

The Effect of Workload, Work Relationships, and Work Facilities on Employee Productivity at PT JNE Medan Main Branch

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Abstract

This study aims to analyze the effect of workload, work relationships, and work facilities on employee productivity at PT JNE Medan Main Branch. The population in this study includes all permanent employees totaling 50 people, who are also used as samples using the saturated sampling method. The study was conducted in 2025. Data were obtained through distributing questionnaires as primary-quantitative data collection instruments and analyzed using multiple linear regression through SPSS version 24. The findings show that the three independent variables, both individually and simultaneously, have a positive and significant effect on work productivity. The results of the t-test show that workload has a regression coefficient of 0.324 (tcount = 3.631; sig. = 0.001), work relationships of 0.238 (tcount = 2.373; sig. = 0.022), and work facilities of 0.492 (tcount = 3.715; sig. = 0.001). The F test obtained an F count of 210.961 (sig. = 0.000), exceeding the F table of 2.807. The R value of 0.966 indicates a very strong relationship between the three variables and work productivity. Work facilities are recorded as the most dominant variable with the highest beta value, which is 0.400. As much as 92.8% of the variation in work productivity is explained by these three variables, while the rest is influenced by other factors.

Keyword: Workload, Work Relationships, Work Facilities, Work Productivity.

Introduction

High employee work productivity is the main expectation of the company because it plays an important role in achieving targets and increasing profits (Egbe, 2022). Productive employees demonstrate efficiency in using time, energy, and other resources, so that they are able to complete tasks on time and maintain the quality of work results (Olynick, 2020). Optimal productivity also helps companies remain competitive, reduces waste, and creates a conducive and motivating work environment (Priya & Aroulmoji, 2020).

Sutrisno (2019) states that work productivity is a comparison between work results and time used, and is influenced by many factors, such as motivation, facilities, workload, and work relationships. Research support from Khoirudin et al. (2024) also shows that workload, work relationships, and work facilities have a positive effect on productivity.

An appropriate workload allows for effective task completion, while harmonious work relationships support collaboration and communication (Wakhyuni, 2018). Adequate facilities, such as modern work tools and comfortable workplaces, also increase efficiency (Ikram, 2023). It is important for companies to pay attention to workload balance, build good working relationships, and provide adequate facilities to encourage employee productivity in a sustainable manner (Khoirudin et al., 2024).

PT Tiki Jalur Nugraha Eka Kurir (JNE Express) is a national logistics company, including the Medan Main Branch which serves package distribution in the Medan area and its surroundings. This branch faces productivity issues influenced

by a lack of employee skills, lack of motivation, and inefficiency in the use of technology and team coordination.

Some employees also show a disregard for quality standards, especially when working under pressure, which can impact customer satisfaction and reduce company performance (Wakhyuni et al., 2021).

Table 1. Employee Work Productivity Against Monthly Targets Throughout 2021-2023

Month	2021			2022			2023		
	Mean Target	Mean Realization	%	Mean Target	Mean Realization	%	Mean Target	Mean Realization	%
January	850	784	92.24	950	775	81.58	100	723	72.30
February	850	792	93.18	950	718	75.58	100	802	80.20
March	850	745	87.65	950	743	78.21	100	723	72.30
April	850	812	95.53	950	778	81.89	100	783	78.30
May	850	767	90.24	950	731	76.95	100	729	72.90
June	850	723	85.06	950	776	81.68	100	732	73.20
July	850	683	80.35	950	728	76.63	100	712	71.20
August	850	739	86.94	950	789	83.05	100	593	59.30
September	850	711	83.65	950	732	77.05	100	688	68.80
October	850	737	86.71	950	701	73.79	100	645	64.50
November	850	776	91.29	950	757	79.68	100	609	60.90
December	850	702	82.59	950	754	79.37	100	587	58.70
Average	850	747.58	87.95	950	748	78.79	100	694	69.38

Source: PT JNE Main Branch Medan (2025)

Productivity data for couriers at PT JNE Medan Main Branch for the period 2021–2023 shows a downward trend in achieving work targets. The average achievement decreased from 87.95% in 2021 to 78.79% in 2022, then decreased again to 69.38% in 2023. This decline indicates obstacles in achieving optimal performance. One of the main causes is the increase in work targets that is not balanced with the ability to realize them. For example, in 2023 the monthly target increased to 1000 packages, but the realization only reached 694 packages. In addition, there were significant fluctuations in monthly

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achievements, especially in December 2023 which only reached 58.70%, allegedly due to seasonal factors and limited operational support. Internal factors such as fatigue, lack of training, and low work efficiency, coupled with external pressures such as logistics complexity and increasing customer expectations, also contributed to the decline in productivity.

