The Effect of Work Discipline and Improving Competence and on Performance With Occupational Safety and Health As Variable Intervening In The Network and Construction at PT PLN (Persero) UP3 Sibolga

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Abstract

This study aims to examine the effect of competence and work discipline on employee performance at PT. PLN (Persero) UP3 Sibolga, with Occupational Safety and Health (OSH) as an intervening variable. The research employs a quantitative approach with an explanatory research design. Data was collected through questionnaires distributed to 53 respondents working in the network and construction department. The data analysis technique used was path analysis to test the direct and indirect relationships between the variables. The results indicate that competence and work discipline have a positive and significant effect on employee performance, both directly and indirectly through OSH as an intervening variable. Competence and work discipline were found to enhance performance by improving OSH conditions, while career development influenced performance through increased awareness of OSH. This study provides important contributions in clarifying the role of OSH as a mediator in the relationship between factors affecting performance. The findings also offer recommendations for PT. PLN (Persero) to strengthen the development of competence, and work discipline, as well as to ensure more effective OSH policies to improve employee performance.

Keywords: Competence Work Discipline, Occupational Safety And Health, Performance, Path Analysis

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Introduction

The rapid development of the industrial world, especially in the utility sector such as electricity, requires serious attention to human resource management. One of the very important components in human resource management is the factors that can affect employee performance. Employee performance in a company is greatly influenced by various factors related to competence and work discipline, as well as a safe and healthy work environment. In Indonesia, one of the companies that has an important role in the provision of electrical energy is PT PLN (Persero), which is responsible for electricity distribution and services throughout Indonesia, including in the PT PLN UP3 Sibolga.

PT PLN UP3 Sibolga, as one of the units under PT PLN (Persero), manages electricity distribution in the northern part of Sumatra. With so many projects to be carried out in the grid and electrical construction, the company faces a great challenge in improving the performance of the human resources (HR) involved. Factors that affect employee performance, such as competence, career, and work discipline, must be well managed. In this context, occupational safety and health (K3) plays a very important role as one of the factors that can intervene in the relationship between these factors and employee performance.

Employee competence refers to the skills and knowledge possessed by individuals in carrying out their jobs. Good competencies allow employees to carry out their duties more efficiently and effectively. In an increasingly complex world of work, improving competencies through training and development is very important. For example, based on research by Muhammad. et.al (2020) which examined the relationship between training and competencies in the industrial sector, found that effective training can improve the quality of work and reduce work errors that can affect the overall performance of the company.

In addition, high work discipline also has a great influence on employee performance. Discipline in following the rules and procedures that have been set by the company greatly affects productivity and work efficiency. Research by Sutrisno (2019) revealed that good work discipline can reduce absenteeism and improve the quality of work produced by employees.

However, even though these factors have an effect, there is one variable that is often forgotten but has a big impact on employee performance, namely occupational safety and health (K3). K3 is a very important aspect, especially in high-risk sectors such as construction and electricity distribution. Guaranteed occupational safety and health will create a conducive work environment and reduce stress and work accidents. Research conducted by Yusuf et.al (2021) shows that the effective implementation of K3 can improve employee performance because they feel safer and more comfortable in carrying out their duties.

By combining all of the above factors, this study aims to investigate how competence, career, and work discipline affect employee performance at PT PLN (Persero) UP3 Sibolga, with occupational safety and health as intervening variables. This is very important considering that this company has a great responsibility in providing safe electricity to the community, which can only be achieved if its human resources have optimal performance.

Data that shows the importance of K3 in improving employee performance is also very relevant. Based on data from the 2020 Labor Supervisory Agency (BPTK), the construction and electricity sectors are two sectors with a fairly high rate of work accidents. This suggests that better implementation of K3 in the sector can have a positive impact not only on physical safety, but also on overall employee performance.

This research is very relevant to be carried out because it can provide a clear picture of the relationship between factors that affect employee performance, as well as contribute to the development of HR management at PT PLN UP3 Sibolga. In addition, the results of this study are expected to provide insight for other companies in the utility sector that face similar challenges, especially in terms of implementing K3 more effectively.

