Jurnal Manajemen Kewirausahaan dan Teknologi
Volume. 2 Nomor. 4 Desember 2025
E-ISSN .: 3047-8979; P-ISSN .: 3047-3020, Hal 244-265
DOI: https://doi.org/10.61132/jumaket.v2i4.1086
Tersedia: https://ejournal.arimbi.or.id/index.php/JUMAKET

The Influence of Workload, Job Stress, and Work Spirit on Employee Performance at PT Victory International Futures Surabaya

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***Abstract**: This study aims to examine the effects of workload, job stress, and work spirit on employee performance at PT Victory International Futures Surabaya, a financial services company operating in the highly demanding futures trading industry. Employing a quantitative descriptive–correlational approach, data were collected using a Likert-scale questionnaire and analyzed through multiple linear regression using JASP and Partial Least Squares–Structural Equation Modeling (PLS-SEM) using WarpPLS, which is suitable for addressing multicollinearity issues and relatively small sample sizes (n = 37). The findings reveal that workload and job stress have significant negative effects on employee performance, whereas work spirit has a significant positive effect and emerges as the most dominant predictor. These results reinforce the Job Demands–Resources (JD–R) theory, which posits that job demands such as workload and stress can reduce performance when not balanced with adequate psychological resources like work spirit. Practically, the study recommends that management optimize workload distribution, implement stress management strategies, and strengthen employee motivation to improve performance sustainably. The study is limited by its small sample size and single-company focus, suggesting that future research should expand the organizational context and incorporate additional variables such as job satisfaction or organizational commitment.*

***Keywords**: Employee Performance; Job Demands Resources; Job Stress; Work Spirit; Workload.*

1. INTRODUCTION

In the financial services industry engaged in futures trading, such as PT Victory International Futures Surabaya, employee performance is one of the key determinants of organizational success. Employees are required to achieve transaction targets while responding quickly and accurately to global market dynamics. In this study, performance is understood as the work outcomes that reflect the quality, quantity, timeliness, effectiveness, independence, and commitment of employees to their assigned tass (Gomes, 2003). Intense competition, strict regulations, and the volatility of financial instruments make human resource management in this sector increasingly strategic (Soelton et al., 2021).

Previous studies have widely employed quantitative correlational approaches to analyze the factors influencing employee performance, particularly workload, job stress, and psychological variables such as work spirit. This approach enables an objective assessment of relationships among variables using numerical data and statistical techniques, including the use of multiple linear regression methods and multivariate analyses. Multiple linear regression is commonly applied to explore both the simultaneous and individual impacts of workload and job stress on employee performance (Ghozali, 2013). Its advantages lie in the ease of interpreting coefficients and testing the significance of each independent variable. However,

Naskah Masuk: 17 Oktober 2025; Revisi: 21 November 2025; Diterima: 15 Desember 2025; Terbit: 17 Desember 2025

multiple linear regression has limitations when faced with multicollinearity issues, relatively small sample sizes, or when variables need to be treated as latent constructs. Under such conditions, alternative methods such as Partial Least Squares Structural Equation Modeling (PLS-SEM) become relevant, as they can handle models with numerous indicators, limited sample sizes, and data that may not follow a normal distribution (Hair et al., 2020). The development of statistical software such as JASP and WarpPLS further facilitates researchers in conducting multiple linear regression and PLS-SEM analyses, including testing validity, reliability, and overall model fit comprehensively.

Conceptually, workload refers to the physical and psychological demands placed on employees that must be completed within a designated period, which, when excessive, can cause fatigue, lower motivation, and reduce productivity (Tarwaka, 2015). An unbalanced workload has been shown to hinder efficiency and performance, either directly or indirectly through mediating variables such as job stress (Tjiabrata et al., 2017). Job stress itself is a psychological tension that arises when there is a disparity between job demands and an individual's ability to fulfill them (Robbins & Judge, 2015). In the financial services industry, job stress tends to intensify due to strict performance targets, unstable market conditions, and the pressure to make fast, high-risk decisions factors that can lower performance if not managed effectively (Badrianto & Ekhsan, 2021). On the other hand, work spirit represents a form of positive energy that motivates employees to work enthusiastically, persistently, and with strong commitment (Mangkunegara, 2015). Empirical evidence consistently highlights the crucial role of work spirit in enhancing employee performance across sectors, and within the Job Demands–Resources (JD-R) framework, it is regarded as a psychological resource that enables employees to cope effectively with high job demands (Schaufeli & Bakker, 2020).

However, the majority of studies investigating the effects of workload, job stress, and work spirit on employee performance have primarily concentrated on the manufacturing, hospitality, and public sectors (Tjiabrata et al., 2017). Research that specifically explores these interrelationships within futures brokerage firms remains scarce, despite the fact that this industry possesses unique characteristics such as reliance on global market fluctuations, the necessity of achieving real-time transaction targets, and exposure to substantial derivative risks (Oberlechner & Nimgade, 2005). This gap in the literature thus forms the basis for the present study conducted at PT Victory International Futures Surabaya.

