

Analysis of Organizational Commitment, Organizational Culture, and Non-Physical Work Environment on Employee Human Resource Development at PT Belawan New Container Terminal

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Abstract

This study was conducted to empirically examine the effect of organizational commitment, organizational culture, and the non-physical work environment on human resource development (HRD) of employees at PT Belawan New Container Terminal. The research employed a quantitative approach with an associative research design, using multiple linear regression analysis to test the relationships and effects among the variables. The research population consisted of all 210 employees, while the sample was determined using the Slovin formula, resulting in 68 permanent employees selected as respondents. A purposive sampling technique was applied. Data collection was carried out through the distribution of questionnaires to respondents in 2025. The collected data were then processed and analyzed using SPSS version 24.0. The results of the analysis indicated that organizational commitment, organizational culture, and the non-physical work environment had a positive and significant effect on human resource development, both partially and simultaneously. The findings also showed that organizational culture was the most dominant variable influencing human resource development compared to the other variables examined. All hypotheses proposed in this study were proven and accepted, as the empirical testing results were consistent with the research hypotheses. The coefficient of determination indicated that approximately 85.7% of the variation in human resource development could be explained by organizational commitment, organizational culture, and the non-physical work environment, while the remaining variation was influenced by other factors outside the research model. In addition, the relationship between the three independent variables and human resource development was classified as very strong.

Keywords: Organizational Commitment, Organizational Culture, Non-Physical Work Environment, Human Resource Development.

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Introduction

PT Belawan New Container Terminal is a company managing an international container terminal operating within the Belawan Port area, North Sumatra [1]. The company was established through a strategic collaboration between PT Pelabuhan Indonesia (Persero), via its subsidiary, and a consortium led by the Indonesia Investment Authority (DP World Investment), with the vision of strengthening the port's role as a primary logistics gateway in western Indonesia [2]. As a customs area and temporary storage facility, along with plans to expand capacity to approximately 1.4 million TEUs, the company is required to manage loading and unloading activities, storage, and terminal operations in a professional, integrated, and globally competitive manner [3]. These conditions position human resources as a strategic element in supporting the sustainability and operational effectiveness of the company.

Human resource development (HRD) plays a crucial role in enhancing organizational performance, particularly in port service companies that face dynamic operational demands and rapid technological changes [4]. HRD is not solely oriented toward improving technical skills but also toward shaping work attitudes, adaptive capabilities, and employee readiness to meet complex job demands [5]. The literature indicates that well-planned and continuous HRD contributes to increased productivity, service quality, and employee engagement in achieving organizational goals [6]. Therefore, companies must ensure that HRD policies and practices are aligned with operational needs and the characteristics of the work environment.

Sudarmanto explains that HRD is influenced by various factors, including business strategy, competency requirements, organizational culture, work environment, leadership commitment, as well as regulatory and external dynamics [7]. In this context, organizational commitment, organizational culture, and the non-physical work environment are regarded as internal factors that play a significant role in encouraging the effectiveness of HRD [7].

Organizational commitment reflects the degree of employees' attachment to the organization, encompassing affective, normative, and continuance dimensions [8]. Priansa states that strong organizational commitment fosters loyalty, active participation, and employees' willingness to engage in self-development programs [8]. Employees who feel appreciated, have clear career prospects, and perceive fairness within the organization tend to demonstrate higher motivation to enhance their competencies [9]. However, the results of a pre-survey involving 20 employees of PT Belawan New Container Terminal indicate that some respondents have not fully perceived recognition for their contributions, consistency in the application of ethical values, the breadth of career opportunities, and the effectiveness of internal communication. This condition suggests variations in the level of organizational commitment that may influence employee involvement in HRD initiatives.