The results of a pre-survey of 20 employees of PT JNE Medan Main Branch showed low work productivity. The majority of respondents felt that they did not have adequate skills, low work motivation, and limited opportunities for self-development. In addition, most considered that the quality of work did not meet standards and working hours were inefficient. This problem was exacerbated by the high workload without adequate operational support, such as vehicles, and minimal training. Tight deadlines, especially during spikes in demand, added to work pressure, making it difficult for employees to meet targets optimally and efficiently.

Table 2. Workload of PT JNE Expedition Couriers, Medan Main Branch in 2023

Years of service	Package Target per Day	Monthly Package Target	Average Realization per Month	Percentage of Target Achievement per Month
0 to 6 months	30	750	428	57.07%
6 to 1 year	35	875	589	67.31%
12 years old	40	1000	718	71.80%
23 years	45	1125	837	74.40%
Above 3 Years	50	1250	897	71.76%

Source: PT JNE Main Branch Medan (2025)

Data on the workload of couriers at PT JNE Medan Main Branch in 2023 shows that the average target achievement is always below 75%, indicating excessive workload. The daily target that continues to increase is not balanced by adequate realization, only reaching 57.07% to 74.40%. The contributing factors include too many packages, inefficient delivery routes, and lack of supporting facilities. The impacts include decreased performance, high stress, and decreased service. Employees also experience physical fatigue due to overtime, as well as mental stress due to unachieved targets, such as threats of sanctions or termination of employment.

The results of a pre-survey of 20 employees confirmed this finding: the majority felt unable to complete targets on time, experienced fatigue, and psychological stress. This condition reflects the need for workload management evaluation to maintain employee well-being and encourage sustainable productivity.

At PT JNE Medan Main Branch, the working relationship between employees faces a number of challenges that impact productivity. Communication barriers are one of the main problems, both between superiors and subordinates and between co-workers, so that misunderstandings often occur in delivering instructions and coordination between teams. Lack of cross-divisional cooperation also slows down task completion, especially when the workload increases. In addition, the level of trust between employees is still low, where some feel doubtful about the responsibility or honesty of their co-workers. This makes it difficult to delegate tasks and lowers work enthusiasm. Conflicts that arise in the workplace are not always handled properly by superiors, which makes the work atmosphere uncomfortable.

The results of a pre-survey of 20 employees reinforce this finding, showing that the majority of respondents are dissatisfied with communication, cooperation, and conflict resolution. In fact, only 25% to 45% of respondents considered the working relationship in their place to be good. This condition emphasizes the importance of improving working relationships to create a productive and harmonious working environment.

PT JNE Express Medan Main Branch faces problems with employee work facilities in the form of inadequate work facilities such as scanners and communication devices. Infrastructure such as workspaces and warehouses are still

narrow and poorly organized. The effectiveness of facility use is low because it is not well integrated. The performance of facilities and infrastructure has decreased due to lack of maintenance and updates, hampering daily operational productivity.

The results of a pre-survey of 20 employees also showed problems with work facilities. Most employees considered that work equipment was still incomplete and not all of it functioned properly. These suboptimal work facilities also became an obstacle in supporting maximum employee productivity in daily activities.

Literature Review

Work Productivity

Every company strives to encourage employees to achieve optimal performance by increasing work productivity (Wulandari, 2022). Employee productivity is the main indicator of the company's operational success, because the higher the productivity, the greater the opportunity for increased profits (Wakhyuni et al., 2021). According to Sutrisno (2019), work productivity is the comparison between work output and the time used in the work process. Increased productivity is achieved if employees are actively involved and show optimal performance (Wulandari, 2022).

Sutrisno (2019) explains that there are many factors that influence employee work productivity, including: work facilities, work motivation, employee competence, work discipline, work environment, leadership, workload, training and development, work relationships, employee health and welfare, reward systems, and time management. Sutrisno (2019) states that measuring employee work productivity can be done with ability, increasing results, self-development, quality, and efficiency as indicators.

