

Analysis of The Influence of Visible Safety Leadership and Job Satisfaction on Safety Work Performance at PT. Solusi Bangun Indonesia Tbk Pabrik Cilacap

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Abstract: This research aims to analyze the influence of visible safety leadership and job satisfaction on safety work performance at PT. Solusi Bangun Indonesia Tbk Cilacap Factory. This research uses quantitative research methods with descriptive and analytical approaches. The research subjects were employees and contractors of PT. Solusi Bangun Indonesia Tbk Cilacap Factory involved in overhaul activities. Data collection was carried out randomly through questionnaires, interviews and observations. Research data was analyzed using quantitative statistical test techniques and then described in detail based on the results of each test. The research results show that work accidents at PT. Solusi Bangun Indonesia decreased during the 2023 overhaul activities due to its leadership role in ensuring workplace safety during these activities. This research highlights how visible leadership behavior in the field, or visible safety leadership and job satisfaction, contributes to increasing safety work performance. The Regression and Correlation Test Method used to analyze the data shows that 76.4% of safety work performance is influenced by visible safety leadership and job satisfaction, while the rest is influenced 23.6 % by other factors. These results confirm that leadership behavior that is proactively involved and visible in the field and high job satisfaction in implementing safety has a significant impact on safety performance, which ultimately contributes to a safer work environment for all workers.

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Introduction

In today's era of globalization, competition between companies is increasingly tight and complex. To survive and thrive, companies are required to have competitive advantages in various aspects, one of which is human resources (HR). According to Sugandha et al. (2018), good and effective HR management is very important to achieve company goals. Skilled and productive employees, as well as highly motivated, are determining factors in the success of company operations. Therefore, companies need to plan the right HR management strategy, including setting clear annual goals to plan effective steps in achieving these goals.

In addition to HR management factors, occupational safety in the industrial environment is also a very important aspect to consider. Data from the International Labor Organization (ILO) in 2018 showed that more than 1.8 million deaths due to work accidents occur each year in the Asia and Pacific region (Tuhulaula & Fajrini, 2021). In Indonesia, the number of work accidents has also increased significantly. Based on BPJS Ketenagakerjaan data, in 2018 there were 173,105 cases of

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work accidents, which is an increase of 65% compared to 2001. This increase reflects the need for more attention to work safety in the industrial sector, especially in large companies with high potential work risks.

In the manufacturing sector, work safety is one of the main priorities. The manufacturing industry often involves a work environment full of risks, such as the use of heavy machinery, hazardous chemicals, and complex work processes. Unsafe environmental conditions can potentially cause serious accidents, fatal injuries, or even death. In addition, work accidents can also result in significant financial losses for the company. Therefore, the implementation of effective safety practices, such as good risk management and regular safety training, is very important to do.

Data obtained from BPJS Ketenagakerjaan shows that the number of work accidents continues to increase. Table below shows the trend of work accidents and the number of deaths due to work accidents in Indonesia from 2001 to 2018, which shows how important it is to reduce work accidents in the industrial sector.

Table 1. Number of Accidents and Deaths Due to Work Accidents

Year	Work Accident Cases	Death Rate Due to Work Accidents
2001	104.714	1.768
2002	103.804	1.903
2003	105.846	1.748
2004	95.418	1.736
2005	99.023	2.045
2006	95.624	1.784
2007	83.714	1.883
2008	93.823	2.124
2009	96.134	2.114
2010	98.712	2.191
2011	94.491	2.144
2012	103.074	2.332
2013	103.235	2.438
2014	105.383	2.375
2015	110.285	2.308
2016	101.367	2.382
2017	123.041	3.000
2018	173.105	

The high number of work accidents shows that there are still many challenges to be faced in creating a safe work environment. Therefore, it is important for companies to not only rely on existing safety standards, but also to continue to evaluate and improve the safety management system implemented.

PT Solusi Bangun Indonesia Tbk, as one of the largest manufacturing companies in Indonesia engaged in the production of cement, ready-mix concrete, and aggregates, has a high commitment to work safety. The company has several factories, including one located in Cilacap, Central Java, which often carry out overhaul activities, a maintenance process that involves many workers and has the potential to cause risks. This overhaul is very important to ensure the efficiency and reliability of

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the machine, as well as to maintain the safety of the workers involved. In its implementation, the company applies strict safety standards and involves skilled workers to minimize the potential for accidents. Careful planning and effective coordination between teams are also the keys to the success of implementing a safe and efficient overhaul (Martalina et al., 2018).

As part of efforts to improve occupational safety, PT Solusi Bangun Indonesia Tbk also complies with various regulations issued by the government, such as Law Number 1 of 1970 concerning Occupational Safety and Law Number 13 of 2003 concerning Manpower. These regulations aim to ensure that companies comply with applicable safety standards and provide adequate protection for workers (Utari, 2020).

One increasingly popular approach to improving occupational safety is Visible Safety Leadership, a form of leadership that is actively involved in workplace safety efforts. Visible leadership, as implemented by PT Solusi Bangun Indonesia Tbk, can strengthen a culture of safety and increase worker awareness of the importance of occupational safety. Previous research has shown that Visible Safety Leadership played a major role in increasing compliance with safety procedures, reducing accidents, and creating a safer work environment (Basahel, 2021). With leaders who are directly involved in safety activities, employees tend to appreciate and follow existing safety procedures more.