Organizational culture refers to a set of values, norms, and beliefs that guide the behavior of organizational members [10]. Moekijat emphasizes that an organizational culture that supports learning, innovation, and individual development can continuously strengthen the quality of human resources [10]. A conducive culture is reflected through leadership role modeling, a shared understanding of the organization's vision and mission, and support for enhancing employee competencies [11]. Based on the pre-survey results, several respondents perceived that leadership role modeling, encouragement for skill development, discipline, and innovation have not been optimally experienced. These findings indicate that strengthening organizational culture remains a challenge in creating a work environment that comprehensively supports HRD.

In addition to organizational commitment and culture, the non-physical work environment also plays an important role in shaping a work atmosphere that supports learning and performance [12]. Nitisemito states that the non-physical work environment includes supervision systems, work relationships, communication, and the psychological climate in the workplace. A conducive environment can enhance comfort, trust, and cooperation among employees, thereby facilitating competency development processes [13]. The pre-survey results show that some employees have not fully experienced consistent supervision, smooth

communication with supervisors, and harmonious working relationships. These conditions may affect team effectiveness and reduce psychological support for HRD.

Based on the above discussion, it can be understood that HRD at PT Belawan New Container Terminal is closely related to the roles of organizational commitment, organizational culture, and the non-physical work environment. The pre-survey findings indicate the presence of areas for improvement in these three aspects, which may influence the effectiveness of HRD. Therefore, this study is relevant to analyze the effects of organizational commitment, organizational culture, and the non-physical work environment on human resource development. The results of this study are expected to contribute academically and to serve as a reference for the company in formulating more focused and sustainable HRD policies.

Research Methodology

This study employs a quantitative approach with an associative research design, aimed at analyzing the relationships and effects among the research variables [14]. The quantitative approach was chosen because it allows objective measurement of variables through numerical data and hypothesis testing using statistical procedures [15]. The associative design is used to examine the effects of organizational commitment, organizational culture, and the non-physical work environment on human resource development (HRD), both partially and simultaneously [16]. The analytical technique applied is multiple linear regression, considering that this study involves more than one independent variable influencing a single dependent variable [17].

The population of this study consists of all permanent employees of PT Belawan New Container Terminal, totaling 210 individuals distributed across various work divisions. The sample size was determined using the Slovin formula with a 10 percent margin of error, resulting in a sample of 68 respondents [18].

$$n = \frac{N}{1 + N e^2} = \frac{210}{1 + 210(0,10^2)} = \frac{210}{1 + 210(0,01)} = \frac{210}{3,10} = 67,74 = 68 \text{ (rounded)}$$

The sampling technique employed is purposive sampling, with criteria that respondents must be permanent employees, have a minimum of one year of work experience, and not hold managerial positions [19]. This approach ensures that respondents possess adequate work experience and relevant understanding of organizational conditions.

The data used in this study are primary data obtained through the distribution of questionnaires to respondents. The research instrument was developed based on indicators for each variable and measured using a five-point Likert scale [20].

The dependent variable in this study is human resource development (Y), measured using the following indicators: satisfaction with training programs, perceptions of performance management, rewards and recognition, and career development [7].

The independent variables include organizational commitment (X1), measured by affective commitment, normative commitment, continuance commitment, and overall commitment [8]; organizational culture (X2), measured by leadership behavior, emphasis on the company mission, learning processes, and motivation [10]; and the non-physical work environment (X3), measured by supervision systems, employee cooperation, interpersonal relationships, and communication among employees [13].

Data analysis was conducted using SPSS version 24. The analysis stages include data quality testing (validity and reliability tests), classical assumption tests (normality, multicollinearity, and heteroscedasticity), and hypothesis testing through t-tests, F-tests, and the coefficient of determination (R^2) [21]. The multiple linear regression model was used to estimate the magnitude of the influence of independent variables on the dependent variable and to explain the contribution of each variable to human resource development [22].