Workload and Its Relationship to Work Productivity

Munandar (2019) explains that workload is the tasks given to workers or employees to be completed at a certain time using the skills and potential of the workforce. Workload includes quantitative aspects (amount of work) and qualitative aspects (level of difficulty or complexity of work) (Ilmi et al., 2024). Optimal workload allows employees to work effectively and efficiently, maintaining a balance between work capacity and job demands (Karauwan et al., 2024). Munandar (2019) states that indicators that can be used to measure workload include: workload, time load, physical load, mental load, and psychological load. A proportional workload plays an important role in optimizing employee performance, maintaining concentration, and producing quality output (Lupika, 2024). Conversely, excessive workload can cause physical and psychological fatigue, resulting in stress that has an impact on decreasing creativity, decision-making accuracy, and productivity (Khoirudin et al., 2024). Likewise, a workload that is too light can lead to feelings of boredom and unappreciation, thus reducing motivation and work efficiency (Wakhyuni, 2018). The results of research conducted by Ilmi et al (2024), Karauwan et al (2024), Lupika (2024), and Khoirudin et al (2024) concluded that workload has a partial positive and significant effect on employee work productivity.

Employment Relationship and Its Relationship to Work Productivity

Sutrisno (2019) explains that an employment relationship is a relationship between two parties, namely employees and employers, which is built on the basis of trust, cooperation, and responsibility to achieve a balance between employee needs and organizational interests. This relationship includes formal and informal aspects, such as communication, cooperation, trust, and conflict management (Ambarini, 2020). Formally, employment relationships are regulated through work agreements or contracts that include the rights and obligations of each party, both employees and employers (Aspani et al.,

2022). Informally, employment relationships involve interpersonal interactions that support a harmonious work environment (Hulu et al., 2024). Sutrisno (2019) explains several indicators in measuring employee employment relationships, including: communication, cooperation, trust, work conflict management, and interpersonal relationships. Harmonious working relationships between fellow employees and between employees and superiors contribute to the creation of a conducive, collaborative work environment that supports improved performance (Parinussa & Dunan, 2022). Open communication and mutual respect strengthen teamwork and minimize conflict, thereby increasing efficiency and productivity (Ambarini, 2020). Conversely, poor working relationships can trigger tension, reduce motivation, and hinder the achievement of organizational goals (Aspani et al., 2022). The results of research conducted by Hulu et al (2024), Parinussa & Dunan (2022), Aspani et al (2022), and Ambarini (2020) concluded that working relationships partially have a positive and significant effect on employee work productivity.

Work Facilities and Their Relationship to Work Productivity

According to Munawirsyah (2021), work facilities are all facilities and infrastructure used, worn, occupied by employees as technical operational support tools. Facilities are also commonly considered a tool (Azhari, 2023). To achieve the company's goals, there are many supporting factors, one of which is employee work facilities which are a supporting factor for the smooth running of the tasks they do, so that work can be done as expected (Afdilla, 2023).

Munawirsyah (2021) stated that the completeness of work facilities can be measured by several indicators as follows: completeness of facilities, completeness of infrastructure, effectiveness of facilities and infrastructure, and performance of facilities and infrastructure. Provision of adequate work facilities, such as ergonomic workspaces, modern equipment, and adequate access to technology, can increase employee efficiency and concentration in carrying out their duties (Ikram, 2023). A comfortable and supportive work environment also plays a role in maintaining physical and mental health, so that employees are encouraged to work more optimally (Putra et al., 2022). Conversely, limited facilities can hinder productivity, reduce motivation, and cause disruption in the implementation of work (Wansah et al., 2024). The results of research conducted by Wansah et al (2024), Afdilla (2023), Ikram (2023), and Darmiah et al (2023) concluded that work facilities partially have a positive and significant effect on employee work productivity.

Method

This study uses a quantitative approach with the aim of testing the effect of workload, work relationships, and work facilities on the work productivity of employees of PT JNE Medan Main Branch. The population consists of 50 employees, and all of them are sampled using saturated sampling techniques. The data collected based on the distribution of questionnaires were then tested using the SPSS 24.0 application through validity, reliability, and classical assumptions (normality, multicollinearity, heteroscedasticity). Data analysis was carried out using multiple linear regression to see the simultaneous and partial effects between variables, both the direction of influence and the level of significance through the t-test and F-test, as well as the coefficient of determination (R^2) to determine the strength of the relationship between variables (Sugiyono, 2019).

Results and Discussion

Respondent Characteristics

Based on the results of a study of 50 respondents at PT JNE Medan Main Branch, the majority of employees are female (60%), aged 26–30 years (28%), and have a Bachelor's degree (70%). In terms of length of service, most have worked for 4–5

years (26%), indicating a relatively stable level of work experience. In addition, the majority of respondents are married (80%). These characteristics illustrate that most employees are of productive age, have a higher educational background, and have established household commitments, which have the potential to affect their motivation and work performance.

