Analysis of Occupational Safety Risk Management and Workload on Occupational Risks for Mechanics at a Workshop in Kwala Bingai, Stabat District

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ABSTRACT

This research endeavors to investigate the influence of occupational safety protocols and task volume on the inherent hazards encountered by motorcycle mechanics situated in Kwala Bingai, within the Stabat District. The study adopted a quantitative survey methodology, engaging a sample of 50 mechanics. Information was systematically gathered through a structured questionnaire and subsequently subjected to a range of statistical analyses. These analyses encompassed tests for validity and reliability, an evaluation of classical assumptions, and the application of multiple linear regression techniques. The findings indicate that workplace safety and workload have a significant influence on the occupational risks faced by mechanics. Good safety practices are associated with lower occupational risks, while higher workloads increase the likelihood of workplace hazards. Furthermore, these two variables jointly influence the level of occupational risk experienced by mechanics. This study concludes that improving workplace safety and maintaining a balanced workload are crucial for reducing occupational risks in motorcycle repair shops. These findings are expected to assist shop owners in creating a safer and more effective work environment.

Keywords: Work Safety, Workload, Work Risk.

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INTRODUCTION

In today's era of globalization, the workplace is undergoing significant changes driven by increasingly fierce competition across various industries. Rising market pressures, continuous technological advancements, and the emergence of new competitors are forcing organizations to operate with greater efficiency, precision, and consistency in order to achieve their goals. The workplace is an organizational environment where individuals interact within a structured system to achieve common goals. Therefore, organizations require a well-organized and well-planned work system to ensure operational smoothness [13].

Proactive measures aimed at improving workplace safety are essential to protect workers from occupational diseases and injuries resulting from accidents that may arise from hazardous work practices or environments [18].As the demands of modern work continue to rise, workplace safety has become a critical issue, particularly in jobs involving technical activities and work equipment. States that workplace risks can arise from the interaction between human factors, work methods, equipment, and the work environment. Weak implementation of safety procedures can increase workplace accidents and occupational health issues, which can reduce employee productivity.

Motorcycle repair shops are classified as high-risk workplaces because mechanics are frequently exposed to sharp tools, engine heat, oil spills, noise, and repetitive physical activities. In many small shops, workplace safety procedures are often implemented informally and without adequate supervision. Excessive workloads combined with poor safety management can increase the likelihood of workplace accidents and health issues among mechanics. Therefore, examining workplace safety and workloads in relation to occupational risks is essential to support safer and more productive working conditions.

To minimize work-related risks, organizations require systematic risk management through a structured approach. ISO 31000:2018 serves as an international guideline for effectively identifying, analyzing, evaluating, and controlling risks [6]. This approach is highly relevant to motor vehicle repair work, which involves machinery, tools, and physically demanding activities.

This study focuses on motorcycle mechanics in Kwala Bingai, Stabat District, as their work involves potential hazards that can increase occupational risks if not properly managed. This investigation scrutinizes workplace safety, designated as independent variable X_1, and workload, identified as independent variable X_2, in relation to occupational risk, serving as the dependent variable (Y). Overburdened workload may precipitate exhaustion and diminished focus, consequently elevating the probability of human error and occupational incidents [13].

Although there have been a number of previous studies addressing occupational safety and workload in industrial settings, few have specifically examined the occupational hazards faced by motorcycle mechanics working in small-scale informal repair shops located in rural areas, such as Kwala Bingai in Stabat District. Existing academic efforts have largely focused on sectors such as manufacturing, logistics, or large-scale corporate entities, thereby reducing academic consideration of informal motor vehicle repair shops. Therefore, this study aims to contribute to the existing literature through a quantitative examination of the combined impact of occupational safety protocols and workload intensity on occupational risk incidents among motorcycle mechanics in these local workshops. Additionally, this study aims to generate actionable insights regarding the improvement of safety management strategies within small-scale automotive service enterprises.

LITERATURE REVIEW

Risk Management

Risk management is a systematic process used to identify, prevent, and control risks in order to reduce uncertainty and achieve organizational objectives [11]. Risk management encompasses risk avoidance, transfer, reduction, and acceptance, emphasize risk identification, assessment, and control through a structured and continuous process [4].

