The Impact of Job Stress and Workload on Employee Performance: Exploring Work-Life Balance as a Mediating Factor

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Abstract:

This research investigates the influence of work stress, workload, and work-life balance on employee performance at PT. Trimitra Jaya Investama. Utilizing a quantitative descriptive approach, data were collected via questionnaires from 99 employees, and the analysis was conducted using Partial Least Square (PLS) methodology. The findings reveal that workload has a significant positive effect on employee performance, supporting existing theories that correlate manageable tasks with improved output. In contrast, work stress was found to have no significant impact on performance, either directly or indirectly through work-life balance. This suggests that employees may perceive certain levels of stress as normal, particularly among Generation Z workers, which may enhance their performance by motivating them to tackle challenges. Furthermore, work-life balance emerged as a crucial factor positively influencing performance. The study highlights the need for organizations to foster a supportive work environment that prioritizes workload management and work-life balance to optimize employee effectiveness.

Keywords: *Work Stress, Workload, Performance and Work Life Balance*

1. Introduction

Human resource management is not something that arises suddenly; it has been practiced for a long time, as people have organized themselves in various domains like government, economy, and society. In profit-oriented companies, human resources play a critical role in determining the success or failure of a business unit. The performance of employees is essential, and organizations continuously strive to improve it to achieve their goals. However, a decline in employee performance is a common issue influenced by internal and external factors, which can lead to reduced product quality and competitiveness. As organizations grow and adopt advanced technologies, employees face increasing stress and heavier workloads, which negatively impact their performance. Additionally, the lack of a proper work-life balance can further decrease productivity. Therefore, maintaining a good work-life balance is crucial in preserving employee performance.

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This study was conducted among employees of PT. Trimitra Jaya Investama, a holding company established in 2013 in Pekanbaru. The employees face a heavy workload, as they are responsible for supporting multiple subsidiaries under the holding company. On average, each employee handles 3 to 5 companies, including palm oil processing firms such as PT. Anugrah Tanjung Medan, PT. Cipta Anugerah Sejati, and others, as well as trading and transportation companies. Ideally, each employee would be assigned to one company, but in reality, they manage several simultaneously, leading to high levels of job stress and workload, as reflected in the high employee turnover rate. Most of the employees who resigned had work constraints related to high workload and stress, as follows:

Table 1. Employee Turnover Data of PT Trimitra Jaya Investama (2019-2023)

Year	Initial Employee Count	New Hires	Departures	End of Year Employee Count	Turnover Rate
2019	93	15	11	97	11.58%
2020	97	20	28	89	30.11%
2021	89	26	21	94	22.95%
2022	94	27	26	95	27.51%
2023	95	35	31	99	31.96%

Source: PT Trimitra Jaya Investama

The employee turnover data indicates that high workload and job stress at PT Trimitra Jaya Investama have led to dissatisfaction, as reflected by the steadily increasing turnover rate, peaking in 2023. The heavy workload, with employees handling multiple companies simultaneously, has resulted in decreased employee performance. This has led to issues such as delayed reports and analytical errors. Additionally, frequent overtime to meet work demands has disrupted employees' work-life balance, further contributing to reduced job satisfaction and performance.

Table 2. Key Performance Indicator (KPI) Results of PT Trimitra Jaya Investama Employees (2019-2023)

Division	Key Performance Indicator	Target (%)	Year				
			2019	2020	2021	2022	2023
Finance	Operational Cost Ratio	90	85	95	80	80	78
	Average Cost of Funds	90	90	98	75	75	80
	Average Cash Availability	90	95	95	85	85	75
	Number of Finance Audit Findings	90	95	98	85	85	78
	Timeliness of Financial Reports	90	95	98	80	76	79
Operations	Sales Growth	90	90	90	80	78	80
	Sales Target	90	98	80	80	78	75
	Transaction Closing	90	95	98	85	79	76
	Distribution Costs	90	95	98	85	80	78
	Sales Cycle Duration	90	96	95	84	76	78
HRGA	Number of Recruits	90	96	95	85	78	79
	Average Probation Employee Score	90	94	95	86	78	80
	Average Employee Training	90	97	98	86	79	80
	ROI of Training	90	97	95	85	80	75
	Individual Development Plan Execution	90	98	98	78	78	75