Respondents' Answers

The Workload variable (X_1) consists of five indicators, namely workload, time load, physical load, mental load, and psychological load. The results of the respondents' responses showed that the majority of employees felt a significant workload, indicated by the average value (mean) of the workload indicator of 3.90 and 3.66 which were included in the good category. Regarding time load, employees stated that they were given tight deadlines and often had to work overtime (mean 3.94 and 3.58). The physical load indicator was also classified as high, indicated by the mean value of 3.68 and 3.84. Mental and psychological loads also appeared dominant, with mean values above 3.80 each, indicating psychological and mental pressure due to high targets and complex tasks.

The Work Relationship variable (X_2) includes five indicators: communication, cooperation, trust, conflict management, and interpersonal relationships. All indicators received positive responses with a mean value above 3.75. Communication within the team and from superiors was considered clear and open. Cooperation and division of responsibilities between colleagues were considered effective. Trust in superiors and colleagues was also high, and the ability to resolve conflicts well and establish harmonious interpersonal relationships were strengths in the respondents' work environment.

The Work Facilities variable (X_3) consists of four indicators, namely completeness of facilities, infrastructure, effectiveness, and performance of facilities and infrastructure. The majority of respondents considered that the company had provided adequate facilities to support work activities. The average score for this indicator was in the range of 3.84 to 3.90, indicating that the completeness and effectiveness of facilities were considered quite good in supporting work productivity and comfort.

Employee Performance Variable (Y) consists of five indicators: work quality, work quantity, punctuality, effectiveness, and independence. The survey results show that the majority of respondents rated their performance as being in the good category, with an average value above 3.75 for each indicator. Employees are able to complete tasks on time and effectively, produce high-quality work output, and demonstrate independence in completing work without relying too much on direct direction from superiors.

Data Quality Test

Validity Test

Table 3. Validity Test Results for Each Statement Item in Each Variable

Variables	Statement to -	Symbol	r_{count}	r_{critical}	Information
Workload (X_1)	1	$X_{1-1.1}$	0.730	0.3	Valid
	2	$X_{1-1.2}$	0.493	0.3	Valid
	3	$X_{1-2.1}$	0.819	0.3	Valid
	4	$X_{1-2.2}$	0.560	0.3	Valid
	5	$X_{1-3.1}$	0.429	0.3	Valid
	6	$X_{1-3.2}$	0.808	0.3	Valid
	7	$X_{1-4.1}$	0.690	0.3	Valid
	8	$X_{1-4.2}$	0.595	0.3	Valid
	9	$X_{1-5.1}$	0.710	0.3	Valid
	10	$X_{1-5.2}$	0.652	0.3	Valid
Employment Relationship (X_2)	1	$X_{2-1.1}$	0.677	0.3	Valid
	2	$X_{2-1.2}$	0.641	0.3	Valid
	3	$X_{2-2.1}$	0.661	0.3	Valid
	4	$X_{2-2.2}$	0.738	0.3	Valid
	5	$X_{2-3.1}$	0.722	0.3	Valid
	6	$X_{2-3.2}$	0.751	0.3	Valid
	7	$X_{2-4.1}$	0.858	0.3	Valid
	8	$X_{2-4.2}$	0.612	0.3	Valid
	9	$X_{2-5.1}$	0.607	0.3	Valid
	10	$X_{2-5.2}$	0.752	0.3	Valid

Work Facilities (X ₃)	1	X ₃₋₁₋₁	0.682	0.3	Valid
	2	X ₃₋₁₋₂	0.610	0.3	Valid
	3	X ₃₋₂₋₁	0.710	0.3	Valid
	4	X ₃₋₂₋₂	0.767	0.3	Valid
	5	X ₃₋₃₋₁	0.580	0.3	Valid
	6	X ₃₋₃₋₂	0.543	0.3	Valid
	7	X ₃₋₄₋₁	0.825	0.3	Valid
	8	X ₃₋₄₋₂	0.642	0.3	Valid
Work Productivity (Y)	1	Y ₁₋₁₋₁	0.370	0.3	Valid
	2	Y ₁₋₁₋₂	0.449	0.3	Valid
	3	Y ₁₋₂₋₁	0.745	0.3	Valid
	4	Y ₁₋₂₋₂	0.325	0.3	Valid
	5	Y ₁₋₃₋₁	0.634	0.3	Valid
	6	Y ₁₋₃₋₂	0.493	0.3	Valid
	7	Y ₁₋₄₋₁	0.834	0.3	Valid
	8	Y ₁₋₄₋₂	0.518	0.3	Valid
	9	Y ₁₋₅₋₁	0.707	0.3	Valid
	10	Y ₁₋₅₋₂	0.786	0.3	Valid

All statement items from each variable were declared valid because the calculated *r* value for each item was greater than the critical *r* (0.3) so that all instruments used in the study (Sujarweni, 2021).