In addition, job satisfaction also has a significant influence on safety performance. Employees who are satisfied with their jobs tend to be more motivated and show a positive attitude towards occupational safety. Factors that influence job satisfaction include a safe working environment, support from management, recognition of contributions, and opportunities for growth. Therefore, understanding the influence of job satisfaction on safety performance at PT Solusi Bangun Indonesia Tbk will provide important insights in improving the effectiveness of safety programs in the company.

This study aims to explore the relationship between Visible Safety Leadership and job satisfaction on safety performance at PT Solusi Bangun Indonesia Tbk. This study will analyze how much influence the active involvement of leaders in safety has on reducing accident incidents and how employee job satisfaction can improve compliance with established safety standards. It is hoped that the results of this study can provide useful recommendations for companies in strengthening safety culture and improving safety performance in their factories.

Research Method

This study used a quantitative approach with survey and experimental research types to test the effect of visible safety leadership on job satisfaction and job performance in the context of work safety in overhaul activities at PT Solusi Bangun Indonesia Tbk Cilacap Factory. This study aims to systematically analyze the relationship between visible safety leadership style, job satisfaction, and job performance on work safety in the factory environment.

The population in this study consisted of all employees directly involved in overhaul activities at PT Solusi Bangun Indonesia Tbk Cilacap Factory, involving around 1,000 people. Overhaul is a routine maintenance activity that involves many workers in various units, from supervisors, operators, to technicians. With a fairly large population, the sampling technique used is simple random sampling. Based on the Slovin formula to determine the number of samples with a 95% confidence level and a 5% margin of error, a sample of 285 respondents was obtained. Respondents

consisted of supervisors, managers, and field workers who were directly involved in the overhaul process.

This study measures three main interrelated variables; the first was Visible Safety Leadership. This variable is measured based on employee perceptions of a leadership style that emphasizes the importance of safety, as well as how often their leaders demonstrate behaviors that support a culture of safety (e.g. by participating in safety training, providing positive feedback related to safety, and providing the resources needed to maintain safety).

The second was Job Satisfaction. This variable refers to the level of employee satisfaction with their jobs, which includes aspects such as work-life balance, relationships with coworkers, and fulfillment of basic needs and rewards from the company.

The last was Job Performance. Job performance is measured through two main indicators, namely work productivity (the amount of output produced in a certain period) and the level of accidents or work incidents (a negative indicator, where fewer incidents mean higher safety and work performance).

The data in this study consisted of primary data and secondary data. Primary data were collected using a main instrument in the form of a questionnaire designed to measure respondents' perceptions of visible safety leadership, job satisfaction, and job performance. In addition, secondary data was also used to further analyze work accidents that occurred during previous overhaul activities. This secondary data was obtained from accident and incident records recorded in the company's annual report that recorded the accident rate, as well as productivity and work safety reports.

To ensure that the instruments used are valid and reliable, the researcher conducted a validity and reliability test on the questionnaire. The validity test was carried out by measuring the correlation between each question item in the questionnaire with the total score of each variable being measured (Janna, 2021). Construct validity was tested by ensuring that each item in the questionnaire actually measures the intended concept.

As for the reliability test, the researcher used the Cronbach's Alpha technique. The questionnaire is considered reliable if the Cronbach's Alpha value is greater than 0.6, which indicates good internal consistency in the instrument (Sugarna et al., 2019). Based on initial testing, the Cronbach's Alpha value for the visible safety leadership variable was 0.88, for job satisfaction 0.85, and for job performance 0.87, all of which indicate that the instrument is reliable and can be used for further research.

After the data was collected, the researcher conducted a descriptive analysis to describe the demographic characteristics of the respondents and provide an overview of the respondents' perceptions of visible safety leadership, job satisfaction, and job performance. This descriptive data is used to map the general perceptions in the field related to these variables.

To test the relationship between variables, the researcher used multiple linear regression techniques. This multiple linear regression is used to analyze the simultaneous and partial effects of visible safety leadership on job satisfaction and job performance. The test was conducted using IBM SPSS version 25 software. Before conducting the regression analysis, a classical assumption test was conducted to ensure that there were no violations of the basic assumptions in the regression model, such as normality, multicollinearity, heteroscedasticity, and autocorrelation. In this case, the Kolmogorov-Smirnov test was conducted for normality, the VIF (Variance Inflation Factor) test for multicollinearity, and the Breusch-Pagan test for heteroscedasticity.

As part of the hypothesis testing, this study used the F test to determine whether the independent variable (visible safety leadership) simultaneously influenced the dependent variable (job satisfaction and job performance). Furthermore, to test the partial influence between each independent variable on the dependent variable, a t-test was conducted. The main hypotheses tested are as follows:

H₁: Visible safety leadership has a positive effect on job satisfaction.
H₂: Visible safety leadership has a positive effect on job performance.
H₃: Job satisfaction has a positive effect on job performance.

Result and Discussion

Respondent Characteristics

In this study, all overhaul workers of PT. Solusi Bangun Indonesia Tbk Cilacap Factory as respondents consisting of employees of PT. Solusi Bangun Indonesia Tbk Cilacap Factory and contract workers with a total of 1,000 workers. Based on the sampling calculation using the previous Slovin formula, the minimum number of respondents was 286 respondents, while the respondents used in this study were 350 people.

Respondent Characteristics Based on Company Origin.