Literature Review

2.1 Employee Performance

Performance among workers is the outcome of work completed by employees in compliance with assigned tasks, company objectives, and established metrics or standards. Performance is a gauge of how well a person does their duties. Judge & Robbins (2021). Employee Performance Indicators (1) Work Product Quality, (2) Work Volume or Quantity Employee performance is the result of work achieved by employees in accordance with responsibilities, organizational goals, and indicators or standards that have been set. Performance is a measure of an individual's success in carrying out their duties Robbins & Judge (2021). Employee Performance Indicators (1) Quality of Work Results, (2) Quantity or Volume of Work, (3) Timeliness of Task Completion (4) Efficiency of Resource Use (5) Initiative, Responsibility, and Discipline.

According to Kasmir (2016: 266), occupational safety is an activity to protect employees as a whole. The company tries to keep employees from having accidents while working. Mangkunegara (2017: 161), the term safety includes safety risks and health risks. Occupational safety refers to safe conditions or survivorship from suffering, damage, or loss in the workplace. Meanwhile, occupational health refers to a condition that is free from physical, mental, emotional, or painful disturbances caused by the work environment.

K3 is a program formed to ensure the safety of workers from activities in the workplace so that accidents do not occur or cause illness by complying with applicable regulations and implementing in accordance with standard operating procedures (Elphiana E G et al., 2017). Occupational safety is a protection activity for workers. This shows the company's commitment to maintaining occupational safety so that employees do not experience work accidents due to overloaded workload or negligence when carrying out activities at work. As for occupational health, it is the company's effort to maintain the health of employees during work.

This is done so that the health of employees is guaranteed, so that it does not affect their activities while working (Kasmir, 2016). Maulidya (2021) stated that K3 measurement indicators include: work protective equipment, safe workspace, use of work equipment, workspace lighting, and healthy workspace. Considering the importance of K3 as an employee human right, and it is the company's effort to improve the performance of its employees. Therefore, it must be the company's main program to maintain the safety and health of employees, so that they can feel safer, more comfortable and healthier at work, so that it will improve their performance. This is very important to be a serious concern because accidents and illnesses during work not only have a bad impact on employees, but also on the company

2.2 Competence

The meaning of competence Sedarmayanti (2017) defines competence as an individual's work ability that encompasses knowledge, skills, and work attitudes in compliance with established norms. Competency-affecting factors In the book "Human Resource Management" in particular, Sedarmayanti listed a number of elements that influence competence, namely: (1) Education and Training, (2) Work Experience, (3) Motivation, (4) Work Environment, (5) Attitude and Personality

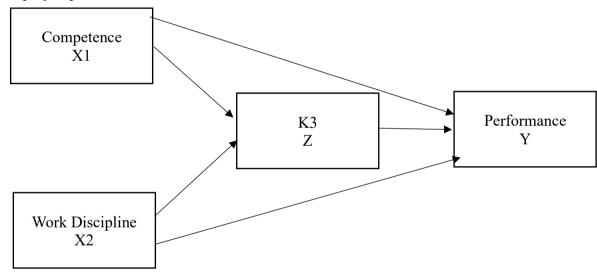
Competency Indicators according to Sedarmayanti (2017): (1) Knowledge, (2) Skills, (3) Attitude Competency indicators (Denison, 2019) are (1) Involvement: Employee participation and empowerment, (2) Consistency: Alignment of values and behaviors, (3) Adaptability: Ability to adapt to change, (4) Mission: Clarity of organizational goals. Employee performance is the result of work achieved by a person in carrying out their duties according to their responsibilities (Armstrong, 2023). According to Pulakos (2019), performance reflects an individual's contribution to the organization's goals.

2.3 Work Discipline

Discipline is a person's willingness to follow all applicable business or organizational rules and social norms. This is to encourage them to be more active in work. According to Saleh, 2018) Work discipline is an attitude of respect, appreciation, obedience, and obedience to applicable regulations, both written and unwritten and able to carry them out and not avoid receiving sanctions if he violates the duties and authorities given to him. Discipline is the most important thing that an individual or employee must follow to show the company that they are capable of carrying out the responsibilities given to them and other tasks assigned to them well by the company. With the help of work discipline, you can increase your work productivity. Meanwhile, according to Rivai (in Pertiwi, 2017) said, "Work discipline is a tool used by managers to communicate with employees so that they are willing to change a behavior and as an effort to increase one's awareness and willingness to obey all applicable social rules and norms. The indicators of work discipline used in this study to measure work discipline according to Malay S.P Hasibuan (in Silalahi et al., 2021) are as follows: (1) Attendance at work, (2) Compliance with work regulations, (3) Compliance with work standards, (4) High level of alertness

2.4 Conceptual Framework

The conceptual framework in this study describes the relationship between existing variables, namely competence, career, work discipline, occupational safety and health (K3), and employee performance.