Reliability Test

Table 3. Reliability Test for Each Variable

Reliability Statistics				
Variables	Cronbach's Alpha	N of Items	Condition	Conclusion
Workload (X ₁)	0.896	10	Cronbach's Alpha > 0.7	Reliable
Employment Relationship (X ₂)	0.921	10	Cronbach's Alpha > 0.7	Reliable
Work Facilities (X ₃)	0.893	8	Cronbach's Alpha > 0.7	Reliable
Work Productivity (Y)	0.866	10	Cronbach's Alpha > 0.7	Reliable

All variables in this study meet the reliability criteria, namely having a Cronbach's Alpha value above 0.7, which indicates that the items in this variable are very reliable in measuring the intended construct (Wakhyuni & Dalimunthe, 2020).

Classical Assumption Test

Normality Test

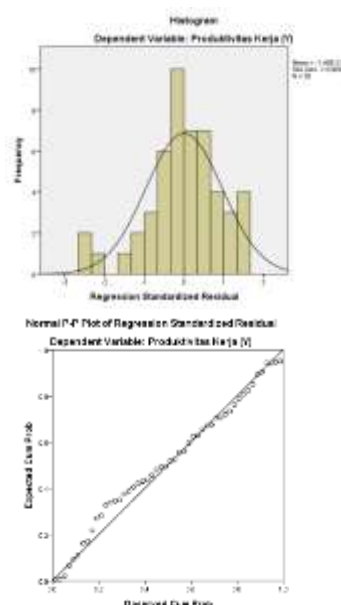


Figure 1. Histogram and PP Plot Graph

The histogram shape approaches a bell (bell-shaped curve) with most of the residual values around zero, and a normal curve

line that forms a symmetrical pattern. This indicates that the residuals are normally distributed (Wakhyuni et al., 2017). The Normal PP Plot graph depicts 50 data points on the graph that are quite close and follow the diagonal line, indicating that the residual values tend to be normally distributed (Sujarweni, 2021).

Table 4. Data Normality with Kolmogorov-Smirnov

One-Sample Kolmogorov-Smirnov Test		
	Unstandardized Residual	
N	50	
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	2.01579505
	Most Extreme Differences	
	Absolute	0.103
	Positive	0.044
	Negative	-0.103
Test Statistics	0.103	
Asymp. Sig. (2-tailed)	0.200 ^{c,d}	
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

The results of the normality test using the Kolmogorov-Smirnov method show that the significance value (Asymp. Sig. 2-tailed) is 0.200. Because this value is greater than the significance limit of 0.05, it can be concluded that the distribution of residual data in the regression model is normal (Nasution, 2024).

Multicollinearity Test

Table 5. Multicollinearity Test Results

Coefficients ^a				
Model	Collinearity Statistics			Conclusion
	Tolerance	VIF	Condition	
1 (Constant)				
Workload (X ₁)	0.167	5.98	Tolerance > 0.10	No Multicollinearity Problem
Employment Relationship (X ₂)	0.125	7.98	VIF < 10	
Work Facilities (X ₃)	0.127	7.86		

a. Dependent Variable: Work Productivity (Y)

The variables workload, work relationships, and work facilities each have a tolerance value greater than 0.10 and a VIF value less than 10 so there is no problem of multicollinearity.

Heteroscedasticity Test

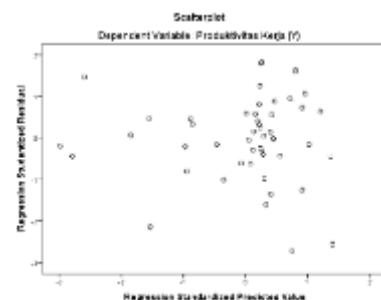


Figure 3. Scatterplot graph

The scatterplot graph shows the distribution pattern of 50 residual points that are random and spread around the horizontal axis (standard regression prediction values). This pattern indicates that the regression model meets the assumption of homoscedasticity, namely constant residual variance at each prediction value (Nasution, 2024).