Building upon this background, the research problems are formulated as follows: (1) Does workload have an impact on the performance of employees at PT Victory International Futures Surabaya? (2) Does job stress affect employee performance at PT Victory International

Futures Surabaya? (3) Does work spirit influence employee performance at PT Victory International Futures Surabaya? and (4) Do workload, job stress, and work spirit collectively influence employee performance at PT Victory International Futures Surabaya? To answer these questions, this study adopts a quantitative research design utilizing multiple linear regression and PLS-SEM analyses, processed through JASP and WarpPLS software. This methodological approach allows for a more thorough examination of the direct effects of the independent variables while also addressing challenges associated with multicollinearity and small sample sizes (Ghozali, 2018).

This study provides three primary contributions. First, from a theoretical perspective, it enhances the body of knowledge in human resource management by presenting empirical evidence on how workload, job stress, and work spirit affect employee performance within the high-risk futures trading sector (Soelton et al., 2021). Second, from a methodological standpoint, it underscores the importance of integrating multiple linear regression and PLS-SEM analyses supported by JASP and WarpPLS software to effectively analyze complex models involving multiple interrelated variables and small sample sizes (Hair et al., 2020). Third, from a practical viewpoint, the results of this research are expected to assist PT Victory International Futures Surabaya's management in formulating strategies that maintain workload balance, mitigate job stress, and enhance work spirit as sustainable efforts to improve overall employee performance (Badrianto & Ekhsan, 2021).

The rest of this paper is organized as follows: the subsequent section provides a literature review discussing the key concepts of workload, job stress, work spirit, and employee performance, along with an overview of relevant previous studies. The methodology section outlines the research framework, sampling methods, measurement tools, and data analysis techniques employed in the study (Creswell & Creswell, 2021). The results section presents the analytical findings, followed by a discussion that interprets these results within theoretical and empirical contexts. Finally, the paper concludes with a summary of implications, conclusions, and suggestions for future research directions.

2. LITERATURE REVIEW

Workload

Workload is generally understood as the accumulation of physical and mental demands that employees must fulfill within a certain period. Tarwaka (2015) defines workload as a set of tasks that require energy, attention, and concentration to be completed effectively. When the level of workload exceeds employees' capacity, it may lead to fatigue, decreased motivation,

and lower productivity. Conversely, workload that is managed proportionally and aligned with employees' abilities can enhance performance outcomes (Nugroho, 2021).

A number of empirical studies highlight the crucial role of effective workload management in organizational performance. Tjiabrata et al. (2017) reveal that workload has a significant effect on employee performance, both directly and through its interaction with the work environment. Likewise, Nugroho (2021) reports that excessive workload can diminish employee performance, whereas a well-balanced workload enhances task efficiency and supports the attainment of organizational objectives. In high-intensity service sectors such as financial and futures trading firms, workload extends beyond quantitative aspects (the number of tasks) to include qualitative dimensions, such as task complexity, time constraints, and the precision required in decision-making processes.

In the context of human resource management, workload is closely related to organizational design, job distribution, and the allocation of responsibilities (Gomes, 2003). Poorly managed workload may lead to role overload and role ambiguity, ultimately diminishing employees' ability to maintain consistent performance. This study adopts the perspective that workload is a job demand that can either facilitate or hinder performance depending on its intensity and alignment with employees' capacities (Tarwaka, 2015).

Job Stress

Job stress is a psychological condition characterized by tension, anxiety, and discomfort arising from an imbalance between job demands and the resources possessed by the individual. Robbins & Judge (2015) state that job stress occurs when employees perceive that they are unable to adequately cope with job pressures and expectations. Lazarus & Folkman (1984) describe stress as the result of a transactional process between individuals and their environment, in which external demands are appraised as exceeding available coping resources.

In the financial and futures trading industries, job stress tends to be high due to strict performance targets, market volatility, and the need to respond quickly to changes. Oberlechner & Nimgade (2005) argue that financial market participants and traders are highly vulnerable to chronic stress, which can affect cognitive functioning, decision-making accuracy, and long-term well-being. If not managed effectively, job stress may reduce concentration, increase errors, and lower job satisfaction, eventually leading to decreased employee performance.

Empirical evidence consistently indicates a negative correlation between job stress and employee performance. Badrianto and Ekhsan (2021) found that job stress exerts a significant adverse impact on performance, emphasizing the importance of implementing structured stress

management programs within organizations. Similarly, Huda and Azar (2020) note that job stress, when compounded by an unfavorable work environment and excessive workload, can lead to diminished productivity. In the context of this study, job stress is conceptualized as a critical job demand that can hinder performance when experienced at high intensity (Oberlechner & Nimgade, 2005).

Work Spirit

Work spirit represents a positive psychological state that drives employees to perform their duties with enthusiasm, determination, and a strong sense of commitment. Herzberg (1996) identifies several motivational elements such as achievement, recognition, and the intrinsic value of the work itself as fundamental factors that foster higher levels of work spirit, ultimately leading to improved performance. Similarly, Mangkunegara (2015) emphasizes that employees who possess strong work spirit are more likely to demonstrate initiative, resilience, and a proactive attitude, often contributing beyond the basic expectations of their roles.

