

The Influence of Work Life Balance and Job Stress on Employee Productivity at PT. PLN (Persero) Tolitoli

Sri Yulliani Atma Taasihe ¹, Aqfir [✉], Edi Yanto ³

^{1,2,3} Management Studies Program, Mujahidin College of Economics

Abstract

This study aims to examine the effect of work-life balance and job stress on employee productivity at PT PLN (Persero) Tolitoli, both partially and simultaneously. This research employs a quantitative method with an associative approach. The population of this study consists of all employees of PT PLN (Persero) Tolitoli, totaling 40 employees. The sampling technique used is saturated sampling (total sampling), in which the entire population is taken as respondents. The primary instrument for data collection is a questionnaire developed using a Likert scale. Data analysis techniques include multiple linear regression analysis using SPSS software, accompanied by validity testing, reliability testing, classical assumption tests, and hypothesis testing through t-tests and F-tests. The results show that work-life balance partially has a positive and significant effect on employee productivity at PT PLN (Persero) Tolitoli. Meanwhile, job stress partially has a negative and significant effect on employee productivity. Simultaneously, work-life balance and job stress have a significant effect on employee productivity. The coefficient of determination indicates that a portion of the variation in employee productivity can be explained by work-life balance and job stress, while the remaining variation is influenced by other variables outside the research model.

Keywords: *Work-Life Balance, Job Stress, Employee Productivity.*

Copyright (c) 2026 Aqfir

✉ Corresponding author :

Email Address : aqfir.thamrin@gmail.com (Tolitoli, Aqfir)

INTRODUCTION

Changes in the contemporary world of work are occurring at an accelerated pace, driven by advances in digitalization, automation, and organizational transformation. Technological innovation has not only reshaped how organizations operate but has also redefined the nature of employment relationships between institutions and their employees. In this modern context, organizations are required to achieve high performance targets, adapt to emerging technologies, and at the same time maintain employees' psychological well-being and work-life balance. However, in practice, rapid digital transformation is often accompanied by increased workloads, heightened productivity expectations, longer working hours, and tighter deadlines. These conditions may disrupt the balance between personal life and work (work life balance), which in turn can trigger job stress and ultimately reduce employee productivity. The imbalance between personal and professional life has become a global concern with significant implications for workforce productivity and retention. This phenomenon is consistent with the findings of Marecki (2024), who reports that a well-maintained work life balance positively contributes to employees' psychological well-being and productivity. Furthermore, Aqfir et al. (2023) emphasize that evolving work systems and increasingly complex organizational demands influence employee behavior, including discipline and performance, which subsequently affect productivity. In modern organizational settings, achieving harmony between work and personal life has become a critical factor in ensuring long-term organizational success.

In Indonesia, workplace pressures have intensified alongside increasing demands for efficiency, accountability, and organizational responsibility, particularly within the public service sector. This sector is expected to deliver high-quality services despite limited resources, thereby creating substantial psychological pressure on employees. Aqfir et al. (2025) argue that inadequate human resource capacity and imbalanced working conditions can undermine both organizational performance and productivity if not managed effectively. This condition is further supported by a report from the International Labour Organization (ILO, 2022), which indicates that public sector employees tend to experience higher levels of stress and fatigue due to social responsibility burdens, extended working hours, and limited work-time flexibility. Such imbalances between job demands and employee capacity may negatively affect psychological well-being, work engagement, and long-term productivity.

A similar situation is evident in the energy sector, which serves as a vital pillar of public service in Indonesia. Data from the PLN Annual Report (2023) reveal a significant increase in employee workload within the national electricity sector. Distribution units and customer service divisions recorded an 18 percent rise in network disruptions compared to the previous year, with an average handling time exceeding two hours per incident. In addition, overtime rates increased by 25 percent, while technical error rates rose by approximately 11 percent.

These findings indicate that high work pressure has become a major challenge in maintaining both performance stability and the mental health of PLN employees across Indonesia. Such conditions not only demand speed and accuracy in resolving technical issues but also require 24-hour readiness, which may disrupt employees' work life balance. Theoretically, this phenomenon can be explained through several conceptual models. The Job Demands Resources (JD-R) Model proposed by Bakker and Demerouti (2017) suggests that employee well-being depends on the balance between job demands and organizational resources. An imbalance between these elements may lead to job stress and decreased motivation. Meanwhile, Role Conflict Theory by Kahn et al. (2020) explains that conflicts between work roles and personal life can generate psychological strain that affects individual performance. Additionally, Spillover Theory (Bulger, 2022) highlights that stress experienced in the workplace can spill over into personal life, reducing emotional well-being and ultimately negatively impacting work productivity.

