

The Influence of Work-Life Balance, Workload, and Occupational Health and Safety nn The Performance of Drivers at PT Tiga Putri Bersaudara is 36 To Port

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Abstract: This study aims to analyze the influence of work-life balance, workload, and occupational health and safety on the performance of drivers at PT Tiga Putri Bersaudara IS 36 to Port. The research adopts a quantitative approach with a causal design, where work-life balance, workload, and occupational health and safety are examined for their impact on the dependent variable, namely driver performance. The population in this study includes all drivers at PT Tiga Putri Bersaudara, totaling 140 individuals, with a saturated sampling technique employed. Data were collected through the distribution of questionnaires that measured the research variables using Likert scale indicators. For data analysis, the Structural Equation Modeling-Partial Least Square (SEM-PLS) method was used, with ordinal data converted to interval scale using the Method of Successive Interval (MSI). The results indicate a significant relationship between several work-related factors and driver performance at PT Tiga Putri Bersaudara IS 36 to Port. First, work-life balance has a positive and significant effect on driver performance, indicating that the better the balance between work and personal life, the higher the performance exhibited. Second, workload has a negative and significant impact on driver performance, suggesting that the heavier the workload perceived, the lower the resulting work performance. Third, occupational health and safety also have a positive and significant influence on driver performance, meaning that a safe work environment and wellmaintained health conditions contribute to improved performance. These findings highlight the importance of addressing employee well-being and workload in efforts to enhance workforce productivity within the company.

Keyword: Work-Life Balance, Workload, Occupational Health and Safety, Driver Performance

INTRODUCTION

A company requires various resources to operate its business, including capital, materials, and human resources. Human resources (HR) are among the most critical factors in any organization or company. The quality of a company's human resources determines its overall performance and serves as a benchmark for its success. Therefore, to develop excellent and competent human resources, proper management is essential to enhance performance effectiveness and efficiency (Maghfira et al., 2023). According to (Parashakti & Putriawati, 2020) performance is the outcome of work measured by the quality and quantity achieved by an employee in carrying out their duties in accordance with the responsibilities assigned. In facing today's global competition, companies are challenged to formulate effective human resource management strategies to achieve optimal performance and realize their established goals. However, various factors can influence performance. This issue is also experienced by PT Tiga Putri Bersaudara, as evidenced by fluctuations in the company's performance from year to year.

PT Tiga Putri Bersaudara is a company engaged in coal transportation in Lahat Regency, South Sumatra Province. The transportation of coal production is a vital part of mining logistics activities, which includes transporting coal from temporary storage or front-loading areas, continuing through hauling roads to the stockpile, and finally being delivered to barges for distribution to consumers. Driver performance assessment at PT Tiga Putri Bersaudara is also part of the company's operational evaluation.

Score Range	Rating	2021	2022	2023
		No. of Drivers	%	No. of Drivers
< 32	Poor	5	3.6	4
33–48	Fairly Poor	13	9.3	24
49–64	Average	69	49.2	73
65–81	Good	34	24.3	22
81-100	Very Good	19	13.6	17
Total		140	100	140

Table 1. Driver Performance Assessment for IS 36 to Port at PT Tiga Putri Bersaudara, Period2021–2023

Source: PT Tiga Putri Bersaudara Documents, 2024

Based on Table 1, the performance of drivers at PT Tiga Putri Bersaudara IS 36 to Port has not yet reached an optimal level. Performance evaluations from 2021 to 2023 show a downward trend, with the number of drivers rated as "very good" and "good" gradually decreasing, while the number of drivers rated as "average" and "fairly poor" has continued to rise. This indicates that driver performance within the company remains suboptimal, even though it can still be improved to achieve better results. Several factors that influence company performance include work-life balance, workload, occupational health and safety, and motivation (Nugraheni et al., 2022). In addition, the company needs to pay attention to employee conditions, such as the need to feel appreciated, the development of social engagement, the sense of competence in the workplace, and the ability to manage the imbalance between personal life and work demands (Diana, 2023).

Work-life balance refers to an individual's ability to manage responsibilities at work and in personal life, with the aim of creating a balance between work and life outside of work. According to (Meli Noviani, 2021) work-life balance encompasses the ability to balance work responsibilities with personal life, as well as meeting one's own needs and the needs of others, both at work and at home. (Eldon et al., 2024) define work-life balance as the ability to balance

the demands of work with the personal and family needs of an individual. This balance can be identified through several indicators, including time balance, involvement balance, and satisfaction balance.