The following is the first characteristic in this study which is grouped based on the company of origin of employees in the overhaul activities of PT. Solusi Bangun Indonesia Tbk. Cilacap Factory.

Table 2. Respondent Characteristics Based on Company Origin.

Company Origin	Percentage	Frequency
PT. Solusi Bangun Indonesia Tbk. Pabrik Cilacap	12,8%	45 people
Contractor	87,1%	305 people

Based on table above, it can be seen that the respondents in this study were mostly contractor workers. As many as 87.1% were contractor workers while the remaining were only 12.8% workers of PT. Solusi Bangun Indonesia Tbk. Cilacap Factory. Because in the overhaul activities of PT. Solusi Bangun Indonesia Tbk. Cilacap Factory, most of them were filled by contract workers so that the contractor was the party most affected by the variables of visible safety leadership, satisfaction and safety work performance.

Respondent Characteristics Based on Position or Job Title.

The following is the second characteristic of this study which is grouped based on the position or job title of each overhaul worker of PT. Solusi Bangun Indonesia Tbk Cilacap Factory.

Table 3. Respondent Characteristics Based on Position or Job Title

Position	Percentage	Frequency
worker	74,2%	260
Supervisor (SO, Supervision, and Superintendent)	21,4%	75
Manager	4,2%	15

Based on the table above, characteristics of respondents based on position or job title, it is known that workers are the largest respondents with a value of 74.2% while for supervisors and managers, respectively, 21.4% and 4.2%. In overhaul activities, one of the tasks of supervisors and managers is to supervise and provide field guidance to overhaul workers. This is related to visible

safety leadership which is carried out proactively in the field so that it can affect the satisfaction and safety work performance of overhaul workers at PT. Solusi Bangun Indonesia Tbk Cilacap Factory.

Data Grouping

Data grouping is used to collect data for each variable that has been determined. This grouping aims to determine questions related to the variables to be tested.

Visible Safety Leadership Data Grouping

In the visible safety leadership variable, there are 6 questions related to the variable.

The following is the data grouping of questions based on the visible safety leadership variable.

Table 4. Visible Safety Leadership Data Grouping

Variable	Code	Questions
<i>Visible Safety Leadership</i>	X1.1	Compliance in Implementation of PPE
	X1.2	Implementation of visible safety leadership by SBI management
	X1.3	Implementation of visible safety leadership by contractor management
	X1.4	Implementation of safety supervision in the field by the SBI safety team
	X1.5	Implementation of safety supervision in the field by the contractor's safety team
	X1.6	The role of SBI leaders in supervising safety in the field

Based on research conducted by Agustina et al., (2019) on safety leadership, it is explained that the factor of implementing occupational safety and health in the work area is carried out with a motivational approach and direction from the leader in the work area. In its implementation, safety leadership can improve the performance of the OHS management system in companies with 4 elements, namely leaders must be committed to building occupational safety and health, leaders must cultivate safety behavior, leaders must have a program in realizing a safety culture and provide examples of occupational safety in work activities. The questionnaire design in table above was prepared with the direction and approval of the OHS expert PT. Solusi Bangun Indonesia Tbk. Cilacap Factory.

Safety Job Satisfaction Data Grouping

The safety job satisfaction variable consists of 5 questions related to the variable. The following is the question grouping data based on the safety job satisfaction variable.

Table 5. Grouping of Safety Job Satisfaction Data

Variable	Code	Questions
<i>Safety Job Satisfaction</i>	X2.1	Implementation of equipment inspection
	X2.2	Implementation of safety talk overhaul with the SBI team and contractors
	X2.3	Implementation of security supervision
	X2.4	Implementation of environmental monitoring
	X2.5	Overall safety job satisfaction

Based on research by Murtadho dan Kusuma (2022), it is stated that job satisfaction can be measured based on the level of job security and protection. Workers will feel safe and comfortable if they get protection and guarantees of work safety from the company. This can provide a sense of comfort for workers so that workers can carry out their duties calmly and well. Satisfaction in the

implementation of occupational safety and health can be shown by the implementation of procedures in the implementation of work. The implementation of work safety carried out includes the implementation of equipment inspections, the implementation of safety talk overhauls, the implementation of security supervision and the implementation of work environment supervision. Based on this research, questions can be arranged to represent the safety job satisfaction variable in this study. The draft questions in table above were arranged with the direction and approval of the K3 expert PT. Solusi Bangun Indonesia Tbk. Cilacap Factory.

Safety Work Performance Data Grouping

The safety work performance variable consists of 6 questions related to the variable. The following is the question grouping data based on the safety work performance variable.

Table 6. Grouping of Safety Work Performance Data

Variable	Code	Questions
Safety Work Performance	Y.1	Implementation of general work permits
	Y.2	Implementation of work permits at height
	Y.3	Implementation of confined space work permits
	Y.4	Implementation of hot work permits
	Y.5	Implementation of energy lockout work permit (Lock Out Tag Out)
	Y.6	Implementation of high voltage electrical work permits

Based on research conducted by Wijaya et al., (2019), it was stated that safety performance is the level of success of implementing occupational safety and health in a certain period. Therefore, it is necessary to carry out periodic monitoring to determine the level of worker compliance with the established occupational safety and health procedures. Based on this, it is necessary to design questions based on the type of work carried out during overhaul activities at PT. Solusi Bangun Indonesia Tbk. Cilacap Factory. The design of questions in the questionnaire in table above was prepared with the direction and approval of the K3 expert at PT. Solusi Bangun Indonesia Tbk. Cilacap Factory.

