

The Influence of Occupational Safety, Occupational Health, and Social Security on Employee Performance at PT. Bukit Angkasa Makmur in Central Bengkulu

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Abstract

This study aims to examine the influence of occupational safety, occupational health, and social security on employee performance at PT. Bukit Angkasa Makmur in Central Bengkulu. The sampling technique used in this research was purposive sampling, and data were collected through questionnaires. The total sample consisted of 84 employees. The research employed a quantitative approach. The results revealed that the independent variables—occupational safety, occupational health, and social security—simultaneously have a positive and significant effect on the dependent variable, employee performance. Furthermore, each independent variable also showed a positive and significant partial effect on employee performance. Data analysis was conducted using multiple linear regression with the aid of SPSS software. The findings indicate that improving occupational safety through the provision of personal protective equipment and a secure work environment, enhancing occupational health systems, and ensuring transparent and adequate social security measures can directly improve employee productivity. Therefore, it is recommended that the company continues to strengthen policies and practices in these three areas to support optimal performance. This study is expected to serve as a reference in human resource management, particularly in efforts to enhance performance through improved employee welfare.

Keywords: Occupational Safety, Occupational Health, Social Security, Employee Performance

INTRODUCTION

In today's increasingly competitive work environment, a company's success is not solely dependent on technology and capital, but also on the quality of its human resources. Employees with strong performance are valuable assets to any organization. Therefore, companies must strive to create a supportive work environment, including prioritizing occupational safety, employee health, and social security. These three factors play a critical role in fostering employee morale and productivity.

Occupational safety is a fundamental aspect that must be considered in every work activity. An unsafe work environment can lead to workplace accidents that not only endanger employees physically but also lower their motivation and overall performance. Providing protection through proper safety measures allows employees to feel more secure and focused in carrying out their responsibilities.

In addition to safety, employee health is equally important, as it is directly linked to both physical and mental well-being. Any disruption in an employee's health can lead to decreased productivity. Companies must therefore pay attention to environmental conditions, provide access to healthcare facilities, and conduct routine health check-ups.

Another important factor is social security. Social security gives employees a sense of assurance in facing various risks such as illness, workplace accidents, and retirement. When employees feel that their rights are protected, they are more likely to remain loyal and motivated to perform well.

However, in practice, not all companies manage occupational safety, health, and social security aspects effectively. Preliminary observations at PT Bukit Angkasa Makmur revealed employee complaints related to insufficient safety equipment, lack of routine health examinations, and suboptimal social security services. These issues may hinder efforts to improve overall employee performance.

Based on these observations, the author is interested in conducting a study on the influence of occupational safety, health, and social security on employee performance at PT Bukit Angkasa Makmur in Central Bengkulu. This research is expected to provide a clearer picture and valuable insights for the company in enhancing its human resource management system.

Human resource management refers to the utilization of people in a way that achieves maximum effectiveness and efficiency in realizing company goals (Edwin, 2019). It involves planning, organizing, directing, and supervising all human resources within an organization to achieve common objectives.

According to Ansory (2018), human resource management is the science and method of managing relationships and roles of workforce resources in an efficient and effective way, so they can be fully utilized to meet the goals of both the company and its employees. It includes dealing with various issues related to workers, staff, managers, and labor forces that support organizational or corporate activities.

Occupational safety is a condition in which employees feel safe and comfortable, supported by a work environment that enhances their performance quality. This sense of comfort includes internal feelings such as confidence in safety equipment, tools used, workspace layout, and the workload received during working hours. Setiawan (2018) stated that one of the key performance indicators for factory managers is the level of safety and health of employees, particularly how often workplace accidents occur. Occupational safety is a vital aspect in any workplace that has a direct impact on employee performance.