Previous studies have consistently demonstrated the relationship between work life balance, job stress, and productivity. Kusnandar and Setiawan (2023) found that work life balance

significantly reduces burnout and improves employee performance in the public sector. Rahmadani et al. (2024) further indicate that job stress acts as a mediating variable between high workload and decreased productivity. However, most of these studies focus on private companies in urban areas with relatively flexible work systems and adequate supporting facilities. Empirical studies examining state-owned enterprises in regional areas particularly those operating continuously for 24 hours, such as PLN remain limited.

This gap highlights an important research opportunity. Existing studies often examine work life balance and job stress separately, resulting in limited understanding of their combined influence on productivity within an integrated analytical framework. Moreover, research in technical work environments that operate continuously is still scarce. This study addresses this gap by integrating both variables and examining them within the context of PT PLN (Persero) Tolitoli, which is characterized by high operational demands, limited personnel, and unique geographical challenges compared to typical office-based sectors.

Field observations indicate that most employees at PLN Tolitoli experience considerable work pressure. Interviews with field workers and administrative staff reveal that increasing job demands, limited technical personnel, and geographical challenges often require employees to work late into the night, including weekends, particularly when responding to electricity network disruptions caused by extreme weather. These conditions reduce rest time and family interaction while also triggering various symptoms of job stress, such as emotional exhaustion, decreased energy and motivation, reduced concentration, and increased technical errors. Prolonged pressure also leads to physical complaints, including headaches, sleep disturbances, and excessive fatigue, while behavioral changes such as increased absenteeism, heightened emotional sensitivity, and declining work enthusiasm have also been observed.

This phenomenon aligns with the findings of Song et al. (2022), who state that high job stress can reduce individual performance through decreased concentration, emotional exhaustion, and reduced work accuracy. Maslach and Jackson (2021) further emphasize that prolonged job stress can lead to burnout, a condition of emotional exhaustion that directly affects productivity, efficiency, and work commitment. The Ilo (2022) report also notes that organizations failing to manage job stress may lose up to 5 percent of productivity annually, whereas those that effectively balance workload and employee well-being can increase productivity by up to 15 percent and reduce absenteeism by 20 percent.

Rachmawati and Harsono (2023) support these findings by demonstrating that organizations that fail to manage employees' work life balance experience a decline in customer satisfaction of up to 12 percent due to increased fatigue and reduced service quality. These findings suggest that unmanaged job stress not only affects individual productivity but also undermines the overall quality of public services.

Based on the above discussion, it can be identified that challenges in balancing job demands and employee capacity may lead to job stress and decreased productivity. Therefore, this study is essential to examine the influence of work life balance and job stress on employee productivity at PT PLN (Persero) Tolitoli. The findings are expected to contribute theoretically to the development of human resource management, particularly in organizational behavior and workplace well-being, as well as provide practical insights for organizational management in designing human resource strategies that prioritize psychological well-being to enhance performance and ensure sustainable public service delivery.

Based on the aforementioned issues, the research problems in this study are formulated as follows:

1. Does work-life balance have a significant effect on employee productivity at PT PLN (Persero) Tolitoli?
2. Does job stress have a significant effect on employee productivity at PT PLN (Persero) Tolitoli?
3. Do work-life balance and job stress simultaneously have a significant effect on employee productivity at PT PLN (Persero) Tolitoli?

METHODOLOGY

This study employs an associative research design, which aims to examine the relationships or effects among two or more variables. According to Pandey and Mishra (2023), associative research falls within the category of correlational studies that seek to explain the interrelationships between variables using measurable data and inferential statistical analysis techniques. This research design is appropriate for addressing questions related to the extent to which work-life balance and job stress influence employee productivity within the workplace.

In addition, this study adopts an explanatory approach, as it not only identifies relationships among variables but also analyzes the direction and magnitude of their effects. Barroga et al. (2023) state that explanatory research is intended to test theoretical frameworks through a deductive approach, where statistical findings are utilized to confirm or reject previously formulated hypotheses. Therefore, this study is expected to provide empirical insights into how work-life balance and job stress management contribute to employee productivity at PT PLN (Persero) Tolitoli.

The population of this study consists of all employees of PT PLN (Persero) Tolitoli. This unit includes personnel involved in electricity network operations, customer service, administrative functions, and technical support. The nature of work, which requires a high level of readiness, makes this population particularly relevant for examining work-life balance, job stress, and employee productivity.

The total population at PT PLN (Persero) Tolitoli comprises 40 employees. All members of this population are included, as they are considered to possess relevant experience related to the phenomena under investigation and are capable of providing comprehensive information regarding work-life balance, job-related pressure, and job performance within a public service organization.