Results

Data Validity and Reliability

Table 1. Results of Validity and Reliability Tests

Organizational Commitment (X ₁)			Organizational Culture (X ₂)			Non-Physical Work Environment (X ₃)			Human Resource Development (Y)		
Symb	r _{hitung}	Cronbac h's Alpha	Symb	r _{hitung}	Cronbac h's Alpha	Symb	r _{hitung}	Cronbac h's Alpha	Symb	r _{hitung}	Cronbac h's Alpha
X _{1,1}	0,745	0,876	X _{2,1}	0,528	0,891	X _{3,1}	0,616	0,889	Y _{,1}	0,503	0,831
X _{1,2}	0,618	0,888	X _{2,2}	0,636	0,882	X _{3,2}	0,584	0,892	Y _{,2}	0,491	0,832
X _{1,3}	0,721	0,879	X _{2,3}	0,699	0,876	X _{3,3}	0,557	0,896	Y _{,3}	0,579	0,822
X _{1,4}	0,745	0,876	X _{2,4}	0,673	0,878	X _{3,4}	0,704	0,881	Y _{,4}	0,545	0,826
X _{1,5}	0,705	0,881	X _{2,5}	0,727	0,874	X _{3,5}	0,813	0,870	Y _{,5}	0,630	0,815
X _{1,6}	0,692	0,881	X _{2,6}	0,777	0,868	X _{3,6}	0,790	0,873	Y _{,6}	0,620	0,817
X _{1,7}	0,619	0,889	X _{2,7}	0,549	0,893	X _{3,7}	0,817	0,870	Y _{,7}	0,609	0,818
X _{1,8}	0,598	0,891	X _{2,8}	0,809	0,866	X _{3,8}	0,565	0,893	Y _{,8}	0,611	0,817

The results of the validity test indicate that all statement items for each variable have calculated correlation values ($r_{\text{calculated}}$) greater than the critical value of 0.30. Therefore, all research instruments are declared valid and appropriate for use [23]. In addition, the Cronbach's Alpha values for all variables exceed 0.70, indicating that the research instruments possess a good level of reliability or consistency in measuring the variables under study [24].

Classical Assumption Tests

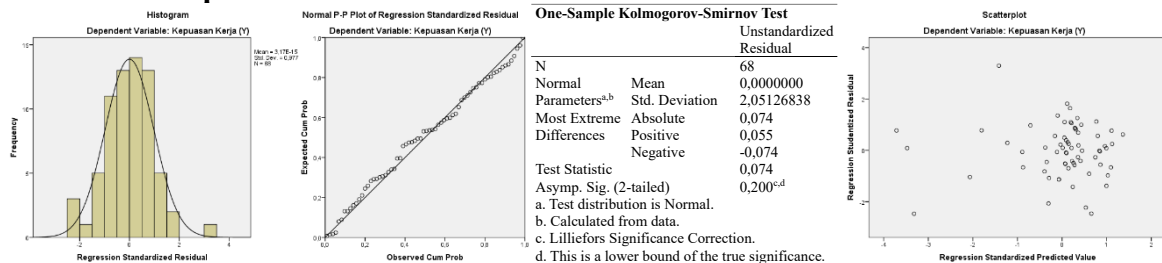


Figure 1. Histogram, P–P Plot, and Scatterplot

The normality test based on the histogram graph shows a residual distribution pattern that resembles a normal curve. The mean of the residuals, which is close to zero, along with a relatively small standard deviation, indicates that the residuals are symmetrically distributed. This finding is further supported by the P–P Plot, which shows residual points distributed around the diagonal line. Thus, it can be concluded that the normality assumption in the regression model has been satisfied [25].

The heteroscedasticity test using the scatterplot graph shows that the residual points are randomly distributed and do not form a specific pattern. This condition indicates that the variance of the residuals is constant, suggesting the absence of heteroscedasticity [26].