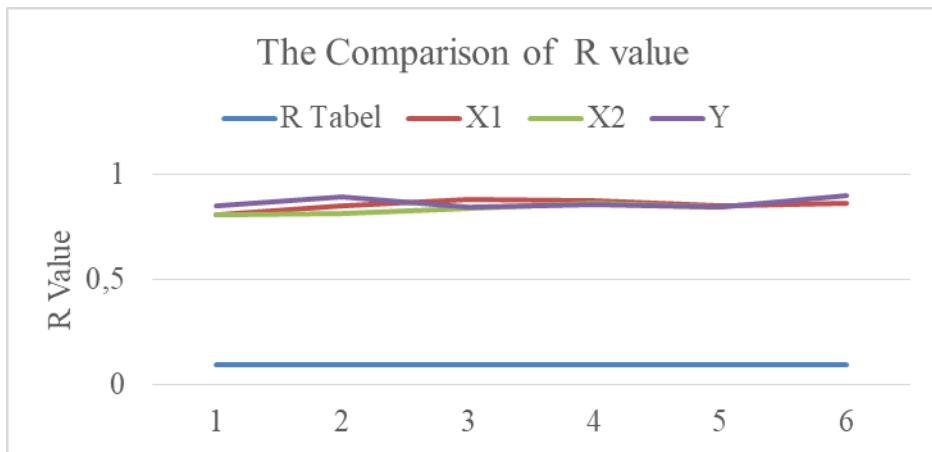
Validity and Reliability Test

Data validation was carried out with the aim of determining the level of accuracy of the results of the questionnaire that has been carried out whether it is valid or not. The results of the questionnaire are said to be valid if there is a significant correlation with the total score. In measuring data validation, each variable uses a significance value of 5% or 0.05.

Table 7. Table Validity Test Results

Variable	Sub Variable	R Count	R Table	Information (R count > R table)
X1	X1.1	0.808	0.095588	Valid
	X1.2	0.851	0.095588	Valid
	X1.3	0.885	0.095588	Valid
	X1.4	0.878	0.095588	Valid
	X1.5	0.852	0.095588	Valid
	X1.6	0.862	0.095588	Valid
X2	X2.1	0.811	0.095588	Valid
	X2.2	0.817	0.095588	Valid

Variable	Sub Variable	R Count	R Table	Information (R count > R table)
Y	X2.3	0.842	0.095588	Valid
	X2.4	0.867	0.095588	Valid
	X2.5	0.848	0.095588	Valid
	Y.1	0.852	0.095588	Valid
	Y.2	0.898	0.095588	Valid
	Y.3	0.847	0.095588	Valid
	Y.4	0.861	0.095588	Valid
	Y.5	0.848	0.095588	Valid
	Y.6	0.900	0.095588	Valid



Picture 1. Comparison of calculated R and table R values

Visible safety leadership variable

Based on table 3, the results of the validity test with the SPSS software above for the visible safety leadership variable, the Pearson correlation value (R count) is obtained > from the R table (0.095588) so that the results of the visible safety leadership variable questionnaire concluded that H0 was accepted and said to be valid. In testing data consistency, a reliability test needs to be carried out by measuring the Cronbach's alpha value on the questionnaire results for the visible safety leadership variable.

Safety job satisfaction variable

Based on table 4, the results of the validity test with the SPSS software above for the safety job satisfaction variable, the Pearson correlation value (R count) is obtained > from the R table (0.095588) so that the results of the safety job satisfaction variable questionnaire concluded that H0 was accepted and said to be valid. In testing data consistency, a reliability test needs to be carried out by measuring the Cronbach's alpha value on the questionnaire results for the safety job satisfaction variable.

Safety work performance

Based on table 5, the results of the validity test with the SPSS software above for the safety work performance variable, the Pearson correlation value (R count) is obtained $>$ from the R table (0.095588) so that the results of the safety work performance variable questionnaire concluded that H_0 was accepted and said to be valid. In testing data consistency, a reliability test needs to be carried out by measuring the Cronbach's alpha value on the questionnaire results for the safety work performance variable.

Reliability Test

Table 8. Reliability Test

Variable	Cronbach Alpha	Information
X1	0.927	Very reliable
X2	0.893	Very reliable
Y	0.933	Very reliable

Visible safety leadership variable

Based on the results of the reliability test, the cronbach's alpha value for the visible safety leadership variable data is 0.927. From the α value, the results of the reliability test for the visible safety leadership variable can be said to be very reliable, this is based on table 2.1 which is quoted in previous research.

Safety job satisfaction variable

Based on the results of the reliability test, the cronbach's alpha value for the safety job satisfaction variable data is 0.893. From the α value, the results of the reliability test for the safety job satisfaction variable can be said to be very reliable, this is based on table 2.1 which is quoted based on previous research.

Safety work performance

Based on the results of the reliability test, the cronbach's alpha value for the safety work performance variable data is 0.933. From the α value, the results of the reliability test for the safety work performance variable can be said to be very reliable, this is based on table 2.1 which is quoted based on previous research.

Based on the results of the validity and reliability tests, it was concluded that the data used in this study were valid and reliable. A test can be said to be good as a measuring tool if it has a high level of validity and reliability (Janna, 2021).