Several empirical studies underscore the crucial influence of work spirit on enhancing employee performance. Yulianti et al. (2024) demonstrate that work spirit exerts a positive and significant impact on employee performance within Indonesian state-owned enterprises. Likewise, Maulida et al. (2025) reveal that work spirit serves as a moderating factor that reinforces the link between work discipline and employee productivity in the financial services industry. Furthermore, Nugroho (2021) observes that employees with strong work spirit are more capable of enduring workload pressures while sustaining stable and high performance levels.

From a human resource management perspective, work spirit can be viewed as a psychological resource that supports employees in coping with job demands. Work spirit is closely related to motivation, work engagement, and organizational commitment (Gomes, 2003). When employees feel that their contributions are valued and receive adequate career development support, their work spirit tends to increase, which in turn enhances performance and reduces turnover intentions.

Employee Performance

Employee performance is defined as the extent to which work outcomes meet expectations in terms of quantity, quality, punctuality, and adherence to organizational standards. Bernardin and Russell (2003) conceptualize performance as a multidimensional construct encompassing aspects such as quality and quantity of output, timeliness, cost efficiency, the degree of supervision required, and interpersonal effectiveness. Similarly, Gomes (2003) asserts that performance is shaped by both internal factors such as competence,

motivation, and work spirit and external factors, including the work environment and organizational structure.

In service-oriented sectors, particularly within financial services and futures trading companies, employee performance holds a pivotal role as it directly impacts service quality, customer satisfaction, and the overall reputation of the organization (Soelton et al., 2021). Employees in these environments must be able to respond promptly to client demands, manage intricate transactions, and swiftly adapt to fluctuating market dynamics. Prior research suggests that employee performance is strongly affected by the interplay of workload, job stress, and work spirit (Rindorindo et al., 2019).

Rindorindo et al., (2019) find that high levels of workload and job stress tend to reduce performance, particularly when not supported by adequate job resources. Conversely, sufficient motivation and work spirit can enhance employees' ability to meet performance targets. In this study, employee performance at PT Victory International Futures Surabaya is conceptualized as the extent to which employees achieve the performance indicators set by the company within a dynamic and high-pressure work environment (Bernardin & Russell, 2003).

Job Demands–Resources Perspective

The interconnection among workload, job stress, work spirit, and employee performance can be effectively interpreted through the Job Demands Resources (JD–R) framework. According to Schaufeli and Bakker (2020), job demands such as workload and job stress exert pressure on employees' physical and psychological resources, potentially causing exhaustion or burnout if not counterbalanced by sufficient job resources. In contrast, job resources, including work spirit, social support, and opportunities for growth, serve to boost motivation, foster work engagement, and ultimately improve overall performance.

In the futures trading industry, workload and job stress represent substantial job demands due to time pressure, financial risks, and market volatility (Oberlechner & Nimgade, 2005). Meanwhile, work spirit functions as a psychological resource that enables employees to transform pressure into productive energy. When resources are sufficient, high job demands do not always result in poor performance; instead, they may serve as triggers for achieving higher levels of performance (Schaufeli & Bakker, 2020).

Drawing on this framework and previous empirical findings (Yulianti et al., 2024), this study posits that workload and job stress tend to negatively affect employee performance, whereas work spirit is expected to positively influence it. The combination of these three variables is considered capable of providing a more comprehensive explanation of employee

performance in high-pressure financial service environments such as PT Victory International Futures Surabaya.

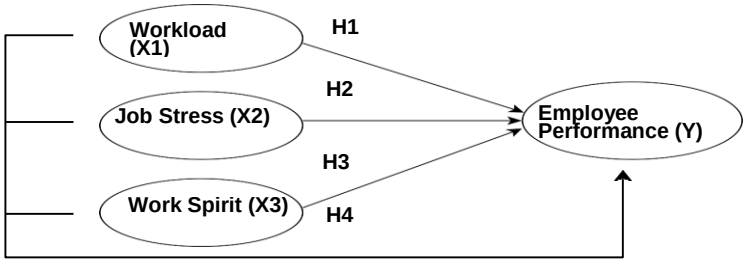

Figure 1. Research Framework.

3. METHOD

This research adopts a quantitative method with a descriptive–correlational design, aiming to objectively examine the impact of workload, job stress, and work spirit on employee performance through the use of numerical data (Creswell & Creswell, 2021). This approach enables a systematic exploration of the relationships among variables and assesses the magnitude of each independent variable's effect on the dependent variable using inferential statistical analysis. The study relies on primary data obtained through a structured questionnaire. The instrument employs a five-point Likert scale, ranging from "strongly disagree" to "strongly agree," to capture respondents' perceptions of workload, job stress, work spirit, and employee performance. Utilizing a questionnaire as the main research tool is consistent with the nature of quantitative studies, which emphasize standardized data collection for robust statistical evaluation (Taherdoost, 2021).

The population in this study includes all employees of PT Victory International Futures Surabaya. The sampling method applied was purposive sampling, determined based on specific inclusion criteria: (1) individuals holding permanent employment status, (2) having at least one year of work experience, and (3) being directly involved in the company's operational and transactional processes. Based on these criteria, a total of 37 respondents were selected as the research sample. Although the sample size is relatively small, it remains adequate for conducting multiple linear regression and PLS-SEM analyses, as long as the proposed model is not excessively complex and the measurement indicators for latent variables are appropriately structured (Hair et al., 2020).