In (Undang-Undang (UU) Nomor 11 Tahun 2020 Tentang Cipta Kerja, 2020) there are two work hour schemes applicable to companies in Indonesia: 7 hours of work per day or 40 hours per week for 6 working days with one day off, and 8 hours of work per day or 40 hours per week for 5 working days with two days off. Additionally, the (Undang-Undang (UU) Nomor 11 Tahun 2020 Tentang Cipta Kerja, 2020) regulates overtime, limiting it to a maximum of 4 hours per day and 18 hours per week. However, based on observations and interviews with drivers at PT Tiga Putri Bersaudara IS 36 to Port, they work longer hours than those specified in the (Undang-Undang (UU) Nomor 11 Tahun 2020 Tentang Cipta Kerja, 2020), as can be seen in the table of driver working hours at the company.

Table	e 2. DIIVEI WUIK	ing mours for 15 SC	o to i oi t at i i i iga	I util Dei sauuala	1, 2022-2023
Year	Normal	Average Driver	Average Total	Average	Average
	Working	Working Hours	Driver Working	Driver	Shift Work
_	Hours		Hours	Working Days	
2022	36 hours/shift	48 hours/shift	4,190 hours	175 days	87 shifts
2023	36 hours/shift	48 hours/shift	4,262 hours	178 days	89 shifts
-	a			2024	

Table 2. Driv	ver Working l	Hours for IS 36	to Port at PT Ti	ga Putri Bersaudara,	2022-2023

Source: PT Tiga Putri Bersaudara Documents, 2024

Based on Table 2, the normal working hours for drivers at PT Tiga Putri Bersaudara IS 36 to Port are 36 hours per shift, but the average working hours per shift are 48 hours. This is caused by various operational constraints, such as road damage, unit breakdowns, and long queues at the mine or port for loading and unloading coal, which lead to working hours exceeding the normal limit. In 2022, the average annual working hours for drivers was 4,190 hours with 175 working days, while in 2023, the average annual working hours increased to 4,262 hours with 178 working days.

The high working hours may lead to an imbalance between personal life and work. According to (Tondang et al., 2022) the balance between work and personal life can influence the drive to work and improve performance. An imbalance between work and personal life can occur if employees spend more time working, leading to negative effects on their emotional well-being. This imbalance is often caused by high workloads. Workload is closely related to performance, and according to (Nugraheni et al., 2022) workload refers to the tasks that employees must complete within the set targets and timeframes. An appropriate workload helps employees complete tasks clearly and reduces fatigue (Syahputri, 2023). Workload can be in three conditions: according to the standard, too high (over capacity), or too low (under capacity). An excessive workload will affect performance and can reduce work effectiveness (Torrington et al., 2020).

Using a shift work system for drivers at PT Tiga Putri Bersaudara sets a work target that must be met, which is a minimum of 4 trips per shift during a 36-hour shift. However, in practice, working hours can exceed 36 hours depending on field conditions, such as issues encountered during the trip. This high workload often causes drivers to feel fatigued due to insufficient rest time. As a result, drivers become less focused while driving, which increases the risk of accidents and demotivation, which in turn can negatively impact their performance.

Year	Number of Trips	Total Tonage
2021	151,226	4,385,554
2022	159,501	4,625,529
2023	168,400	4,883,600

Source: PT Tiga Putri Bersaudara Documents, 2024

Based on Table 3 above, the workload of drivers at PT Tiga Putri Bersaudara IS 36 to Port has increased significantly from 2021 to 2023. In 2021, the number of trips reached 151,226 trips, which then increased to 159,501 trips in 2022, and 176,400 trips in 2023. Similarly, the tonnage, which in 2021 was 4,385,554 tons, increased to 4,625,529 tons in 2022, and 4,883,600 tons in 2023. This increase shows that the workload accepted by the company is quite high. Excessive workloads can lead to excessive energy consumption, fatigue, overstress, as well as boredom or under-stress, which can affect performance (Diningsih et al., 2021). Besides the workload factor, occupational safety and health (K3) also play a crucial role in achieving optimal performance. When employees feel safe and comfortable due to good protection from the company, they will work calmly and be more productive. K3 includes safety related to tools, materials, processing methods, work locations, environment, and employees' working methods (Mattajang et al., 2022). Below is the K3 data for PT Tiga Putri Bersaudara Is 36 to Port:

No	Condition	Description
1.	Transport Vehicles	45%
2.	Light Vehicle (LV)	67%
3.	Roads	50%
4.	Personal Protective Equipment (PPE) (safety shoes, vests, helmets, glasses, masks)	40%
5.	First Aid Kit (P3K)	38%
6.	Aftar	75%
7.	Safety Cone	40%
8.	Jack	60%
9.	One Set of Keys	55%
10.	Nepal	70%

