

ANALYSIS of WORK DISCIPLINE, COMPENSATION, and MOTIVATION on EMPLOYEE WORK PRODUCTIVITY at PT BELAWAN NEW CONTAINER TERMINAL

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Abstract

This study aimed to analyze the influence of work discipline, compensation, and work motivation on employee work productivity at PT Belawan New Container Terminal. This study used a quantitative approach with an associative research design. The population of this study consisted of all permanent employees of PT Belawan New Container Terminal, totaling 210 employees. The sample size was determined using the Slovin formula with a 10% margin of error, resulting in 68 respondents. The sampling technique used was purposive sampling, with the criteria that respondents were permanent employees, had worked for at least one year, and did not hold managerial positions. Primary data were obtained by distributing closed ended questionnaires using a Likert scale. The data analysis techniques included data quality testing, classical assumption testing, multiple linear regression analysis, t test, F test, and coefficient of determination analysis using SPSS. The results showed that work discipline had a positive and significant effect on work productivity, with a regression coefficient of 0.377, a t statistic of 3.441, and a significance value of 0.001. Compensation had a positive and significant effect, with a regression coefficient of 0.279, a t statistic of 2.308, and a significance value of 0.024. Work motivation also had a positive and significant effect, with a regression coefficient of 0.254, a t statistic of 2.854, and a significance value of 0.006. Simultaneously, work discipline, compensation, and work motivation had a significant effect on work productivity, with an F statistic of 88.340 and a significance value of 0.000. The Adjusted R Square value of 0.796 indicated that 79.6% of work productivity could be explained by the three variables.

Keywords: Work Discipline, Compensation, Work Motivation, Work Productivity, Employees.

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Introduction

Employee work productivity is one of the essential aspects in supporting company operational effectiveness, especially in the port service sector, which requires punctuality, accuracy, occupational safety, and coordination across functions [1]. PT Belawan New Container Terminal is an international standard container terminal that plays a role in supporting the smooth flow of export and import logistics at Belawan Port, North Sumatra [2]. As a terminal located on the strategic international shipping route of the Malacca Strait, the company's operational success is closely related to the ability of human resources to produce quality work, meet work targets, complete tasks on time, and maintain compliance with operational procedures [3].

Employee work productivity at PT Belawan New Container Terminal needed to be examined because container terminal activities have dynamic and intensive work characteristics and require process accuracy. Based on the results of a preliminary survey involving 20 employees, work productivity still required attention in several indicators. A total of 70% of respondents stated that they did not fully agree that work results had met the company's quality standards, 60% stated that work volume targets had not always been achieved, and 65% considered that task completion had not fully met the predetermined time. In addition, 60% of respondents stated that enthusiasm to improve work results was not yet optimal, while 55% considered that compliance with working hours and operational rules still needed improvement. These initial findings showed that work productivity was not only related to final output, but was also influenced by work behavior, the accuracy of task implementation, and employee motivation in carrying out their responsibilities.

One factor related to work productivity is work discipline [4]. Work discipline reflects employee compliance with applicable rules, schedules, procedures, and work instructions [5]. In container terminal operations, discipline is important because delays, procedural noncompliance, or lack of responsibility can affect work coordination and service continuity. The preliminary survey showed that 65% of respondents stated that employees were not fully consistent in remaining in the work area without official permission and were not always punctual according to the work schedule. In addition, 55% of respondents considered that compliance with work rules and procedures still needed to be strengthened, while 60% stated that task implementation and leadership instructions had not been fully carried out optimally. This condition indicated that work discipline was a relevant variable to be analyzed in relation to work productivity.

