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THE ROLE OF ZERO ACCIDENTS ON EMPLOYEE PERFORMANCE

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Abstract

This study aims to analyze the influence of work environment and work discipline on employee performance through zero accidents as a mediating variable. The research was conducted at PT PLN (Persero) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh, with a population and sample of 39 employees, using a saturated sampling technique since the entire population was included as respondents. The data analysis method used was Structural Equation Modeling (SEM) with the Partial Least Square (PLS) approach. The results showed that both work environment and work discipline have a positive and significant effect on employee performance. Furthermore, work environment and work discipline also have a positive and significant effect on zero accidents. The zero accident variable is proven to positively and significantly affect employee performance. Additionally, zero accidents significantly mediates the effect of work environment and work discipline on employee performance. These findings emphasize the importance of creating a safe work environment and fostering employee discipline to achieve optimal performance.

Keywords:*work environment, work discipline, zero accident, employee performance*

Background

Occupational Safety and Health (OHS) is a crucial aspect of company operations, particularly in the energy industry, such as PT PLN (Persero). Effective OHS implementation not only protects workers from potential hazards but also contributes to improved performance and productivity. One indicator of OHS success is achieving Zero Accident status, indicating that a company has successfully minimized or even eliminated workplace accidents. Occupational safety and health (OHS) is a fundamental factor in the industrial and business world. A safe, healthy, and efficient work environment not only ensures worker well-being but also increases a company's productivity and operational efficiency. In practice, many companies still face challenges in creating an ideal work environment. Some of the main challenges include low compliance with OHS regulations, a lack of awareness of the importance of a healthy work environment, and limitations in managing operational efficiency without sacrificing safety.(Jackson, EN and Priya, 2024). The concept of zero accidents refers to a condition where no work accidents occur in an organization during a certain period.

Although this is an ideal target, many companies experience difficulties in achieving it due to various factors, including a lack of compliance with OHS regulations, low worker awareness of the importance of occupational safety, a lack of adequate facilities and personal protective equipment (PPE), an underdeveloped safety culture, and suboptimal risk management in anticipating potential hazards in the workplace.(Ederer, David J., 2023). An efficient work environment is a form of work environment intended for companies that are able to manage employee work efficiently, where this level of efficiency can be seen from the level of work carried out to minimize wasted time and costs, so that it will hinder employee performance continuously, and will make the company unable to work optimally, and work targets are not achieved and require a very long time to complete, where this situation will give rise to large costs, a long time to complete work, and will have an impact on the less productive performance of employees and companies which will make employee performance improvements tend

to run in place or stagnate and not increase(Alqahtani, Fahad M., 2024).PT PLN (Persero) Customer Service Unit (ULP) Matang Glumpang DuaUP3 Lhokseumawe UID Aceh, as part of an electrical energy distribution company, faces its own challenges in maintaining occupational safety. With a dynamic work environment and high operational demands, optimal implementation of OHS is essential. However, despite various efforts, there are still cases of workplace accidents, indicating that OHS implementation is not fully effective. An unconducive work environment and low work discipline are the main contributing factors to accidents. Poor work environments, such as lack of lighting, poor hygiene, and inadequate facilities, can increase the risk of accidents. In addition, low work discipline, such as failure to comply with safety procedures, inappropriate use of personal protective equipment (PPE), and a lack of awareness of the importance of OHS, also exacerbate these conditions. PT PLN (Persero) ULP Matang Glumpang DuaUP3 Lhokseumawe UID Aceh is one of the work units of PT PLN in the Aceh region, where the number of employees working in this unit is...PT PLN (Persero) ULP Matang Glumpang DuaUP3 Lhokseumawe UID Aceh has 39 employees, of which 70% of the 39 employees have not achieved very good performance, where their performance is only at a satisfactory level and not very high. This is caused by an unsafe, unhealthy and inefficient work environment, where there are still many thefts of PLN equipment, as well as conditions where there are many robbers who affect the comfort of workers when working in night conditions. In addition, environmental conditions that still contain dust and waste that endanger workers are a problem, so that existing work is still not done on time which has an impact on increasing work accidents, so that it will have an impact on low performance achievement and the process of creating zero accidents is hampered and has an impact on decreasing performance

Formulation of the problem

1. Does the work environment have a positive and significant influence on employee performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office?
2. Does Work Discipline have a positive and significant effect on Employee Performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office?
3. Does the Work Environment have a positive and significant influence on Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office?
4. Does Work Discipline have a positive and significant effect on Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office?
5. Does Zero Accident have a positive and significant effect on Employee Performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office?
6. Does the Work Environment have a positive and significant influence on Employee Performance through Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office?
7. Does Work Discipline have a positive and significant effect on Employee Performance through Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office?