Occupational Safety

Occupational safety refers to all efforts aimed at protecting workers from workplace accidents and work-related illnesses. Occupational safety encompasses the use of personal protective equipment, hazard prevention procedures, safety training, and supervision. The proper implementation of workplace safety can increase employee productivity and reduce accident rates [14]. Previous research also found that safety management significantly influences employee work performance and risk reduction [8].

Workplace inspections are crucial in occupational safety management for identifying and preventing potential hazards. Furthermore, states that occupational safety encompasses physical aspects—such as Personal Protective Equipment (PPE), warning signs, and safety training—as well as social aspects, including fair regulations and insurance coverage [14].

Workload

Workload is defined as the amount of physical and mental effort required to complete a task within a specific period of time. Excessive workload can lead to fatigue, stress, and decreased concentration. Indicators of workload include working conditions, work targets, and time utilization.

Research conductedshows that high workloads have a negative impact on employee performance and increase work-related stress [12].

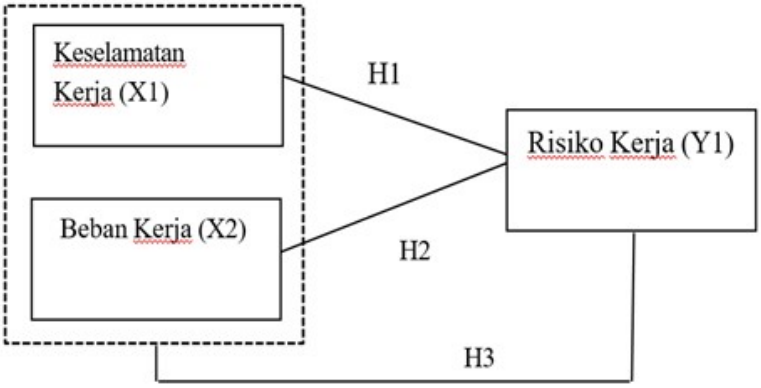
Workload refers to the physical and mental stress caused by job demands. Define workload as the gap between a worker's capabilities and job demands, workload indicators as working conditions, time utilization, and work targets [1], [3].

Occupational Risk

Occupational risks refer to the likelihood of accidents, injuries, or health problems arising from workplace activities. According to ISO 31000, risk management aims to systematically identify, assess, and control potential hazards. Occupational risks in a motorcycle repair shop may include burns, cuts, falls, and musculoskeletal disorders caused by repetitive work activities and unsafe working conditions.

Framework of thinking

State that ergonomic workplace risks arise from non-ergonomic working conditions, which can endanger workers' health [10]. These risks include uncomfortable body postures, repetitive activities, manual handling, and long working hours, which can lead to fatigue, musculoskeletal problems, and reduced workplace safety.



Source: Data processed by the author (2026)

Figure1. Conceptual Framework

Hypothesis

Enforcing safety regulations and providing personal protective equipment can enhance worker protection and reduce workplace hazards [14]. Therefore, effective workplace safety is expected to reduce occupational risks.

H_1: Workplace safety has a negative and significant impacton workplace risks in auto repair shops.

Workload refers to the physical and mental demands of a job that must be met within a certain period of time. Excessive workload in this context can lead to fatigue and a decline in concentration,thereby increasing the risk of work errors and accidents. Previous research has also found that high workloads contribute to workplace accidents and worker fatigue [13].

H_2:Workload has a negative and significant impact on the occupational risks faced by auto mechanics.

Workplace risks are influenced by workplace safety and job demands. Proper implementation of safety measures and balanced workload management can reduce risks, while poor safety systems and excessive workloads can increase the potential for accidents .

H_3:Workplace safety and workload together have negative and significant impacton the occupational risks faced by auto mechanics.

RESEARCH METHODS

This study employs a quantitative survey method to analyze the influence of workplace safety (X_1) and workload (X_2) on occupational risk (Y) among auto mechanics in Kwala Bingai, Stabat District. The study uses a causal-associative approach to statistically test the relationship between the independent and dependent variables.This study uses a quantitative survey method to examine the influence of workplace safety (X_1) and workload (X_2) on occupational risk (Y) among automotive mechanics in Kwala Bingai, Stabat District. This study employs a causal-associative approach to statistically evaluate the relationship between the independent and dependent variables.