A sample is defined as a subset of the population that represents the overall characteristics of that population (Sugiyono, 2021). This study applies a saturated sampling technique (census sampling), in which all members of the population are selected as respondents. This approach is appropriate given the relatively small population size (fewer than 100 individuals), allowing the entire population to be included as the research sample.

The use of saturated sampling is based on the following considerations:

1. The population size is relatively small, making it more effective and efficient to include all members as respondents.
2. It ensures that all employee perceptions regarding work-life balance and job stress are fully captured.
3. The external validity of the findings is enhanced, as no respondent selection process is involved.

Therefore, the total sample in this study consists of 40 individuals, representing all employees of PT PLN (Persero) Tolitoli.

RESULTS AND DISCUSSION

Results of Model Assumption Testing and Hypothesis Testing

Classical assumption tests are conducted to determine the feasibility of a regression model. Prior to performing multiple regression analysis, prerequisite parametric statistical tests are first carried out to ensure that the model satisfies the required assumptions. This step is essential so that the regression analysis can be properly conducted and the results can be interpreted as valid and scientifically accountable findings. In this study, the classical assumption tests applied include the following:

1 Normality Test

The normality test is used to assess whether the data follow a normal distribution, which is a key requirement for parametric analysis. One commonly used method to detect normality issues is the Kolmogorov–Smirnov test, which determines whether the sample data originate from a normally distributed population.

In this study, data normality was examined using the One-Sample Kolmogorov–Smirnov test, with the following decision criteria:

- a. If the significance value is greater than 0.05, the data are considered normally distributed.
- b. If the significance value is less than 0.05, the data are considered not normally distributed.

The following section presents the results of the normality test using the One-Sample Kolmogorov–Smirnov method, conducted on research data obtained from 40 respondents at PT PLN (Persero) Tolitoli.

Table 1. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		40
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	4.41533615
Most Extreme Differences	Absolute	.123
	Positive	.102
	Negative	-.123
Test Statistic		.123
Asymp. Sig. (2-tailed)		.129 ^c

Based on Table Normality Test, the results of the One-Sample Kolmogorov–Smirnov test indicate that the total sample size (N) is 40, with a Test Statistic value of 0.123 and an Asymp. Sig. (2-tailed) value of 0.129. Since the significance value exceeds the threshold of 0.05 ($0.129 > 0.05$), it can be concluded that the residual data in this study are normally distributed.

Therefore, the normality assumption of the regression model has been satisfied, and the data are appropriate for further statistical analysis.

2 Heteroskedasticity Test

In this study, heteroskedasticity is examined using a scatterplot test by observing the distribution pattern of points between the Studentized Residual values and the Predicted Values.

The decision criteria for interpreting the scatterplot are as follows:

- a. If the data points are randomly distributed and do not form a specific pattern, then heteroskedasticity is not present.
- b. If the data points are not clustered only above or below the zero axis.
- c. If the data points are spread both above and below, or around, the zero value.

The results of the heteroskedasticity test using the scatterplot method are presented in Figure below.

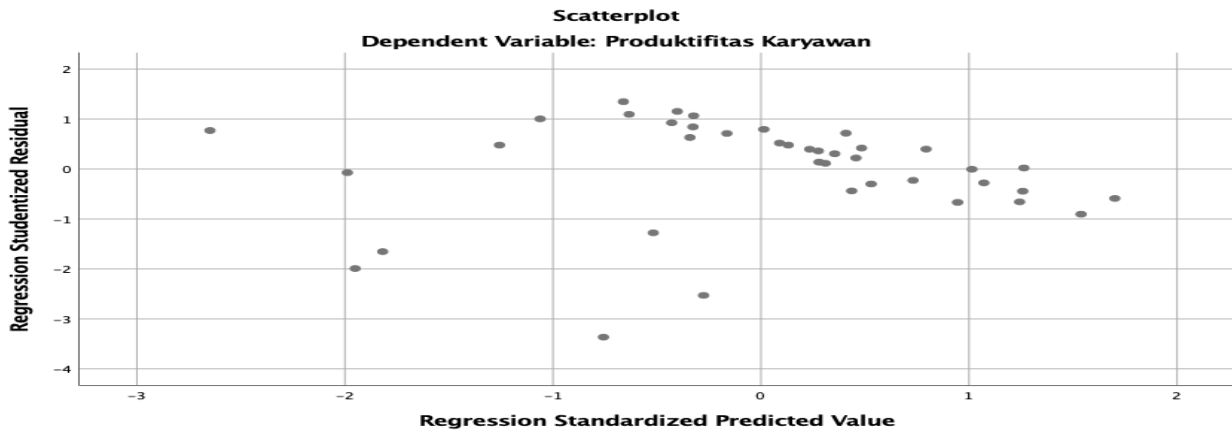


Figure 1. Scatterplot

Based on the scatterplot of the heteroskedasticity test above, it can be observed that the residual points are randomly distributed both above and below the zero value on the Y-axis and do not form any specific pattern, such as a wave-like, narrowing, widening, or circular pattern. This distribution indicates the absence of heteroskedasticity in the regression model used.