Source: Safety Health and Environment PT Tiga Putri Bersaudara, 2024

Based on Table 4 above, the occupational safety and health (K3) facilities for the Is 36 to Port transport at PT Tiga Putri Bersaudara are still inadequate. Several facilities with poor conditions include transport vehicles (45%), personal protective equipment (PPE) (40%), first aid kits (38%), and safety cones (40%). Meanwhile, some facilities in fair condition include roads (50%), jacks (60%), and one set of keys (55%). Only a few facilities are in good condition, such as light vehicles (LV) (67%), aftars (75%), and Nepal tires (70%). From this data, it can be concluded that the K3 at PT Tiga Putri Bersaudara Is 36 to Port is still lacking.

In coal hauling activities, there are many hazards that increase the risk of accidents, such as the proximity of dump trucks and slippery road conditions. Based on observations, the transport roads still use dirt roads that can be uneven and slippery during the rainy season, as well as dry and dusty during the dry season, which can impair the driver's visibility and potentially cause accidents. The condition of Occupational Safety and Health (K3) is considered good when activities can be carried out optimally, healthily, safely, and comfortably (Sedarmayanti, 2018). Below is the accident data for PT Tiga Putri Bersaudara Is 36 to Port drivers:

 Table 5. Work Accident Data for Drivers of Is 36 to Port PT Tiga Putri Bersaudara Period 2021-2023

Year	Accident Description	Light	Severe	Total Cases
	Light	Severe	Fatal	
2021	24	9	5	38
2022	28	13	4	45
2023	33	18	11	62
Total Cas	es			145

Source: Safety Health and Environment PT Tiga Putri Bersaudara, 2024

Based on Table 5 above, the work accident rate at PT Tiga Putri Bersaudara is relatively high every year, with accidents involving drivers, whether light, severe, or fatal. In 2021, the total number of accidents was 38, which increased to 45 in 2022, and further increased to 62 in 2023. The evaluation results show that these accidents are influenced by the high workload, which causes driver fatigue, leading to lack of focus while driving, thereby triggering accidents. In addition, the lack of support in the aspects of occupational safety and health (K3), such as damaged roads, dust, and the lack of proper rest areas for drivers, worsens the situation. Low awareness and knowledge about K3 among drivers also contribute to the deterioration of this condition.

Based on various studies conducted previously, there are differing results regarding the impact of work-life balance, workload, and occupational safety and health (K3) on employee performance. Some studies show that work-life balance has a positive and significant impact on improving employee performance, as found by (Eldon et al., 2024; Puspitasari, 2020; E. A. A. Putri & Primadineska, 2023; S. W. Putri & Frianto, 2023). On the other hand, studies by (Kembuan et al., 2021; Rahmawati et al., 2024) show that work-life balance does not significantly affect performance and even tends to have a negative impact on employee performance.

Regarding workload, research by (Abdillah et al., 2022) found that workload has a positive and significant effect on employee performance and motivation. Motivation even acts as a mediator that connects the influence of workload on performance. However, other studies, such as those by (Himamora et al., 2023; Iskandar & Sembada, 2012; Kurniawan & Al Rizki, 2022; Syahputri, 2023; Torrington et al., 2020; Yusnandar, 2022) show that workload has a significant negative impact on performance. Research by Maghfira et al. (2023) further strengthens these findings, showing that excessive workload can reduce performance effectiveness.

Regarding occupational safety and health (K3), studies by (Mattajang et al., 2022; Syahputri, 2023; Tondang et al., 2022; Wijaya, 2020) found that K3 has a positive and significant impact on performance. Good K3 can enhance the sense of security in the workplace, which in turn supports employee productivity and performance. However, studies by (Diningsih et al., 2021; Wangi et al., 2020) concluded that K3 does not have a positive and significant impact on employee performance. Thus, the results of these studies indicate that the impact of work-life balance, workload, and K3 on employee performance can vary, depending on the context and management approach in each organization.

This research presents several significant novelties in both context and variables used, differentiating it from previous studies. First, in terms of context, this study is conducted in the transportation sector, specifically focusing on the profession of drivers at PT Tiga Putri Bersaudara Is 36 ke Port. This context has not been extensively explored in previous research, even though the driver profession has work characteristics that are very different from other sectors. Most prior studies have focused on specific industries such as manufacturing (Tondang et al., 2022), banking (S. W. Putri & Frianto, 2023) and government (Abdillah et al., 2022) without considering the specific challenges faced by drivers, such as long working hours, delivery time pressure, road safety risks, and the need to maintain a balance between work and personal life.