Table 2. Results of Multicollinearity Test and Glejser Test

Model	Coefficients ^a		Sig.	Conclusion
	Collinearity Statistics			

	<i>Toleranc e</i>	<i>VIF</i>		
1 (Constant)			0,011	
Organizational Commitment (X ₁)	0,269	3,719	0,060	There are no multicollinearity problems and no symptoms of heteroscedasticity.
Organizational Culture (X ₂)	0,261	3,831	0,784	
Non-Physical Work Environment (X ₃)	0,204	4,905	0,450	
a. <i>Dependent Variable:</i> Human Resource Development (Y)			a. <i>Dependent Variable:</i> Absolute Residual	

The multicollinearity test results show that the tolerance values are greater than 0.10 and the Variance Inflation Factor (VIF) values are less than 10. This indicates that there is no strong linear relationship among the independent variables, and therefore, the regression model is free from multicollinearity issues [27].

Furthermore, the Glejser test reveals that all independent variables have significance values greater than 0.05, confirming that the regression model is free from heteroscedasticity problems [24].

Table 3. Results of Multiple Linear Regression Analysis and t-Test (Partial)

<i>Model</i>	Coefficients^a			<i>t_{hitung}</i>	<i>t_{tabel}</i>	<i>Sig.</i>	Rule of Sig.	Conclusion
	<i>Unstandardized Coefficients</i>	<i>Standardized Coefficients</i>						
	B	Std. Error	Beta					
1 (Constant)	1,557	1,547		1,006		0,318		
Organizational Commitment (X ₁)	0,250	0,078	0,284	3,185	1,998	0,002	< 0,05	Positive & Significant
Organizational Culture (X ₂)	0,414	0,090	0,415	4,587	1,998	0,000	< 0,05	Positive & Significant
Non-Physical Work Environment (X ₃)	0,273	0,097	0,287	2,805	1,998	0,007	< 0,05	Positive & Significant
a. Dependent Variable: Human Resource Development (Y)								

The results of the multiple linear regression analysis produce the following regression equation [28]:

$$Y = 1,557 + 0,250X_1 + 0,414X_2 + 0,273X_3 + e.$$

The constant value of 1.557 indicates that when Organizational Commitment, Organizational Culture, and Non-Physical Work Environment are equal to zero, Human Resource Development still has a baseline value of 1.557. The positive regression coefficients for all independent variables indicate that any increase in Organizational Commitment, Organizational Culture, or Non-Physical Work Environment will be followed by an increase in Human Resource Development. This means that the direction of influence of all three variables is positive and reinforcing toward Human Resource Development [29].

The partial t-test results indicate that Organizational Commitment has a positive and significant effect on Human Resource Development, as evidenced by a *t_{calculated}* value of 3.185, which is greater than the *t_{table}* value of 1.998, and a significance level of 0.002 < 0.05. A positive effect implies that higher Organizational Commitment leads to higher levels of

Human Resource Development, while significance indicates that the effect is statistically reliable [30].

Organizational Culture is also proven to have a positive and significant effect on Human Resource Development, with a $t_{\text{calculated}}$ value of 4.587, exceeding the t_{table} value of 1.998, and a significance level of $0.000 < 0.05$. This result indicates that improvements in Organizational Culture substantially encourage the enhancement of Human Resource Development [11]. Meanwhile, the Non-Physical Work Environment has a $t_{\text{calculated}}$ value of 2.805 with a significance level of $0.007 < 0.05$, indicating that this variable also has a positive and significant effect on Human Resource Development [31].

Based on the partial test results, Organizational Culture is identified as the most dominant variable influencing Human Resource Development, as it has the highest regression coefficient and $t_{\text{calculated}}$ value compared to the other variables [23]. This dominance indicates that Organizational Culture plays the strongest role in explaining variations in Human Resource Development.