Classical Assumption Test

Residual Normality Test

The residual normality test is carried out to test the regression model, whether the residual value is normally distributed or not (Samad et al., 2022). If the regression model is normally distributed, then the analysis can be carried out using regression analysis. Meanwhile, if it is not normally distributed, the regression model cannot be subjected to regression analysis.

Table 9. Residual Normality Test Results

One-Sample Kolmogorov-Smornov	
N	422
Asymp. Sig. (2-tailed)	0.52

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Based on the results of the residual normality test above, the Asymp. Sig value is 0.52. This value is > 0.05 , so it can be concluded that the residual data is normally distributed.

Multicollinearity Test

The multicollinearity test aims to test whether one independent variable is not perfectly related to another (Samad et al., 2022). This study tested the visible safety leadership variable with the safety job satisfaction variable whether it is not perfectly related or not.

Table 10. Multicollinearity Test Results

Model	Unstandardized Coefficients		Collinearity Statistics	
	B	Std. Error	Tolerance (> 0.1)	VIF (< 10)
1 (Constant)	12,300	1,059		
Visible Safety Leadership (X1)	0,164	0,056	0,602	1,660
Kepuasan Kerja Safety (X2)	0,320	0,063	0,602	1,660

Based on the results of the multicollinearity test above, it can be concluded that each independent variable does not have a perfect relationship with each other. This is because the tolerance value ($0.602 > 0.1$) and the VIF value ($1.660 < 10$) can be concluded that the independent variables do not have multicollinearity problems.

Autocorrelation Test

Autocorrelation testing was carried out with the aim of finding an error in the regression model between disturbances in period 1 to period t-1 or earlier. If the t and t-1 models have a correlation, it can be concluded that the model has a correlation problem (Samad et al., 2022).

Table 11. Autocorrelation Test Result

dU	<	Durbin-Watson	<	4-dl (1.84461)	Information
1.83507	<	1.787	<	2.15539	does not have autocorrelation problems

Based on the calculation results above, the Durbin-Watson value was obtained as 1.787 in the test for the variables visible safety leadership (X1), safety job satisfaction (X2), and safety work performance (Y) with a frequency of 422. Therefore, it can be concluded that the regression model does not have an auto-correlation problem because the dU value ($1.83507 < d (1.787) < 4 - dl (4 - 1.84461 = 2.15539)$).

Multiple Linear Regression Analysis

Multiple linear regression analysis is a method used to estimate the response of a dependent variable to its independent variables (Samad et al., 2022). In this study, multiple linear regression analysis was conducted to describe the influence of visible safety leadership, safety job satisfaction, and safety job performance variables.

Table 12. Multiple Linear Regression Analysis

Variable	Regression Coefficient	Sig
Constants	12.3	0
Visible Safety Leadership	0.164	0.003
Safety Job Satisfaction	0.32	0

Based on the calculation above using SPSS software, the regression equation for safety work performance with visible safety leadership and safety work satisfaction is obtained as follows:

$$Y=12,300+0,164 X1+0,320 X2$$

Where Y = Safety Work Performance, X1 = Visible Safety Leadership, X2 = Safety Work Satisfaction.

1. Constant

If the value of the visible safety leadership (X1) and safety work satisfaction (X2) variables is considered zero or does not change, then the value of the safety work performance variable is 12,300.

2. Visible safety leadership (X1)

If the visible safety leadership (X1) variable increases, while the safety work satisfaction (X2) variable is assumed to remain constant, then safety work performance (Y) will increase by 0.164.

3. Safety work satisfaction (X2)

If the safety work satisfaction (X2) variable increases, while the visible safety leadership variable is assumed to remain constant, then safety work performance (Y) will increase by 0.320.

Hypothesis Testing

Partial Test (T-Test)

In partial testing (T-Test) aims to determine the partial effect of the independent variable on the dependent variable (Harahap, 2020). Partial testing is carried out to determine the variable relationship between visible safety leadership (X1) and safety work performance (Y) and safety work satisfaction (X2) with safety work performance (Y).

Table 13. Partial Test Results (T-Test)

Variable	Regression Coefficient	T Count	Sig
Constant	12.3	11.614	0.00
Visible Safety Leadership	0.164	2.938	0.003
Safety Job Satisfaction	0.32	5.043	0.00

Based on the calculation results in the table above, the results of the T-test calculation for the influence of visible safety leadership on safety work performance (constant) obtained a T-value of $2.938 > T$ table 1.965642 . Meanwhile, for the influence of safety work satisfaction on safety work performance, a T-value of $5.043 > T$ table was obtained.

Simultaneous Test (F Test)

The Simultaneous Test (F Test) aims to measure independent variables simultaneously whether or not they affect the dependent variable (Samad et al., 2022). The following are the results of the F Test with software on the variables of visible safety leadership and safety job satisfaction on safety work performance.

Table 14. Simultaneous Test Results (F Test)

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regresion	1630.0020	2	815.001	43.792	0.0000
Residual	7797.953	419	18.611		
total	9427.955	421			

Based on the table above, the calculation results above obtained an F value of 43.792, so it can be concluded that the variables visible safety leadership and safety job satisfaction have an effect on safety work performance in the overhaul activities of PT. Solusi Bangun Indonesia Tbk, Cilacap Factory. This is because the calculated F value (43.782) $> F$ table (3.0172).