Therefore, it can be concluded that the residual variance is constant (homoskedasticity), meaning that the regression model satisfies the classical assumptions and is appropriate for further analysis in this study.

3. Multicollinearity Test

The multicollinearity test is conducted to determine whether there is a correlation among the independent variables in the regression model. High multicollinearity can inflate the variance of the estimated coefficients, resulting in larger standard errors. Consequently, the calculated t-values may become smaller than the critical t-values, making it difficult to detect significant relationships. A good regression model should be free from multicollinearity among the independent variables.

To detect the presence of multicollinearity, the Variance Inflation Factor (VIF) and tolerance values are used, with the following criteria:

- a. If the VIF value is greater than 10 or the tolerance value is less than 0.10, multicollinearity is indicated.
- b. If the VIF value is less than 10 or the tolerance value is greater than 0.10, multicollinearity is not indicated.

Table 2. Multicollinearity Test

Model	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	42.533	7.558		5.627	.000		
Work Life Balance	.357	.144	.330	2.483	.018	.924	1.083
Job Stress	-.547	.115	-.634	-4.768	.000	.924	1.083

a. Dependent Variable: Employee Productivity

Based on the multicollinearity test table, the results indicate that the tolerance values for the variables Work Life Balance and Job Stress are both 0.924, while the Variance Inflation Factor (VIF) values for these variables are 1.083. Tolerance values greater than 0.10 and VIF values below 10 suggest that there is no indication of multicollinearity among the independent variables in the regression model.

Thus, it can be concluded that Work Life Balance and Job Stress are not highly correlated with each other and are each able to explain the dependent variable independently. Therefore, the regression model used in this study satisfies the multicollinearity assumption and is appropriate for further analysis regarding the effect of Work–Life Balance and Job Stress on Employee Productivity.

4. Multiple Linear Regression Analysis Results

Multiple linear regression is a parametric statistical method used to examine the extent of causal relationships between two or more independent variables and a single dependent variable. In this study, multiple linear regression is applied to measure the effect of Work–Life Balance and Job Stress on Employee Productivity at PT PLN (Persero) Tolitoli.

Based on the results of the multiple linear regression analysis using SPSS for Windows version 26, data obtained from 40 respondents indicate the presence of an influence of the independent variables, namely Work–Life Balance and Job Stress, on the dependent variable, Employee Productivity, at PT PLN (Persero) Tolitoli. The detailed results of the analysis are presented in the following table.

Table 3. Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Beta	Coefficients		
1	(Constant)	42.533		7.558	5.627	.000
	Work Life Balance	.357	.144	.330	2.483	.018
	Job Stress	-.547	.115	-.634	-4.768	.000

a. Dependent Variable: Employee Productivity

Based on the table above, the results show that the constant value (a) is 42.533, the coefficient for Work–Life Balance is 0.357, and the coefficient for Job Stress is -0.547. Based on these results, the multiple linear regression equation can be formulated as follows:

$$Y = 42.533 + 0.357X_1 - 0.547X_2 + e$$

1. The regression model yields a positive constant value of 42.533, indicating that when the independent variables Work–Life Balance and Job Stress are equal to zero, Employee Productivity is predicted to be at 42.533 units. This value reflects the baseline level of productivity in the absence of the influence of the independent variables included in the model.
2. The regression coefficient for Work–Life Balance is positive (0.357), which implies that a one-unit increase in Work–Life Balance leads to an increase of 0.357 units in Employee Productivity, assuming other variables remain constant. This finding suggests that better balance between employees’ work and personal life contributes to higher productivity.
3. The regression coefficient for Job Stress is negative (-0.547), indicating that a one-unit increase in Job Stress results in a decrease of 0.547 units in Employee Productivity, assuming other variables remain constant. This finding implies that higher levels of job stress are likely to reduce employee productivity.

