

THE EFFECT OF WORK LIFE BALANCE AND WORKLOAD ON EMPLOYEE PERFORMANCE OF PT. PLANTATION NUSANTARA IV KSO REGIONAL II TANJUNG GARBUS GARDEN

^{*1}Mira Fitriyanti²Elisabet Siahaan³Yeni Absah^{*1}University of North Sumatra, North Sumatra, Indonesia²University of North Sumatra, North Sumatra, Indonesia³University of North Sumatra, North Sumatra, Indonesia

2nd ICOERESS
(25-09-2025)

Submission:
(01-09-2025)
Published:
(28-06-2026)

ABSTRACT

This study aims to analyze the influence of work-life balance and workload on the performance of employees of PT. Nusantara IV Plantation KSO Regional II Tanjung Garbus Plantation. In the era of globalization and Society 5.0, companies are required to operate efficiently and effectively by utilizing technology and managing employee performance optimally. Tanjung Garbus Plantation production data shows fluctuations over the past five years influenced by internal and external factors, including human resource management. This study uses an associative method with probability sampling techniques and Slovin formula to determine a sample of 167 respondents. The results of the study show that work-life balance and workload have a significant effect on employee performance. The multiple linear regression equation shows that increasing work-life balance and workload can improve employee performance. The T test shows that the variables of work life balance and workload partially affect employee performance, and the F test shows that the two variables simultaneously affect employee performance. The coefficient of determination shows that work-life balance and workload contribute 64.3% to employee performance.

Keywords: Work Life Balance, Workload, Employee Performance

BACKGROUND

The increasing intensity of global competition and the rapid advancement of digital technology have fundamentally transformed the way organizations manage their operations and human resources. In the era of Society 5.0, technology is no longer viewed merely as a supporting tool but as an essential component for creating human-centered solutions that integrate artificial intelligence (AI), the Internet of Things (IoT), robotics, and big data into organizational processes. Consequently, organizations are expected to optimize employee performance by effectively integrating people, technology, and organizational resources. Performance management has also shifted toward greater flexibility, where remote and hybrid working arrangements supported by digital collaboration platforms enable organizations to evaluate employees based on productivity and work outcomes rather than physical presence. Such transformation also encourages organizations to create a healthier work-life balance while maintaining high levels of organizational performance (Sixdio et al., 2024; Shepiani et al., 2022).

Employee performance is widely recognized as one of the primary determinants of organizational success because it reflects employees' ability to accomplish organizational objectives efficiently and effectively. According to Ramly (2021), performance refers to the actual achievements accomplished by an employee in carrying out assigned responsibilities. Similarly, Nugroho et al. (2020) define employee performance as the quality and quantity of work achieved according to assigned responsibilities, whereas Wibowo et al. (2020) emphasize that performance reflects how well employees perform their duties in achieving organizational goals. Therefore, organizations seeking sustainable competitiveness must continuously improve employee performance through effective human resource management practices.

One organization that has experienced substantial organizational transformation is PT Perkebunan Nusantara IV (PTPN IV). Following the restructuring of Indonesia's state-owned plantation enterprises under PalmCo, PTPN IV has demonstrated remarkable financial achievements, including accumulated profits of approximately IDR 11.7 trillion over the last three years and the successful settlement of major financial obligations. The company has also strengthened its competitive position among the PTPN Group by introducing the organizational vision "Growth Fast, Beyond Imagine." Nevertheless, organizational success at the corporate level does not necessarily guarantee consistent operational performance across all regional business units.

At the operational level, production performance at PTPN IV Regional II, Tanjung Garbus Plantation, has shown considerable fluctuations during the 2019–2023 period. Production realization failed to achieve the company's annual target in 2019, 2020, and 2022, while only exceeding the target in 2021 and 2023. Although weather conditions, particularly rainfall intensity, contributed to fluctuations in harvest productivity, production outcomes were also influenced by internal organizational factors, including the effectiveness of human resource management. During peak harvesting periods, employees were frequently required to work overtime, including weekends, to maintain production quality and prevent fruit deterioration. Such working conditions may increase employees' workload while simultaneously reducing their ability to maintain a healthy balance between work responsibilities and personal life, ultimately affecting employee performance.