Multiple Correlation Coefficient (R^2)

In the Multiple Correlation Coefficient (R^2) test, it was carried out to determine the level of independent variables in influencing the dependent variables based on the Adjusted R Square value in the SPSS software (Harahap, 2020). The following are the results of the Multiple Correlation Coefficient (R^2) calculation on the relationship between visible safety leadership variables and safety job satisfaction on safety work performance.

Table 15. Multiple Correlation Coefficient Test Results

R	R Square	Adjusted R Square	Std. Error of The Estimate
0.891	0.793	0.764	1.577

Predictors: Visible safety leadership, Safety Job Satisfaction

Dependent: Safety Work Performance

Based on the Adjusted R Square value obtained a value of 0.764, it is concluded that 76.4% of safety work performance is influenced by visible safety leadership and safety work satisfaction. Based on the R Square value of 23.6% (100 - 76.4%) the safety work performance variable is influenced by other factors outside of visible safety leadership and safety work satisfaction.

Analysis of Research Findings.

The relationship between variables can be measured by regression and correlation methods where the method consists of validity and reliability tests, classical assumption tests, multiple linear regression tests, and hypothesis tests. Regression analysis is one way to test whether a variable has an effect on another variable or not. In this study, multiple linear regression analysis was carried out because the purpose of the analysis was to measure the effect of two or more independent variables (X) on the fixed variable (Y) (Samad et al., 2022). Regression analysis can be carried out if it has gone through several previous tests.

In the validity test which aims to determine the level of accuracy of each instrument in the questionnaire where the instrument can be said to be valid if there is a correlation with its total score (Sugandha et al., 2019). In validity testing, a criterion can be said to be valid if it meets the criteria with a significance value of 5% or 0.05 then H_0 will be accepted if $r_{count} > r_{table}$. Based on this classification, the variables visible safety leadership, safety job satisfaction, and safety work performance can be concluded as valid because all the validity test results of each question instrument are greater than the r_{table} , which is 0.095588. Reliability testing is a follow-up test of the validity test. This test is carried out to measure the level of consistency of the instruments used in the questionnaire (Sugandha et al., 2019). In reliability testing, the results of the questionnaire will be tested using the Cronbach's Alpha method with an α value on a scale of 0-1 with its own level of reliability (Sugandha et al., 2019). The results of the reliability test with a total of 350 respondents for the visible safety leadership variable, there are 6 question points and an α value of 0.827 is obtained, for the safety job satisfaction variable, there are 5 question points, an α value of 0.893 is obtained, and for the safety work performance variable, there are 6 question points, an α value of 0.933 is obtained. From the results of the reliability test of the three variables according to table 2.1 quoted from previous research, the three variables are in the very reliable category.

The Effect of Visible Safety Leadership on Safety Work Performance (H1)

Based on the calculation results in table 4.6.1, it is known that visible safety leadership has an influence on safety work performance because in the T Test, the calculated t value was 2.938 where this value is greater than the t_{table} value of 1.965 on the other hand, the significance value of the

relationship between the visible safety leadership variable and safety work performance is 0.003 where the significance value is less than 0.05. Based on the calculated t value and significance value, it can be concluded that visible safety leadership has a significant effect on safety work performance in the overhaul activities of PT. Solusi Bangun Indonesia Tbk. Cilacap Factory in 2023.

Visible leadership or visible safety leadership can affect safety work performance because according to Astuti dan Prayogi (2018) leadership is the ability that a person has to influence other workers to work. Meanwhile, according to Kurniawan dan Yani (2019), leadership is a process of influencing others with the aim of providing understanding and agreement regarding the things needed in carrying out the tasks of each worker, so that it can support the achievement of common goals. The definition of work performance according to Agustina (2018) is an achievement achieved by individuals or organizations in achieving the desired goals. Based on the statement and calculation results, leaders who actively demonstrate a commitment to safety will increase employee awareness and compliance with safety procedures. Visible leadership or visible safety leadership can significantly affect safety work performance. Therefore, it is possible to improve leadership performance in the field directly by providing regular supervision of each job being carried out so that it can improve safety performance in particular in every overhaul activity carried out at PT. Solusi Bangun Indonesia Tbk. Cilacap Factory.

The Influence of Safety Job Satisfaction on Safety Work Performance (H2)

Based on the calculations, it is known that the safety job satisfaction variable has an influence on safety work performance because in the T Test, the calculated t value is 5.043 where this value is greater than the t table value of 1.965 and the significance value is 0.00 which is less than 0.05. Based on these calculations, safety job satisfaction has an influence on safety work performance in the overhaul activities of PT. Solusi Bangun Indonesia Tbk Cilacap Factory in 2022.

According to research conducted by Nurba et al., (2021), it is known that job satisfaction is one of the factors that can drive employee or organizational work performance. While work performance is a result that has been achieved by an individual or organization. Based on the calculations that have been carried out, it can be concluded that safety job satisfaction has a significant effect on safety work performance. Therefore, improving aspects that can increase safety job satisfaction in overhaul activities such as implementing safety equipment inspections, implementing safety talks, and implementing work area safety supervision can increase key performance that can support achieving the desired safety goals or performance.