Table 6. Heteroscedasticity Test with Gjelser

Coefficients ^a				
Model		Sig.	Sig. Requirements	Conclusion
1	(Constant)	0.861		
	Workload (X ₁)	0.110	Sig. > 0.05	No Heteroscedasticity Symptoms
	Employment Relationship (X ₂)	0.460		
	Work Facilities (X ₃)	0.247		
a. Dependent Variable : Absolute_Residu al				

The significance of the variables workload, work relationships, and work facilities is greater than 0.05 so that there are no symptoms of heteroscedasticity and are homoscedastic (Wakhyuni & Dalimunthe, 2020).

Multiple Linear Regression Analysis

Table 7. Multiple Linear Regression Analysis				
Coefficients ^a				
Model	Unstandardized Coefficients	Standardized Coefficients	Conclusion Direction of Influence	
	B	Std. Error	Beta	
1 (Constant)	1.029	1.497		
Workload (X ₁)	0.324	0.089	0.341	Positive
Employment Relationship (X ₂)	0.238	0.100	0.257	Positive
Work Facilities (X ₃)	0.492	0.132	0.400	Positive
a. Dependent Variable: Work Productivity (Y)				

Based on the results of multiple linear regression analysis, the regression equation is obtained: $Y = 1.029 + 0.324X_1 + 0.238X_2 + 0.492X_3 + e$. This equation indicates that when all independent variables (Workload, Work Relationship, and Work Facilities) are at zero, then Work Productivity has an initial value of 1.029. The Workload regression coefficient of 0.324 indicates a positive relationship, which means that an increase in one unit of workload will increase work productivity by 0.324 units. Likewise, Work Relationships have a coefficient of 0.238, and Work Facilities of 0.492.

Thus, all independent variables have a positive influence on the dependent variable (Sujarweni, 2021). Among the three, work facilities have the most dominant contribution to increasing work productivity, indicated by the highest regression value and beta coefficient (Sugiyono, 2019).

Hypothesis Testing

Partial Hypothesis Testing with t-Test

Table 8. Partial Hypothesis Test (t-Test)					
Coefficients ^a					
Model	count	table	Sig.	Sig. Requirements	Conclusion of Influence
1 (Constant)	0.688		0.495		
Workload (X ₁)	3.631	2.013	0.001	t _{count} > t _{table}	Significant
Employment Relationship (X ₂)	2.373	2.013	0.022	Sig. < 0.05	Significant
Work Facilities (X ₃)	3.715	2.013	0.001		Significant
a. Dependent Variable: Work Productivity (Y)					

Based on the results of the t-test, it can be concluded that each independent variable has a significant influence on Work

Productivity (Y) partially. The Workload variable (X₁) obtained a t_{count} value of 3.631 which exceeded the t_{table} of 2.013, with a significance value of 0.001 < 0.05. This indicates a positive and significant influence on Work Productivity (Sugiyono, 2019). The Work Relationship variable (X₂) shows a t_{count} value of 2.373 which is also greater than the t_{table} of 2.013, and a significance value of 0.022 < 0.05. This indicates a positive and significant influence on Work Productivity (Sugiyono, 2019). The Work Facilities variable (X₃) recorded a t_{count} value of 3.715 which is also greater than the t_{table} of 2.013, and a significance value of 0.001 < 0.05. This indicates a positive and significant influence on Work Productivity (Sugiyono, 2019).

Thus, all independent variables (X₁, X₂, X₃) have a positive and significant partial effect on Work Productivity (Y), so that the analysis can be continued to simultaneous testing through the F test.

Simultaneous Hypothesis Testing F Test

Table 9. Simultaneous Hypothesis Testing (F Test)							
ANOVA ^a							
Model	Sum of Squares	df	Fcount	Ftable	Sig.	Condition	Conclusion of Influence
1 Regression	2739.392	3	210.961	2.807	0.000 ^b	F _{count} > F _{table}	Significant
Residual	199.108	46				And Sig. < 0.05	
Total	2938.500	49					
a. Dependent Variable: Work Productivity (Y)							
b. Predictors: (Constant), Workload (X ₁), Work Relationship (X ₂), Work Facilities (X ₃)							

The results of the F test (simultaneous) shown in Table 3.33 show a significance value of 0.000, which is far below the significance threshold of 0.05. Thus, the alternative hypothesis (H_a) is accepted, while the null hypothesis (H₀) is rejected. The calculated F_{value} of 210.961 is higher than the F_{table} of 2.807, based on the calculation of degrees of freedom (df₁ = 3 and df₂ = 46). Thus, it can be concluded that Workload, Work Relationships, and Work Facilities simultaneously have a significant effect on Work Productivity (Sugiyono, 2019).