Another factor that also influences productivity is compensation [6]. Compensation does not only include basic salary, but also incentives, allowances, work facilities, and nonfinancial rewards [7]. Compensation that is perceived as fair and appropriate to workload can support employee satisfaction, commitment, and motivation to work more productively [8]. The preliminary survey showed that 70% of respondents considered that the basic salary was not fully aligned with workload, length of service, and job responsibilities. A total of 55% of respondents stated that incentives did not fully reflect performance achievement, 65% considered that allowances and nonfinancial rewards still needed to be strengthened, and 60% stated that work facilities did not fully support the smooth implementation of daily tasks. These data indicated that perceptions of compensation potentially had a relationship with employee enthusiasm and work productivity.

In addition to work discipline and compensation, work motivation is also an important factor in encouraging productivity [9]. Work motivation reflects employees' drive to achieve targets, work enthusiastically, take initiative, generate new ideas, and be responsible for work results [5]. Based on the preliminary survey results, 70% of respondents stated that the drive

to achieve targets and work enthusiasm were not yet fully strong. Furthermore, 55% of respondents considered that initiative and work responsibility still needed improvement, while 60% stated that creativity in generating new ideas had not developed optimally. These findings showed that strengthening work motivation was necessary so that employees could work in a more focused, active, and results oriented manner.

Theoretically, work productivity can be influenced by various factors, such as motivation, discipline, skills, responsibility, compensation, work environment, technology, social security, leadership, and achievement opportunities [10]. Several previous studies also showed that work discipline, compensation, and work motivation influenced employee work productivity [11][12]. Based on these phenomena, this study was important to conduct in order to obtain an empirical understanding of the relationship between work discipline, compensation, and motivation toward employee work productivity at PT Belawan New Container Terminal.

The research problem in this study was whether work discipline, compensation, and motivation had partial and simultaneous effects on employee work productivity at PT Belawan New Container Terminal. This study aimed to analyze the partial and simultaneous effects of work discipline, compensation, and motivation on employee work productivity at PT Belawan New Container Terminal.

Research Methodology

This study used a quantitative approach with an associative research design. The quantitative approach was used because this study aimed to measure and analyze the influence among variables based on numerical data obtained from respondents [13]. Meanwhile, the associative research design was used to determine the influence of Work Discipline, Compensation, and Work Motivation on Employee Work Productivity, both partially and simultaneously. The study was conducted at PT Belawan New Container Terminal, located on Jalan Raya Pelabuhan Gabion, Medan City, North Sumatra.

The population in this study consisted of all permanent employees of PT Belawan New Container Terminal, totaling 210 employees. The sample size was determined using the Slovin formula with a margin of error of 10%, resulting in 68 respondents [14]. The sampling technique used was purposive sampling, which is a sampling technique based on certain criteria relevant to the needs of the study [15].

The respondent criteria in this study were permanent employees, employees who had worked for at least one year at PT Belawan New Container Terminal, and employees who did not hold leadership positions. These criteria were used so that the selected respondents had adequate work experience and were able to provide relevant assessments of the research variables [14].

The type of data used in this study was primary data obtained through the distribution of closed questionnaires to respondents. The research instrument was developed based on the indicators of each variable.

Work discipline was measured using indicators of work attendance, compliance with regulations, punctuality, responsibility for tasks, and obedience to superiors [5]. Compensation was measured using indicators of basic salary, incentives, allowances, work facilities, and nonfinancial rewards [7]. Work motivation was measured using indicators of the drive to achieve goals, enthusiasm at work, initiative, creativity, and sense of responsibility [5].

Work productivity was measured using indicators of achieving work quality targets, achieving work quantity targets, achieving task completion time, high work enthusiasm, and

high work discipline [10]. All statement items were measured using a Likert scale with five response options, ranging from strongly disagree to strongly agree.

The data analysis technique was carried out through several stages. The first stage was data quality testing, which included validity and reliability tests. Statement items were declared valid if the calculated r value was greater than 0.30, while the instrument was declared reliable if the Cronbach's Alpha value was above 0.70 [16].