Supply Chain	Sales Growth	**90**	98	98	79	79	70
	Sales Target	**90**	98	98	80	80	70
	Transaction Closing	**90**	95	98	75	75	75
	Distribution Costs	**90**	95	98	76	76	65
	Delivery Duration	**90**	95	90	78	78	75
	Average	**90**	**94,85**	**95,40**	**81,35**	**78,65**	**76,05**

Source: PT Trimitra Jaya Investama

The Key Performance Indicator (KPI) data reveals significant issues in employee performance across various divisions at PT Trimitra Jaya Investama. In the finance division, key metrics such as operational cost ratio, average cost of funds, cash availability, audit findings, and timely financial reporting have consistently declined, indicating poor work quality. Similarly, the operational and supply chain divisions show a decrease in sales growth, sales targets, and transaction closing deadlines, reflecting declining work quantity. The HRGA division, responsible for personnel management, recruitment, training, and development, also exhibits diminished resilience, with recruitment and probation processes suffering. Attitude development, reflected in the implementation of individual development plans, has also declined across the company. Overall, these performance issues suggest a broad decline in employee performance, highlighting a crucial concern for this study.

The aim of this research is to examine the impact of job stress and workload on employee performance at PT Trimitra Jaya Investama, with a specific focus on how work-life balance acts as a mediating factor. By analyzing key performance indicators (KPIs) and employee turnover data, the study seeks to identify the underlying factors contributing to decreased employee performance and high turnover rates. Ultimately, the research aims to provide insights and recommendations for improving employee performance, reducing job stress, and enhancing work-life balance within the company.

2. Theoretical Background

Management is generally associated with activities such as planning, organizing, controlling, staffing, directing, motivating, communicating, and decision-making, all aimed at coordinating a company's resources to produce goods or services efficiently. It is also defined as the process of planning, organizing, leading, and supervising the work of organizational members while utilizing available resources to achieve organizational goals (Wibowo, 2016).

Job Stress

According to Ekawarna (2018), job stress refers to stress related to work, arising from excessive demands and pressures imposed by the company. The higher the level of job stress experienced by employees, the more negatively it affects their performance, hindering both individual and organizational progress. Similarly, Mangkunegara (2017) defines job stress as a condition where employees feel pressured in performing their tasks, leading to emotional instability, excessive anxiety, tension, nervousness,

and other disturbances. If not addressed, job stress can impair an employee's ability to interact effectively with their environment.

Hasibuan (2018) emphasizes that job stress is a tension that disrupts the psychological balance of employees, affecting their thinking, emotions, and overall well-being. Stress is an inevitable part of human life that can occur at any time. Kawiana and Putu (2020) further explain that job stress can destabilize employees' emotions, causing anxiety and nervousness. Handoko (2018) identifies both on-the-job and off-the-job causes of stress, including excessive workloads, time pressures, poor supervision, political instability in the workplace, inadequate performance feedback, and conflicts between personal values and organizational demands.

Workload

According to Munandar and S (2019), workload refers to the tasks assigned to employees that must be completed within a specified time, using their skills and potential. Workload is often operationally defined by factors such as task demands or the efforts required to perform the job. It is a critical aspect that organizations must consider, as workload directly influences employee performance (Sulastri and Onsardi, 2020). Proper workload management ensures that employees are neither overburdened nor underutilized, which is key to maintaining productivity and efficiency.

Workload analysis techniques involve the use of standard staff ratios or guidelines to determine personnel needs. This process helps identify both the number and types of employees required to achieve organizational goals (Astianto, 2014). Additionally, Suci R. Mar'ih defines workload as the magnitude of work that needs to be completed, which may include long working hours, high job pressure, or significant responsibilities in the workplace (Koesomowidjojo and Ma'rih, 2017). Understanding and managing workload is essential for ensuring that employees can perform effectively without being overwhelmed by excessive demands.

Work-Life Balance

Beardwell and Thompson argue that work-life balance is about mediating the conflicting demands between company profitability and the concerns of employees under both work and life pressures (Koesomowidjojo and Ma'rih, 2017). According to Dikshit and Acharya (2017), work-life balance refers to a state of equilibrium where the demands of work and personal life are equally met. Zaheer et al. emphasize that work-life balance is something managers cannot overlook, as it is not only beneficial to employees but also crucial in preventing negative outcomes that can arise from poor work-life balance (Zaheer, Islam, and Darakhshan, 2016).