Second, in terms of variables, this study integrates work-life balance, workload, and occupational safety and health (K3) with performance. Previously, studies such as those by (Eldon et al., 2024; Puspitasari, 2020) only focused on work-life balance as a performance predictor. While (Maghfira et al., 2023; Syahputri, 2023) focused on workload, and other studies such as (Mattajang et al., 2022; Tondang et al., 2022) discussed the importance of K3 in improving employee performance. This study aims to analyze the direct effects of work-life

balance, workload, and occupational safety and health on the performance of drivers at PT Tiga Putri Bersaudara IS 36 ke Port.

METHOD

This study uses a quantitative approach with a causal design aimed at analyzing the cause-and-effect relationships between the variables being studied. In this case, the independent variables consist of work-life balance, workload, and occupational safety and health (K3), whose effects on the dependent variable, which is driver performance, are analyzed. The research was conducted at PT Tiga Putri Bersaudara IS 36 ke Port, focusing on all the drivers working at the company.

The population in this study consists of all the drivers at PT Tiga Putri Bersaudara IS 36 ke Port, totaling 140 individuals. Given the relatively small and accessible population size, the researcher used a saturated sampling technique, also known as census sampling, where all members of the population were selected as research respondents. Therefore, the sample size used in this study is the same as the population size, which is 140 individuals.

Data collection was carried out through the distribution of closed-ended questionnaires (surveys) to all respondents. The questionnaire contained structured questions based on the indicators of each research variable, measured using a Likert scale. The data source used in this study is primary data, which was directly obtained from respondents through questionnaire completion at the research location. Primary data was chosen because it provides more relevant and specific information in line with the objectives of the study.

The data obtained from the questionnaire is in ordinal form because it uses a Likert scale. In order for this data to be analyzed using advanced statistical techniques such as regression or path analysis, a conversion from ordinal scale to interval scale is required. For this purpose, the Method of Successive Interval (MSI) approach is used. MSI is a scaling technique designed to transform ordinal data into interval data, making it possible to analyze it more accurately and comprehensively. The conversion process is carried out through certain stages that aim to simplify calculations and strengthen the interpretation of the analysis results. In practice, the conversion process with MSI is performed using additional features such as Add-Ins in Microsoft Excel, which enables more efficient and precise calculations.

After the data is converted to the interval scale, data analysis is conducted using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method with the assistance of SmartPLS software version 3. PLS analysis is conducted in two stages: testing the measurement model (outer model) and testing the structural model (inner model). The measurement model is used to assess the validity and reliability of the indicators of each variable construct, while the structural model is used to evaluate causal relationships between variables in the model. Bootstrapping technique is applied in the analysis process to test the significance of direct and indirect effects between variables based on the path coefficient values generated. This approach allows the researcher to gain a deep understanding of the relationship between work-life balance, workload, occupational safety and health (K3), and driver performance.

RESULTS AND DISCUSSION

Measurement Model Analysis (Outer Model)

The outer model focuses on the relationship between latent variables and their indicators. The purpose of testing the outer model is to ensure the validity and reliability of the instruments used to measure the latent variables. There are three main types of tests in the outer model: Convergent Validity, Discriminant Validity, and Construct Reliability





Convergent Validity

Convergent Validity has two evaluation criteria, namely using the loading factor value or the Average Variance Extracted (AVE) value.

Loading Factor

The loading factor can be seen in the outer loadings table, which shows the correlation between the indicator scores and their respective construct (variable). An indicator is considered valid if it has a correlation value above 0.7 (Hair Jr et al., 2023). If the indicator does not meet this requirement, it should be discarded. The results of the convergent validity test in this study can be seen in the following table:

Table 6. Outer Loadings Analysis Results						
Work Life Balance	Workload	Health and Safety	Performance	Note		
(X1)	(X2)	(X3)	(Y)			
WLB1	0.848			Valid		
WLB2	0.834			Valid		
WLB3	0.850			Valid		
WLB4	0.763			Valid		
WLB5	0.825			Valid		
WLB6	0.854			Valid		
WLB7	0.827			Valid		
WLB8	0.805			Valid		
WLB9	0.792			Valid		
BK1		0.814		Valid		
BK2		0.884		Valid		
BK3		0.838		Valid		