Coefficient of Determination (R²)

Table 10. Results of the Determination Coefficient (R ²)				
Model Summary ^b				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	0.966 ^a	0.932	0.928	2.08049
Predictors: (Constant), Workload (X ₁), Work Relationship (X ₂), Work Facilities (X ₃)				
b. Dependent Variable: Work Productivity (Y)				

The Adjusted R Square value of 0.928 indicates that 92.8% of the variation in Work Productivity can be explained by the variables Workload, Work Relationships, and Work Facilities. The remaining 7.2% is influenced by other variables not analyzed in this study, such as motivation, competence, discipline, leadership, training, welfare, and time management (Nasution, 2024). The R coefficient of 0.966 reflects a very strong correlation between the three independent variables and Work Productivity (Wakhyuni et al., 2021).

Discussion

The Influence of Workload on Work Productivity

Hypothesis H1 is proposed, namely that workload has a partial positive and significant effect on employee work productivity at PT JNE Medan Main Branch. The results of

multiple linear regression analysis through the t-test show that the workload regression coefficient is 0.324, with a ^{calculated t value of} 3.631 which is greater than the ^{t table of} 2.013, and a significance value of 0.001 (<0.05). Thus, hypothesis H1 is accepted. The positive direction of the coefficient indicates that an increase in workload will be followed by an increase in work productivity, and vice versa. Workload indicators, which include workload, time, physical, mental, and psychological contribute to work productivity. This study supports Sutrisno's statement (2019) that workload is one of the determining factors of productivity. This is also in line with the findings of Ilmi et al. (2024), Karauwan et al. (2024), Lupika (2024), and Khoirudin et al. (2024). With these results, the objectives and formulation of the research problem have been achieved, namely regarding the partial influence of workload on employee productivity.

The results of the study at PT JNE Medan Main Branch showed that workload has a positive and significant effect on employee work productivity partially. This is reviewed from five main indicators, namely workload, time load, physical load, mental load, and psychological load. A proportional workload can increase employee motivation and sense of responsibility in completing tasks. Time load that is managed effectively encourages efficiency and work accuracy. Appropriate physical load helps maintain fitness and prevents excessive fatigue. Optimal mental load improves cognitive ability in facing work challenges. Meanwhile, psychological load that is handled well through social support can improve emotional well-being. Overall, balanced workload management based on these five indicators can create positive challenges that support increased employee productivity in the organization in a sustainable manner.

The Influence of Employment Relations on Work Productivity

Based on the theoretical basis and findings from previous studies, the author proposes Hypothesis H2, namely: Work relationships have a partial positive and significant effect on employee work productivity at PT JNE Medan Main Branch. The results of the analysis show that work relationships contribute significantly to productivity, as evidenced by the t-test results of 0.238 and a ^{calculated t value of} 2.373 which exceeds the ^{t table of} 2.013, and a significance value of 0.022 (below 0.05). This indicates that H2 is accepted. Quality work relationships, including communication, cooperation, mutual trust, conflict management, and interpersonal relationships will increase productivity. This finding is in line with the opinion of Sutrisno (2019) and several previous studies such as by Hulu et al. (2024), Parinussa & Dunan (2022), Aspani et al. (2022), and Ambarini (2020). This study also succeeded in answering the objectives and formulation of the problem, namely regarding the partial effect of work relationships on employee productivity.

Based on the results of research at PT JNE Medan Main Branch, it is known that work relationships have a positive and significant influence on employee productivity partially, with the main indicators being communication, cooperation, trust, conflict management, and interpersonal relationships. Effective, open, and reciprocal communication facilitates the exchange of clear information, thereby accelerating coordination and reducing errors in carrying out tasks. Cooperation between employees allows for efficient division of responsibilities, strengthens collaboration, and creates a pleasant work environment. Trust, both between coworkers and superiors, builds a sense of responsibility and increases independence in working. Good conflict management helps maintain work stability and prevents productivity disruptions. Meanwhile, harmonious interpersonal relationships create a supportive work atmosphere and increase work motivation. Overall, quality work relationships are a crucial element in improving company performance and competitiveness.