The benefits of achieving work-life balance extend beyond individuals to organizations as well. Programs designed to promote work-life balance, such as eldercare, vacation bonuses, sick leave compensation, and insurance, can improve employee well-being (Snell and Morris, 2019). Additionally, Lussier and Hendon (2019) highlight that work-life balance initiatives, such as flexible working schedules, allow employees to better balance work and family commitments, giving them the freedom to adjust their work hours to accommodate family activities and needs.

Performance

According to Sutrisno (2016), performance refers to the success of an individual in carrying out tasks, measured by the quality, quantity, and timeliness of the work performed. It reflects how well an individual or group within an organization fulfills their responsibilities in accordance with their authority. Performance is influenced by how effectively someone functions and behaves in their role. Human resources are essential to the sustainability of any organization (Khaeruman, 2021). Essentially, performance is the result obtained by individuals when they meet the job standards and criteria, which is also significantly impacted by motivation and individual capabilities (Nuraini, 2018).

Veithzal Rivai (2019) highlights two key reasons why companies conduct performance appraisals: first, managers require an objective evaluation of employees' past performance to make informed decisions regarding future human resource management. Second, managers need a tool to help employees improve their performance, plan their tasks, develop their skills for career growth, and strengthen the relationship between managers and their employees. To achieve optimal performance, employees must possess the readiness and skills necessary to perform their tasks efficiently (Kawiana and Putu, 2020).

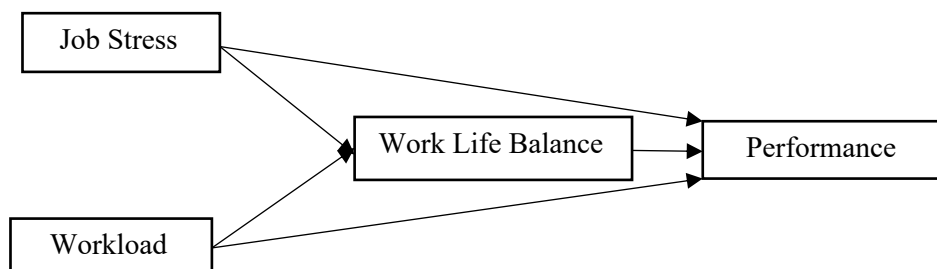The following is the framework of this research:

Figure 1: Framework

3. Methodology

This research is a quantitative descriptive study aiming to determine the extent of the impact of work stress and workload on employee performance through work-life

balance at PT. Trimitra Jaya Investama. Primary data was collected via questionnaires distributed to respondents, with the analysis conducted using Partial Least Squares (SEM-PLS). The study population consisted of 99 employees, and the sampling method used was purposive sampling, ensuring that each member of the population had an equal chance of selection. The research variables included performance, work stress, workload, and work-life balance, each measured through relevant dimensions such as quality of work, task demands, workload targets, and time balance, all using a Likert scale. The study's focus is on understanding the interplay between these factors and their effect on employee performance.

4. Empirical Findings/Result

Instrument Test
Validity test
This research employs the Structural Equation Model (SEM) approach using Partial Least Square (PLS), a variance-based structural equation modeling technique, to test the hypotheses. SEM allows for the simultaneous assessment of complex relationships that are difficult to measure (Gudono 2017). Using Smart PLS 3.0 software, the outer model analysis evaluates the reliability and validity of latent constructs through convergent and discriminant validity tests (Hair et al. 2019). Convergent validity is achieved with a loading factor threshold of 0.60 (Sugiyono 2018), and all constructs show loadings above this threshold, confirming their validity. Discriminant validity, which ensures that each construct is distinct from others, is confirmed by cross-loading values indicating stronger correlations between constructs and their respective indicators compared to other constructs (Ghozali et al. 2015). This demonstrates that the model constructs are valid and reliable for further analysis.

Reliability Test
The instrument's reliability in this study is demonstrated through the construct reliability values, as indicated by Cronbach's alpha, rho_A, and composite reliability. According to Table 5, all constructs show Cronbach's alpha values greater than 0.75, meeting the minimum threshold for reliability, with rho_A values above 0.70, confirming that the latent variables meet the set criteria. Additionally, composite reliability values exceed 0.70, further affirming that the questionnaire used is highly reliable. These results indicate strong internal consistency and reliable correlation between the items in each construct, confirming the overall reliability of the variables used (Jogiyanto 2017).