Among the factors influencing employee performance, work-life balance has received considerable attention in human resource management literature. Greenblatt (2023) defines work-life balance as the ability of individuals to fulfill work responsibilities while simultaneously satisfying personal and family needs. Similarly, Schermerhorn (2018) explains that work-life balance reflects an individual's capacity to balance work demands with family and personal commitments. Ganapathi (2016) further argues that work-life balance represents employees' ability to fulfill both occupational and non-work responsibilities effectively. Employees who successfully maintain this balance generally experience greater psychological well-being, stronger organizational commitment, and higher work motivation. Hutcheson and Peggy (2019) emphasize that work-life balance serves as an important psychological indicator of employee satisfaction and motivation in increasingly competitive organizations.

Empirical studies also support the importance of work-life balance in improving employee outcomes. Panda (2021) found that work-life balance strengthens employee commitment and contributes positively to organizational success by fostering collaboration, well-being, and self-awareness. However, contrasting findings were reported by Purwaningsih (2024), who concluded that work-life balance did not significantly influence employee performance among police officers and civil servants in the South Kalimantan Regional Police. These inconsistent findings suggest that the influence of work-life balance may vary across organizational contexts, indicating the need for further investigation in plantation companies undergoing organizational transformation.

Another important determinant of employee performance is workload. Fransiska and Tupti (2020) define workload as the quantity of work activities assigned to employees within a specific period, where excessive workloads may generate stress and reduce performance. Likewise, Vanchapo (2020) describes workload as the amount of work that must be completed within a predetermined timeframe. Schultz (2016) further explains that workload occurs when employees are required to perform excessive or highly complex tasks within limited available time. An excessive workload may increase physical and psychological fatigue, reduce work quality, and ultimately lower employee productivity. Conversely, workloads that are too low may also create boredom and reduce employee engagement. Therefore, organizations must carefully manage workload distribution to ensure optimal employee performance.

Besides work-life balance and workload, compensation also represents an important organizational mechanism for motivating employees and improving performance. Dessler (2018) defines compensation as all forms of financial and non-financial rewards provided by organizations in exchange for employees' contributions. Similarly, Mondy (2008) explains that compensation encompasses all

rewards received by employees for services rendered to the organization. Appropriate compensation not only improves employee motivation but also enhances organizational commitment and retention. However, despite the corporate restructuring under PalmCo, compensation disparities remain evident within PTPN IV Regional II, where management continues efforts to gradually reduce compensation gaps among employees.

Previous empirical studies have reported inconsistent findings regarding the influence of compensation on employee performance. Fulmer et al. (2023) concluded that compensation positively and significantly improves employee performance, while Kadir et al. (2019) also found a significant relationship between compensation and work performance. In contrast, Mardika (2023) reported that compensation had a negative and insignificant effect on employee performance, suggesting that other motivational factors beyond monetary rewards may play a more important role in determining employee productivity.

Considering the fluctuations in production performance at PTPN IV Regional II and the inconsistent findings reported in previous studies, this research seeks to examine the influence of work-life balance, workload, and compensation on employee performance. The findings are expected to contribute to the development of human resource management literature while providing practical recommendations for improving employee performance and organizational productivity in Indonesia's plantation industry

RESEARCH METHOD

Research Method

This study employed an associative quantitative research design to examine the relationships between work-life balance, workload, compensation, and employee performance. According to Sugiyono (2016), associative research aims to identify and analyze the relationships or causal influences among two or more variables. The research was conducted at PT Perkebunan Nusantara IV KSO Regional II, Tanjung Garbus Plantation, North Sumatra Province.

Population and Sample

The population of this study consisted of 287 employees of PT Perkebunan Nusantara IV KSO Regional II, Tanjung Garbus Plantation. The sample was selected using a probability sampling technique, specifically proportional random sampling, which provides every member of the population with an equal opportunity to be selected as a respondent (Sugiyono, 2018). The sample size was determined using the Slovin formula with a margin of error of 5%, as follows:

$$[n = \frac{N}{1 + N(e)^2}]$$

$$[n = \frac{287}{1 + 287(0.05)^2} = 167]$$

Accordingly, the final sample consisted of 167 respondents.