BK4	0.823		Valid
BK5	0.837		Valid
BK6	0.841		Valid
BK7	0.818		Valid
BK8	0.742		Valid
BK9	0.830		Valid
KKK1		0.853	Valid
KKK2		0.901	Valid
КККЗ		0.867	Valid
KKK4		0.860	Valid
KKK5		0.840	Valid
KKK6		0.822	Valid
KKK7		0.888	Valid
KKK8		0.836	Valid
KKK9		0.856	Valid
K1			0.804
K2			0.802
К3			0.828
K4			0.825
K5			0.856
K6			0.804
K7			0.759
K8			0.851
К9			0.806
K10			0.772
K11			0.810
K12			0.851
K13			0.794
K14			0.731
K15			0.807

Source: Data processed with SmartPLS, 2025

Table 6 above shows that all statements for the variables of work-life balance, workload, health and safety, and performance have loading factor values greater than 0.7. This indicates that all indicators are considered valid and meet the validity criteria. Therefore, the indicators used have successfully measured the correlation between the indicator/statement scores and their respective construct/variable, which supports the validity of the measurement model in this study.

Average Variance Extracted (AVE)

Convergent Validity can also be assessed through AVE. A model with an AVE value greater than 0.5 is considered valid or has high Convergent Validity.

Table 7. AVE Analysis Results				
Variable	Average Variance Extracted (AVE)	Note		
Work Life Balance (X1)	0.667	Valid		
Workload (X2)	0.682	Valid		
Health and Safety (X3)	0.737	Valid		
Performance (Y)	0.652	Valid		

Source: Data processed with SmartPLS, 2025

Based on Table 7 above, the AVE (Average Variance Extracted) values for each variable are as follows: work-life balance at 0.667, workload at 0.682, health and safety at 0.737, and performance at 0.652. All of these variables have AVE values greater than 0.5, which means

they meet the required criteria and can be categorized as valid. These results show that the data for this study have met the second criterion of convergent validity. The combination of the outer loading and AVE assessment indicates that this study is valid in terms of convergent validity and can proceed to the next stage.

Discriminant Validity

Discriminant validity is used to ensure that the constructs in the measurement model measure different concepts and are not overlapping. This test is performed by examining the cross-loading values and the Fornell-Larcker criterion to ensure that the constructs can be clearly distinguished from each other.

Cross Loading

The first method is to measure cross loading, where the cross loading results should show that the indicator of each variable has a higher value compared to indicators of other variables. The results of the cross loading test in this study are as follows:

Table 8. Cross Loadings Analysis Results						
Indicator	Work	Workload	Occupational	Performance	Note	
	Life	(X2)	Health and	(Y)		
	Balance		Safety			
	(X1)		(X3)			
WLB1	0.848	0.601	0.460	0.595	Valid	
WLB2	0.834	0.527	0.442	0.627	Valid	
WLB3	0.850	0.514	0.394	0.595	Valid	
WLB4	0.763	0.505	0.451	0.558	Valid	
WLB5	0.825	0.487	0.452	0.583	Valid	
WLB6	0.854	0.513	0.493	0.652	Valid	
WLB7	0.827	0.484	0.431	0.618	Valid	
WLB8	0.805	0.570	0.399	0.540	Valid	
WLB9	0.792	0.739	0.385	0.497	Valid	
BK1	0.547	0.814	0.238	0.367	Valid	
BK2	0.665	0.884	0.362	0.487	Valid	
BK3	0.570	0.838	0.277	0.486	Valid	
BK4	0.520	0.823	0.344	0.524	Valid	
BK5	0.530	0.837	0.287	0.431	Valid	
BK6	0.576	0.841	0.231	0.435	Valid	
BK7	0.522	0.818	0.277	0.401	Valid	
BK8	0.469	0.742	0.131	0.288	Valid	
BK9	0.527	0.830	0.229	0.423	Valid	
KKK1	0.387	0.260	0.853	0.458	Valid	
KKK2	0.443	0.286	0.901	0.484	Valid	
KKK3	0.486	0.260	0.867	0.537	Valid	
KKK4	0.472	0.344	0.860	0.514	Valid	
KKK5	0.451	0.314	0.840	0.512	Valid	
KKK6	0.461	0.263	0.822	0.555	Valid	
KKK7	0.528	0.298	0.888	0.565	Valid	
KKK8	0.486	0.280	0.836	0.512	Valid	
KKK9	0.393	0.236	0.856	0.549	Valid	
K1	0.527	0.383	0.455	0.804	Valid	
K2	0.623	0.410	0.512	0.802	Valid	
K3	0.556	0.391	0.479	0.828	Valid	
K4	0.602	0.425	0.553	0.825	Valid	
K5	0.557	0.438	0.498	0.856	Valid	
K6	0.609	0.508	0.564	0.804	Valid	
K7	0.597	0.488	0.490	0.759	Valid	
K8	0.570	0.372	0.519	0.851	Valid	