Table 1. Reliability Test Results

Variable	Reliability Value	Standard	Information
Workload	0,937		Reliable
Performance	0,954	0,6	Reliable
Job Stress	0,949		Reliable
Work Life Balance	0,954		Reliable

Source: Data processing from SmartPLS 3.0 (2024)
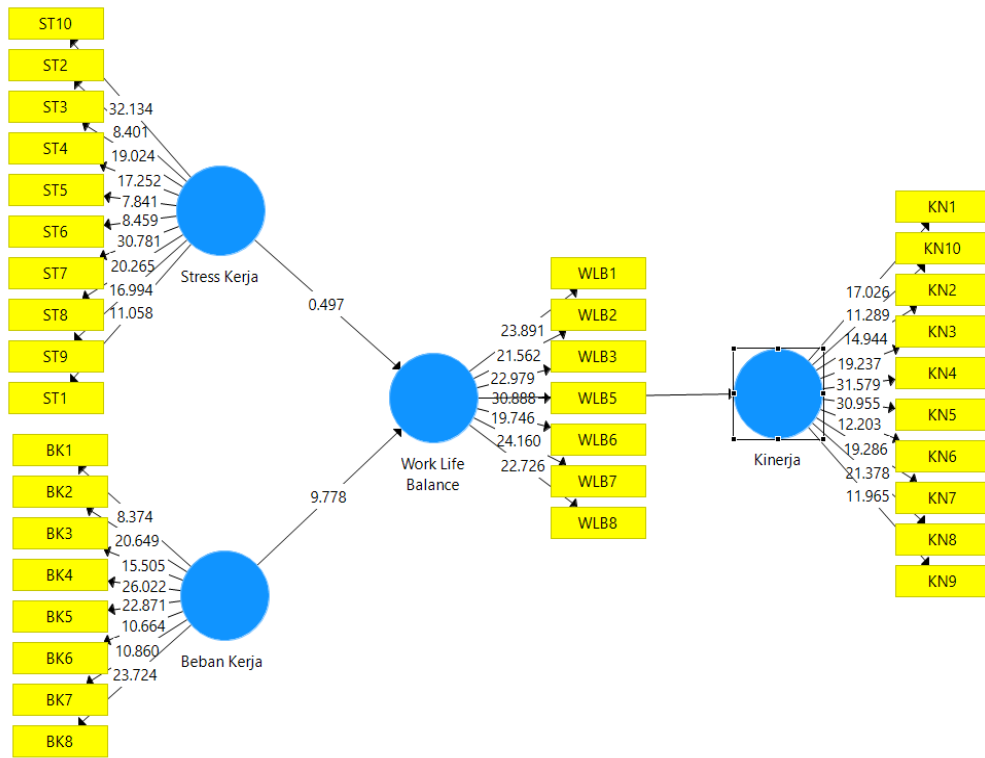
Hypothesis Testing Results

Figure 2. Bootsrapping

Direct Effect

Table 3. Direct effect

Hypothesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Workload -> Performance	0,829	0,820	0,085	9,722	0,000
Workload -> Work Life Balance	0,872	0,861	0,089	9,778	0,000
Job Stress -> Performance	0,043	0,057	0,087	0,496	0,311
Job Stress -> Work Life Balance	0,046	0,059	0,092	0,497	0,310
Work Life Balance -> Performance	0,950	0,952	0,010	96,057	0,000

The results of the hypothesis testing (Direct Effect) reveal several significant findings regarding the relationships between workload, stress, work-life balance, and performance. Firstly, the path from Workload to Performance shows a strong positive effect with an original sample value of 0.829 and a highly significant p-value of 0.000, indicating that an increase in workload is associated with improved performance among employees. Similarly, the path from Workload to Work-Life Balance also demonstrates a significant effect (0.872) with a p-value of 0.000, suggesting that higher workloads are linked to better work-life balance perceptions.

In contrast, the relationships involving stress reveal non-significant results. The paths from Stress to Performance (0.043) and Stress to Work-Life Balance (0.046) both

exhibit weak effects, with p-values of 0.311, indicating that stress does not have a direct impact on performance or work-life balance in this study's context. Lastly, the relationship from Work-Life Balance to Performance is particularly noteworthy, as it presents a very strong positive effect (0.950) with a p-value of 0.000, emphasizing that a well-maintained work-life balance is crucial for enhancing employee performance. Overall, these findings underscore the importance of workload management and work-life balance in influencing employee performance, while stress appears to have a lesser direct impact.