Table 4. Results of F-Test (Simultaneous) and Determination Test

<i>Model</i>	<i>df</i>	ANOVA ^a				<i>Conclusion</i>	Model Summary ^b	
		<i>F_{hitung}</i>	<i>F_{tabel}</i>	<i>Sig</i>	<i>Rule of Sig.</i>		<i>R</i>	<i>Adjusted R Square</i>
1 Regression	3							
Residual	64	134,378	2,748	0,000 ^b	< 0,05	Significant	0,929 ^a	0,857
Total	67							

a. *Dependent Variable:* Human Resource Development (Y)

b. *Predictors:* (Constant), Organizational Commitment (X₁), Organizational Culture (X₂), Non-Physical Work Environment (X₃)

The results of the simultaneous F-test show a significance value of $0.000 < 0.05$, with an $F_{\text{calculated}}$ value of 134.378, which is greater than the F_{table} value of 2.748. These results indicate that Organizational Commitment, Organizational Culture, and Non-Physical Work Environment simultaneously have a positive and significant effect on Human Resource Development. A positive effect means that simultaneous improvements in all three variables will enhance Human Resource Development, while significance indicates that the effect is statistically strong [26].

The adjusted R^2 value of 0.857 indicates that 85.7% of the variation in Human Resource Development can be explained by Organizational Commitment, Organizational Culture, and Non-Physical Work Environment, while the remaining 14.3% is influenced by other factors outside the research model [28]. The correlation coefficient (R) value of 0.929 signifies a very strong relationship between the independent variables and Human Resource Development [32].

Discussion

The Effect of Organizational Commitment on Human Resource Development

Organizational Commitment at PT Belawan New Container Terminal (BNCT) serves as a fundamental driver in promoting human resource development (HRD) within the company. As an international container terminal that has experienced rapid growth in recent years, BNCT faces high operational demands and intense global competition, particularly following the strengthened investment and capacity expansion led by the consortium of Pelindo, Indonesia Investment Authority (INA), and DP World. This consortium has introduced international management practices and world-class operational standards into the BNCT working environment, requiring employees to continuously adapt, enhance their skills, and engage in ongoing learning to keep pace with increasingly complex operational and logistics strategies. The company's clear vision, which emphasizes professionalism, competence, and collaboration, further strengthens Organizational Commitment by fostering employee

involvement in achieving strategic objectives. This condition positively affects employees' active participation in Human Resource Development programs [33].

The positive influence of Organizational Commitment on Human Resource Development is also reflected in various initiatives and work practices implemented at BNCT. The company's strong emphasis on occupational safety, the adoption of Lean approaches to improve efficiency, and the implementation of cross-functional training and collaboration demonstrate management's commitment to creating a work environment that supports learning and innovation. For instance, achieving more than one million safe working hours without a Lost Time Injury (LTI) reflects the high standards set and consistently upheld by employees, which in turn fosters confidence and organizational attachment. Furthermore, capacity-building training programs and employee-involved corporate social responsibility and sustainability initiatives provide opportunities for individuals to expand their professional skills and strengthen team engagement in fulfilling the company's mission [29]. These practices encourage employees to actively participate in competency development activities, enhance loyalty, and ultimately reinforce Human Resource Development in a comprehensive manner.

Strong Organizational Commitment at BNCT is also evident through clear internal communication, transparent long-term strategies, and support for community-based and sustainability initiatives that directly involve employees. By integrating employees into the achievement of strategic corporate missions, including sustainability programs and environmental initiatives such as mangrove projects, employees perceive themselves as integral contributors to the company's transformation journey. This sense of belonging creates a strong emotional bond between employees and the organization, which, according to the research findings, significantly contributes to improvements in skills, motivation, and the assimilation of new knowledge [33]. Organizational Commitment not only fosters a conducive work environment but also facilitates both individual and collective competency growth, thereby directly supporting the effectiveness of Human Resource Development at BNCT [4].

The Effect of Organizational Culture on Human Resource Development

Organizational Culture at PT Belawan New Container Terminal (BNCT) plays a crucial role in systematically facilitating human resource development (HRD). As a modern container terminal that began full operations in 2024 and operates amid global operational challenges, BNCT positions organizational values as the foundation of expected employee behavior. A culture that emphasizes trust, competence, harmony, loyalty, adaptability, and collaboration is embedded within the company's corporate values and internalized by employees, encouraging proactive work practices and support for continuous learning. The values of competence and adaptability, in particular, reflect the company's strong encouragement for ongoing capability enhancement through both formal and informal learning, which directly contributes to improvements in employees' technical and non-technical competencies [34]. The internalization of these cultural values creates a motivating environment that encourages employees to actively engage in Human Resource Development programs, such as training sessions, workshops, and other capacity-building initiatives.