Data Collection

Primary data were collected using a structured questionnaire, which was considered an effective and efficient instrument for gathering research data. The questionnaire was distributed electronically through Google Forms to employees who met the predetermined sampling criteria. To ensure the accuracy, completeness, and consistency of the responses, the data collection process was conducted under the supervision of the researcher. All questionnaire items were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

RESEARCH FINDINGS

Reliability Validity Test

The results of the validity test, it can be seen that all items are valid because they have a significance value below 0.05 and the calculated r value is greater than the table r value, which is 0.1698. The results

of the reliability test show that all variables have an Alpha Cronbach value above 0.6, thus all variable items are reliable.

Classical Assumption Test

Classical assumption tests are used to determine the accuracy of the data used in the research. The classical assumption tests used include normality tests, multicollinearity tests, and heteroscedasticity tests. The explanation is as follows:

Table 1. Classical Assumption Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		167
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	4.08552636
Most Extreme Differences	Absolute	.114
	Positive	.073
	Negative	-.114
Test Statistic		.114
Asymp. Sig. (2-tailed)		.200c

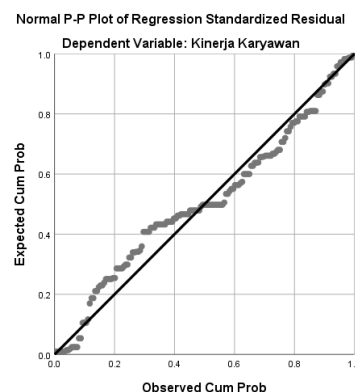
a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: SPSS test results version 25 (2025)

Based on the results in Table 1. above, it shows that the significance value is greater than 0.05, which is 0.200. This means that the residual data is distributed normally. This can also be explained by the results of graph analysis, namely the Normal Probability plot as follows:



Picture 1. Regression Curve

Multicollinearity Test

Table 2. Multicollinearity Test

Coefficients^a

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	12.096	3.779		3.201	.002		
	Work Life Balance	.370	.090	.300	4.120	.000	.873	1.146
	Workload	.468	.114	.300	4.120	.000	.873	1.146

a. Dependent Variable: Employee Performance

Source: SPSS test results version 25 (2025)

Based on the results of the multicollinearity test in table 2, it can be known that the tolerance value is $0.873 > 0.10$ and the VIF value is $1.146 < 10.00$. So it can be concluded that there is no multicollinearity.

Multiple Linear Regression Test

The multiple linear regression test aims to test the Effect of Work-life Balance (X1) and Workload (X2) on Employee Performance (Y). The results of the multiple linear regression equation to see the Effect of Work-life Balance (X1) and Workload (X2) on Employee Performance (Y) are shown by the results of the regression calculation as shown in table 3, below:

Table 3. Linear Regression Test

Coefficients^a

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	12.096	3.779		3.201	.002		
	Work Life Balance	.370	.090	.300	4.120	.000	.873	1.146
	Workload	.468	.114	.300	4.120	.000	.873	1.146

a. Dependent Variable: Employee Performance

Source: SPSS test results version 25 (2025)

Test T

Table 4. Test T

Coefficients^a

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.096	3.779		3.201	.002
	Work Life Balance	.370	.090	.300	4.120	.000
	Workload	.468	.114	.300	4.120	.000

a. Dependent Variable: Employee Performance

Source: SPSS test results version 25 (2025)

Based on the results of partial tests in table 4. It can be explained as follows:

The Effect of Work-life Balance on Employee Performance:

There is an influence of *Work-life Balance* on Employee Performance. The test results of the IBM SPSS Version 25 program in the table above show that the t_{cal} value $> t_{table}$ for the *Work-life Balance* variable is $4.120 > 1.654$ and the significance value of $< \alpha$ is $0.000 < 0.05$, then it can be concluded that there is an influence of the *Work-life Balance* variable (X1) on the Employee Performance variable (Y)

Effect of Workload on Employee Performance:

There is an effect of Workload on Employee Performance. The test results of the IBM SPSS Version 25 program in the table above show that the t_{count} value $> t_{table}$ for the Workload variable is $4.120 > 1.654$ and the significance value of $< \alpha$ is $0.000 < 0.05$, it can be concluded that there is an influence of the Workload variable (X2) on the Employee Performance variable (Y).