Research purposes

1. To test and analyze the influence of the work environment on employee performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh Office
2. To test and analyze the influence of Work Discipline on Employee Performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh Office
3. To test and analyze the influence of Zero Accident on Employee Performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh Office
4. To test and analyze the influence of the work environment on Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh Office
5. To test and analyze the influence of Work Discipline on Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh Office
6. To test and analyze the influence of the work environment on employee performance through Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh Office
7. To test and analyze the influence of Work Discipline on employee performance through Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh Office

Literature review

Employee Performance

According to Mangkunegara (2015)Performance is the work results in terms of quality and quantity achieved by an employee in carrying out his duties according to the responsibilities given. According toMathis & Jackson (2016):Performance is what employees do and don't do that affects how much they contribute to the organization.

Employee Performance Indicators

According toMangkunegara (2015)Employee Performance Indicators:

1. Quantity of work
2. Quality of work
3. Punctuality
4. Work discipline
5. Teamwork

Factors Affecting Performance

According to Kasmir (2019), the factors that influence performance are:

1. Skills and Expertise.
   The ability or skill that a person has in doing a job.
2. Knowledge,
   Having good knowledge about the job will give good work results too.
3. Work Plan
   Job design that will make it easier for employees to achieve their goals.
4. Personality
   The character that a person has
5. Work motivation
   The motivation for someone to do work
6. Leadership
   The behavior of a leader in organizing, managing and ordering his subordinates to carry out the tasks and responsibilities given.
7. Leadership style,
   The attitude of a leader in facing or ordering his subordinates.
8. Organizational culture,
   Norms that apply and are owned by an organization or company.
9. Job satisfaction,
   A person's feelings before and after doing a job.
10. Work environment
    The atmosphere or conditions around the workplace
11. Loyalty,
    Employee loyalty to continue working and defending the company where they work.
12. Commitment
    Employee compliance with the promises they have made.
13. Work discipline
    Employees' efforts to carry out their work activities seriously.

Work environment

According to Sedarmayanti (2017), the work environment is all the tools, materials, conditions, and procedures around workers that can influence the implementation of work and work comfort. A good work environment will provide a sense of security, comfort, and motivate employees to work more productively.

Factors that influence the work environment

According to Sedarmayanti (2017), the work environment is everything around workers that can influence them in carrying out their duties and work. The work environment is divided into two main types: the physical work environment and the non-physical work environment.

1) Physical Work Environment

The physical work environment is all the physical conditions surrounding the workplace that can affect work comfort and efficiency. These physical factors include:

a. Lighting (bright/sufficient or dim)
b. Air circulation or ventilation
c. Cleanliness and tidiness of the work space
d. Noise level
e. Room temperature or temperature
f. Workspace layout
g. Work safety and security

2) Non-Physical Work Environment (Psychosocial)

The non-physical work environment relates to interpersonal relationships within the organization and the work culture that forms within it. These factors include:

a. Relationship between employees
b. Relationship between superiors and subordinates
c. Organizational culture
d. Communication system
e. A sense of psychological safety and comfort
f. Social support in the workplace
g. A conducive non-physical work environment will create a harmonious work atmosphere and increase productivity.

According to Sedarmayanti (2017), a good work environment, both physically and non-physically, will create a comfortable work atmosphere, support the achievement of optimal performance, and reduce work stress levels.

Work Environment Indicators

According to Sedarmayanti (2017), work environment indicators are divided into two main groups, namely:

1. Physical Work Environment

The physical work environment relates to conditions that can be directly observed and felt by the five senses. Indicators include:

a. Lighting
Sufficient light will improve concentration and reduce eye fatigue.
b. Air circulation and ventilation
Fresh air and good ventilation are important for health and working comfort.
c. Noise
The noise level must be within comfort limits so as not to disturb concentration.
d. Workspace layout (Layout)
Efficient spatial planning supports smooth employee activities and mobility.
e. Cleanliness and safety
A clean and safe workspace will encourage employees to work more comfortably and productively.