5. Hypothesis Testing Results

1. t-Test (Partial Test)

Based on the results of the statistical data analysis presented in the table above, which were processed using SPSS software, the partial hypotheses in this study can be explained as follows:

The Effect of Work Life Balance on Employee Productivity

Based on the results of the t-test, the calculated t-value is 2.483, which is greater than the t-table value of 2.026, with a significance level of $0.018 < 0.05$. Therefore, it can be concluded that the hypothesis stating that Work Life Balance has a significant partial effect on Employee Productivity at PT PLN (Persero) Tolitoli is supported. In other words, the Work-Life Balance variable individually contributes significantly to influencing Employee Productivity. This finding indicates that improvements in the balance between employees' work and personal life are associated with increased productivity at PT PLN (Persero) Tolitoli.

The Effect of Job Stress on Employee Productivity

Based on the t-test results, the calculated t-value is -4.768 , which in absolute terms is greater than the t-table value of 2.026, with a significance level of $0.000 < 0.05$. Thus, it can be concluded that the hypothesis stating that Job Stress has a significant partial effect on Employee Productivity at PT PLN (Persero) Tolitoli is supported. In other words, the Job Stress variable individually has a significant influence on Employee Productivity. This result indicates that higher levels of job stress experienced by employees tend to reduce their productivity at PT PLN (Persero) Tolitoli.

2. F-Test (Simultaneous Test)

The F-test (simultaneous test) is a statistical procedure used to examine the combined effect of independent variables on a dependent variable within a regression model. This test is conducted to determine whether Work-Life Balance and Job Stress simultaneously influence Employee Productivity at PT PLN (Persero) Tolitoli. Therefore, the F-test is used to address the third hypothesis in this study.

The results of the F-test analysis are presented in the following table.

Table 4. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	497.287	2	248.644	12.100	.000 ^b
	Residual	760.313	37	20.549		
	Total	1257.600	39			

a. Dependent Variable: Employee Productivity

b. Predictors: (Constant), Job Stress, Work Life Balance

Based on Table F-Test Results, the regression sum of squares is 497.287 with 2 degrees of freedom (df), while the residual sum of squares is 760.313 with 37 degrees of freedom. The mean square for the regression is 248.644, whereas the mean square for the residual is 20.549.

The test results indicate an F-statistic value of 12.100 with a significance level of 0.000. Since the significance value is less than 0.05, it can be concluded that Work Life Balance and Job Stress simultaneously have a significant effect on Employee Productivity at PT PLN (Persero) Tolitoli. Therefore, the hypothesis stating that Work Life Balance and Job Stress jointly influence Employee Productivity is accepted.

These findings suggest that the combination of work-life balance and employees' job stress levels plays an important role in either enhancing or reducing employee productivity. Accordingly, the regression model used in this study is considered appropriate and statistically significant for explaining the relationships among the variables examined.

6. Coefficient of Determination Test Results

The coefficient of determination, commonly denoted as R^2 , is a statistical measure used to assess how well a regression model explains the variation in the dependent variable. In other words, the coefficient of determination indicates the proportion of variance in the dependent variable that can be explained by the independent variables included in the model.

Table 5. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.629 ^a	.395	.363	4.53310

a. Predictors: (Constant), Job Stress, Work Life Balance

b. Dependent Variable: Employee Productivity

Based on the table above, the Adjusted R Square value is 0.363, indicating that approximately 36.3% of the variation in Employee Productivity can be explained by Work-Life Balance and Job Stress. This suggests that the regression model is reasonably adequate in explaining the relationship between Work Life Balance, Job Stress, and Employee Productivity.

Although a portion of the variation in employee productivity is accounted for by the model, the remaining 63.7% is influenced by other variables not included in this study. This implies that there is still room for improvement and further research to identify additional factors that may affect Employee Productivity at PT PLN (Persero) Tolitoli.

Based on the results of the data analysis presented in the previous section, this study reveals important findings regarding the factors influencing Employee Productivity at PT PLN (Persero) Tolitoli, particularly those related to Work Life Balance and Job Stress. This discussion elaborates on the results of hypothesis testing conducted through multiple linear regression analysis, t-tests (partial), and F-tests (simultaneous), by linking statistical findings with empirical conditions, supporting theories, and relevant previous studies.

The results indicate that Work Life Balance has a positive and significant effect on Employee Productivity, suggesting that a balance between work demands and personal life is a key determinant in enhancing employee performance. In contrast, Job Stress shows a negative and significant effect on Employee Productivity, confirming that unmanaged work pressure can hinder optimal productivity. Furthermore, simultaneous testing demonstrates that Work-Life Balance and Job Stress jointly have a significant effect on Employee Productivity, indicating that both variables are closely interrelated in shaping a productive work environment.