Test F

Table 5. Test F

ANOVA^a

Type		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	891.650	2	445.825	26.388	.000b
	Residual	2770.793	164	16.895		
	Total	3662.443	166			

- a. Dependent Variable: Employee Performance
- b. Predictors: (Constant), Workload, Work Life Balance

Source: SPSS test results version 25 (2025)

Based on the results of the F (Simultaneous) test in table 5. above, it can be explained that: There is an influence of *work-life balance* and workload on employee performance. The test results of the IBM SPSS Version 25 program in the table above show that the $f_{\text{calculated}} > f_{\text{table}}$ is $26.388 > 3.28$ and the significance value is $0.000 < 0.05$, so it can be concluded that the *work-life balance* and workload variables simultaneously affect the employee performance variables.

Coefficient of Determination Test

Table 6. Determination Coefficient Test Results

Model Summary^b

Type	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.793a	.643	.534	4.11036	1.824

a. Predictors: (Constant), Workload, Work Life Balance

b. Dependent Variable: Employee Performance

Source: SPSS test results version 25 (2025)

Based on the results in table 6. Above the magnitude of the determination coefficient value is obtained from the R Square value of 0.643. This means that the independent work-life balance and workload variables contribute 64.3% to the dependent variables of employee performance while the remaining 35.7% is influenced by other variables that are not included in the research model.

DISCUSSION

The Effect of Work-life Balance on Employee Performance, There is an effect of *Work-life Balance* on Employee Performance. The test results of the IBM SPSS Version 25 program in the table above show that the $t_{\text{count}} > t_{\text{table}}$ for the *Work-life Balance* variable is $4.120 > 1.654$ and the significance value of $< \alpha$ is $0.000 < 0.05$, it can be concluded that there is an influence of the *Work-life Balance* variable (X1) on the Employee Performance variable (Y) The results of this study are in line with the results of the research from Lngsih, et.al (2022) and Setyanti, et.al (2022) who stated that work-life balance has a positive effect on employee performance.

The Effect of Workload on Employee Performance, There is an effect of Workload on Employee Performance. The test results of the IBM SPSS Version 25 program in the table above show that the $t_{\text{count}} > t_{\text{table}}$ for the Workload variable is $4.120 > 1.654$ and the significance value of $< \alpha$ is $0.000 < 0.05$, it can be concluded that there is an influence of the Workload variable (X2) on the Employee Performance variable (Y) Fransiska & Tupti, (2020) conducted a study on the influence of workload on employee performance both partially and simultaneously at the Population Office and Civil Registration of Labuhan Batu Utara Regency. The results of the study show that workload has a

negative effect on employee performance, meaning that an increase in workload will be followed by a decrease in employee performance. A high workload can improve employee performance, but excessive workload can cause employee performance to decrease.

In Test F, there is an effect of *work-life balance* and workload on employee performance. The test results of the IBM SPSS Version 25 program in the table above show that the $f_{\text{calculated}} > f_{\text{table}}$ is $26.388 > 3.28$ and the significance value is $0.000 < 0.05$, so it can be concluded that the *work-life balance* and workload variables simultaneously affect the employee performance variables.

CONCLUSION

Based on the results of the analysis and discussion, it can be concluded that workload has a positive effect on the performance of employees at PT Perkebunan Nusantara IV KSO Regional II, Tanjung Garbus Plantation, indicating that employees are able to maintain or even improve their performance when managing higher levels of workload effectively. In addition, work-life balance also has a positive effect on employee performance, suggesting that employees who are able to maintain a healthy balance between their work responsibilities and personal life tend to demonstrate better performance. These findings highlight the importance of effective workload management and the promotion of work-life balance as strategic approaches to enhancing employee performance within the organization.