2. Non-Physical Work Environment (Psychological/Social)

This includes social and psychological aspects that support work comfort, such as:

a. Relationships between coworkers
A harmonious working atmosphere can improve teamwork.
b. Relationship with superiors
A good relationship between subordinates and superiors encourages effective communication.
c. Leadership and management support
A fair and participatory leadership style creates a positive work climate.
d. Organizational culture
The values, norms and habits shared within an organization contribute to creating a comfortable work environment.

Work Discipline

Understanding Work Discipline

According to Sutrisno (2019)Work discipline is a person's awareness and willingness to obey all company regulations and applicable social norms. According to Hasibuan (2017)Work discipline is a person's awareness and willingness to obey all company regulations and social norms that apply in the workplace.

Work Discipline Indicators

According to Sutrisno (2019), the work discipline indicators are as follows:

1. Compliance with work rules
2. Attendance and punctuality
3. Compliance with work safety procedures
4. Responsibility for work
5. Compliance with the use of personal protective equipment (PPE)

Zero Accident

Definition of Zero Accident

According to Robbins (2019), Zero Accident is a condition in which an organization is able to create a work environment free from workplace accidents thanks to effective risk and safety management. According to the Indonesian Ministry of Manpower and Transmigration (2020), Zero Accident is the achievement of zero workplace accidents within a certain time period as evidence of the successful implementation of the Occupational Safety and Health (K3) program.

Zero accident indicator

According toRobbins (2019)zero accident indicators are:

1. Work accident rate
2. Recurrence of employee safety levels
3. Reducing costs related to work accidents
4. Increased employee satisfaction and performance(Naz, Sumera, 2024)

Conceptual Framework

The existing conceptual framework that can be seen in this research is:

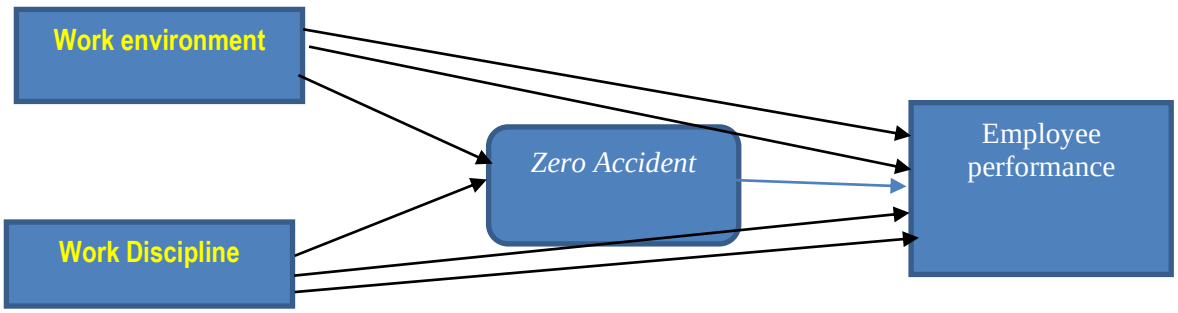

Figure 1 Conceptual Framework

Hypothesis

1. The work environment has a positive and significant influence on employee performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office.
2. Work Discipline has a positive and significant effect on Employee Performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office
3. The work environment has a positive and significant influence on Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office.

4. Work Discipline has a positive and significant influence on Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office
5. Zero Accidenthas a positive and significant effect on employee performance at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office
6. The work environment has a positive and significant influence on employee performance through zero accidents at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office.
7. Work Discipline has a positive and significant effect on Employee Performance through Zero Accident at the PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh office.

RESEARCH METHODS

This research method was carried out using a quantitative descriptive method using structural equation model (SEM) analysis, where according to(Akter, Tania, 2024)SEM analysis is a data analysis that explains several construct variables that influence each other. The population in this study is39 employeesPT PLN (Persero) ULP Matang Glumpang DuaUP3 Lhokseumawe UID Aceh,where the sampling method uses the saturated sampling method, where according to(Akter, Tania, 2024)The saturated sampling method is taking samples from a portion of the existing population. The number of samples that appeared was 39 employeesPT PLN (Persero) ULP Matang Glumpang DuaUP3 Lhokseumawe UID Aceh. The data collection technique used was observational studies and questionnaires were distributed to respondents, namely employees.PT PLN (Persero) ULP Matang Glumpang DuaUP3 Lhokseumawe UID Aceh.