The Influence of Work Facilities on Work Productivity

Hypothesis H3 proposed: work facilities have a partial positive and significant effect on employee productivity at PT JNE Medan Main Branch. The results of multiple linear regression analysis show a positive coefficient value of 0.492 with a ^{calculated t of} 3.715 greater than the ^{t table of} 2.013 and a significance value of 0.001 (<0.05), which means that hypothesis H3 is proven and can be accepted. The direction of this positive relationship indicates that improving the quality of work facilities will encourage increased employee productivity. Work facility indicators include the completeness and effectiveness of facilities and infrastructure, which if optimal, can support smooth work activities. This finding supports the opinion of Sutrisno (2019) and is in line with the research of Wansah et al. (2024), Afdilla (2023), Ikram (2023), and Darmiah et al. (2023) which states that work facilities are an important factor in supporting employee productivity in an organization. This study also succeeded in answering the objectives and formulation of the problem, namely regarding the partial effect of work facilities on employee productivity.

The results of the study at PT JNE Medan Main Branch showed that work facilities have a positive and significant partial effect on employee productivity through several indicators, namely completeness of facilities and infrastructure, effectiveness, and facility performance. Work facilities are an important aspect in supporting work effectiveness. Completeness of facilities such as computers, communication tools, and operational vehicles help speed up task completion. Meanwhile, completeness of infrastructure such as comfortable workspaces, rest facilities, and security systems support smooth daily activities. The effectiveness of facilities is reflected in the use of facilities and infrastructure that are appropriate to needs and function optimally, thereby reducing work obstacles. Good facility performance, such as reliable delivery vehicles and information systems, encourages efficiency and avoids delays. Thus, well-organized work facilities are able to create a productive and efficient work environment, which ultimately has a positive impact on improving the performance of PT JNE employees.

The Influence of Workload, Work Relationships, and Work Facilities on Work Productivity

Hypothesis H4 states that workload, work relationships, and work facilities simultaneously have a positive and significant effect on employee work productivity at PT JNE Medan Main Branch. The findings of this study support this hypothesis, as indicated by the results of multiple linear regression analysis through the F test which obtained a ^{calculated F value of} 210.961, far exceeding the ^{F table of} 2.807 with a significance level of 0.000. This finding confirms that H4 is proven and acceptable. The positive direction of the coefficient indicates that an increase in workload, work relationships, and work facilities simultaneously have an impact on increasing employee work productivity. This study has succeeded in achieving its objectives, namely testing the simultaneous influence of the three variables on work productivity. In addition, this study has also provided answers to the formulation of the problems proposed empirically and convincingly and the objectives have been achieved.

The results of this study are in line with the opinion of Sutrisno (2019) who explained that employee work productivity is influenced by many factors, three of which are workload, work relationships, and work facilities. This study is also in line with the results of research conducted by Khoirudin et al. (2024) which shows that workload, work relationships, and work facilities have a positive and significant influence on employee work productivity.

Based on the results of research conducted at PT JNE Medan Main Branch, it was found that workload, work relationships, and work facilities simultaneously have a positive and significant influence on employee work productivity. These three variables, when applied in an integrated manner, contribute to increased productivity through five main

indicators, namely work ability, work results, self-development, quality, and efficiency.

Workloads designed according to individual capacity can stimulate employee skills and responsiveness. Meanwhile, conducive working relationships create a collaborative environment that strengthens communication and solidarity. Adequate work facilities support smooth operations, speed up work processes, and reduce the risk of technical errors. Among the three, work facilities have the greatest influence, as evidenced by the highest regression coefficient value (0.492) and the significance of the t count (3.715).

Good facilities not only speed up the execution of tasks, but also create physical and psychological comfort. Therefore, work facilities are considered the most dominant factor in increasing productivity. However, synergy between the three aspects is still needed because each has a complementary role.

Imbalance in one aspect can hamper overall performance. To achieve optimal productivity, PT JNE Medan Main Branch is advised to maintain harmony between proportional workload, harmonious working relationships, and adequate work facilities, in order to support overall employee development and increase the company's competitiveness sustainably.

Conclusions and Recommendations

Based on the results of research at PT JNE Medan Main Branch, it was found that workload, work relationships, and work facilities partially and simultaneously have a positive and significant effect on employee performance. Work facilities are the most dominant factor with the highest regression value.

Companies are advised to manage workloads proportionally and implement a job rotation system to maintain work morale. In addition, it is important to build harmonious working relationships through communication training and internal activities that support teamwork. Maintenance of work facilities also needs to be carried out routinely to remain optimal and support operational efficiency. Finally, developing employee competencies through training and assignments that are appropriate to their abilities will have a direct impact on improving the quality and consistency of work results. By integrating these three aspects in a balanced manner, companies can encourage employee work productivity sustainably and increase competitiveness in the logistics sector.

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