Research Hypothesis

Based on the formulation of the problem and the objectives of the research, the hypotheses proposed in this study are as follows:

- H1 : Competence has a positive effect on K3 and PT. PLN (Persero) UP3 Sibolga.
- H2: Work discipline has a positive effect on K4 and PT. PLN (Persero) UP3 Sibolga.
- H3 : Competencies have a positive effect on employee performance at PT. PLN (Persero) UP3 Sibolga.
- H4 : Work discipline has a positive effect on K3 at PT. PLN (Persero) UP3 Sibolga.
- H5: K3 has a positive effect on employee performance at PT. PLN (Persero) UP3 Sibolga.

- H6: Occupational safety and health (K3) plays a role as an intervening variable that Strengthening the Influence of Competence on Employee Performance at PT. PLN (Persero) UP3 Sibolga.
- H7: Occupational safety and health (K3) plays an intervening variable that strengthens the influence of work discipline on employee performance at PT. PLN (Persero) UP3 Sibolga.

Methods

3.1 Approaches and Types of Research

This study uses a quantitative approach with the type of explanatory research. The quantitative approach was chosen because this study aims to test the influence between several variables statistically that can be measured and analyzed. The type of explanatory research is used to explain the cause-and-effect relationship between the variables studied. This study focuses on analyzing the relationship between competence, career, work discipline, and occupational safety and health (K3) on employee performance in the network and construction section of PT. PLN (Persero) UP3 Sibolga. In addition, this study also examines occupational safety and health (K3) as an intervening variable that mediates the relationship between independent factors (competence, career, work discipline) and employee performance.

3.2 Data Types and Sources

In this study, the data used were primary and secondary. Primary Data Data obtained directly from respondents through questionnaires distributed to employees in the network and construction section of PT. PLN (Persero) UP3 Sibolga. This questionnaire consists of questions related to research variables, namely competence, career, work discipline, occupational safety and health (K3), and employee performance. Respondents were asked to provide an assessment based on the Likert scale that had been provided. Secondary Data: Secondary data is obtained from company documents and reports that can support primary data, such as employee performance reports, training and competency development data, as well as information related to occupational safety and health policies implemented at PT. PLN (Persero) UP3 Sibolga.

3.3 Population and Research Sample

The population in this study is all employees who work in the network and construction section of PT. PLN (Persero) UP3 Sibolga, which is around 100 people. The research sample was taken by non-probability sampling using the purposive sampling method, which is to select samples that are considered to be able to provide information relevant to the research objectives. The number of samples taken in this study was 53 respondents. This sample was selected with consideration that the number is representative enough to describe the conditions in the field, as well as considering the limitations of time and available resources.

3.4 Variable Operational Definition

The operational definition of variables is used to provide a clear explanation of the variables being studied so that they can be measured objectively. Here are the operational definitions and indicators for each variable:

Table 1. Operational Variable

Variabel	Operational Definition	Indicator	
Competencies (X1)	The ability and skills possessed by	1. Technical knowledge	
	employees to carry out their duties	2. Ability to manage tasks	
		3. Experience on the job	

Variabel	Operational Definition	Indicator		
	and responsibilities effectively and efficiently.	4. Interpersonal skills		
Work Discipline (X3)	Employee obedience and compliance with the rules and procedures that apply in the company.	 On-time attendance Compliance with work procedures Timely completion of tasks 		
Occupational Safety and Health (K3) (Z)	Programs and policies implemented by the company to ensure a safe and healthy work environment.	 Occupational safety training Availability of safety facilities Implementation of work safety procedures 		
Performance (Y)	The results of the work achieved by the employee in carrying out the duties and responsibilities given.	Achievement of work targets Quality of work Work efficiency and effectiveness		

Data Analysis Model

In this study, path analysis is used to analyze the relationship between existing variables. Path analysis is a statistical technique used to test the direct and indirect relationships between variables in a model. This model makes it possible to test whether occupational safety and health (K3) play a role as intervening variables in the relationship between competencies, careers, work discipline, and employee performance.