The next stage was classical assumption testing, which included normality, multicollinearity, and heteroscedasticity tests [17]. After the model met the classical assumptions, the data were analyzed using multiple linear regression with the following equation [18]:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e.$$

Hypothesis testing was conducted using the t test to determine partial effects, the F test to determine simultaneous effects, and the coefficient of determination to determine the ability of the independent variables to explain variations in employee work productivity [19].

Results

3.1. Overview of Respondent Characteristics

Based on the results of questionnaire distribution to 68 respondents, most respondents were male, with 38 respondents or 55.9%, while female respondents totaled 30 respondents or 44.1%. In terms of age, the largest group of respondents was in the age range of 41 to 45 years, totaling 18 respondents or 26.5%. The educational background was dominated by Bachelor's degree holders, with 37 respondents or 54.4%. The longest work experience groups were in the range of 6 to 10 years and 11 to 15 years, each consisting of 14 respondents or 20.6%. Marital status was dominated by married respondents, totaling 61 respondents or 89.7%. Thus, the respondents in this study were predominantly male employees, in a mature productive age group, held a Bachelor's degree, had relatively long work experience, and were married.

3.2. Analysis of Respondents' Answers to the Work Discipline Variable (X_1)

The distribution of respondents' answers to the Work Discipline variable showed a good tendency. In the work attendance indicator, most respondents gave agree and strongly agree responses, namely 59 respondents or 86.7% for the first statement and 50 respondents or 73.5% for the second statement. In the compliance with regulations indicator, positive responses were given by 49 respondents or 72.0% and 55 respondents or 80.8%. Furthermore, the punctuality indicator received positive responses from 55 respondents or 80.9% and 58 respondents or 85.3%. In the responsibility for tasks indicator, positive responses were given by 56 respondents or 82.3% and 53 respondents or 77.9%. Meanwhile, the obedience to superiors indicator received positive responses from 52 respondents or 76.5% and 51 respondents or 75.0%. The overall mean score was 4.0. Based on these results, it can be concluded that work discipline was in the good category.

3.3. Analysis of Respondents' Answers to the Compensation Variable (X_2)

The distribution of responses to the Compensation variable showed a positive tendency. In the basic salary indicator, agree and strongly agree responses were given by 51 respondents or 75.0% and 52 respondents or 76.4%. The incentive indicator received positive responses from 55 respondents or 80.9% and 56 respondents or 82.4%. In the allowance indicator, positive responses reached 56 respondents or 82.3% and 57 respondents or 83.8%. The work facilities indicator was positively assessed by 54 respondents or 79.4% and 55 respondents or 80.9%. Meanwhile, nonfinancial rewards received positive responses from 54

respondents or 79.4% and 55 respondents or 80.9%. Based on these results, it can be concluded that employee compensation was in the good category.

3.4. Analysis of Respondents' Answers to the Work Motivation Variable (X₃)

The distribution of respondents' answers to the Work Motivation variable showed good results. In the drive to achieve goals indicator, positive responses were given by 57 respondents or 83.8% and 46 respondents or 67.6%. The work enthusiasm indicator received positive responses from 56 respondents or 82.4% and 54 respondents or 79.4%. In the initiative indicator, positive responses reached 56 respondents or 82.4% and 57 respondents or 83.8%. The creativity indicator received positive responses from 56 respondents or 82.4% and 58 respondents or 85.3%, while the responsibility indicator received positive responses from 57 respondents or 83.8% and 56 respondents or 82.4%. Based on these results, it can be concluded that employee work motivation was in the good category.

3.5. Analysis of Respondents' Answers to the Work Productivity Variable (Y)

The distribution of respondents' answers to the Work Productivity variable showed a good tendency. In the work quality target achievement indicator, positive responses were given by 57 respondents or 83.8% and 52 respondents or 76.5%. The work quantity target achievement indicator received positive responses from 56 respondents or 82.4% and 55 respondents or 80.9%. In the task completion time indicator, positive responses reached 56 respondents or 82.3% and 57 respondents or 83.9%. The high work enthusiasm indicator received positive responses from 56 respondents or 82.4% and 53 respondents or 77.9%, while the high work discipline indicator received positive responses from 51 respondents or 75.0% and 52 respondents or 76.5%. Based on these results, it can be concluded that employee work productivity was in the good category.