Research Design

This study employed a quantitative survey approach to measure the effects of workplace safety (X_1) and workload (X_2) on occupational risk (Y) among motorcycle mechanics in Kwala Bingai, Stabat District. Data were collected from 50 respondents via a questionnaire using a simple random sampling method. Analysis was performed using SPSS, which included validity and reliability tests, classical assumption tests, multiple linear regression, t-tests, F-tests, and the coefficient of determination.

Research Limits

This study specifically focuses on motorcycle mechanics working in Kwala Bingai, Stabat District. Workplace safety and workload were examined as independent variables, while occupational risk was used as the dependent variable. Research data were collected from 50 respondents using a questionnaire. Furthermore, this study did not include several other factors that could potentially influence the results, such as work experience, work-related stress, environmental conditions, and technical competence.

Variable Identification

This study focuses on mechanics working at a motorcycle repair shop located in Kwala Bingai, Stabat District. The study analyzes workplace safety and workload as independent variables, while occupational risk is treated as the dependent variable. Data were collected from 50 respondents using a questionnaire as the primary data collection method. In addition, this study is limited to motorcycle repair shops and does not account for other factors that could potentially influence occupational risk, including work experience, stress levels, workplace conditions, and technical skills.

Participants and Setting

This study involved 50 motorcycle mechanics from repair shops in Kwala Bingai, Stabat District, who were selected using simple random sampling. The location was chosen because of the technical tasks, physical demands, and occupational hazards commonly encountered in motorcycle repair work.

Measurement

Data Collection

Data were collected by distributing questionnaires to motorcycle mechanics at repair shops in Kwala Bingai, Stabat District, using a five-point Likert scale and a simple random sampling method. Work safety (X_1), workload (X_2), and occupational risk (Y) were measured using relevant indicators, supported by limited observations. SPSS was used to evaluate the validity and reliability of all research instruments before proceeding to further analysis.

Data Analysis

The statistical analysis was executed utilizing SPSS, incorporating examinations of validity and reliability, computation of descriptive statistics, verification of classical assumptions, and the application of multiple linear regression. Hypothesis assessment involved the use of t-tests, F-tests, and an evaluation of the coefficient of determination (R^2) to ascertain the influence of workplace safety and job demands on occupational hazards.

RESULTS

Validity Test and Reliability Test

Validity was tested on 30 respondents by comparing the r values calculated for each questionnaire item with the critical r value of 0.361 listed in the table. Items with values exceeding 0.361 were considered valid, as they accurately and reliably measured the intended variable. Meanwhile, items with r values lower than the required standard were removed from the research instrument to maintain the

accuracy of the measurement results. This process ensures that only valid statement items are used in the subsequent analysis stage.

Reliability was measured using Cronbach's alpha to assess the instrument's consistency. All variables obtained a Cronbach's alpha value above 0.70, thereby meeting the reliability criteria established. These findings indicate that the questionnaire possesses good internal consistency and is reliable for measuring the variables of workplace safety, workload, and occupational risk. Therefore, the instruments used in this study are considered valid and reliable for data collection and subsequent statistical analysis.

Table 1. Validity Test Results for X_1

Item	r hitung	r table	Kesimpulan
KK1	0.854	0.361	Valid
KK2	.688***	0.361	Valid
KK3	0,166	0.361	Tidak Valid
KK4	.758***	0.361	Valid
KK5	.583***	0.361	Valid
KK6	0,289	0.361	Tidak Valid
KK7	.708***	0.361	Valid
KK8	.799***	0.361	Valid
KK9	.626***	0.361	Valid
KK10	.867***	0.361	Valid
KK11	.883***	0.361	Valid
KK12	.626***	0.361	Valid
KK13	.635***	0.361	Valid
KK14	.832***	0.361	Valid
KK15	0.764	0.361	Valid
KK16	0.770	0.361	Valid
KK17	0.719	0.361	Valid

Source: Data processed by the author (2026)

The validity test for workplace safety (X_1) showed that 15 items were deemed valid, while KK3 and KK6 were excluded because their r-values were below 0.361. The remaining items were considered reliable for measurement.