Result and Discussion

4.1 Descriptive Analysis Results

The results of the descriptive analysis aim to describe the characteristics of the data obtained from the respondents, including the mean value, standard deviation, minimum, and maximum for each variable. The following is a summary of the results of the descriptive analysis:

Table 2. Analysis Descriptive

Variabel	Mean	Std. Dev.	Min	Max
Competencei (X1)	4.12	0.63	2	5
Work Discipline (X3)	4.10	0.68	3	5
Occupational Health & Safety (Z)	4.17	0.74	3	5
Performance (Y)	4.09	0.71	3	5

The average for each variable was in the range of 4, indicating that in general respondents gave a relatively positive assessment of the variables studied.

4.2 Validity and Reliability Test Results

Validity Test: The validity test is conducted using the Pearson correlation between the questionnaire items and the total score. Based on the results of the validity test, all question items in the questionnaire had an r> value of 0.3 and were significant at a level of $\alpha = 0.05$, indicating that all question items were valid.

Reliability Test: Reliability is measured using Alpha Cronbach. The results of the reliability test showed a value of $\alpha = 0.85$ for the entire questionnaire, which showed that the instrument used in this study was reliable because the $\alpha >$ value was 0.7.

Results of Regression Test and Regression Path AnalysisTo analyze the influence between the variables studied, a regression test was carried out using path analysis. Here are the results of the path regression model calculation:

Model Regresi:

- 1. $X1 \rightarrow Z$ (Kompetensi $\rightarrow K3$): $\beta X1 \rightarrow Z=0.45$ (significant in p < 0.05)
- 2. $X3 \rightarrow Z$ (Disiplin Kerja $\rightarrow K3$): $\beta X3 \rightarrow Z=0.40$ (signifikan in p < 0.05)
- 3. $Z \rightarrow Y$ (K3 \rightarrow Kinerja): $\beta Z \rightarrow Y=0.42$ (signifikan in p < 0.05)
- 4. X1 \rightarrow Y (Kompetensi \rightarrow Kinerja): β X1 \rightarrow Y=0.38 (signifikan pada p < 0.05)
- 5. $X3 \rightarrow Y$ (Disiplin Kerja \rightarrow Kinerja): $\beta X3 \rightarrow Y=0.35$ (signifikan in p < 0.05)

Indirect and Total Influence:

- 1. Indirect Effect:
- 2. Competency (X1 \rightarrow Z \rightarrow Y):0.45×0.42=0.189
- 3. Career $(X2 \rightarrow Z \rightarrow Y):0.33\times0.42=0.1386$
- 4. Work Discipline $(X3 \rightarrow Z \rightarrow Y):0.40\times0.42=0.1680$
- 5. Pengaruh Total (Total Effect):
 - a. Competency $(X1 \rightarrow Y):0.38+0.189=0.569$
 - b. Career $(X2 \rightarrow Y):0.30+0.1386=0.43860$
 - c. Work Discipline $(X3 \rightarrow Y):0.35+0.168=0.518$

Discussion

This study aims to examine the influence of competence, career, work discipline, and occupational safety and health (K3) on employee performance at PT. PLN (Persero) UP3 Sibolga, with occupational safety and health as intervening variables. Based on the results of the analysis, it was found that all the variables studied had a significant relationship with employee performance, either directly or indirectly through the role of occupational safety and health.

1. Competencies and Performance

Competence plays an important role in improving employee performance. The results of this study show that competence has a significant direct influence on employee performance. This positive influence can be explained by the theory that the higher a person's level of competence, the more effective they will be in carrying out their duties and responsibilities. Good technical knowledge, interpersonal skills, and experience possessed by employees make them more productive and able to meet the expected work standards (Robbins, 2009). These

findings are consistent with previous research by Luthans (2005) which stated that developing competencies contribute directly to improving employee performance. In addition, the results of this study also show that competence has an indirect effect on performance through occupational safety and health (K3). This may happen because employees who have good competencies better understand the importance of safety and correct procedures at work, so as to create a safer and conducive work environment, which in turn improves their performance.