Research Instrument Test

4.1. Data Quality Test Validity and Reliability

Table 1. Results of Validity and Reliability Tests

Variable	Items	Corrected Item-Total Correlation (<i>r</i> _{value})	Validity Criteria	Cronbach's <i>Alpha</i>	Reliability Criteria
Work Discipline (X ₁)	X1.1	0,629	Valid	0,888	Reliabel
	X1.2	0,452	Valid		
	X1.3	0,323	Valid		
	X1.4	0,831	Valid		
	X1.5	0,596	Valid		
	X1.6	0,710	Valid		
	X1.7	0,760	Valid		
	X1.8	0,513	Valid		
	X1.9	0,791	Valid		
	X1.10	0,648	Valid		
Compensation (X ₂)	X2.1	0,647	Valid	0,873	Reliabel
	X2.2	0,388	Valid		
	X2.3	0,606	Valid		
	X2.4	0,711	Valid		
	X2.5	0,654	Valid		
	X2.6	0,342	Valid		
	X2.7	0,709	Valid		
	X2.8	0,612	Valid		
	X2.9	0,600	Valid		
	X2.10	0,689	Valid		
Work Motivation (X ₃)	X3.1	0,781	Valid	0,943	Reliabel
	X3.2	0,447	Valid		
	X3.3	0,838	Valid		
	X3.4	0,700	Valid		

Variable	Items	Corrected Item-Total Correlation (r _{value})	Validity Criteria	Cronbach's Alpha	Reliability Criteria
Work Productivity (Y)	X3.5	0,680	Valid	0,877	Reliabel
	X3.6	0,898	Valid		
	X3.7	0,918	Valid		
	X3.8	0,678	Valid		
	X3.9	0,882	Valid		
	X3.10	0,897	Valid		
	Y.1	0,426	Valid		
	Y.2	0,526	Valid		
	Y.3	0,539	Valid		
	Y.4	0,642	Valid		
	Y.5	0,635	Valid		
	Y.6	0,568	Valid		
	Y.7	0,767	Valid		
	Y.8	0,541	Valid		
	Y.9	0,593	Valid		
	Y.10	0,765	Valid		

Based on the results of the instrument quality test, all statement items had a Corrected Item Total Correlation value or calculated r value greater than 0.30. This indicated that each questionnaire item was able to measure the intended indicator, so all statements were declared valid [20].

In addition, the Cronbach's Alpha value for each variable was above 0.70. This result indicated that the research instrument was consistent, stable, and suitable to be used as a data collection tool for the next analysis stage [21].

4.2. Classical Assumption Test Normality, Multicollinearity, and Heteroscedasticity

Table 2. Normality Test Using Kolmogorov Smirnov

One-Sample Kolmogorov-Smirnov Test			
	Unstandardized Residual	Significant Conditions	Conclusion
N	68		
Test Statistic	0,078	Sig > 0,05	Data is Normally Distributed
Asymp. Sig. (2-tailed)	0,200 ^{c,d}		

The normality test using Kolmogorov Smirnov showed a significance value of 0.200. This value was greater than 0.05, so the research data were declared normally distributed. This means that the residuals in the regression model met the normality requirement and were suitable for further analysis [22].