REFERENCE

- Alqudah, I. H. A., Carballo-Penela, A., & Ruzo-Sanmartín, E. (2022). High-performance human resource management practices and readiness for change: An integrative model including affective commitment, employees' performance, and the moderating role of hierarchy culture. *European Research on Management and Business Economics*, 28, 100177.
- Alzadjali, B., & Ahmad, S. Z. (2024). The impacts of a high commitment work system on well-being: The mediating role of organizational support and employee work-life balance. *Industrial and Commercial Training*, 56(1).
- Andriana, Riyanto, D., & Darmawan, D. (2019). Workload and motivation on employee performance analyzed by information technology. *IOP Conference Series: Materials Science and Engineering*, 662, 022120.
- Ariani, D. (2023). Relationship model of compensation, motivation, job satisfaction and employee performance. *International Review of Management and Marketing*, 13(4), 9–13.
- Bahrami, P., Nosratabadi, S., Palouzian, K., & Hegedüs, S. (2023). Modeling the impact of mentoring on women's work-life balance: A grounded theory approach. *Administrative Sciences*, 13(6).
- Badriyah, M. (2015). *Human resource management*. Pustaka Setia.
- Dessler, G. (2018). *Human resource management* (16th ed.). Pearson.
- Dube, N., & Ndofirepi, T. M. (2024). Academic staff commitment in the face of a role imbalance between work and personal life: Can job satisfaction help? *European Journal of Management Studies*, 29(1), 31–50.
- Fisher, G. G., Bulger, C. A., & Smith, C. S. (2009). Beyond work and family: A measure of work/nonwork interference and enhancement. *Journal of Occupational Health Psychology*.
- Fulmer, I. S., et al. (2023). [Complete publication details should be added].
- Ganapathi, I. M. D. (2016). [Complete publication details should be added].
- Ghozali, I., & Aprilia, K. (2023). *Partial least squares: Concepts, techniques and applications using the SmartPLS 4.0 program for empirical research*. Diponegoro University Press.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior*.
- Hammond, M., et al. (2022). How quality of work-life influences employee job satisfaction in a gas processing plant in Ghana. *Research Square*.
- Hasibuan, M. S. P. (2013). *Human resource management* (Rev. ed.). Bumi Aksara.
- Hirschi, A., & Spurk, D. (2021). Ambitious employees: Why and when ambition relates to performance and organizational commitment. *Journal of Vocational Behavior*, 127, 103576.

- Kadir, A. A., et al. (2019). The effect of compensation and benefits towards employee performance. *ResearchGate*.
- Mangkunegara, A. P. (2013). *Corporate human resource management*. PT Remaja Rosdakarya.
- Mehak, S. S., & Batcha, H. M. (2023). Exploring the antecedents of motivation on employee performance in the leather industry in South India. *Interdisciplinary Journal of Management Studies*.
- Panda, A., & Sahoo, C. K. (2021). Work-life balance, retention of professionals and psychological empowerment: An empirical validation. *European Journal of Management Studies*.
- Ramly, A. T. (2021). *Human resource performance management*. Bintang Pustaka Madani.
- Rivai, V., & Sagala, E. J. (2013). *Human resource management for the company*. Rajawali Pers.
- Robbins, S. P., & Judge, T. A. (2008). *Organizational behavior* (12th ed.). Salemba Empat.
- Schabracq, M. J., Winnubst, J. A. M., & Cooper, C. L. (2003). *The handbook of work and health psychology*. John Wiley & Sons.
- Scientific Reports. (2024). *Scientific Reports*, 14, 5924.
- Sharma, S. T., Bentley, T., & Yuan, Y. (2020). Psychosocial work environment, work engagement, and employee commitment: A moderated mediation model. *International Journal of Hospitality Management*, 88, 102415.
- Shepiani, et al. (2022). *[Complete publication details should be added]*.
- Siagian, S. P. (2010). *Human resource management*. Bumi Aksara.
- Sixdio, et al. (2024). *[Complete publication details should be added]*.
- Sofyandi, H. (2008). *Human resource management*. Graha Ilmu.
- Sugiyono. (2016). *Quantitative, qualitative, and R&D research methods*. Alfabeta.
- Syed, J. (2015). *Managing diversity and inclusion: An international perspective* (pp. 291–314). Sage.
- Thilagavathy, S., & Geetha, S. N. (2021). Work-life balance: A systematic review. *Vilakshan - XIMB Journal of Management*.
- Vanchapo, A. R. (2020). *[Complete publication details should be added]*.
- Wardani, et al. (2021). *[Complete publication details should be added]*.
- Widagdo, A. K., Rahmawati, Djuminah, Arifah, S., Goestjahjanti, F. S., & Kiswanto. (2023). The impact of ownership characteristics and gender on earnings management: Indonesian companies. *Journal of Risk and Financial Management*, 16, 17.