Types of research

The type of research used by the researcher is quantitative research. According to Sugiyono (2010) quantitative research can be interpreted as a method based on the philosophy of positivism, used to research a specific population or sample, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative/statistical with the aim of testing the established hypothesis. This type of quantitative research was conducted to create a study that aims to adjust a study and to analyze the Work Environment and Work Discipline on Employee Performance through Zero Accident at the office of PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh?

Research Location and Research Time

The research location was at PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh. The research period was carried out for 3 months, starting from June to August 2025.

Population and Sample

According to Sugiyono (2017), population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. The population and sample in this study were all employees of PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh. The number of employees at PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh was 39 employees.

Research Data Sources

The data sources used in this study are primary data. The data collection techniques used were observational studies and questionnaires distributed to respondents, namely employees of PT PLN (PERSERO) ULP Matang Glumpang Dua UP3 Lhokseumawe UID Aceh.

Data Analysis Model

The statistical test tool used in this study is the variance-based structural equation test or better known as Partial Least Square (PLS) using SmartPLS 3.0 software. According to Imam Ghozali (2016), the Partial Least Square (PLS) method explains that the variance-based structural equation model (PLS) is able to describe latent variables (not directly measured and measured using indicators (manifest variables). According to Imam Ghozali (2016), Partial Least Square (PLS) is defined as follows: "Partial Least Square (PLS) is a powerful analysis method because it does not assume that data must be measured on a certain scale, and the number of samples is small. The purpose of Partial Least Square (PLS) is to help researchers obtain latent variable values for prediction purposes."

RESULTS AND DISCUSSION

Outer Model Analysis

Outer Model AnalysisIn research using the Partial Least Square (PLS) approach, the aim is to test the validity and reliability of the indicators used to measure latent constructs (latent variables).

Convergent Validity

Convergent validity is the level of conformity (consistency) between indicators within a construct (latent variable) that aim to measure the same concept. This means that the indicators must be strongly correlated with each other and truly reflect the intended construct. If the outer loading is <0.70 but ≥ 0.60 → it can still be retained if the construct's AVE ≥ 0.50. If the outer loading is <0.60 → the indicator should be removed. The results are as follows:

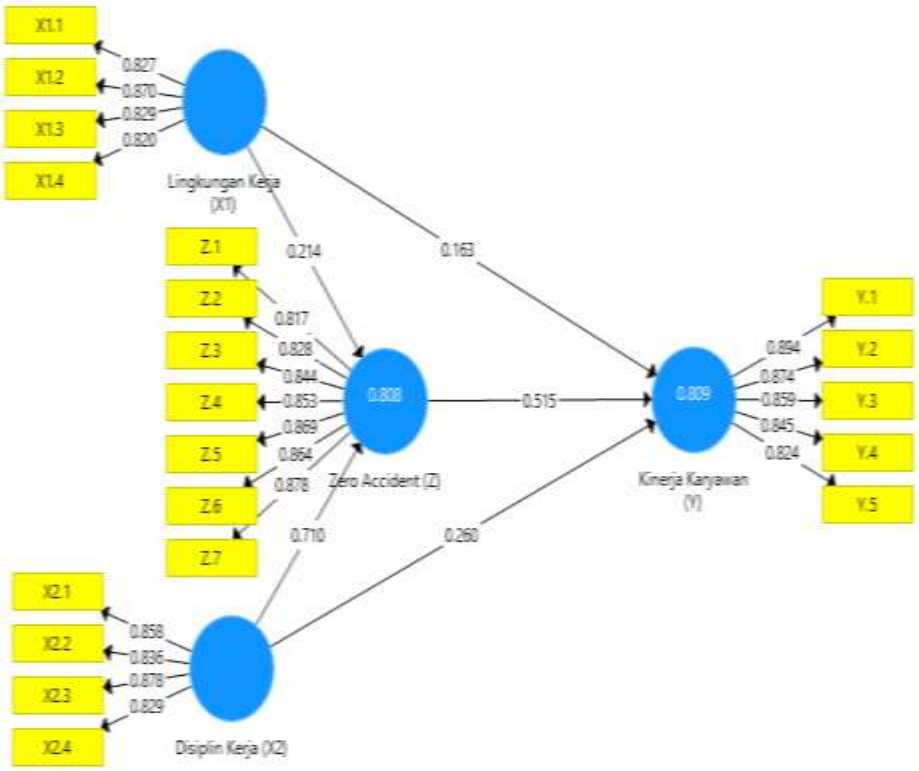

Figure 2. Outer Model

The Smart PLS output for loading factor gives the results in the following table: Outer Loadings In this study there is an equation and the equation consists of two substructures for substructure 1

Z = b1X1 + b2X2 + e1

Z = 0.214 + 0.710 + e1

For substructure 2

Y = b2X1 + b4X2 + b3Z + e2

Y = 0.163 + 0.260 + 0.515 + e2

Table 1. Outer Loadings

	Work Discipline (X2)	Employee Performance (Y)	Work Environment (X1)	Zero Accident (Z)
X1.1			0.827	
X1.2			0.870	
X1.3			0.829	
X1.4			0.820	
X2.1	0.858			
X2.2	0.836			
X2.3	0.878			
X2.4	0.829			
Y.1		0.894		
Y.2		0.874		
Y.3		0.859		
Y.4		0.845		
Y.5		0.824		
Z.1				0.817
Z.2				0.828
Z.3				0.844
Z.4				0.853
Z.5				0.869
Z.6				0.864
Z.7				0.878

Source: Smart PLS 3.3.3.

Based on the results of the outer loading test, all indicators for each variable had values above 0.70. This indicates that all indicators used in this study have excellent convergent validity. These indicators are able to accurately represent the constructs being measured. Thus, the measurement model meets the requirements for convergent validity.

Discriminant Validity

Discriminant validityis the ability of a construct (latent variable) to be truly distinct from other constructs. This means that the indicators of a construct should not have a higher correlation with other constructs than with the construct itself.

Table 2. Discriminant Validity

	Work Discipline (X2)	Employee Performance (Y)	Work Environment (X1)	Zero Accident (Z)
X1.1	0.733	0.657	0.827	0.662
X1.2	0.690	0.691	0.870	0.673
X1.3	0.702	0.656	0.829	0.675
X1.4	0.710	0.686	0.820	0.718
X2.1	0.858	0.714	0.762	0.692
X2.2	0.836	0.711	0.759	0.737
X2.3	0.878	0.786	0.695	0.814
X2.4	0.829	0.704	0.673	0.781
Y.1	0.751	0.894	0.713	0.789
Y.2	0.773	0.874	0.702	0.775
Y.3	0.739	0.859	0.687	0.771
Y.4	0.727	0.845	0.680	0.703
Y.5	0.697	0.824	0.676	0.743
Z.1	0.755	0.695	0.704	0.817
Z.2	0.780	0.778	0.719	0.828
Z.3	0.740	0.719	0.664	0.844
Z.4	0.757	0.731	0.633	0.853
Z.5	0.760	0.739	0.722	0.869
Z.6	0.744	0.771	0.716	0.864
Z.7	0.772	0.804	0.698	0.878

Source: Smart PLS 3.3.3.

Based on the results of discriminant validity testing using cross-loading analysis, all indicators had the highest loading values for the constructs they were intended to measure compared to other constructs. This indicates that the measurement model has met the criteria for discriminant validity, ensuring that each construct in this study has a unique identity and does not overlap with other constructs.

Composite reliability

Composite ReliabilityA value between 0.70 and 0.90 indicates that the indicators within the construct have adequate internal consistency, thus being reliable in measuring the intended variables. If the Composite Reliability value exceeds 0.90, the reliability is indeed very high, but this should also be considered because there may be indicators that are too similar or overlapping, which can cause data redundancy. Conversely, if the Composite Reliability value is less than 0.70, the construct is considered unreliable, because the indicators within it are not consistent enough to be used in measuring latent variables. The results are as follows:

Table 3. Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Work Discipline (X2)	**0.872**	**0.913**	**0.723**
Employee Performance (Y)	**0.912**	**0.934**	**0.739**

Work Environment (X1)	**0.857**	**0.903**	**0.700**
Zero Accident (Z)	**0.936**	**0.948**	**0.723**

Source: Smart PLS 3.3.3.