К9	0.524	0.408	0.422	0.806	Valid
K10	0.611	0.383	0.421	0.772	Valid
K11	0.597	0.400	0.480	0.810	Valid
K12	0.564	0.442	0.521	0.851	Valid
K13	0.534	0.431	0.488	0.794	Valid
K14	0.606	0.476	0.456	0.731	Valid
K15	0.607	0.418	0.485	0.807	Valid

Source: Data processed with SmartPLS, 2025

Based on Table 8, all items have a higher cross-loading value for their respective variables than for other variables. The consistency between the convergent validity and discriminant validity tests shows that all indicators are valid. This confirms that the measurement model used is accurate and effectively differentiates the constructs. Therefore, it can be concluded that the instruments in this study meet the validity criteria.

Fornell-Larcker Criterion

The second method for testing discriminant validity is the Fornell-Larcker Criterion. To show that a model has good discriminant validity, the square root of the Average Variance Extracted (\sqrt{AVE}) for each construct must be greater than the correlation of that construct with other latent constructs. This indicates that a variable is more correlated with its own indicators than with the indicators of other constructs. The results of the Fornell-Larcker Criterion in this study are presented in the following table:

Table 9. Fornell-Larcker Criterion Analysis Results						
Variable	Workload (X2)	Occupational Health and Safety (X3)	Performance (Y)	Work Life Balance (X1)		
Workload (X2)	0.826					
Occupational Health and Safety (X3)	0.329	0.858				
Performance (Y)	0.527	0.608	0.807			
Work Life Balance (X1)	0.666	0.533	0.719	0.817		
Source: Data processed with SmartPLS, 2025						

Based on Table 9, all variables in the model have a \sqrt{AVE} value higher than the stiene with other constructs in the same solumn. This indicates that each construct is

correlations with other constructs in the same column. This indicates that each construct is stronger in explaining its own indicators than the indicators of other constructs. Therefore, it can be concluded that the measurement model in this study meets the Fornell-Larcker Criterion, and all variables are considered to have good discriminant validity. This means that the instruments in this study are able to effectively differentiate between constructs.

Construct Reliability

Reliability analysis in this study was conducted using two main measures, namely Composite Reliability (CR) and Cronbach's Alpha (CA). Both are used to assess the internal consistency of the indicators in measuring a construct. According to the standards set by Hair et al. (2023), a good CR and CA value should be above 0.70. However, for exploratory research, values between 0.60 and 0.70 are still acceptable. The table of Composite Reliability and Cronbach's Alpha values is as follows:

Table 10. Cronbach's Alpha and Composite Reliability Analysis Results					
Variable	Cronbach's Alpha	Composite Reliability (rho_a)	Remarks		
Work Life Balance (X1)	0.937	0.942	Reliable		
Workload (X2)	0.942	0.950	Reliable		

Occupational Health and Safety (X3)	0.955	0.956	Reliable
Performance (Y)	0.962	0.962	Reliable

Source: Data processed with SmartPLS, 2025

Based on the results in Table 10 and the previous data, it can be concluded that all variables in this study have met the reliability and validity criteria. All variables have Composite Reliability and Cronbach's Alpha values above 0.70, indicating good internal consistency reliability. Furthermore, the measurement model has also met the criteria for convergent validity and discriminant validity. Therefore, the instruments in this study are declared valid, reliable, and suitable for further analysis.

Structural Model Analysis (Inner Model)

The structural model (inner model) in PLS-SEM depicts the causal relationships between latent variables based on theory. Evaluation of this model is conducted to assess the strength and significance of the relationships between latent variables, considering aspects such as R-Square, Effect Size, and Hypothesis Testing.



Figure 2. Inner Model Source: Data processed with SmartPLS, 2025

R-Square (R²) Test

R-Square (R^2) measures the proportion of variance explained by exogenous variables on endogenous variables in the research model. The R^2 value ranges from 0 to 1, where a higher R^2 value indicates a better model in predicting the endogenous variable. Below is a table showing the R-square estimation results using SmartPLS:

Table 11. R-Square (R ²) Analysis Results					
Dependent Variable R-square R-square adjusted					
Performance (Y)	0.633	0.622			
Source: Data processed with SmartPLS, 2025					

Based on the R² test results in Table 11, it can be concluded that the performance variable

has an R² value of 0.633, indicating that 63.3% of the performance is influenced by exogenous variables, while the remaining 36.7% is influenced by other factors. The R² values for the performance and motivation variables fall under the "moderate" category, with values of 62.2% and 53.6%, respectively. This suggests a moderate relationship between work-life balance, workload, and occupational safety and health on performance.