2. Career and Performance

Career also has a significant effect on employee performance, both directly and indirectly through K3. Companies that provide clear and structured career development opportunities for employees tend to get better results in terms of performance. Employees who feel valued and have opportunities to develop in their careers will be more motivated to work hard and achieve optimal results (Setiawan, 2017). This suggests that employee career sustainability, whether in the form of promotion or skill development, can play a big role in improving their performance. Careers also affect K3 indirectly. Employees who have good career prospects tend to be more concerned about their well-being at work, including occupational safety and health. On the other hand, companies that prioritize employees' careers biasanya juga memberikan perhatian lebih terhadap kebijakan K3, karena mereka ingin memastikan pegawai mereka bekerja dalam lingkungan yang aman dan sehat.

3. Work Discipline and Performance

Work discipline has been proven to have a direct influence on employee performance. Discipline at work, such as on-time attendance, adherence to procedures, and completion of tasks on deadlines, are important factors that affect the quality and quantity of employee work. Good discipline creates an orderly and efficient work atmosphere, which in turn encourages improved performance (Handayani, 2019). In addition, work discipline also affects occupational safety and health. Disciplined employees tend to pay more attention to the safety procedures set by the company, so that they can reduce the risk of work accidents and create a safer work environment. Thus, work discipline not only improves performance, but also contributes to the creation of better K3.

4. Occupational Safety and Health (K3) as an Intervening Variable

Occupational safety and health (K3) has been proven to play an important role as an intervening variable in the relationship between competence, career, work discipline, and employee performance. The results of this study show that K3 functions as a mediator that strengthens the relationship between these variables and performance. Employees who work in a safe and healthy environment tend to feel more comfortable and motivated to work at their best. Guaranteed work safety will reduce stress and anxiety, which in turn increases employee productivity and performance (Hani, 2019). From this analysis, it can be concluded that improving factors such as competence, career, and work discipline will strengthen the implementation of K3 policies, which will ultimately result in better employee performance. Therefore, companies need to pay more attention to occupational safety and health aspects as an integral part of the employee performance improvement strategy.

Conclusion and Recomendations Conclusion

Overall, the results of this study support existing theories about the influence of competence, career, work discipline, and occupational safety and health on employee performance. All of these variables have been shown to be positively related to performance, both directly and through the role of occupational safety and health as mediators. Therefore,

companies, especially PT. PLN (Persero) UP3 Sibolga, is advised to focus on developing employee competencies, careers, and work discipline, as well as strengthening occupational safety and health programs to achieve more optimal performance. This research is also in line with previous studies that revealed that improved competence, good career management, high work discipline, and the implementation of effective K3 policies can encourage improvement in individual performance in organizations. Based on the results of the data analysis and discussion above, it can be concluded that:

- 1. Improving competence, career, and work discipline has a positive effect on employee performance at PT. PLN (Persero) UP3 Sibolga.
- 2. Occupational safety and health (K3) plays a role as an intervening variable that mediates the relationship between independent factors (competence, career, work discipline) and employee performance.
- 3. The direct and indirect influence of each variable on employee performance shows the importance of the role of occupational safety and health in improving performance.

Recommendations

Based on the results of the research, it can be concluded that competence, career, and work discipline have a significant influence on the performance of employees at PT. PLN (Persero) UP3 Sibolga, either directly or indirectly through occupational safety and health (K3) as an intervening variable. Directly, competence, career, and work discipline play an important role in improving employee performance. In addition, K3 serves as a mediator that strengthens the relationship between the three independent variables and performance. Employees who have good competence, a developed career, and high work discipline tend to be more productive and perform optimally, especially in an environment that supports occupational safety and health. Therefore, companies are advised to increase their focus on developing competencies, careers, and work disciplines, as well as ensure the effective implementation of K3 policies to achieve higher performance.:

- 1. Improving Competency Development Programs: PT. PLN (Persero) UP3 Sibolga needs to strengthen training and education programs for employees to improve their technical and non-technical skills.
- 2. Develop Employee Careers: Companies must ensure that there are clear career paths and provide opportunities for employees to grow within the organization.
- 3. Pay Attention to Work Discipline: Increase compliance with rules and procedures through programs that support work discipline.
- 4. Improving Occupational Safety and Health (K3): Providing regular safety training and updating workplace safety facilities to maintain employee health and safety.

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