1. The Effect of Work Life Balance on Employee Productivity

The t-test results show that Work Life Balance has a positive and significant effect on Employee Productivity at PT PLN (Persero) Tolitoli. Therefore, the first hypothesis (H_1), which states that Work-Life Balance influences Employee Productivity, is accepted.

Empirically, respondents' answers indicate that the indicators of time balance and satisfaction balance have the highest mean values compared to other indicators. Most employees report that they still have opportunities to manage rest time, fulfill family roles, and receive support from the work environment despite facing high operational demands. This condition positively affects employees' physical and mental readiness in performing their daily tasks.

A high score on the time balance indicator suggests that employees who are able to proportionally manage their work and personal time tend to demonstrate better focus, concentration, and work accuracy. In the context of PT PLN (Persero) Tolitoli, which operates continuously for 24 hours, maintaining such balance is crucial for sustaining productivity, particularly in handling network disruptions and customer service activities.

These findings are consistent with the Job Demands-Resources (JD-R) Model proposed by Bakker and Demerouti (2017), which posits that employee performance and productivity improve when there is a balance between job demands and available resources. In this context,

Work-Life Balance functions as a psychological resource that helps reduce work fatigue while enhancing employee energy and engagement.

This result is also supported by Witriaryani (2022), who found that Work-Life Balance has a positive and significant effect on employee performance through increased work engagement. Similarly, Satrya et al. (2025) demonstrated that employees in the public sector with a better Work-Life Balance tend to exhibit higher productivity and stronger work commitment. Thus, this study reinforces previous empirical findings that Work Life Balance is a critical factor in improving employee productivity, particularly within public service organizations.

2. The Effect of Job Stress on Employee Productivity

The t-test results for Job Stress indicate a negative and significant effect on Employee Productivity at PT PLN (Persero) Tolitoli. Therefore, the second hypothesis (H_2), which states that Job Stress influences Employee Productivity, is accepted.

Based on the distribution of respondents' answers, the emotional exhaustion indicator has the highest mean value among the job stress indicators. This suggests that employees tend to experience mental fatigue due to high workloads, shift-based work systems, and continuous readiness to respond to power outages and emergency services.

High levels of emotional exhaustion directly reduce employees' concentration, accuracy, and work speed. As a result, productivity declines in both quantity and quality. In addition, prolonged job stress may reduce work motivation and increase the likelihood of technical errors, which is particularly critical in the electricity sector.

These findings can be explained through Role Conflict Theory (Kahn et al., 2020), which states that conflicts between work demands and personal roles increase psychological strain and negatively affect individual performance. Moreover, Spillover Theory (Bulger, 2022) suggests that stress originating from the workplace can extend into personal life, thereby worsening psychological conditions and reducing work productivity.

The findings are consistent with Fitri (2024), who concluded that job stress negatively affects employee performance. Likewise, Jass et al. (2024) found that high job demands without adequate organizational support increase psychological stress and reduce productivity among public sector employees. These results further confirm that job stress is a major barrier to achieving optimal employee productivity.

3. The Simultaneous Effect of Work Life Balance and Job Stress on Employee Productivity

The F-test results indicate that Work Life Balance and Job Stress simultaneously have a significant effect on Employee Productivity at PT PLN (Persero) Tolitoli. Therefore, the third hypothesis (H_3) is accepted.

This finding suggests that employee productivity is not determined by a single factor but rather by the interaction between work-life balance and job stress. A well-maintained Work Life Balance can help reduce job stress, while controlled stress levels enable employees to optimize the balance between their professional and personal lives.

The coefficient of determination (R^2) indicates that Work Life Balance and Job Stress explain a portion of the variation in Employee Productivity, while the remaining variation is influenced by other factors outside the model, such as the work environment, leadership, compensation systems, work motivation, and individual characteristics. This finding aligns with the Job Demands-Resources Model, which emphasizes that productivity is optimized when organizations successfully balance job demands with supportive resources.

Kusnandar and Setiawan (2023) also found that work life balance and job stress management simultaneously have a significant effect on improving productivity and reducing burnout in the public sector. Thus, this study provides empirical evidence that improving employee productivity at PT PLN (Persero) Tolitoli requires an integrated approach through organizational policies that support Work-Life Balance and sustainable job stress management strategies.

Furthermore, empirical conditions at PT PLN (Persero) Tolitoli reveal differences in job characteristics between technical and administrative employees, which also influence Work-Life Balance and Job Stress levels. Technical employees face unpredictable work demands, as they must be ready to respond to sudden calls when power disruptions occur, both during the day and at night. This situation blurs the boundary between work time and personal time, making Work-Life Balance more difficult to maintain. Such uncertainty may increase both physical and mental fatigue, especially when disruptions occur repeatedly within short periods.

