

Furthermore, the simultaneous testing results revealed that work environment and work discipline collectively exerted a positive and significant influence on employee performance. The coefficient of determination ( $R^2=0.823$ ) indicates that 82.3% of the variation in employee performance could be explained by the combined contribution of the two independent variables. Therefore, improving employee performance requires an integrated organizational strategy that not only strengthens employee discipline but also continuously improves workplace conditions and organizational support systems.

### Theoretical Implications

The findings of this study contribute to the development of human resource management literature, particularly regarding the relationship between work environment, work discipline, and employee performance in educational institutions. The insignificant effect of the work environment variable indicates that supportive physical conditions alone may not necessarily improve employee performance unless accompanied by strong internal organizational factors such as discipline, motivation, and organizational commitment. This finding enriches previous empirical discussions by demonstrating that the

effectiveness of workplace conditions may vary depending on organizational context and employee characteristics.

Moreover, the significant influence of work discipline reinforces organizational behavior theories emphasizing the importance of compliance, responsibility, and adherence to organizational standards in improving employee outcomes. The findings support the argument that employee discipline remains a fundamental determinant of organizational effectiveness, especially in institutions that require high levels of operational accuracy and service quality such as maritime education institutions.

### Practical Implications

From a managerial perspective, the findings provide several practical implications for Politeknik Ilmu Pelayaran Makassar and similar educational institutions. First, institutional management should continue improving organizational discipline through regular supervision, clear operational standards, and employee development programs aimed at strengthening responsibility and professionalism. Discipline-building initiatives may include attendance monitoring systems, performance evaluations, and reward mechanisms for high-performing employees.

Second, although the work environment variable was not statistically significant, workplace conditions should still receive managerial attention because employees generally perceived some aspects of the environment as requiring improvement. Institutional management may consider implementing flexible and employee-oriented activities that support work-life balance while strengthening interpersonal relationships among employees. Providing professional development programs such as workshops, seminars, and team-building activities may also improve employee engagement and organizational commitment.

Third, the institution should strengthen emergency preparedness and employee responsiveness through periodic training programs focused on workplace safety, crisis response, and operational readiness. Such programs are particularly important in maritime educational institutions where safety awareness and rapid response capabilities represent essential organizational competencies.

## Limitations of the Study

This study has several limitations that should be acknowledged. First, the research involved only 40 respondents from a single institution, limiting the generalizability of the findings to broader organizational settings. Second, the study focused only on two independent variables, namely work environment and work discipline, while employee performance may also be influenced by other factors such as leadership style, organizational culture, compensation, work motivation, and job satisfaction.

In addition, the use of a cross-sectional quantitative design restricted the ability to observe changes in employee perceptions and organizational conditions over time. The reliance on self-reported questionnaire data may also introduce response bias because respondents may provide socially desirable answers.

## Recommendations for Future Research

Future studies are recommended to expand the scope of research by involving larger samples and multiple educational or public-sector institutions in order to improve the external validity of the findings. Researchers may also incorporate additional variables such as leadership, organizational culture, job satisfaction, employee engagement, and work motivation to obtain a more comprehensive understanding of factors influencing employee performance.

Furthermore, future research may apply mixed-method or longitudinal approaches to explore employee behavior and organizational dynamics more deeply. Qualitative methods such as interviews and focus group discussions could provide richer insights into employees' experiences regarding workplace conditions and organizational discipline. Such approaches may contribute to the development of more effective human resource management strategies in educational institutions and public organizations.