All constructs in this study met the criteria for reliability and convergent validity. This is demonstrated by Composite Reliability values above 0.70, Cronbach's Alpha values above 0.70, and AVE values above 0.50. Thus, the four constructs in this research model can be declared reliable and valid, and can be used for further analysis, such as structural model testing and hypothesis testing.

Inner Model Analysis

Inner model analysis aims to evaluate the relationships between latent constructs in a designed structural model. In the PLS-SEM approach, inner model evaluation is conducted by examining several important indicators, the research results of which are as follows:

Coefficient of Determination (R2)

The coefficient of determination or R-Square (R^2) is a statistical measure used to describe how much an independent variable is able to explain the variation of a dependent variable. In the context of PLS-SEM, R^2 is used to assess the explanatory power of a structural model against endogenous latent constructs.

Table 4 R Square Results

	R Square	Adjusted R Square
Employee Performance (Y)	0.809	0.806
Zero Accident (Z)	0.808	0.806

Source: Smart PLS 3.3.3.

The R Square value = 0.809 shows that 80.9% of the variability in Employee Performance can be explained by the variables Work Environment (X1), Work Discipline (X2), and Zero Accident (Z) as predictors in the model.The R Square value = 0.808 indicates that 80.8% of the variation in Zero Accident can be explained by the Work Environment (X1) and Work Discipline (X2) as exogenous variables. The structural model in this study has a very strong predictive ability, both for Zero Accident and Employee Performance, with R Square values both above 0.80. This indicates that the independent variables in the model are very relevant and contribute significantly to the endogenous variables studied.

Hypothesis Testing

Hypothesis testing in this study was conducted using the Partial Least Square Structural Equation Modeling (PLS-SEM) method through the SmartPLS application. This test was conducted to determine whether the relationship between variables in the model was statistically significant or not. The hypothesis testing criteria were based on the T-statistic and P-values, with the following conditions: The hypothesis is accepted if the T-statistic value is ≥ 1.96 and P-values ≤ 0.05 (5% significance). The hypothesis is rejected if the T-statistic value is <1.96 and P-values > 0.05.

Table 5. Path Coefficients (Direct Effect)

	Original Sample (O)	T Statistics (| O/STDEV |)	P Values	Results
Work Discipline (X2) -> Employee Performance (Y)	0.260	3,518	**0,000**	**Accepted**
Work Discipline (X2) -> Zero Accident (Z)	0.710	12,639	**0,000**	**Accepted**
Work Environment (X1) -> Employee Performance (Y)	0.163	2,635	**0.004**	**Accepted**

Work Environment (X1) -> Zero Accident (Z)	0.214	3,591	**0,000**	**Accepted**
Zero Accident (Z) -> Employee Performance (Y)	0.515	7,412	**0,000**	**Accepted**

Source: Smart PLS 3.3.3.

Table 5 above contains direct hypothesis results, so the explanation is as follows:

1. Work Discipline (X2) has a positive and significant effect on Employee Performance (Y) With a coefficient value of 0.260, a T-statistic of 3.518, and a P-value of 0.000, it can be concluded that the higher the work discipline possessed by employees, the better the performance shown. Strong work discipline encourages consistency and responsibility in completing tasks, thereby improving overall work results.
2. Work Discipline (X2) has a positive and significant effect on Zero Accident (Z) The test results showed a coefficient value of 0.710, a T-statistic of 12.639, and a P-value of 0.000, indicating that high work discipline can significantly reduce the number of workplace accidents. This means that employees who adhere to work rules and procedures in a disciplined manner will be better able to create safe and accident-free working conditions (zero accidents).
3. Work Environment (X1) has a positive and significant effect on Employee Performance (Y)With a coefficient of 0.163, a t-statistic of 2.635, and a p-value of 0.004, it can be concluded that a positive and supportive work environment significantly contributes to improving employee performance. A safe, comfortable, and clean work environment creates an atmosphere that encourages productivity.
4. Work Environment (X1) has a positive and significant effect on Zero Accident (Z) A coefficient value of 0.214, a T-statistic of 3.591, and a P-value of 0.000 indicate that a well-organized work environment that meets safety standards will significantly impact the achievement of zero accidents. A well-designed work environment can minimize the risk of workplace accidents.
5. Zero Accident (Z) has a positive and significant effect on Employee Performance (Y). With a coefficient value of 0.515, a T-statistic of 7.412, and a P-value of 0.000, it can be concluded that achieving zero accidents significantly improves employee performance. When employees feel safe and protected from workplace accidents, they can work with more focus, productivity, and efficiency.