On the other hand, administrative employees encounter different pressures, including high administrative workloads, report preparation, and strict deadlines. These conditions often lead to overtime work, particularly during peak periods such as the end of the month or year. Frequent overtime reduces rest time and family interaction, thereby lowering Work Life Balance and increasing Job Stress.

Although the nature of work demands differs, both technical and administrative employees face risks of work life imbalance that may affect productivity. These differences further reinforce the findings of this study that Work Life Balance and Job Stress are critical factors influencing Employee Productivity at PT PLN (Persero) Tolitoli. Therefore, managing these factors should be tailored to the specific characteristics of each job type to ensure optimal employee productivity.

CONCLUSION

Based on the results of data analysis and the discussion regarding the influence of Work-Life Balance and Job Stress on Employee Productivity at PT PLN (Persero) Tolitoli, several conclusions can be drawn:

First, Work-Life Balance has a positive and significant partial effect on Employee Productivity at PT PLN (Persero) Tolitoli. This finding indicates that better balance between work demands and personal life is associated with higher levels of employee productivity. Employees who are able to manage their work and personal time proportionally, obtain adequate rest, and receive organizational support for their personal lives tend to work more effectively, maintain emotional stability, and complete tasks more efficiently.

Second, Job Stress has a negative and significant partial effect on Employee Productivity at PT PLN (Persero) Tolitoli. This result suggests that increasing levels of job stress – arising from heavy workloads, time pressure, and continuous job demands – can reduce employees' ability to perform optimally. Poorly managed stress may lead to physical and mental fatigue, decreased concentration and accuracy, and ultimately a decline in productivity.

Third, Work-Life Balance and Job Stress simultaneously have a significant effect on Employee Productivity at PT PLN (Persero) Tolitoli. This finding demonstrates that employee productivity is not influenced by a single factor, but rather by the interaction between work life balance and job stress. A well-maintained work life balance can help reduce stress levels, while controlled stress enables employees to optimize both their professional and personal roles. Therefore, integrated management of these two aspects is essential for sustaining employee productivity.

Research Contributions and Limitations

This study provides both theoretical and practical contributions. From a theoretical perspective, the findings reinforce human resource management theories that identify Work-Life Balance and Job Stress as key determinants of Employee Productivity. The results may serve as empirical references for further academic research, particularly in the fields of organizational behavior and public sector human resource management.

From a practical standpoint, this study offers insights for the management of PT PLN (Persero) Tolitoli in formulating human resource policies. The findings can be used as a basis for

designing strategies aimed at improving employee productivity through better work-life balance arrangements and structured job stress management.

This study has several limitations that should be considered. First, the independent variables examined are limited to Work-Life Balance and Job Stress, while other factors such as work motivation, leadership, compensation, work environment, and organizational culture were not included in the model. Second, the study involves a relatively small sample consisting only of employees at PT PLN (Persero) Tolitoli, which may limit the generalizability of the findings to other PLN units or different organizations. Third, data were collected through questionnaires, making the results dependent on respondents' perceptions and honesty in providing answers.

Recommendations

Based on the descriptive analysis of respondents' answers, several indicators within the Work Life Balance and Job Stress variables show relatively lower mean scores compared to others. These indicators represent aspects that require greater managerial attention.

Work Life Balance has a positive and significant effect on employee productivity, although the availability of sufficient time for family remains relatively limited. Therefore, it is important for PT PLN (Persero) Tolitoli to improve work scheduling, particularly for employees with shift systems and high field workloads. In addition, greater flexibility in rest periods and fair job rotation should be implemented to prevent fatigue, along with strengthening internal policies that support work-life balance.

Job Stress has a negative and significant impact on productivity, as reflected in reduced employee engagement. To address this issue, the company needs to ensure a more balanced distribution of workload, enhance psychological support, and foster open communication between supervisors and employees. Furthermore, the implementation of structured stress management programs, such as training and counseling, is essential to reduce the negative effects of work stress.

Although overall employee productivity is categorized as high, maintaining motivation under pressure remains a challenge. Therefore, the company should strengthen motivation through reward and recognition systems, improve managerial support by providing continuous and constructive feedback, and offer opportunities for training and skill development. These efforts are expected to sustain and further enhance employee productivity, even in high-pressure working conditions.

ACKNOWLEDGMENTS

All praise is devoted to Allah SWT for His abundant blessings, guidance, and mercy, which have enabled the author to complete this research article. The author would like to express sincere gratitude to all parties who have contributed, both directly and indirectly, to the completion of this study.