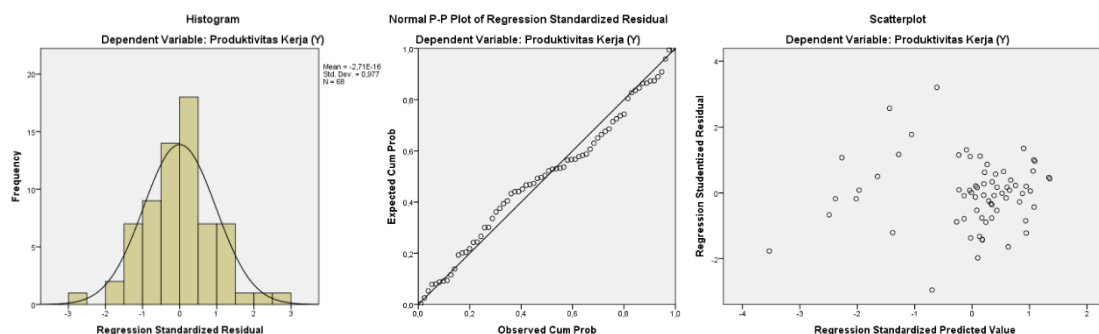


Figure 1. Histogram, Normal Probability Plot, and Scatterplot Graphs

Based on the residual histogram, the data distribution pattern appeared to resemble a bell shaped curve. The data distribution also appeared relatively balanced on the left and right sides, indicating no meaningful skewness. This showed that the residuals had a normal distribution pattern [23].

The Normal Probability Plot also strengthened this finding. The residual points appeared to follow and remain around the diagonal line. Since there was no substantial deviation from the reference line, the regression model could be declared to have met the normality assumption [24].

In the scatterplot graph, the residual points were randomly distributed around zero and did not form a specific pattern. This pattern indicated that the residual variance was relatively stable, so the regression model did not experience heteroscedasticity and was suitable for further analysis [25].

Table 3. Results of the Multicollinearity Test

Table 5/ Results of the Multicollinearity Test					
Model	Coefficients ^a				Conclusion
	Collinearity Statistics				
	Tolerance	Tolerance Conditions	VIF	VIF Conditions	
1 (Constant)					
Work Discipline (X ₁)	0,228	Tolerance > 0,10	4,380	VIF < 10	No Multicollinearity
Compensation (X ₂)	0,247	Tolerance > 0,10	4,050	VIF < 10	
Work Motivation (X ₃)	0,275	Tolerance > 0,10	3,631	VIF < 10	

a. Dependent Variable: Work Productivity (Y)

The multicollinearity test results showed that all independent variables had tolerance values greater than 0.10 and Variance Inflation Factor values smaller than 10. This finding showed that the independent variables did not have excessively strong relationships with one another, so no multicollinearity occurred. Thus, the regression model could be used because the estimated effect of each independent variable was not disrupted by excessive correlation [20].

Table 4. Results of the Heteroscedasticity Test Using the Glejser Test

Model	Coefficients ^a		Conclusion
	Sig.	Condition	
1 (Constant)	0,006		There are no symptoms of heteroscedasticity
Work Discipline (X ₁)	0,609	Sig. > 0,05	
Compensation (X ₂)	0,826	Sig. > 0,05	
Work Motivation (X ₃)	0,476	Sig. > 0,05	

a. Dependent Variable: Absolute_Residual

The Glejser test results showed that the significance values of all independent variables were greater than 0.05. This indicated that the regression model did not experience heteroscedasticity. In other words, the residual variance tended to be stable at each predicted value, so the model had met the homoscedasticity assumption and was suitable for hypothesis testing [16].

Table 5. Multiple Linear Regression Analysis and t Test Partial Test

Table 3: Multiple Linear Regression Analysis and t-Test Partial Test								
Model	Coefficients ^a					Sig.	Significant Conditions	Conclusion
	Unstandardized Coefficients		Standardized Coefficients	t _{statistic}	t _{table}			
	B	Std. Error	Beta					
1 (Constant)	4,239	2,449		1,731		0,088		
Work Discipline (X ₁)	0,377	0,109	0,397	3,441	1,998	0,001	Sig < 0,05	Positive & Significant

Compensation (X ₂)	0,279	0,121	0,256	2,308	1,998	0,024	Sig < 0,05	Positive & Significant
Work Motivation (X ₃)	0,254	0,089	0,300	2,854	1,998	0,006	Sig < 0,05	Positive & Significant

a. *Dependent Variable: Work Productivity (Y)*

4.3. Multiple Linear Regression Analysis

Based on the results of multiple linear regression analysis, the following regression equation was obtained [26]:

$$Y = 4.239 + 0.377X_1 + 0.279X_2 + 0.254X_3$$

The constant value of 4.239 indicated that if work discipline, compensation, and work motivation were considered constant or did not change, work productivity would be at a value of 4.239 [27].