Table 6. Path Coefficients (Indirect Effect)

	Original Sample (O)	T Statistics (| O/STDEV |)	P Values	Results
Work Discipline (X2) -> Zero Accident (Z) -> Employee Performance (Y)	0.366	5,882	**0,000**	**Accepted**
Work Environment (X1) -> Zero Accident (Z) -> Employee Performance (Y)	0.110	3,435	**0,000**	**Accepted**

Source: Smart PLS 3.3.3.

In table 6 above there are indirect results, so the explanation is as follows:

6. Work Discipline (X2) has a positive and significant effect on Employee Performance (Y) through Zero Accident (Z). The test results show a coefficient value of 0.366, a T-statistic of 5.882, and a P-value of 0.000, which means that Zero Accident significantly mediates the relationship between Work Discipline and Employee Performance. This means that high work discipline can create safe working conditions (zero accidents), and ultimately improve employee performance. Disciplined employees will be more compliant with work safety procedures, thereby reducing work accidents and creating a work environment that supports productivity.
7. Work Environment (X1) has a positive and significant influence on Employee Performance (Y) through Zero Accident (Z)With a coefficient value of 0.110, a T-statistic of 3.435, and a P-value of 0.000, it can be concluded that Zero Accident also plays a significant role as a mediator between the Work Environment and Employee Performance. A good and safe work environment can minimize the risk of workplace accidents (zero accidents), thus enabling employees to work more comfortably, focused, and productively.

Conclusion

1. Work Discipline has a positive and significant effect on Employee Performance. This shows that the higher the level of work discipline an employee has, the higher the performance they show will be.
2. Work Discipline has a positive and significant impact on Zero Accidents. This means that the more disciplined an employee is in following work rules and procedures, the lower the risk of work accidents occurring.
3. The work environment has a positive and significant influence on employee performance. A comfortable, safe and supportive work environment will encourage employees to work more optimally, thereby improving their performance.
4. The work environment has a positive and significant impact on Zero Accidents. A good work environment significantly reduces the potential for workplace accidents. This demonstrates the importance of managing a safe and ergonomic work environment.
5. Zero Accidents has a positive and significant impact on Employee Performance. The lower the workplace accident rate (zero accidents), the better the employee's performance. This demonstrates that occupational safety is a crucial factor in improving performance.
6. Work discipline has a positive and significant impact on employee performance through zero accidents. This means that the influence of work discipline on employee performance is partially mediated by zero accidents. Work discipline not only directly impacts performance but also through the role of zero accidents as an intermediary factor.
7. The work environment has a positive and significant impact on employee performance through zero accidents. A safe work environment can create zero accidents, which ultimately improves employee performance indirectly.

Suggestion

1. Company managementIt's necessary to continuously improve employee discipline through consistent supervision, sanctions and rewards, and ongoing coaching. High discipline has been proven to not only improve performance but also reduce the risk of workplace accidents.
2. Improving the quality of the work environmentis highly recommended, especially in terms of safety, comfort, and cleanliness. A good work environment significantly encourages zero accidents and has a direct impact on employee productivity.
3. Companies also need to strengthen their work safety programs (zero accidents) by providing regular safety training, providing personal protective equipment (PPE), and ensuring that all SOPs are complied with by all employees.
4. It is recommended that companies conduct regular monitoring and evaluation of the implementation of work safety and discipline, in order to identify obstacles and design appropriate improvement strategies.
5. For academics, these results can be used as a basis for developing theoretical studies in the field of human resource management, particularly those related to occupational safety as a mediating variable in improving performance.

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