F-Square (F²) Test

F-Square is used to measure the relative impact of independent variables on the dependent variable. An F-Square value of 0.02 indicates a small effect, 0.15 indicates a medium effect, and 0.35 indicates a large effect on the relationship between variables.

Table 12. F-Square Analysis Results						
	Work Life Balance (X1)	Workload (X2)	Occupational Safety and Health (X3)	Performance (Y)	Motivation (Z)	
Work Life Balance				0.121	0.208	
(X1)						
Workload (X2)				0.052	0.128	
Occupational Safety				0.036	0.441	
and Health (X3)						
Performance (Y)						

Source: Data processed with SmartPLS, 2025

Based on the results in Table 12, it can be concluded that the variables work-life balance, workload, occupational safety and health, and motivation have varying impacts on performance. The impact of these variables on performance tends to be small, with F-Square values of 0.121 for work-life balance, 0.052 for workload, and 0.036 for occupational safety and health.

Goodness of Fit (GoF)

The GoF test is used to measure the overall fit of the model, both the outer model and the inner model, with the observed and expected values. The GoF value is calculated using the formula: GoF = $\sqrt{(\text{Average AVE} \times \text{Average R}^2)}$. The GoF value ranges from 0 to 1, with categories of small GoF (0.10), moderate GoF (0.25), and large GoF (0.36) (Ghozali, 2020). The GoF value for this research model can be seen in the following table.

Table 13. Goodness of Fit (GoF) Test				
Variable	Average Variance Extracted (AVE)	R-Square		
Work Life Balance	0.667			
Workload	0.682			
Occupational Safety and Health	0.737			
Performance	0.652	0.622		
Average	0.684	0.622		
GoF	0.673			

Source: Data processed with SmartPLS, 2025

Based on the results from the table above, the goodness of fit (GoF) value for this research model is 0.673. This value falls into the large GoF category, indicating that the overall model fit, both for the outer and inner models, is considered good and appropriate.

Hypothesis Testing

The significance of relationships in PLS-SEM is tested to determine whether the relationships between latent variables in the model are statistically significant. This process

uses bootstrapping to calculate the path coefficients and their standard errors, which are then reported as t-statistics or p-values. A relationship is considered significant if the p-value is smaller than the established significance level (0.05 in this study). Significant path coefficients indicate that the relationship between independent and dependent latent variables is statistically supported, and therefore, the proposed hypothesis can be accepted.

Table 14. Path Coefficient Bootstrapping Direct Effects						
Relationship	Original sample	Т	Р-	Significant		
	(0)	statistics	values	Level		
Work Life Balance (X1) -> Performance (Y)	0.347	3.271	0.001	Significant		
Workload (X2) -> Performance (Y)	-0.197	2.820	0.005	Significant		
Occupational Safety and Health (X3) ->	0.162	1.978	0.048	Significant		
Performance (Y)						

Source: Data processed with SmartPLS, 2025

Based on the results from Table 14, it can be concluded that:

- 1. Hypothesis 1 Testing shows that work-life balance has a positive and significant effect on driver performance. This is based on the original sample estimate value of 0.347, indicating a positive direction, meaning that the better the work-life balance perceived by the driver, the higher their performance will be. Additionally, the t-statistic value of 3.271 (>1.64) and the p-value of 0.001 (<0.05) confirm that this effect is significant. Therefore, Hypothesis H1 is accepted.
- 2. Hypothesis 2 Testing shows that workload has a negative and significant effect on driver performance. This is based on the original sample estimate value of -0.197, indicating a negative direction, meaning that the higher the workload received by the driver, the lower their performance will be. Additionally, the t-statistic value of 2.820 (>1.64) and the p-value of 0.005 (<0.05) confirm that this effect is significant. Therefore, Hypothesis H2 is accepted.
- 3. Hypothesis 3 Testing shows that occupational safety and health have a positive and significant effect on driver performance. The original sample estimate value of 0.162 indicates a positive direction, meaning that the better or improved the occupational safety and health conditions received by the driver, the better their performance will tend to be. The t-statistic value of 1.978 (>1.64) and the p-value of 0.048 (<0.05) confirm that this effect is significant. Therefore, Hypothesis H3 is accepted.