According to Setiawan, the indicators of occupational safety include:

1. Layout of work equipment
2. Availability of safety equipment
3. Labor insurance

4. Workplace accident compensation
5. Workplace atmosphere

Occupational health is a medical discipline aimed at enabling workers to achieve the highest possible standard of physical, mental, and social well-being through preventive efforts against work-related illnesses and conditions. A healthy and safe working environment can reduce absenteeism, improve concentration, and encourage employee morale. A comprehensive occupational health program should address not only physical health but also the mental well-being of employees.

Indicators of occupational health include:

1. Air ventilation
2. Temperature control
3. Physical health condition of employees
4. Employees' emotional state
5. Lighting regulation

Social security is a form of protection for employees, offering financial benefits to compensate for lost or reduced income due to certain conditions such as illness, workplace accidents, pregnancy, childbirth, retirement, or death. It serves as a safeguard against potential risks faced by employees in the course of their duties and includes benefits such as medical care, financial compensation, and other forms of support.

According to Setiadi (in Andisi & Uhing), the indicators of social security are:

1. Employee perception of retirement benefits
2. Employee perception of health insurance
3. Sense of safety and comfort at work

Employee performance is a key factor in achieving organizational goals. Efforts to improve performance cannot be separated from the aspects of occupational safety, health, and social security.

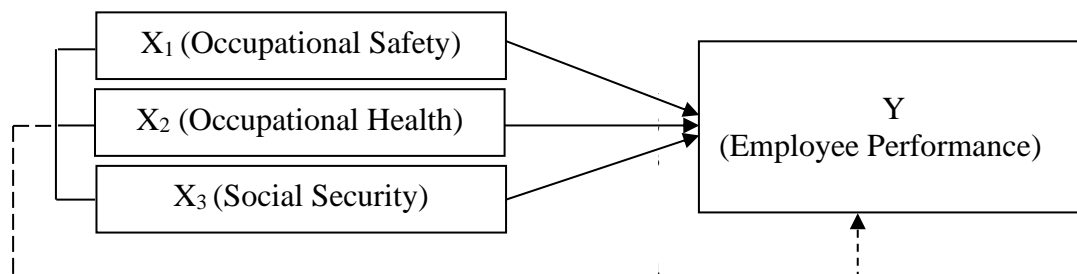
According to Nasution et al. (2020), the performance indicators for employees include:

1. Quality
2. Quantity
3. Timeliness
4. Cost efficiency
5. Supervision
6. Interpersonal relationships among employees

Theoretical Framework

The conceptual framework of this study is presented as follows:

Figure 1. Research Framework



Hypotheses

H1: It is hypothesized that occupational safety has an effect on employee performance at PT Bukit Angka Makmur in Central Bengkulu.

H2: It is hypothesized that occupational health has an effect on employee performance at

PT Bukit Angkasa Makmur in Central Bengkulu.

H3: It is hypothesized that social security has an effect on employee performance at PT Bukit Angkasa Makmur in Central Bengkulu.

H4: It is hypothesized that occupational safety, occupational health, and social security simultaneously have an effect on employee performance at PT Bukit Angkasa Makmur in Central Bengkulu.

RESEARCH METHODOLOGY

In this study, the researcher employed a quantitative approach. Quantitative research refers to data presented in the form of numerical values, which are structured in such a way by the researcher that they become easier to interpret and understand. The data consist of measurable figures analyzed using statistical tools to draw conclusions related to the research problem. The nature of this research is explanatory, aiming to explain the relationships between variables.

Sample

According to Sugiyono (2023), a sample is a subset of the total population that possesses the same characteristics. The sample in this study consists of 84 permanent employees of PT. Bukit Angkasa Makmur.

Data Collection Methods

The techniques used for data collection in this study are as follows:

1. Observation

Observation was carried out through direct monitoring of aspects related to occupational safety, occupational health, and social security that influence employee performance at PT Bukit Angkasa Makmur.

2. Questionnaire

According to Talitha (2018), a questionnaire is a series of written questions or statements concerning factual data or opinions related to the respondent, which are considered facts or known truths and must be answered by the respondent. The questionnaire uses a Likert scale. The Likert scale is a measurement method used to assess an individual's attitude toward a subject. Each item is scored, and respondents are asked to choose from five categories ranging from strongly disagree to strongly agree.