The Effect of Visible Safety Leadership and Safety Job Satisfaction on Safety Job Performance (H3)

It is known that the visible safety leadership and safety job satisfaction variables have an influence on safety work performance because it is known that the results of the F Test obtained a calculated F value of 43.792 where this value is much greater than the F table value of 3.0172 based on these results it is concluded that the visible safety leadership and safety job satisfaction variables have an influence on safety work performance in the overhaul activities of PT. Solusi Bangun Indonesia Tbk Cilacap Factory in 2023.

Visible leadership or visible safety leadership and safety job satisfaction can affect safety work performance. This is clarified by the results of the F Test which proves that both variables significantly affect the safety work performance of the overhaul activities of PT. Solusi Bangun Indonesia Tbk. Cilacap Factory. Therefore, increasing work supervision by leaders or supervisors in a structured manner and increasing worker safety job satisfaction can improve safety performance

(Safety Work Performance) so that the main goal of the company is to improve the implementation of safety work by workers in the field so that it can reduce the possibility of work accidents.

Based on the results of the calculation of the Multiple Correlation Coefficient (R^2), it is known that the level of influence of visible safety leadership and safety job satisfaction is 76.4%. This is known based on the Adjusted R Square value in table 4.6.3 of 0.764 so that it is possible that 23.6% there are other factors that influence safety work performance besides the variables of visible safety leadership and safety job satisfaction.

Comparison with Previous Research

Based on the analysis of the findings in the study, it shows that this study is very consistent with the findings of previous. This means strengthening this study regarding the influence of visible safety leadership and job satisfaction on safety work performance.

Conclusion

Based on the results of the research that has been conducted, it can be concluded that:

The safety leadership variable has a significant influence on safety work performance at PT. Solusi Bangun Indonesia Tbk, Cilacap factory. This proves that leaders who actively demonstrate a commitment to safety will increase employee awareness and compliance with safety procedures.

2. The job satisfaction variable has an influence on safety work performance at PT. Solusi Bangun Indonesia Tbk, Cilacap factory. This proves that employees who are satisfied with their working conditions are more likely to be motivated in maintaining safety because they feel appreciated and cared for by the company.

3. Visible safety leadership and safety work satisfaction have an influence on safety work performance at PT. Solusi Bangun Indonesia Tbk. Cilacap factory. This proves that visible leadership strengthens the positive impact of job satisfaction and together will have a significant influence on work performance.

Based on the analysis of the findings in this study, it shows that this study can enrich the literature on occupational safety and provide guidelines for companies to improve occupational safety programs.

Recommendation

future research use a longitudinal design to better understand the causal relationships between visible safety leadership, job satisfaction, and safety performance. Additionally, future research also consider other variables that may influence safety performance, such as organizational culture or social support in the workplace. Furthermore, the future research uses other research methods, such as in-depth interviews or case studies, to gain a more comprehensive understanding of the topic.

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References

Agustina, K. &. (2018). Pengaruh Gaya Kepemimpinan Terhadap Prestasi Kerja Pegawai Negeri Sipil Pada Dinas Perhubungan, Komunikasi Dan Informatika *Kindai*, II(1). <https://ejournal.stiepancasetia.ac.id/kindai/article/view/200>

Alfonsa, L., H.A, O., & ST., R. (2016). *Korelasi Pola Mata Pencaharian Masyarakat dengan Pola Pemanfaatan Lahan di Desa Sifnane Kabupaten Maluku Tenggara Barat.*

Astuti, R., & Prayogi, I. (2018). Pengaruh Kepemimpinan dan Prestasi Kerja terhadap Kinerja Karyawan Pada PT Karya Hevea Indonesia Afdeling Hevea Dolok Masihul. *Prosiding: The National Conferences Management and Business (NCMAB)*, 1(1), 490–502. <https://publikasiilmiah.ums.ac.id/handle/11617/9980>

Basahel, A. M. (2021). *Safety Leadership , Safety Attitudes , Safety Knowledge and Motivation toward Safety-Related Behaviors in Electrical Substation Construction Projects.*

Elizar, E., & Tanjung, H. (2018). Pengaruh Pelatihan, Kompetensi, Lingkungan Kerja terhadap Kinerja Pegawai. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 1(1), 46–58. <https://doi.org/10.30596/maneggio.v1i1.2239>

Girsang, L., Zulkarnain, & Isnaniah. (2021). Pengaruh pelatihan dan budaya organisasi terhadap kinerja karyawan PT. Lintas Aman Andalas Medan. *Jurnal Ilmiah Manajemen Dan Bisnis (JIMBI)*, 2(1), 1–8. <https://doi.org/10.31289/jimbi.v2i1.460>

Harahap, S. S. (2020). *Teknik Korelasi dan Kolmogorov Smirnov dalam Menganalisis Pengaruh Motivasi Intrinsik dan Peningkatan Kemampuan Menulis KTI Pada Widya Iswara*. 07, 45–52.

Hayono, J., Setiawan, A., Pintardi, H., & Soehendro, R. (2021). *Pengaruh kepemimpinan terhadap k3 di masa pandemi covid-19*. 41–48.

Hidayat, A. (2022). *Cara Hitung Rumus Slovin Besar Sampel*. [Www.Statistikian.Com](https://www.statistikian.com/2017/12/hitung-rumus-slovin-sampel.html). <https://www.statistikian.com/2017/12/hitung-rumus-slovin-sampel.html>

Janna, N. M. (2021). *Konsep uji validitas dan reliabilitas dengan menggunakan spss*. 18210047.