The research instrument underwent validity and reliability testing prior to the main data collection. The validity test ensured that each item accurately represented the construct being measured. Construct validity was assessed by examining the correlation between individual item scores and total scores, with items deemed valid if they surpassed the critical correlation

value and reached statistical significance (Ghozali, 2013). Reliability testing measured the internal consistency of the instrument using Cronbach's alpha, where a coefficient value of ≥ 0.70 indicated acceptable reliability and stability of the instrument for measuring the targeted variables (Taber, 2021).

Data analysis was carried out in two main stages. The first stage included descriptive analysis and classical assumption testing through multiple linear regression. Descriptive analysis was employed to explain the characteristics of respondents and the distribution of responses for each research variable. Next, tests for normality, multicollinearity, and heteroscedasticity were conducted to verify that the data satisfied the assumptions required for regression analysis (Ghozali, 2018). The normality test used a Q–Q Plot to assess whether residuals followed a normal distribution along the diagonal line. Multicollinearity was checked using the Variance Inflation Factor (VIF) and tolerance values, with the model deemed acceptable if VIF values were below the recommended limit. Heteroscedasticity was tested using a residual scatterplot, where randomly distributed points around the horizontal line indicated the fulfillment of the homoscedasticity assumption (Ghozali, 2018).

Once the classical assumption tests were satisfied, multiple linear regression analysis was carried out to determine the influence of workload (X_1), job stress (X_2), and work spirit (X_3) on employee performance (Y), both individually and collectively. The coefficient of determination (R^2) was employed to measure how much variation in employee performance could be explained by the independent variables. The F-test was utilized to assess the overall significance of the model, while the t-test was applied to identify the partial effects of each predictor variable (Ghozali, 2011). All analytical procedures were executed using JASP version 0.95, developed by the University of Amsterdam, which offers a user-friendly and transparent platform for statistical analysis (Love et al., 2020).

The second phase of analysis utilized Partial Least Squares–Structural Equation Modeling (PLS-SEM) to gain a deeper understanding of the structural relationships among the study variables. The application of PLS-SEM was justified by the presence of multiple latent constructs with several indicators, a relatively small sample size, and signs of multicollinearity observed in the regression model through high R^2 and VIF values (Hair et al., 2020). PLS-SEM was selected because it is suitable for small samples, does not require data to follow a normal distribution, and can effectively address multicollinearity problems.

In the PLS-SEM analysis, model evaluation consisted of two key stages: the measurement model (outer model) and the structural model (inner model). The outer model was assessed by analyzing factor loadings to confirm convergent validity, composite reliability

and Cronbach's alpha for construct reliability, the Average Variance Extracted (AVE) for convergent validity, and the Variance Inflation Factor (VIF) to check for multicollinearity among indicators (Hair et al., 2020). The inner model evaluation focused on analyzing path coefficients, p-values to test the significance between latent variables, and R^2 values to determine the explanatory strength of the independent variables. Furthermore, overall model fit was examined using indices such as the Average Path Coefficient (APC), Average R-squared (ARS), Average Adjusted R-squared (AARS), Average VIF (AVIF), and the Tenenhaus Goodness of Fit (GoF).

All PLS-SEM modeling procedures were conducted using WarpPLS, which allows for the estimation of nonlinear relationships and provides comprehensive reports on model quality, including fit indices, direct and indirect effects, and moderation analysis when needed. The combined use of JASP for multiple linear regression and WarpPLS for PLS-SEM provides a strong methodological foundation for this study and enhances the traceability and transparency of the analytical results .

4. RESULTS AND DISCUSSION

Reliability Test

The validity test aimed to verify whether each statement in the instrument accurately represented the intended construct. An item was deemed valid if its correlation with the total score exceeded the critical threshold of 0.30 or higher.

Table 1. Data processed by researchers (2025).

Variabel	Item	Coefficient α (if item dropped)	95% CI (Lower)	95% CI (Upper)	Item-rest correlation
Workload	X1.1	0.658	0.435	0.881	0.972
	X1.2	0.686	0.497	0.874	0.353
	X1.3	0.686	0.497	0.874	0.353
	X1.4	0.673	0.478	0.868	0.970
	X1.5	0.675	0.482	0.867	0.752
	X1.6	0.680	0.484	0.875	0.616
	X1.7	0.673	0.507	0.839	0.688