Table 2. Reliability Test Results for X_1

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.942	.943	15

Source: Data processed by the author (2026)

After removing invalid questionnaire items, the occupational safety variable (X_1) yielded a Cronbach's Alpha value of 0.942, indicating very high reliability and strong internal consistency among the remaining items. This value is significantly higher than the minimum reliability standard of 0.70, indicating that these indicators are capable of measuring the occupational safety construct consistently and accurately. Furthermore, the high reliability value indicates that respondents' answers are stable and reliable in representing the variables under study. Thus, the occupational safety instrument is considered reliable and suitable for further statistical analysis in this study.

Table 3.Validity Test Result for X_2

Item	r hitung	r tabel	Kesimpulan
BK1	0.750	0.361	Valid
BK2	0.634	0.361	Valid
BK3	0.370	0.361	Valid
BK4	0.195	0.361	Tidak Valid
BK5	0.756	0.361	Valid
BK6	0.619	0.361	Valid
BK7	0.616	0.361	Valid
BK8	0.641	0.361	Valid
BK9	0.742	0.361	Valid
BK10	0.473	0.361	Valid
BK11	0.455	0.361	Valid
BK12	0.705	0.361	Valid
BK13	0.666	0.361	Valid

Source: Data processed by the author (2026)

The validity test for workload (X_2) indicated that 12 items were deemed valid, while item BK4 was excluded because its r value was below 0.361. Therefore, the remaining items were considered suitable for consistently measuring workload.

Table 4. Reliability Test Result for X_2

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.860	.857	12

Source: Data processed by the author (2026)

Validity test results for the workload variable (X_2), most questionnaire items had calculated r values above 0.361 and were considered valid. However, item BK4 had an r value of 0.195, which was below the required standard, so it was excluded from further analysis. Consequently, the number of workload items was reduced from 13 to 12 valid items. These findings indicate that the remaining indicators are capable of measuring the workload construct accurately and consistently.

Table 5. Validity Test Result for Y

Item	r hitung	r tabel	Kesimpulan
RK1	0.815	0.361	Valid
RK2	0.617	0.361	Valid
RK3	0.782	0.361	Valid
RK4	0.684	0.361	Valid
RK5	0.770	0.361	Valid
RK6	0.652	0.361	Valid
RK7	0.645	0.361	Valid
RK8	0.764	0.361	Valid
RK9	0.705	0.361	Valid
RK10	0.573	0.361	Valid

Source: Data processed by the author (2026)

Based on the results of the validity test, all items for the occupational risk variable (Y) were found to be valid, with r values ranging from 0.573 to 0.815 and exceeding 0.361. Therefore, these ten items are suitable for further analysis and accurately represent the occupational risk construct.

Table 6. Reliability Test Result for Y

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.885	.885	10

Source: Data processed by the author (2026)

All items pertaining to the occupational risk variable (Y) were included in the analysis, signifying their appropriateness for both reliability assessment and regression modeling. The Cronbach's Alpha

coefficient surpassed the benchmark of 0.70, thereby affirming the reliability of the variable and its satisfactory internal consistency in assessing the occupational risk construct.

Descriptive Statistical Test

To elucidate the characteristics of variables pertaining to workplace safety, task demands, and occupational hazards, descriptive statistical measures including the minimum, maximum, average, and standard deviation were computed. The resultant findings are presented in the subsequent table:

Table 7. Results of Descriptive Statistical Tests

	N	Minimum	Maximum	Mean	Std. Deviation
Keselamatan Kerja	50	16.00	75.00	66.6200	10.93933
Beban Kerja	50	15.00	60.00	48.1800	9.78063
Risiko Kerja	50	10.00	50.00	39.9800	9.00451
Valid N (listwise)	50				

Source: Data processed by the author (2026)

A descriptive analysis of 50 respondents indicates that workplace safety is in the "good" category, while workload and occupational risks are classified as "high." The data shows stability, with a standard deviation lower than the average.

Kolmogorov-Smirnov Normality Test

The Kolmogorov-Smirnov test, conducted using SPSS, indicates that the data distribution is normal, given that the p-value exceeds 0.05.

Table 8. Results of Kolmogorov-Smirnov Normality Test

			Unstandardized Residual
N			50
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.08520445
Most Extreme Differences	Absolute		.116
	Positive		.111
	Negative		-.116
Test Statistic			.116
Asymp. Sig. (2-tailed)[c]			.090
Monte Carlo Sig. (2-tailed)[d]	Sig.		.087
	99% Confidence Interval	Lower Bound	.080
		Upper Bound	.094

Source: Data processed by the author (2026)

The Kolmogorov-Smirnov test yielded Asymp. Sig. and Monte Carlo Sig. values greater than 0.05, confirming that the data distribution is normal and suitable for further statistical analysis.