## 6. References

- Ahmed, Z., & Malik, M. A. (2023). Human resource management practices and organizational performance: Evidence from service organizations. *International Journal of Organizational Analysis*, 31(4), 1023–1039. <https://doi.org/10.1108/IJOA-07-2022-3345>
- Al-Omari, K., & Okasheh, H. (2021). The influence of work environment on job performance: A case study of engineering company employees. *International Journal of Applied Engineering Research*, 16(5), 1–10. <https://doi.org/10.37622/IJAER/16.5.2021>
- Asfar, A. H., & Anggraeni, R. (2020). The effect of work environment and work discipline on employee performance through motivation as an intervening variable. *Jurnal Manajemen dan Organisasi*, 11(2), 95–108. <https://doi.org/10.29244/jmo.v11i2.31245>
- Astuti, R., & Rahardjo, M. (2021). The influence of work discipline on employee productivity and organizational effectiveness. *Jurnal Manajemen dan Kewirausahaan*, 23(2), 145–156. <https://doi.org/10.9744/jmk.23.2.145-156>
- Creswell, J. W., & Creswell, J. D. (2021). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hasibuan, M. S. P. (2021). *Manajemen sumber daya manusia*. Bumi Aksara.
- Kim, S., & Park, S. (2021). Employee engagement, organizational commitment, and performance: Evidence from higher education institutions. *Sustainability*, 13(14), 7819. <https://doi.org/10.3390/su13147819>
- Mangkunegara, A. P. (2022). *Manajemen sumber daya manusia perusahaan*. Remaja Rosdakarya.
- Mufida, N., Santoso, B., & Kurniawan, D. (2021). The influence of work discipline on employee performance at Karoseri Meizam Body Repair. *Jurnal Ilmu Manajemen*, 9(1), 66–75. <https://doi.org/10.26740/jim.v9n1.p66-75>
- Pradhan, R. K., & Jena, L. K. (2022). Employee performance at workplace: Conceptual model and empirical validation. *Business Perspectives and Research*, 10(2), 1–15. <https://doi.org/10.1177/22785337211063054>
- Rahman, F. (2021). The effect of work environment and work discipline on employee performance at the Department of Population and Civil Registration of Pandeglang Regency. *Jurnal Manajemen Sumber*

 DOI: 10.65246

*Daya Manusia*, 15(1), 78–89.  
<https://doi.org/10.32424/jmsdm.v15i1.2021>

- Rivai, V. (2021). *Manajemen sumber daya manusia untuk perusahaan*. Rajawali Pers.
- Rosalina, E., & Wati, L. (2020). Work discipline and its impact on employee performance in organizational settings. *Jurnal Administrasi Bisnis*, 9(3), 210–219.  
<https://doi.org/10.14710/jab.v9i3.2020>
- Saunders, M., Lewis, P., & Thornhill, A. (2022). *Research methods for business students* (9th ed.). Pearson Education.
- Sedarmayanti. (2021). *Tata kerja dan produktivitas kerja*. Mandar Maju.
- Sekaran, U., & Bougie, R. (2021). *Research methods for business: A skill-building approach* (9th ed.). Wiley.
- Sugiyono. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sunarno, S. (2021). Pengaruh lingkungan kerja dan disiplin kerja terhadap kinerja pegawai pada Kantor Kecamatan Bekasi Barat. *Jurnal Ekonomi dan Bisnis*, 10(2), 55–66.  
<https://doi.org/10.34308/eqien.v10i2.410>
- Vernandes, R., Putra, D., & Syafrizal, H. (2022). The simultaneous effect of work environment and work discipline on employee performance at PT Pos Indonesia Padang. *Jurnal Administrasi Bisnis*, 18(1), 44–56. <https://doi.org/10.31289/jab.v18i1.2022>
- Yusuf, M., Rahman, A., & Hidayat, R. (2021). The effect of work environment on employee commitment and performance. *International Journal of Economics, Business and Accounting Research*, 5(3), 112–121.  
<https://doi.org/10.29040/ijebar.v5i3.2874>
- Zaenulloh, M., & Sinollah, S. (2021). The effect of work discipline on employee performance at the Department of Industry and Trade of Malang Regency. *Jurnal Aplikasi Manajemen*, 19(4), 811–820.  
<https://doi.org/10.21776/ub.jam.2021.019.04.10>