Data Analysis Technique

The primary data collection method used was the questionnaire. The data were analyzed using multiple linear regression, along with t-tests and F-tests, to answer the research questions. The total number of respondents in this study was 84 employees.

RESULTS AND DISCUSSION

Validity Test

Table 1. Results of Validity Test

Variabel	R hitung	R tabel	Ket
X1			
1	0,932	0,2146	Valid
2	0,871	0,2146	Valid
3	0,820	0,2146	Valid
4	0,823	0,2146	Valid
5	0,748	0,2146	Valid
6	0,896	0,2146	Valid
7	0,816	0,2146	Valid
8	0,830	0,2146	Valid
9	0,957	0,2146	Valid
10	0,982	0,2146	Valid

X2			
1	0,918	0,2146	Valid
2	0,983	0,2146	Valid
3	0,986	0,2146	Valid
4	0,932	0,2146	Valid
5	0,904	0,2146	Valid
6	0,922	0,2146	Valid
7	0,988	0,2146	Valid
8	0,976	0,2146	Valid
9	0,945	0,2146	Valid
10	0,955	0,2146	Valid
X3			
1	0,989	0,2146	Valid
2	0,994	0,2146	Valid
3	0,988	0,2146	Valid
4	0,984	0,2146	Valid
5	0,973	0,2146	Valid
6	0,985	0,2146	Valid
Y			
1	0,985	0,2146	Valid
2	0,977	0,2146	Valid
3	0,963	0,2146	Valid
4	0,970	0,2146	Valid
5	0,967	0,2146	Valid
6	0,969	0,2146	Valid
7	0,974	0,2146	Valid
8	0,911	0,2146	Valid
9	0,863	0,2146	Valid
10	0,974	0,2146	Valid
11	0,945	0,2146	Valid
12	0,861	0,2146	Valid

Source: Processed data using SPSS 30, 2025

Based on the results of the validity test, the variables X1 (Occupational Safety), X2 (Occupational Health), and X3 (Social Security) in relation to Y (Employee Performance) in this study are declared valid, as the calculated r-value exceeds the r-table value of 0.2146 (see attachment).

Reliability Test

Table 2. Results of Reliability Test

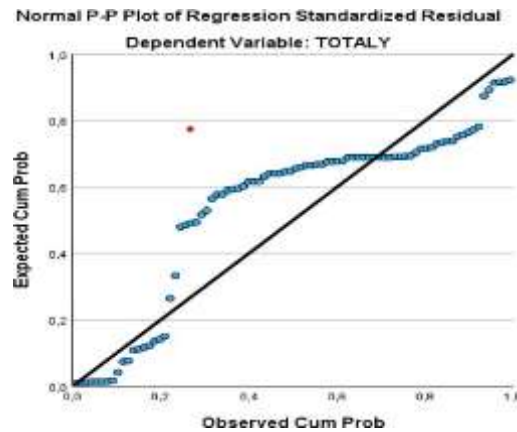
No	Variabel	Alpha Cronbach	Alpha	Keterangan
1	Occupational Safety	0,964	0,6	Reliabel
2	Occupational Health	0,988	0,6	Reliabel
3	Social Security	0,993	0,6	Reliabel
4	Employee Performance	0,989	0,6	Reliabel

Source: Processed data using SPSS 30, 2025

Based on the table above, the results of the reliability test show that the Cronbach's Alpha value for each variable exceeds 0.6. Therefore, it can be concluded that the variables X (Occupational Safety, Occupational Health, and Social Security) and Y (Employee Performance) have a good level of reliability.

Normality Test

Figure 2. Results of the Normality Test



Source: Processed data using SPSS 30, 2025

Based on the Figure above, it can be seen that most of the points follow the diagonal line, although there are some deviations. This indicates that the residual data tends to be normal. So the assumption of normality in the regression model is still acceptable. Thus, the normality test is met because the data from the results of the questionnaire distribution on variables X1 (Occupational Safety), X2 (Occupational Health), X3 (Social Security), and Y (Employee Performance) show a normal distribution.