The regression coefficient of Work Discipline was 0.377 and had a positive value, indicating a positive effect. This means that an increase in work discipline would be followed by an increase in work productivity [28]. This could occur because disciplined employees tended to be more punctual, comply with procedures, and be responsible in completing their tasks [29].

The Compensation coefficient of 0.279 also had a positive value, indicating a positive effect. This means that the better the compensation received, the higher the employee work productivity [30]. Appropriate compensation could increase employee satisfaction and work encouragement [31].

The Work Motivation coefficient of 0.254 had a positive value, indicating a positive effect. This means that an increase in work motivation would be aligned with an increase in employee work productivity [32]. Higher motivation would encourage employees to work with greater enthusiasm, be more active, and be more results oriented [33].

The variable that had the strongest effect on work productivity was Work Discipline because it had the largest regression coefficient, namely 0.377, and the largest Beta value, namely 0.397 [34].

4.5. Analysis of the t Test Partial Test

In the t test, the t table value was obtained from the number of respondents, namely 68, with three independent variables. Thus, the degree of freedom was calculated using the formula $df = n \text{ minus } k \text{ minus } 1$, namely $68 \text{ minus } 3 \text{ minus } 1 = 64$. At a significance level of 0.05, the t table value obtained was 1.998 [14].

The test results showed that Work Discipline had a t statistic of $3.441 > 1.998$ with a significance value of $0.001 < 0.05$, Compensation had a t statistic of $2.308 > 1.998$ with a significance value of $0.024 < 0.05$, and Work Motivation had a t statistic of $2.854 > 1.998$ with a significance value of $0.006 < 0.05$.

This showed that the three independent variables partially had a positive and significant effect on Work Productivity [34][35][36]. A significant effect indicated that changes in each variable had a real relationship with the increase in employee work productivity [37].

Table 6. Results of the F Test Simultaneous Test and Determination Test

Model	df	ANOVA ^a				Conclusion	Model Summary ^b	
		<i>F</i> _{statistic}	<i>F</i> _{table}	Sig	Significant Conditions		R	Adjusted R Square
1 Regression	3							
Residual	64	88,340	2,748	0,000 ^b	< 0,05	Significant	0,897 ^a	0,796
Total	67							

a. *Dependent Variable: Work Productivity (Y)*

b. *Predictors: (Constant), Work Discipline (X₁), Compensation (X₂), Work Motivation (X₃)*

4.6. Analysis of the F Test Simultaneous Test

In the F test, the F table value was obtained from $df_1 = 3$ and $df_2 = 64$ at a significance level of 0.05, resulting in an F table value of 2.748 [15]. The test results showed that the F statistic was $88.340 >$ the F table value of 2.748, with a significance value of $0.000 < 0.05$. This means that work discipline, compensation, and work motivation simultaneously had a significant effect on employee work productivity [11][27].

4.7. Analysis of the Determination Test

The R value of 0.897 indicated that the relationship between work discipline, compensation, and work motivation with work productivity was in the very strong category [12]. The Adjusted R Square value of 0.796 meant that 79.6% of the variation in work productivity could be explained by the three independent variables, while the remaining 20.4% was influenced by other factors outside this study [37].