Indirect Effect

Table 2. Indirect Effect

Hypothesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Workload -> Work Life Balance -> Performance	0,829	0,820	0,085	9,722	0,000
Job Stress -> Work Life Balance -> Performance	0,043	0,057	0,087	0,496	0,311

The results of the indirect effect analysis provide insightful findings regarding the mediating role of work-life balance in the relationships between workload, job stress, and performance. The first hypothesis, Workload → Work-Life Balance → Performance, demonstrates a strong positive indirect effect with an original sample value of 0.829 and a statistically significant p-value of 0.000. This indicates that workload positively influences performance through the enhancement of work-life balance, suggesting that effective management of workload can lead to better employee performance by improving their perception of work-life balance.

Conversely, the second hypothesis, Job Stress → Work-Life Balance → Performance, presents an original sample value of 0.043, accompanied by a p-value of 0.311, indicating a lack of statistical significance. This result implies that job stress does not have a meaningful indirect effect on performance through work-life balance in this study's context. Therefore, while workload appears to enhance performance indirectly by fostering better work-life balance, job stress does not significantly impact performance through this mediation pathway. Overall, these findings highlight the importance of workload management in improving employee performance while also suggesting that reducing job stress alone may not significantly enhance performance outcomes through work-life balance.

5. Discussion

Based on the research findings, several key implications emerge regarding the influence of work stress, workload, and work-life balance on employee performance at PT. Trimitra Jaya Investama. First, the study indicates that work stress does not have a significant impact on employee performance. This finding contradicts the theory proposed by Ekawarna, which posits that work stress arises from excessive demands and pressure from organizational tasks, adversely affecting employee performance and impeding organizational goals. However, the researcher argues that

not all stress is negative; light stress may motivate employees to perform better, especially among the predominantly Generation Z workforce at the company, who may thrive under certain pressures (Hermawati and Syofian 2021).

Second, the research demonstrates that workload has a significant positive effect on employee performance, aligning with Munandar's definition that workload comprises tasks assigned to employees to be completed within specific timeframes utilizing their skills and potential. This relationship suggests that a manageable workload can enhance performance levels, supporting findings from previous studies conducted by Bahar and Prasetio (2021), which also highlighted the positive influence of workload on performance.

Third, the findings indicate a significant positive impact of work-life balance on performance, consistent with theories that emphasize the benefits of achieving a balance between work and personal life. Such balance not only contributes to individual well-being but also enhances organizational performance through initiatives like healthcare support and vacation bonuses. This aligns with the work of Lukmiati, Samsudin, and Jhoansyah (2020), who also found that work-life balance significantly influences employee performance.

Fourth, the research shows that work stress does not significantly affect employee performance through work-life balance, contradicting Mangkunegara's assertion that work stress can lead to emotional instability and hinder interactions with the environment. Despite experiencing high levels of stress, employees perceived it as normal and did not believe it negatively impacted their performance. This finding highlights a potential resilience among employees, particularly within Generation Z, who may adapt to stressors while maintaining their performance, contrary to the claims of Efendi and Suwarsi (2022).

Finally, the study reveals that workload significantly influences employee performance through work-life balance, supporting theories that analyze workload in terms of employee numbers and types necessary for achieving organizational goals. The operational definition of workload reflects the demands and efforts required to complete tasks, reinforcing the conclusion drawn by Wirawan (2020) that workload positively impacts performance through the mediation of work-life balance. Overall, these findings emphasize the need for organizations to focus on managing workloads and enhancing work-life balance to improve employee performance effectively.

6. Conclusions

The conclusions drawn from this research indicate that while workload and work-life balance significantly influence employee performance at PT. Trimitra Jaya Investama, work stress does not exhibit a substantial effect on performance, either directly or indirectly through work-life balance. Specifically, the study finds that

increased workload positively correlates with enhanced performance, aligning with existing theories that recognize the importance of manageable tasks in optimizing employee output. Conversely, the perception of work stress among employees appears to be normalized, suggesting that certain levels of stress may not detrimentally affect performance, particularly within a workforce characterized by Generation Z. These findings underscore the importance of fostering a supportive work environment that emphasizes work-life balance and workload management to enhance overall employee effectiveness.

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