Januari, C. I., Utami, H. N., & Ruhana, I. (2015). PENGARUH PENILAIAN KINERJA TERHADAP KEPUASAN KERJA DAN PRESTASI KERJA (Studi pada Karyawan PT . Telekomunikasi Indonesia , Tbk Wilayah Malang). *Administrasi Bisnis*, 24(2), 1–8.

Kuncoro, A. (2017). Korelasi Penggunaan Kosakata dengan Keterampilan Berbicara Siswa dalam Bahasa Inggris. *SAP (Susunan Artikel Pendidikan)*, 1(3), 302–311. <https://doi.org/10.30998/sap.v1i3.1547>

Kurniawan, R., & Yani, A. (2019). Pengaruh Kepemimpinan, Motivasi, Lingkungan Kerja Dan Budaya Organisasi Terhadap Kinerja Yang Berdampak Pada Prestasi Kerja. *JEM: Jurnal Ekonomi Dan Manajemen STIE Pertiba Pangkalpinang*, 5(1), 115–134.

Mardiatmoko, G. (2020). *PENTINGNYA UJI ASUMSI KLASIK PADA ANALISIS REGRESI LINIER BERGANDA (STUDI KASUS PENYUSUNAN PERSAMAAN ALLOMETRIK KENARI MUDA [CANARIUM INDICUM L .] The Importance of the Classical Assumption Test in Multiple Linear Regression Analysis (A Case Study of .* 14(3), 333–342.

Martalina, S., Yetti, H., & Lestari, Y. (2018). Identifikasi Bahaya dan Risiko Keselamatan Kerja Pada Saat Overhaul di Area Kiln PT. X tahun 2017. *Jurnal Kesehatan Andalas*, 7(1), 14. <https://doi.org/10.25077/jka.v7i1.774>

Miftahul, N. (2020). *Variabel dan skala pengukuran statistik*. 1–8.

Novia, A. D. (2012). Analisis Perbandingan Uji Autokorelasi Durbin- Watson dan Breusch - Godfrey. *Universitas Islam Negeri Maulana Malik Ibrahim*.

Nurba, I., Dilla, A. M., & DIpoatmodjo, T. (2021). *Pengaruh Kepuasan Kerja terhadap Prestasi Kerja Karyawan Bagian Pengolahan dan Teknik Pada PTP*. *Nusantara XIV (PERSERO) Pabrik Gula Camming Kabupaten Bone*. 3(March), 6.

Nuzuliyah, N., Sujoso, A. D. P., & Hartanti, R. I. (2014). Analisis Bahaya Pekerjaan Bagian Paper

Machine Berdasarkan Metode Job Safety Analysis (JSA) Dalam Upaya Pengendalian Bahaya. *Keselamatan Kerja*, 4(3), 1–6.

Riski, M. S. (2019). Analisis Penerapan Aturan Kesehatan dan Keselamatan Kerja (K3) PT.Kaltim Prima Coal Sangatta. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.

Samad, S., Sendow, G. M., & Uhing, Y. (2022). Pengaruh Keselamatan, Kesehatan, Dan Kepuasan Kerja Terhadap Kinerja Karyawan PT. Salaim Ivomas Pratama TBK (Bimoli) Bitung Pada Era New Normal. *Jurnal EMBA*, 10(1), 745–753.

Setyawan, A., Hadijati, M., & Switrayni, N. W. (2019). *Analisis Masalah Heteroskedastisitas Menggunakan Generalized Least Square dalam Analisis Regresi*. 02(02).

Sugandha, S., Wibowo, F. P., & Hendra, H. (2019). Pengaruh Pelatihan Dan Pengembangan Sumber Daya Manusia Terhadap Prestasi Kerja Karyawan Pt.Jembo Energindo. *Dynamic Management Journal*, 3(2). <https://doi.org/10.31000/dmj.v3i2.1963>

Sugarna, A., Marini, & Nurhayatina, R. (2019). *Tingkat pengetahuan penggunaan jamu sebagai upaya swamedikasi di rt 01 rw 01 desa japara*. 4(2), 18–23.

Sugiyanto, & Sulfian. (2020). Pengaruh Kebijakan Keselamatan dan Kesehatan Kerja (K3) Terhadap Kinerja Karyawan. *Jurnal Teknik WAKTU*, 18(02), 38–50.

Supriyadi, A. (2019). *Statistik Angka Kecelakaan Kerja tahun 2018 Tertinggi Sejak 2001*. [Www.Katigaku.Top](http://www.katigaku.top). www.katigaku.top

Tuhulaula, N. A., & Fajrini, F. (2021). *Analisis Tingkat Risiko Keselamatan Kerja Pada Pekerjaan Service dan Fabrikasi Gondola di PT Tien Persada Nusantara Tahun 2020*. 2(1), 69–80.

Utari, T. (2020). *PERLINDUNGAN HUKUM PEKERJA TERHADAP KECELAKAAN KERJA BERDASARKAN UNDANG-UNDANG NOMOR 1 TAHUN 1970 TENTANG KESELAMATAN KERJA (STUDI KASUS DI PT PG RAJAWALI I UNIT KREBET BARU KABUPATEN MALANG)*. 26, 253–267.

Yanne, A., & Febsri, S. (2018). *Pengaruh Stress Kerja dan Motivasi Kerja Terhadap Prestasi Kerja Karyawan Pada PT. Frisian Flag Indonesia Wilayah Padang*.