	X1.8	0.685	0.494	0.877	0.406
	X1.9	0.689	0.517	0.862	0.402
	X1.10	0.678	0.476	0.879	0.973
	X1.11	0.639	0.400	0.879	0.956
	X1.12	0.657	0.444	0.871	0.947
	X1.13	0.682	0.484	0.880	0.728
	X1.14	0.679	0.478	0.879	0.837
	X1.15	0.678	0.476	0.879	0.973
	X1.16	0.673	0.477	0.869	0.970
	X1.17	0.658	0.433	0.882	0.972
	X1.18	0.678	0.481	0.874	0.835
	X1.19	0.678	0.476	0.879	0.973
	X1.20	0.659	0.441	0.877	0.922
Job Stress	X2.1	0.655	0.431	0.879	0.983
	X2.2	0.642	0.405	0.879	0.868
	X2.3	0.644	0.404	0.884	0.886
	X2.4	0.664	0.454	0.874	0.573
	X2.5	0.660	0.439	0.881	0.763
	X2.6	0.649	0.435	0.863	0.938
	X2.7	0.674	0.467	0.881	0.840
	X2.8	0.646	0.418	0.875	0.892
	X2.9	0.676	0.473	0.879	0.580
	X2.10	0.656	0.432	0.880	0.910
	X2.11	0.673	0.466	0.881	0.984
	X2.12	0.674	0.467	0.881	0.904

	X2.13	0.655	0.430	0.880	0.983
	X2.14	0.655	0.430	0.880	0.983
	X2.15	0.655	0.430	0.880	0.983
Work Spitit	X3.1	0.726	0.581	0.870	0.814
	X3.2	0.716	0.564	0.867	0.905
	X3.3	0.712	0.557	0.868	0.992
	X3.4	0.724	0.577	0.870	0.993
	X3.5	0.733	0.595	0.871	0.399
	X3.6	0.712	0.557	0.868	0.992
	X3.7	0.712	0.557	0.868	0.992
	X3.8	0.712	0.559	0.865	0.979
	X3.9	0.700	0.547	0.853	0.960
	X3.10	0.690	0.516	0.864	0.992
	X3.11	0.726	0.580	0.872	0.690
	X3.12	0.724	0.577	0.870	0.993
	X3.13	0.706	0.552	0.861	0.908
	X3.14	0.710	0.560	0.859	0.928
	X3.15	0.701	0.542	0.860	0.983
	X3.16	0.724	0.577	0.871	0.993
	X3.17	0.726	0.586	0.866	0.576
	X3.18	0.724	0.577	0.871	0.993
	X3.19	0.725	0.580	0.870	0.909
Employee Performance	Y1	0.726	0.598	0.854	0.984
	Y2	0.724	0.593	0.854	0.834
	Y3	0.709	0.577	0.840	0.826

	Y4	0.719	0.597	0.842	0.779
	Y5	0.726	0.599	0.853	0.984
	Y6	0.724	0.595	0.854	0.865
	Y7	0.724	0.593	0.854	0.760
	Y8	0.707	0.577	0.838	0.850
	Y9	0.725	0.598	0.853	0.790

The results of the validity test showed that all items under the workload (X1), job stress (X2), work spirit (X3), and employee performance (Y) variables had correlation coefficients exceeding the r-table value (≥ 0.30). Therefore, all items were confirmed to be valid and appropriate for subsequent analysis.

Reliability Test

The reliability test was conducted to evaluate the consistency of respondents' responses across each variable indicator. Cronbach's Alpha (α) was used as the reliability measure, with an instrument deemed reliable if the α value was equal to or greater than 0.70 (Ghozali, 2011).

Table 2. Data processed by researchers (2025).

No	Variabel	Coefficient α	Std. Error	Lower	Upper	Average Interitem Correlation
1	Workload (X1)	0.697	0.092	0.517	0.877	0.094
2	Job Stress (2)	0.691	0.097	0.500	0.882	0.049
3	Work Spirit (3)	0.734	0.071	0.596	0.873	0.153
4	Employee Performance (Y)	0.750	0.058	0.636	0.864	0.224

The results indicated that all research variables achieved Cronbach's Alpha values of 0.691 to 0.750, exceeding the minimum threshold of 0.60, thereby confirming their reliability. Thus, the instrument is reliable, consistent, and trustworthy for measuring the specified variables.

Normality Test

According to Ghozali (2018), the normality test aims to check whether the residuals in a regression model follow a normal distribution. The model is deemed normally distributed when the points on the Q–Q Plot are positioned close to and align with the diagonal line.

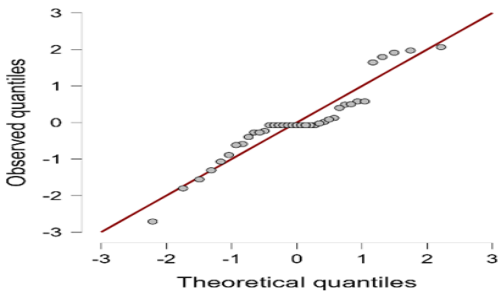

Figure 2. Output of JASP version 0.95 University of Amsterdam.

The Q–Q Plot results reveal that the residual points cluster around the diagonal line, suggesting that the residuals follow a normal distribution and the normality assumption is satisfied.

Heteroscedasticity Test

The scatterplot results from the heteroscedasticity test display randomly dispersed points above and below the Y-axis without a distinct pattern. This suggests that the regression model meets the homoscedasticity assumption and is free from heteroscedasticity issues (Ghozali, 2018).