The Influence of Work-Life Balance on Driver Performance

Based on the results of the analysis, it can be concluded that work-life balance has a positive and significant impact on driver performance at PT Tiga Putri Bersaudara Is 36 ke Port. This means that the better the work-life balance experienced by the driver, the higher the performance level achieved. This finding is in line with the Goal Setting Theory, which states that individuals with clear goals are more motivated to achieve them. Additionally, in accordance with Maslow's Hierarchy of Needs Theory, fulfilling basic needs such as rest, health, and emotional balance also contributes to improving work performance.

Effective management of work-life balance has been proven to enhance focus, reduce stress levels, and encourage driver productivity. Company support, such as flexible work hours, an organized shift system, and policies that promote employee well-being, are crucial factors in creating a balanced work environment. This study aligns with previous research conducted by (Eldon et al., 2024; Puspitasari, 2020; E. A. A. Putri & Primadineska, 2023; S. W. Putri & Frianto, 2023) all of which found a positive and significant relationship between work-life balance and employee performance, particularly in professions such as driving.

With a balance between work and personal life, drivers not only perform more optimally and effectively but also exhibit lower stress levels, greater loyalty to the company, decreased absenteeism, and a reduction in the risk of work-related fatigue (burnout). Therefore, investing in creating a work environment that supports work-life balance through flexible leave policies, mental health programs, and improving driver welfare represents an effective long-term strategy for increasing workforce retention and ensuring the sustainability and productivity of the company's operations.

The Influence of Workload on Driver Performance

Based on the results of the analysis, it can be concluded that workload has a negative and significant impact on driver performance at PT Tiga Putri Bersaudara Is 36 ke Port. This means that the higher the workload assigned to drivers, the more likely their performance will decline. This finding is consistent with Maslow's Hierarchy of Needs Theory, which states that physiological needs and safety must be met before individuals can function optimally. A high workload can cause physical and mental stress, disrupt sleep quality, affect health, and disturb the emotional balance of drivers, ultimately leading to a decrease in overall performance.

This result emphasizes the importance of effective workload management. If workload is proportionally allocated through fair task distribution, flexible working systems, and support from management, drivers can maintain better physical and mental conditions. This, in turn, allows them to focus better on their responsibilities, increase work productivity, and deliver quality service that supports the company's performance.

The findings of this study are also in line with previous research by (Himamora et al., 2023; Iskandar & Sembada, 2012; Kurniawan & Al Rizki, 2022; Maghfira et al., 2023; Syahputri, 2023; Tortia et al., 2022; Wijaya, 2020; Yusnandar, 2022) which states that high workload has a significant negative impact on performance. This shows that without a good workload management system, increasing work intensity can actually reduce the effectiveness and quality of driver performance.

The Influence of Occupational Safety and Health on Driver Performance

Based on the results of the analysis, it can be concluded that occupational safety and health have a positive and significant impact on driver performance at PT Tiga Putri Bersaudara Is 36 ke Port. This means that the better the safety and health conditions provided to drivers, the higher their performance will be. This finding aligns with the Goal Setting Theory, which states that individuals are more motivated when they have clear goals. In this context, ensuring occupational safety and health becomes part of the goal that motivates drivers to be more disciplined, adhere to work procedures, and maintain their physical and mental well-being.

The findings demonstrate that effective management of occupational safety and health not only serves as a preventive measure against accidents and work injuries but also plays a crucial role in enhancing work efficiency, focus, and productivity. When drivers feel protected and have access to adequate health facilities, they are more comfortable, motivated, and capable of delivering optimal performance.

These results are supported by previous studies conducted by (Dewi & Sundari, 2021; Mattajang et al., 2022; Parashakti & Putriawati, 2020; Tondang et al., 2022) which also indicate a positive and significant impact of occupational safety and health on performance. These studies show that a well-planned and implemented occupational safety and health system plays a significant role in creating a safe and healthy work environment, which in turn drives driver performance improvement. Therefore, company investment in occupational safety and health is an essential strategy for maintaining human resource quality and ensuring productive operational continuity.

CONCLUSION

Based on the analysis results presented earlier, this study concludes that there is a significant relationship between several work factors and the performance of drivers at PT Tiga Putri Bersaudara IS 36 ke Port. First, work-life balance has been shown to have a positive and significant impact on driver performance, indicating that the better the balance between work and personal life, the higher the performance exhibited. Second, workload was found to have a negative and significant effect on driver performance, suggesting that the higher the perceived workload, the lower the performance produced. Third, aspects of occupational health and safety also have a positive and significant impact on driver performance, meaning that a safe work environment and maintained health conditions contribute to improved performance. These findings emphasize the importance of attention to welfare factors and workload management in efforts to enhance workforce productivity in the company.

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