Multicollinearity Test

Table 3. Results of the Multicollinearity Test

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	X1	0.933	1.072
	X2	0.930	1.076
	X3	0.993	1.007

a. Dependent Variable: Y

Source: Processed data using SPSS 30, 2025

Based on the table above, the results of the multicollinearity test show that the tolerance values for variables X1 (Occupational Safety), X2 (Occupational Health), and X3 (Social Security) are above 0.1, and the VIF (Variance Inflation Factor) values are below 10. This indicates that there is no multicollinearity present among the three variables.

Heteroscedasticity Test

Table 4. Results of the Heteroscedasticity Test

Coefficients ^a		
Model		Sig.
1	(Constant)	0.788
	X ₁	0.113
	X ₂	0.245
	X ₃	0.345

a. Dependent Variable: Abs_Res

Source: Processed data using SPSS 30, 2025

From the table above, it can be seen that the significance values (sig) for each independent variable are greater than 0.05. Based on these results, it can be concluded that, according to the Glejser test, there is no indication of heteroscedasticity in the independent variables.

Analytical Test

Multiple Linear Regression

Table 5. Multiple Linear Regression Results

Model		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	43,422	3,560		<,001
	X1	0.361	0.050	0.531	<,001
	X2	0.176	0.050	0.260	<,001
	X3	0.575	0.077	0.541	<,001

a. Dependent Variable: Y

Source: Processed data using SPSS 30, 2025

From Table IV.XV, the multiple linear regression equation can be written as follows:
 $Y = 43.422 + 0.361 X_1 + 0.176 X_2 + 0.575 X_3 + e$

The meaning of this multiple linear regression equation is as follows:

1. $a = 43.422$ means that the constant value is 43.422. This implies that if the variables Occupational Safety (X_1), Occupational Health (X_2), and Social Security (X_3) are held constant, then the Employee Performance (Y) will remain at 43.422.
2. $b_1X_1 = 0.361$ means that the regression coefficient b_1 for variable X_1 (Occupational Safety) is 0.361. This indicates that if Occupational Safety increases by one unit, while X_2 and X_3 remain constant, Employee Performance (Y) will increase by 0.361 units.
3. $b_2X_2 = 0.176$ means that the regression coefficient b_2 for variable X_2 (Occupational Health) is 0.176. This indicates that if Occupational Health increases by one unit, while X_1 and X_3 remain constant, Employee Performance (Y) will increase by 0.176 units.
4. $b_3X_3 = 0.575$ means that the regression coefficient b_3 for variable X_3 (Social Security) is 0.575. This indicates that if Social Security increases by one unit, while X_1 and X_2 remain constant, Employee Performance (Y) will increase by 0.575 units.

Multiple Correlation Test

Table 6. Multiple Correlation and Coefficient of Determination

Model Summary ^b		
Model	R	Adjusted R Square
1	.765 ^a	0.570
a. Predictors: (Constant), X_1 , X_2 , X_3		
b. Dependent Variable: Y		

Source: Processed data using SPSS 30, 2025

The Multiple Correlation Coefficient (R) value is 0.724, which falls within the range of 0.60 to 0.799. This indicates a strong relationship between the independent variables (X) — occupational safety, occupational health, and social security — and the dependent variable (Y), employee performance.

Coefficient of Determination Test

Table 7. Multiple Correlation and Coefficient of Determination

Model Summary ^b		
Model	R	Adjusted R Square

1	.765 ^a	0.570
a. Predictors: (Constant), X ₁ , X ₂ , X ₃		
b. Dependent Variable: Y		

Source: Processed data using SPSS 30, 2025

Based on the table above, the value of the Adjusted R Square is 0.570, or 57.0%. This figure indicates that the variables occupational safety (X₁), occupational health (X₂), and social security (X₃) collectively contribute 57.0% to the employee performance (Y) at PT. Bukit Angkasa Makmur. The remaining 43.0% is influenced by other factors outside the scope of this study.