Multicollinearity Test

The multicollinearity assessment involves an examination of the Tolerance and Variance Inflation Factor (VIF) metrics for the predictor variables. Given that the Tolerance metric surpasses 0.10 and the VIF metric is less than 1.0, the regression framework is deemed to be unburdened by multicollinearity concerns.

Table 9. Result of Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	X1	.965	1.036
	X2	.965	1.036

Source: Data processed by the author (2026)

The assessment of multicollinearity reveals that both workplace safety (X_1) and workload (X_2) exhibit Tolerance values exceeding 0.10 and Variance Inflation Factor (VIF) values below 10. These findings suggest the absence of multicollinearity within the established regression model.

Heteroscedasticity Test

The presence of heteroscedasticity was evaluated employing the Glejser methodology, whereby the significance level (Sig.) was scrutinized. A regression model is deemed homoscedastic when the Sig. value surpasses the threshold of 0.05. The outcomes derived from this test are presented in the subsequent table:

Table 10. Result of Heteroscedasticity Test

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.003	.001		-2.017	.049
	X1	.027	.039	.228	.691	.493
	X2	.157	.118	.436	1.323	.192

Source: Data processed by the author (2026)

The outcomes of the heteroscedasticity assessment suggest that occupational safety measures (X_1) and task demands (X_2) exhibit statistical significance values exceeding 0.05. This observation substantiates the non-existence of heteroscedasticity within the employed regression framework.

Multiple Linear Regression Analysis

This research employs multiple linear regression to ascertain the influence of workplace safety and job demands on the probability of occupational hazards. The outcomes of the regression analysis are delineated in the subsequent table:

Table 11. Result of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-15.097	5.297		-2.850	.006
Keselamatan Kerja	.257	.073	.218	3.501	.001
Beban Kerja	.786	.058	.842	13.524	.000

a. Dependent Variable: Risiko Kerja
Source: Data processed by the author (2026)

Based on the multiple linear regression analysis, the following regression equation was obtained:

$$Y = -15{,}097 + 0{,}257\ (X_1) + 0{,}786\ (X_2)$$

The regression equation shows a constant term of -15.097. The work safety coefficient of 0.257 and the workload coefficient of 0.786 indicate that both variables positively influence occupational risk when all other variables are held constant.

t-test (Partial)

A t-test statistical analysis was performed to ascertain the discrete influence of each predictor variable on the criterion variable. An independent variable is deemed to possess statistical significance when its associated p-value falls below the predetermined threshold of 0.05.

Table 12. Result of t-test (Partial)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-15.097	5.297		-2.850	.006
Keselamatan Kerja	.257	.073	.218	3.501	.001
Beban Kerja	.786	.058	.842	13.524	.000

a. Dependent Variable: Risiko Kerja
Source: Data processed by the author (2026)

The t-test results show that workplace safety has a significance level of 0.001, while workload has a significance value of 0.000. Since both values are below 0.05, workplace safety and workload have been shown to have a significant effect on occupational risk.

F test (Simultaneous)

A F-test was employed to ascertain the collective influence of the independent variables on the dependent variable, as indicated by the statistical significance values reported within the ANOVA table.

Table 13. Result of F Test (Simultaneous)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2168.853	2	1084.427	110.290	.000[b]
	Residual	462.127	47	9.832		
	Total	2630.980	49			

a. Dependent Variable: Risiko Kerja

b. Predictors: (Constant), Beban Kerja, Keselamatan Kerja

Source: Data processed by the author (2026)

The F-test yielded a p-value of 0.000, which is below the significance threshold of 0.05. Thus, workplace safety and workload together have a significant effect on occupational risk.

Coefficient of Determination (R^2)

The coefficient of determination serves as a metric to quantify the degree to which the explanatory power of the independent variables accounts for the variance observed in the dependent variable. The empirical outcomes derived from the coefficient of determination analysis are systematically delineated within the subsequent tabular presentation.