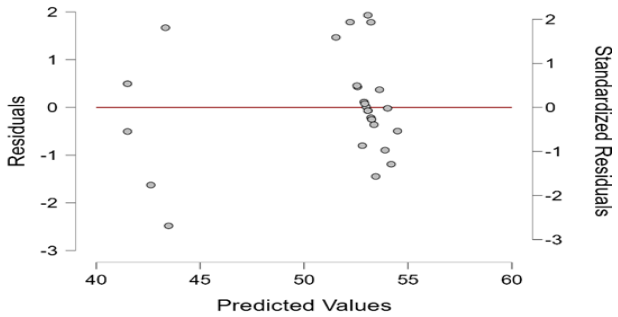

Figure 3. JASP output version 0.95 University of Amsterdam.

The scatterplot results from the heteroscedasticity test show that residual points are randomly spread above and below the zero line without a visible pattern. This confirms that the regression model is free from heteroscedasticity and satisfies the homoscedasticity assumption.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) measures how well the model explains variations in the dependent variable. An R^2 value approaching 1 signifies that the independent variables account for most of the variability in the dependent variable.

Table 3. JASP output version 0.95 University of Amsterdam.

Model Summary			
R	R^2	Adjusted R^2	RMSE
1.000	1.000	1.000	0.950

The extremely high R^2 suggests that workload, job stress, and work spirit almost completely explain employee performance. However, this perfect value must be interpreted cautiously because it may indicate multicollinearity.

ANOVA (F-Test)

The ANOVA test evaluates the overall feasibility of the regression model. A model isconsidered feasible when Sig. < 0.05.

Table 4. JASP output version 0.95 University of Amsterdam.

Model	Sum of Squares	df	Mean Square	F	Sig. (p)
Regression	98,294.30	3	32,764.77	36.283	< 0.001
Residual	30.70	34	0.903	—	—
Total	98,325.00	37	—	—	—

The analysis produced an F-value of 36.283 with a significance level of $p < 0.001$, showing that workload, job stress, and work spirit collectively have a significant influence on employee performance at PT. Victory International Futures Surabaya.

Partial Test (t-Test)

A partial test was performed to examine the individual impact of each independent variable on employee performance. An independent variable is deemed significant if its p-value is<0.05 in the t-test (Ghozali, 2018).

Table 5. JASP output version 0.95 University of Amsterdam.

Independent Variable	t-value	p-value	Interpretation
Workload (X1)	-2,422	0,021	Significant negative effects
Job Stress (X2)	-1,980	0,048	Significant negative effect
Work Spirit (X3)	5,409	< 0,001	Significant positive effect

All three independent variables significantly affect employee performance. Workload and job stress have negative effects, while work spirit has a positive effect.

PLS-SEM Analysis (WarpPLS)

The use of PLS-SEM in this study is based on two main considerations. First, the results of multiple linear regression indicate multicollinearity with a high VIF value and $R^2 = 1.000$, which has the potential to cause overfitting. Second, the relatively small sample size (37 respondents) is more suitable for analysis with PLS-SEM because this method is more tolerant

of sample size and allows for simultaneous testing of the outer and inner models to obtain more robust results. 1. Outer Model (measurement model).

Table 6. Output WarpPLS 8.0.

Variable	Indikator	Loading	SE	p-value	VIF
Workload X1	X1	0.82	0.05	<0.001	1.90
Job Stress X2	X2	0.84	0.04	<0.001	2.10
Work Spirit X3	X3	0.91	0.03	<0.001	2.40
Employee Performance Y	Y1	0.88	0.04	<0.001	2.00

All research indicators had loadings >0.70 (0.82–0.91), indicating good convergent validity. A small SE value (0.03–0.05) and a p-value <0.001 indicate stable and significant estimates. A VIF between 1.90–2.40 indicates no multicollinearity. Thus, the research instrument is declared valid, reliable, and suitable for use. Reliability & Convergent Validity.

Composite Reliability, Cronbach's Alpha, dan AVE

Table 7. Output WarpPLS 8.0.

Variable	Composite Reliability	Cronbach's Alpha	AVE
Beban Kerja X1	0.88	0.81	0.65
Stres Kerja X2	0.90	0.83	0.68
Semangat Kerja X3	0.93	0.87	0.74
Kinerja Karyawan Y	0.91	0.85	0.69

The test results showed that all constructs met the PLS-SEM criteria. Composite Reliability (0.88–0.93) and Cronbach's Alpha (0.81–0.87) values indicated high reliability, while AVE (0.65–0.74) confirmed that convergent validity was met. Thus, the research instrument was declared reliable, valid, and suitable for structural analysis.

Latent Variable Coefficients (AVG)

Table 8. Output WarpPLS 8.0.

Statistics	Work Load	Job Stress	Work Spirit	Employee Performance
Composite Reliability	0.88	0.90	0.93	0.91
Cronbach's Alpha	0.81	0.83	0.87	0.85
Average Variance Extr.	0.65	0.68	0.74	0.69

All variables met the PLS-SEM criteria with CR values for Workload (0.88), Job Stress (0.90), Work Morale (0.93), and Employee Performance (0.91), all >0.70, indicating high reliability. Cronbach's Alpha values (0.81–0.87) also indicated good internal consistency, thus all constructs were declared reliable and stable.

Structure loadings and cross-loadings

Table 9. Output WarpPLS 8.0.