The implementation of organizational culture at BNCT is clearly reflected in various company initiatives, including occupational safety training programs and Lean Management practices. For example, operational safety training involving more than 320 workers demonstrates that BNCT prioritizes not only technical aspects but also the development of safety awareness as an integral part of its Organizational Culture. By inviting experts from Dubai Port to deliver training sessions, the company illustrates its commitment to applying international standards aligned with values of competence and safety, thereby enhancing employees' skills and understanding of safe and efficient work practices. Such initiatives not only improve technical capabilities but also strengthen employees' sense of belonging and organizational identity within a company that prioritizes safety and service quality [6].

Organizational Culture at BNCT is further reflected in the company's approach to continuous improvement through the implementation of Lean principles and internal programs that emphasize teamwork and innovation. The application of 5S and Kaizen projects provides employees with opportunities to participate in problem identification, solution formulation, and continuous evaluation of outcomes. This collaborative approach strengthens a culture that supports collective learning while enabling employees to enhance their knowledge and skills in a contextual manner aligned with operational needs [5]. Moreover, initiatives related to social responsibility and community empowerment around the Belawan area further reinforce values of harmony and collaboration, thereby extending the positive impact of organizational culture both within the workplace and the broader community.

The Effect of the Non-Physical Work Environment on Human Resource Development

The Non-Physical Work Environment at PT Belawan New Container Terminal (BNCT) plays a strategic role in supporting human resource development (HRD), particularly within the context of a modern port company operating under high levels of operational complexity and risk. The Non-Physical Work Environment encompasses interpersonal relationships, communication patterns, supervision systems, organizational justice, and leadership support for employees [13]. In container terminal operations that demand cross-functional coordination and time precision, a psychologically conducive work atmosphere becomes a critical factor enabling employees to learn, adapt, and optimally develop their competencies. The results of regression analysis and t-tests indicating a positive and significant effect suggest that improvements in the quality of the Non-Physical Work Environment lead to greater opportunities for enhancing employees' capabilities, knowledge, and professionalism.

This influence occurs because a healthy Non-Physical Work Environment fosters feelings of safety, comfort, and appreciation among employees as they perform their duties [12]. At BNCT, collaborative work relationships and structured operational communication are essential for ensuring smooth container handling activities. When communication between management and employees is open and supervision is conducted consistently and fairly, employees tend to feel more confident in expressing ideas, asking questions, and actively engaging in learning processes. These conditions promote knowledge sharing and continuous skill development [35]. Additionally, harmonious relationships among colleagues strengthen teamwork, enabling employees to learn collectively from shared experiences in addressing the dynamic challenges of port operations.

In practice, BNCT has undertaken various initiatives to improve and strengthen the Non-Physical Work Environment as part of its Human Resource Development strategy. The company has implemented work systems based on clear standard operating procedures, strengthened coordination among work units, and encouraged leaders to act as facilitators and mentors for employees. Through more structured supervision and continuously improved internal communication, BNCT strives to create a work climate that supports learning and competency enhancement. This conducive Non-Physical Work Environment not only assists employees in developing technical skills but also fosters professional attitudes, responsibility, and readiness to face the evolving operational demands of container terminal activities. The findings of this study confirm that the Non-Physical Work Environment is a critical factor that significantly supports the effectiveness of Human Resource Development at PT Belawan New Container Terminal [9].