Table 14. Result of Coefficient of Determination (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.908[a]	.824	.817	3.136

a. Predictors: (Constant), Beban Kerja, Keselamatan Kerja

Source: Data processed by the author (2026)

The coefficient of determination test yielded an R-squared value of 0.824, indicating that workplace safety and workload account for 82.4% of the variation in occupational risk, while the remaining 17.6% is attributed to other factors beyond the scope of this study.

DISCUSSION

The empirical results of this study indicate a strong correlation between workplace safety protocols and the prevalence of occupational hazards, with a statistically significant p-value of 0.001, thereby supporting the acceptance of Hypothesis H_1. The adoption of stringent safety regulations and the compulsory utilization of personal protective apparatus are instrumental in mitigating exposure to workplace perils and cultivating an environment conducive to enhanced safety for mechanical personnel. Concurrently, the analysis revealed that workload exerts a considerable influence on occupational risk, as indicated by a p-value of 0.000. This finding suggests that elevated job demands are intrinsically linked to increased levels of fatigue, diminished cognitive focus, and a consequently heightened probability of workplace incidents. All of whom underscore the interconnectedness of work intensity, employee exhaustion, and the potential for occupational harm [3][13].

Moreover, the F-test produced a p-value of 0.000, thereby substantiating the concurrent impact of both occupational safety and task load on the level of workplace hazards. Consequently, hypothesis H_3 is validated. The coefficient of determination (R^2) value, recorded at 0.824, signifies that the investigated variables account for 82.4% of the variance observed in occupational risk. The residual 17.6% is attributable to extraneous variables not encompassed within the present research framework.), who posits that the implementation of robust safety protocols and judicious workload regulation can effectively mitigate occupational risks.

Although workplace safety shows a positive regression coefficient, this may indicate that workshops with higher occupational risks tend to implement more safety measures. Therefore, this positive relationship may reflect increased awareness of safety practices in hazardous work environments, rather than indicating that safety directly increases risk.

CONCLUSION

The empirical findings of this investigation suggest that both the safety conditions of the work environment and the magnitude of the tasks assigned exert a substantial effect on the occupational hazards encountered by automotive technicians within the service centers located in Kwala Bingai, Stabat District. Inferential statistical analysis, specifically the t-test, revealed probability values of 0.001 for workplace safety and 0.000 for workload. As these values are demonstrably lower than the conventional alpha level of 0.05, the null hypotheses pertaining to the individual impact of these variables are rejected, and the alternative hypotheses (H_1 and H_2) are consequently substantiated. Furthermore, the F-test, designed to assess the collective influence of independent variables, produced a significance value of 0.000. This statistically significant outcome confirms the contemporaneous effect of workplace safety and

workload on occupational risk, thereby providing robust support for the acceptance of H_3, which posits a combined effect.

Further elaborating on the explanatory power of the investigated factors, the coefficient of determination (R^2) analysis yielded a value of 0.824. This indicates that workplace safety and workload collectively account for a considerable 82.4% of the variance observed in occupational risk. The residual 17.6% of the variability must therefore be attributed to exogenous variables not included within the parameters of this particular research endeavor.

SUGGESTION

Based on these findings, workshop owners are advised to improve workplace safety by providing Personal Protective Equipment (PPE), supervising the use of tools, and implementing standard operating procedures. Mechanics should also continue to adhere to safety practices and maintain their physical condition to reduce fatigue and accidents. In addition, it is recommended to implement balanced workload management and proper scheduling.

Further research is recommended to examine other factors that influence occupational risks, such as the work environment, work experience, stress, PPE usage, and equipment condition, in order to obtain more comprehensive results.

CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

Muhammad Farid Abrar: Conceptualization, data collection, formal analysis, investigation, validation, visualization, and preparation of the initial draft.. **Waizul Qarni**: Supervision, review, and academic guidance. **Nur Ahmadi Bi Rahmani**: Evaluation, validation, and manuscript review.

DECLARATION OF COMPETING INTEREST

The authors affirm that there are no financial or personal conflicts of interest that may have influenced the conduct or results of this study.

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DATA AVAILABILITY

Data supporting the findings of this study may be obtained from the corresponding author upon reasonable request.

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ETHICAL APPROVAL

All participants took part voluntarily and provided information after giving informed consent. Throughout the study, the researchers ensured the confidentiality and anonymity of all respondents' data.

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