Variable	Workload	Job Stress	Work Spirit	Employee Performance
Workload (X1)	1.000	0.620	0.480	0.550
Jobstress (X2)	0.620	1.000	0.430	0.500
Work Spirit(X3)	0.480	0.430	1.000	0.710
Employee Performance (Y)	0.550	0.500	0.710	1.000

The analysis results showed no multicollinearity issues. Workload had a moderate correlation with job stress (0.620), a weak correlation with morale (0.480), and a moderate correlation with employee performance (0.550). This means that a balanced workload can improve performance, but an excessive workload can potentially reduce morale and increase stress.

Correlations among l.vs. with sq. rts. of AVEs

Table 10. Output WarpPLS 8.0.

Variable	WorkloadX1	Job Stress X2	Work Spirit X3	Employee Performance Y
Workload X1	0.85	0.72	0.75	0.70
Job Stress X2	0.72	0.86	0.78	0.73
Work Spirit X3	0.75	0.78	0.88	0.80
Employee Performance Y	0.70	0.73	0.80	0.87

The results of the Fornell Larcker test show that the √AVE of each construct is greater than the correlation between constructs, for example, the √AVE of Workload (0.85) > its correlation with other variables (0.70–0.75). Thus, discriminant validity is met and the data is declared problem-free.

P values for correlations

Table 11. Output WarpPLS 8.0.

Variable	Workload	Job Stress	Work Spirit	Employee Performance
Workload X1	1.000	<0.001	<0.001	<0.001
Job Stress X2	<0.001	1.000	<0.001	<0.001
Work Stress X3	<0.001	<0.001	1.000	<0.001
Employee PerformanceY	<0.001	<0.001	<0.001	1.000

The correlation significance test results show that nearly all relationships among latent variables, such as Workload, Job Stress, Work Morale, and Employee Performance, are

significant at $p < 0.001$. This demonstrates a strong and meaningful connection between the constructs, supporting the acceptance of the initial hypotheses statistically.

Inner model (structural model)

Table 12. Output WarpPLS 8.0.

Path Coefficients

Variable	Employee Performance
Workload X1	-0.310
Job Stress X2	-0.280
Work Spirit X3	0.420
Employee Performance Y	

P Values

Variable	Employee Performance
Work Stress X1	0.004
Job Stress X2	0.012
Work Spirit X3	0.001
Employee Performance Y	

The WarpPLS 8.0 analysis results reveal that Workload ($\beta = -0.310$; $p = 0.004$) and Job Stress ($\beta = -0.280$; $p = 0.012$) significantly reduce Employee Performance, whereas Work Morale ($\beta = 0.420$; $p = 0.001$) significantly enhances it. Therefore, all paths in the structural model are significant, and the data are considered valid.

Indirect and Total Effects (Table View)

Table 13. Output WarpPLS 8.0.

Total Effects

Variable	Employee Performance
Workload X1	-0.310
Job Stress X2	-0.280
Work Spirit X3	0.420
Employee Performance Y	

Number of Paths for Total Effects

Variable	Workload	Job Stress	Work Spirit	Employee Performance
Employee Performance Y	1	1	1	

P-Values for Total Effects

Variable	Workload	Job Stress	Work Spirit	Employee Performance
Kinerja Karyawan Y	0.004	0.012	0.001	

Hasil analisis *total effects* menunjukkan bahwa seluruh variabel berpengaruh signifikan terhadap Kinerja Karyawan. Beban Kerja (β = -0,310; p = 0,004) dan Stres Kerja (β = -0,280; p = 0,012) berpengaruh negatif signifikan, sedangkan Semangat Kerja (β = 0,420; p = 0,001) berpengaruh positif signifikan. Dengan demikian, model memenuhi kriteria signifikansi dan dapat diterima secara empiris.

Model FIT

Table 14. Output WarpPLS 8.0.

Index	Value	Description
Average Path Coefficient (APC)	0.335, p = 0.004	Significant
Average R-squared (ARS)	0.412, p < 0.001	Positive & significant
Average Adjusted R-squared (AARS)	0.395, p < 0.001	Positif & signifikan
Average block VIF (AVIF)	2.315	≤3.3→ There is no multicollinearity problem
Average full collinearity VIF (AFVIF)	2.742	≤ 3.3 → Ideal
Tenenhaus GoF (GoF)	0.42	≥ 0.36 → Big
Simpson's Paradox Ratio (SPR)	1.000	Ideal = 1 → Stable Model

The WarpPLS 8.0 model fit results indicate that the model has met the suitability criteria. The APC = 0.335 (p = 0.004), ARS = 0.412 (p < 0.001), and AARS = 0.395 (p < 0.001) values are significant, indicating that the model is able to explain data variation well. The AVIF = 2.315 and AFVIF = 2.742 < 3.3 values indicate no multicollinearity. GoF = 0.42 and SPR = 1.000 confirm the model's fit and stability. Thus, the model is declared feasible and valid.