The Simultaneous Effect of the Three Variables on Human Resource Development

The results of the multiple linear regression analysis and the F-test indicate that Organizational Commitment, Organizational Culture, and the Non-Physical Work Environment simultaneously have a positive and significant effect on employee Human Resource Development at PT Belawan New Container Terminal (BNCT). These findings suggest that Human Resource Development within the company is not influenced by a single factor, but

rather emerges from the interaction of various organizational aspects that mutually reinforce one another. As an international container terminal operator with a high level of operational complexity, BNCT requires employees who are not only technically competent but also demonstrate professionalism, adaptability, and readiness to respond to the continuously evolving dynamics of the port working environment.

This simultaneous influence can be understood through the role of Organizational Commitment in fostering employees' attachment to organizational goals. Employees who possess strong affective, normative, and continuance commitment tend to demonstrate a greater willingness to participate in training programs, skills enhancement initiatives, and continuous learning activities [8]. At BNCT, Organizational Commitment functions as a psychological foundation that encourages employees to actively contribute to their personal development. When employees feel valued, perceive opportunities for growth, and clearly understand the organization's strategic direction, their participation in Human Resource Development becomes more active and sustainable [29].

Organizational Culture and the Non-Physical Work Environment further serve as reinforcing factors for this commitment. The Organizational Culture at BNCT, which emphasizes professionalism, occupational safety, collaboration, and competency enhancement, shapes work behavior patterns that support learning and development. Organizational values that are communicated through leadership practices, training programs, and daily work activities help employees understand the expected standards of behavior [35]. Meanwhile, the Non-Physical Work Environment—encompassing communication quality, work relationships, supervision systems, and leadership support—creates a psychologically conducive workplace climate [12]. Such an environment enables employees to feel secure in learning, asking questions, and developing skills without excessive pressure.

Simultaneously, these three variables complement one another in driving the effectiveness of Human Resource Development at BNCT. Organizational Commitment shapes employees' willingness to develop, Organizational Culture provides direction and values that guide development efforts, while the Non-Physical Work Environment offers a supportive climate for the development process [33][5][9]. The company has also implemented various concrete initiatives, including the application of standardized operating procedures, strengthened cross-unit coordination, the implementation of safety and competency training programs, and the enhancement of leadership roles as mentors and facilitators. The synergy among these three aspects enables Human Resource Development at PT Belawan New Container Terminal to be more structured and sustainable, thereby supporting the company's overall operational performance.

Organizational Culture exerts the strongest influence on Human Resource Development at PT Belawan New Container Terminal because culture functions as a framework of values and norms that directly shape employees' work behavior. Values such as professionalism, safety, collaboration, and continuous learning serve as daily operational guidelines, encouraging employees to continuously enhance their competencies without relying solely on formal encouragement [34]. A strong Organizational Culture also ensures that training, coaching, and skill development programs are not merely administrative activities but are deeply internalized within daily work practices [11]. Compared to Organizational Commitment and the Non-Physical Work Environment, which function primarily as supporting factors, Organizational Culture plays a more direct role in shaping employees' mindset, attitudes, and readiness for sustainable professional development.

Conclusion

Based on the results of the analysis, it can be concluded that Organizational Commitment, Organizational Culture, and the Non-Physical Work Environment have a positive and significant effect on employee Human Resource Development at PT Belawan New Container Terminal. Both partially and simultaneously, these variables enhance employee competence,

professional attitudes, and readiness to support company operations. Organizational Culture is proven to be the most dominant variable influencing Human Resource Development, as it directly shapes work behavior, professional values, and the spirit of continuous learning within the organizational environment.

Based on the research findings, the company is advised to continuously strengthen an Organizational Culture that supports learning, occupational safety, and collaboration through exemplary leadership and consistent internalization of organizational values. The company should also enhance Organizational Commitment by clarifying career development pathways, providing fair recognition of employee performance, and strengthening internal communication. In addition, improvements to the Non-Physical Work Environment can be achieved through objective supervision systems, enhanced quality of work relationships, and two-way communication between leaders and employees. These measures are expected to sustainably improve employee performance.

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