Uji Parsial T

Tabel 8. Uji T

Coefficients ^a			
Model		T	Sig.
1	X1	7.204	0.001
	X2	3.524	0.001
	X3	7.493	0.001
a. Dependent Variable: Y			

Source: Processed data using SPSS 30, 2025

1. The result of the t-test for X₁ (occupational safety) shows a significance value of 0.001, which is less than 0.05. This means that H₀ is rejected and H_a is accepted, indicating that occupational safety has a partial (individual) effect on employee performance (Y).
2. The result of the t-test for X₂ (occupational health) shows a significance value of 0.001, which is less than 0.05. This means that H₀ is rejected and H_a is accepted, indicating that occupational health has a partial (individual) effect on employee performance (Y).
3. The result of the t-test for X₃ (social security) shows a significance value of 0.001, which is less than 0.05. This means that H₀ is rejected and H_a is accepted, indicating that social security has a partial (individual) effect on employee performance (Y).

Uji Simultan F

Tabel 9. Uji F

Anova ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3944.664	3	1314.888	37.685	<.001 ^b
	Residual	2791.326	80	34.892		
	Total	6735.990	83			
a. Dependent Variable: Y						
b. Predictors: (Constant), X ₃ , X ₂ , X ₁						

Source: Processed data using SPSS 30, 2025

Based on the table above, the calculated F-value is 37.685 with a significance value (sig) of 0.001, which is less than the standard significance level of 0.05. This indicates that H₀ is rejected and H_a is accepted, and it can be concluded that occupational safety, occupational health, and social security collectively have a significant influence on employee performance at PT Bukit Angkasa Makmur in Central Bengkulu.

Discussion

1. The Influence of Occupational Safety on Employee Performance Occupational safety has a positive effect on employee performance at PT Bukit Angkasa Makmur, Central Bengkulu. A safe work environment and protection from work-related risks contribute to employees feeling comfortable, thereby enhancing their work performance. This finding is in line with theoretical frameworks and prior studies that

- emphasize the importance of workplace safety in supporting employee productivity.
2. The Influence of Occupational Health on Employee Performance Occupational health also shows a positive influence on employee performance. A physically and emotionally healthy work environment helps employees perform optimally. This study supports the theory stating that occupational health efforts protect workers from health disturbances during work, thereby enhancing their overall efficiency and performance.
 3. The Influence of Social Security on Employee Performance Social security has a positive impact on employee performance at PT Bukit Angkasa Makmur. It provides a sense of security by protecting against risks such as illness or workplace accidents, enabling employees to stay focused and productive. These results align with previous theories and studies that highlight the importance of social security in improving employee welfare and performance.
 4. The Combined Effect of Occupational Safety, Occupational Health, and Social Security on Employee Performance Collectively, occupational safety, health, and social security significantly influence employee performance, contributing as much as 57% to performance improvement. The combination of a safe environment, healthy conditions, and social protection creates an ideal work setting that supports better performance among employees at PT Bukit Angkasa Makmur, Central Bengkulu.

Conclusion

Occupational safety has a positive and significant effect on employee performance at PT Bukit Angkasa Makmur, with a regression coefficient of 0.361 and a significance level < 0.05 . This shows that better implementation of safety practices leads to higher employee performance.

Occupational health also has a positive and significant effect, with a regression coefficient of 0.176 and a significance level < 0.05 . A healthy work environment promotes efficiency, reduces fatigue, and improves employee performance.

Social security has the most significant positive effect on employee performance, with a regression coefficient of 0.575 and a significance level < 0.05 . This indicates that company-provided protection and job security play a major role in enhancing performance.

Simultaneously, occupational safety, health, and social security have a significant influence on employee performance, with social security being the dominant factor. Therefore, all three aspects must be managed in a balanced way to create a productive and sustainable work environment.

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