Discussion

5.1. The Effect of Work Discipline (X1) on Work Productivity (Y)

The results of the t test showed that work discipline had a positive and significant effect on employee work productivity at PT Belawan New Container Terminal. This effect could occur because BNCT operates in international container terminal services that require punctuality, procedural compliance, safety, and coordination across divisions. BNCT has a strategic position in the Malacca Strait and is directed to become an important logistics and maritime hub for northern Sumatra. Thus, the consistency of employee work behavior becomes a key factor in maintaining the smooth flow of loading and unloading services [2].

In terminal operations, work discipline plays a role in ensuring that employees attend work according to schedule, comply with operational standards, apply safety procedures, and complete work according to time targets. When discipline increases, the workflow becomes more orderly, the risk of technical errors can be reduced, and coordination among units becomes more effective. This explains why improved work discipline at BNCT can encourage productivity, because container terminal activities require a high level of work order so that services to users remain fast, safe, and reliable.

The company's efforts to improve productivity related to work discipline can be seen through the strengthening of safety culture, professionalism, reliability, and collaboration. BNCT emphasizes that operational success can only be achieved through consistent and standardized implementation of occupational health and safety, with discipline and work competence serving as elements that shape operational reliability. In addition, the partnership among Pelindo, INA, and DP World in the development and operation of BNCT also indicates the strengthening of governance, infrastructure, and international practices to support terminal operational performance.

The findings of this study are in line with the theory proposed by Anoraga (2023), which explained that employee work productivity is influenced by various factors, one of which is employee work discipline [10]. The results of this study are also consistent with previous studies proving that work discipline partially has a positive and significant effect on work productivity [1][4][28][29][34].

4.2. The Effect of Compensation (X2) on Work Productivity (Y)

The analysis results showed that compensation had a positive and significant effect on employee work productivity at PT Belawan New Container Terminal. This effect could occur because container terminal activities require accuracy, speed, safety, and work consistency. BNCT is located in a strategic position in the Malacca Strait and is directed to become an

important logistics and international trade node. Thus, employee productivity becomes an important part of maintaining the smooth flow of goods and operational services.

Compensation does not only function as financial remuneration, but also as a form of appreciation for employee contributions, responsibilities, and work demands [6]. When employees perceive salary, incentives, allowances, facilities, and nonfinancial rewards as appropriate, their satisfaction and work encouragement will increase [31]. This condition encourages employees to work with greater focus, maintain accuracy, meet targets, and complete tasks more effectively [35].

The company's efforts related to productivity improvement can be seen from the development of BNCT through the partnership among Pelindo, INA, and DP World. This partnership is directed toward strengthening terminal operations, modernizing infrastructure, and implementing international practices. DP World also emphasizes the use of advanced technology, world class training, and high standards of health and safety to reduce operational inefficiency. This support becomes part of indirect compensation because it provides facilities, competence, job security, and a more productive work environment for employees.

The findings of this study are in line with the theory proposed by Anoraga (2023), which explained that employee work productivity is influenced by various factors, one of which is the level of employee income or compensation [10]. The results of this study are also consistent with previous studies proving that compensation partially has a positive and significant effect on work productivity [6][8][30][31][35].

4.3. The Effect of Work Motivation (X3) on Work Productivity (Y)

The results of multiple linear regression analysis and the t test showed that work motivation had a positive and significant effect on employee work productivity at PT Belawan New Container Terminal. This effect could occur because container terminal operations require employees who have strong drive, enthusiasm, initiative, creativity, and responsibility in completing work. In a work environment that demands punctuality and high coordination, motivated employees tend to be more focused, responsive, and committed to achieving work targets [38].

At PT Belawan New Container Terminal, work motivation plays an important role because loading and unloading activities, container arrangement, vessel services, administration, and coordination across divisions must be carried out quickly and accurately. Employees with high motivation will be more encouraged to maintain work quality, complete tasks on time, and find more effective ways to overcome operational constraints [33]. This explains why increased work motivation can encourage higher employee work productivity [38].