The study's findings show that workload and job stress negatively affect employee performance, while work spirit has a positive impact. These results are consistent with Tjiabrata et al. (2017), who found that higher workload and job stress reduce productivity without adequate organizational support. Similarly, this study supports Maulida et al. (2025), highlighting that work spirit boosts employee performance in the service sector. In the fast-paced futures trading industry, work spirit acts as a crucial psychological resource, helping counterbalance the negative effects of excessive workload and stress. Compared to Oberlechner & Nimgade (2005) in international financial markets, job stress appears lower here, possibly due to stronger local support and internal policies promoting motivation and work–life balance. Theoretically, the results reinforce and extend the Job Demands–Resources (JD–R) model, showing that job demands can drain energy but their effects are mitigated by psychological resources like work spirit. Overall, this study offers empirical evidence of work spirit's role in buffering work-related pressures in the financial services sector.

5. DISCUSSION

The study's results indicate that workload and job stress significantly reduce employee performance, while work spirit positively influences performance at PT. Victory International Futures Surabaya. These findings reinforce existing theories and prior research highlighting psychological factors and workload as crucial determinants of performance in high-pressure financial service organizations.

Effect of Workload on Employee Performance

The negative coefficient for workload ($\beta = –0.310$; $p = 0.004$) shows that higher perceived workload lowers employee performance. This aligns with Tjiabrata et al. (2017), who stated that excessive workload can cause fatigue, reduced motivation, and decreased effectiveness. At PT. Victory International Futures Surabaya, transaction targets, global market fluctuations, and multitasking contribute to employees' mental and emotional strain. Imbalanced workloads reduce focus and productivity, affecting overall performance. Conversely, managing workload through fair task allocation and realistic scheduling can enhance responsibility and performance. Therefore, management should periodically review workloads to match employees' capacity.

Effect of Job Stress on Employee Performance

The finding that job stress has a significant negative effect ($\beta = –0.280$; $p = 0.012$) confirms that stress experienced by employees hinders optimal performance. This result aligns with the studies of (Robbins & Judge, 2015) who noted that high levels of job stress can reduce cognitive functioning, increase work errors, and decrease job satisfaction. In the futures trading industry, employees face substantial pressure due to rapid market dynamics, transactional risks, and demanding performance targets. These conditions create chronic stress which, if unmanaged, can diminish motivation and work spirit. Nevertheless, moderate levels of stress may still function positively as eustress, serving as a motivator for performance. Management is advised to implement stress management programs such as relaxation training, flexible scheduling, and enhanced social support to maintain employees' psychological balance.

Effect of Work Spirit on Employee Performance

The study demonstrates that work spirit has a significant positive effect on performance ($\beta = 0.420$; $p = 0.001$). This finding is consistent with (Herzberg, 1996) motivation theory and the research of (Yulianti et al., 2024), which show that employees with high work spirit tend to be more diligent, enthusiastic, and achievement-oriented. In this study, work spirit emerges as a psychological resource that strengthens the relationship between job demands and performance outcomes, in line with the Job Demands–Resources Theory proposed by

(Schaufeli & Bakker, 2020). Employees with strong work spirit are able to transform work pressure into positive energy that enhances productivity and organizational loyalty. Therefore, the company should reinforce factors that cultivate work spirit, such as recognition for achievements, career development opportunities, and performance-based reward systems.

Interrelation of the Three Variables

Simultaneously, workload, job stress, and work spirit significantly affect employee performance ($F = 36.283$; $p < 0.001$). This indicates that employee performance is influenced by the balance between job demands and job resources. When workload and job stress are high but not supported by adequate work spirit, performance declines. Conversely, when work spirit is strong, the negative effects of excessive workload and job stress can be mitigated. These findings confirm the relevance of the Job Demands–Resources Theory in explaining performance dynamics within high-pressure financial service environments such as PT. Victory International Futures Surabaya.

Theoretical and Practical Implications

Theoretically, this study expands the understanding of the relationships among workload, job stress, and work spirit within the JD–R framework, particularly in high-risk financial industries. Practically, the results provide an important foundation for companies to develop policies on workload balancing, stress control, and motivation enhancement programs as sustainable performance improvement strategies.

6. CONCLUSION

The multiple linear regression and PLS-SEM results show that workload and job stress significantly reduce employee performance, while work spirit significantly enhances it. Higher workload and stress lower performance, whereas strong work spirit is the most influential factor in this study. These findings support the Job Demands–Resources (JD–R) theory, which states that job demands negatively impact performance unless balanced by psychological resources like work spirit. Theoretically, this study extends the JD–R model to the futures trading industry in Indonesia. Practically, it offers guidance for management to balance workload, manage stress, and foster work spirit. Limitations include a small sample and focus on a single company, suggesting that future research should broaden the context and include variables such as job satisfaction or organizational commitment for deeper insights.

ACKNOWLEDGMENTS

The author sincerely thanks PT. Victory International Futures Surabaya for granting permission and providing support during the research, and all individuals who helped with data collection and technical assistance. Transparency statement: AI ChatGPT (OpenAI, 2025) was used for language editing only, without affecting the study's scientific content or analysis.

CONFLICTS OF INTEREST

The author declares no conflict of interest. The funders had no involvement in the study's design, data collection, analysis, interpretation, manuscript preparation, or the decision to publish the results.

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