The author extends special appreciation to the Management Study Program and the Development Economics Study Program of the Mujahidin College of Economics for their academic support and the opportunity provided to conduct and publish this research. Deep gratitude is also addressed to the leadership and employees of PT PLN (Persero) Tolitoli for their cooperation, participation, and willingness to provide the necessary data and information for this study. Finally, the author acknowledges colleagues, reviewers, and all individuals who have offered valuable input, encouragement, and constructive suggestions, which have significantly improved the quality of this research.

References:

Aqfir, A., Ilham, I., & Messa, S. B. (2025). Effect of Human Resource Capacity on Village Fund Management via Anti-Corruption Numeracy Mediation Variable. *Jurnal Manajemen*

- Dayasaing,27(2).<https://journals2.ums.ac.id/index.php/dayasaing/article/view/12296>
- Aqfir, A., Sabran, M., & Ilham, I. (2023). Influence of implementation of face recognition absence on employee work discipline. *Kinerja: Jurnal Ekonomi Dan Manajemen*, 20(4), 467–474. <https://journal.feb.unmul.ac.id/index.php/KINERJA/article/view/14053>
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Bulger, C. (2022). *Spillover Theory and Work–Family Conflict in Modern Organizations*. Springer. https://link.springer.com/chapter/10.1007/978-3-031-07401-7_9
- Fitri, D. A. E. (2024). Pengaruh Work-Life Balance Dan Stres Kerja Terhadap Kinerja Karyawan Pada Pabrik Cincau Dan Tahu Desa Tanah Merah Kabupaten Kampar Provinsi Riau [UIN Suska Riau Repository]. In Skripsi. <https://repository.uin-suska.ac.id/>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Multivariate Data Analysis* (8th ed.). Pearson Education Limited.
- Jass, L., Klußmann, A., Harth, V., & Mache, S. (2024). Job demands and resources perceived by hybrid working employees in German public administration: a qualitative study. *Journal of Occupational Medicine and Toxicology*, 19(1). <https://doi.org/10.1186/s12995-024-00426-5>
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (2020). *Role Conflict and Ambiguity in Work–Family Interface*. Routledge. <https://doi.org/10.4324/9781003138829>
- Kusnandar, D., & Setiawan, R. (2023). Work-Life Balance, burnout, and job performance among public servants. *Jurnal Administrasi Publik*. <https://garuda.kemdikbud.go.id/>
- Marecki, Ł. (2024). Work–life balance and employee productivity: Evidence from European firms. *Journal of Management and Financial Sciences*. https://www.researchgate.net/publication/Work-Life_Balance_and_Productivity_2024
- Organization, I. L. (2022). *Working Time and Work-Life Balance Around the World: Main Findings and Policy Implications*. International Labour Office. https://www.ilo.org/sites/default/files/wcmstp5/groups/public/@ed_protect/@protrav/@travail/documents/publication/wcms_864222.pdf
- Pandey, P., & Mishra, M. (2023). *Research Methodology: Tools and Techniques*. In *Research Methodology*. EU Academic Publishing. <https://euacademic.org/bookupload/9.pdf>
- PLN, P. T. (2023). *PLN Annual Report 2023*. PT PLN (Persero). <https://web.pln.co.id/statics/uploads/2023/08/annual-report-2023.pdf>
- Rachmawati, A., & Harsono, D. (2023). Work-Life Balance and customer satisfaction in public service organizations. *Journal of Applied Business Research*. https://www.researchgate.net/publication/Worklife_balance_and_customer_satisfaction_2023
- Rahmadani, I., Lestari, D., & Putra, B. (2024). The mediating role of work stress in the relationship between workload and employee productivity in public service sector. *Journal of Human Resource and Organization Studies*, 8(2), 112–125. <https://doi.org/10.1016/j.jhros.2024.02.008>
- Satrya, A., Pangaribuan, L., & Parasuraman, B. (2025). The Influence of Knowledge Management, Work-Life Balance, and Commitment on Public Sector Employee Performance. *IJBE (Integrated Journal of Business and Economics)*, 9(1), 139. <https://doi.org/10.33019/ijbe.v9i1.1011>
- Song, Y., Wang, M., & Zhang, L. (2022). Job stress and employee performance: Mediating role of emotional exhaustion. *Frontiers in Psychology*. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.834105/full>
- Sugiyono. (2021). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Witriaryani, A. S., Putri, A., Jonathan, D., Mohd, T., & Abdullah, K. (2022). Pengaruh Work-Life Balance dan Flexible Working Arrangement terhadap Job Performance dengan Dimediasi oleh Employee Engagement. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(7), 932-947.
<http://journal.ikopin.ac.id/index.php/fairvalue/article/view/1202>