The company's efforts to support productivity related to work motivation can be seen through the development of BNCT as a modern container terminal through the strategic partnership among Pelindo, INA, and DP World. Strengthening governance, modernizing facilities, implementing international operational standards, paying attention to work safety, and increasing service capacity can create a more directed and professional work environment. This condition can strengthen employees' sense of pride, engagement, and encouragement to provide their best contribution to the company.

The findings of this study are in line with the theory proposed by Anoraga (2023), which explained that employee work productivity is influenced by various factors, one of which is employee work motivation [10]. The results of this study are also consistent with previous studies proving that work motivation partially has a positive and significant effect on work productivity [9][32][33][36][38].

4.4. The Simultaneous Effect of the Three Independent Variables (X1, X2, X3) on Work Productivity (Y)

The results of multiple linear regression analysis and the F test showed that work discipline, compensation, and motivation simultaneously had a positive and significant effect on employee work productivity at PT Belawan New Container Terminal. This simultaneous effect could occur because work productivity in a container terminal is not only determined by technical ability, but also by orderly work behavior, proper reward support, and employee psychological encouragement in achieving operational targets. These three factors complement one another in shaping effective performance [37].

The operational condition at PT Belawan New Container Terminal requires employees to work quickly, accurately, safely, and in a coordinated manner. Activities such as container loading and unloading, yard arrangement, vessel services, container traffic control, and operational administration require compliance with procedures and punctuality. In this condition, work discipline maintains process order, compensation strengthens job satisfaction and work commitment, while motivation encourages employees to work more actively, responsibly, and with a results oriented mindset [27].

This simultaneous effect can also be understood from the character of BNCT as a terminal that is being directed to become a more competitive maritime and logistics gateway. Productivity improvement cannot depend on only one factor, because terminal operations involve many interconnected work units. When employees are disciplined, receive adequate compensation support, and have high work motivation, task completion becomes faster, work errors can be reduced, and service targets become easier to achieve [26].

The company has also made various efforts related to productivity improvement, particularly through strengthening operational governance, modernizing infrastructure, implementing more professional work standards, paying attention to occupational safety, and developing employee competence. The strategic partnership with Pelindo, INA, and DP World shows the company's transformation direction toward a more modern, integrated, and internationally standardized container terminal. These efforts support the creation of a more orderly, safe, and productive work environment.

Work discipline had the greatest effect because container terminal operations highly depend on punctuality, procedural compliance, and work coordination. A delay in one unit can disrupt the loading and unloading process, container queues, and vessel services. Unlike compensation and motivation, which function more as driving factors, discipline directly determines the regularity of daily task implementation, so its effect on productivity becomes more tangible and dominant.

The findings of this study are in line with the theory proposed by Anoraga (2023), which explained that employee work productivity is influenced by various factors, including employee work motivation, education, work discipline, skills, ethical attitude and sense of responsibility, ability to cooperate, nutrition and health, income or compensation level, work environment, work climate, technological sophistication, adequate production factors, social security, leadership management, and achievement opportunities [10]. The results of this study are also consistent with previous studies proving that work discipline, compensation, and work motivation simultaneously have a positive and significant effect on employee work productivity [11][12][26][27][37].

Conclusion

This study showed that work discipline, compensation, and work motivation had a positive and significant effect on employee work productivity at PT Belawan New Container

Terminal, both partially and simultaneously. Work discipline became the most dominant variable because it had the largest contribution in shaping orderliness, punctuality, procedural compliance, and work responsibility. These findings confirm that employee productivity can be improved through the integrated strengthening of these three factors.

The company is advised to strengthen the work discipline system through attendance monitoring, evaluation of compliance with standard operating procedures, consistent work direction, and coaching for employees who have not yet met disciplinary standards. In terms of compensation, the company needs to maintain fairness in salary, incentives, allowances, work facilities, and performance based rewards. In addition, work motivation can be improved through training, career development opportunities, appreciation for achievement, and leadership communication that encourages employees to work more actively, responsibly, and productively.

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