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The Role of Career Development in Improving Employee Performance

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Abstract
This study aims to analyze the effect of workload and work environment on employee performance, both directly and indirectly through career development as an intervening variable. The research was conducted on 69 respondents who are employees of a certain institution/company (institution name can be added if available). The analytical method used in this study is Partial Least Squares (PLS) with the assistance of SmartPLS software. The results show that workload has a positive and significant effect on employee performance but does not have a significant effect on career development. On the other hand, the work environment has a positive and significant effect on both career development and employee performance. Furthermore, career development also has a positive and significant effect on performance. In terms of indirect effects, the study found that career development does not mediate the relationship between workload and performance. However, it significantly mediates the relationship between the work environment and employee performance. These findings emphasize the importance of a supportive work environment and structured career development programs in enhancing employee performance. Organizations are encouraged to provide conducive working conditions and continuous development opportunities to optimize employee outcomes.

Keywords: Workload, Work Environment, Career Development, Employee Performance.

INTRODUCTION

One of the challenges faced by large companies in Indonesia, including PT PLN (Persero) UP3 Medan Utara, is how to create an effective and efficient work environment to increase employee productivity and performance. In this case, workload and work environment play a crucial role that often affects performance and the achievement of organizational goals. Excessive workload and a non-conducive work environment can reduce employee motivation and performance. This has the potential to worsen the achievement of targets that are indicators of company success. PT PLN (Persero) UP3 Medan Utara, as one of the electricity service providers in Indonesia, faces various challenges in creating a work environment that supports performance. The success of PT PLN in achieving its goals depends heavily on the quality of its employees' performance. Employees working at PT PLN are often faced with quite heavy tasks and targets that must be achieved within a limited time. Therefore, it is very important to study factors that can affect performance, including workload, work environment, and connecting factors such as career development. Based on previous research, it was found that excessive workload and a non-supportive work environment can reduce employee performance and hinder organizational performance. Ferine (2020) Partially, motivation has a significant effect on performance. With a clearer understanding of these factors, companies such as PT PLN (Persero) UP3 Medan Utara can design better policies to improve employee performance and achieve organizational goals more effectively.

Formulation of the problem

1. Does Workload have a positive and significant effect on Performance at PT PLN (Persero) UP3 North Medan?
2. Does the work environment have a positive and significant influence on performance at PT PLN (Persero) UP3 North Medan?
3. Does Workload have a positive and significant effect on Career Development at PT PLN (Persero) UP3 North Medan?
4. Does the Work Environment have a positive and significant influence on Career Development at PT PLN (Persero) UP3 North Medan?
5. Does Career Development have a positive and significant impact on Performance at PT PLN (Persero) UP3 North Medan?
6. Does Workload have a positive and significant effect on Performance through Career Development at PT PLN (Persero) UP3 North Medan?
7. Does the Work Environment have a positive and significant influence on Performance through Career Development at PT PLN (Persero) UP3 North Medan?

Research purposes

1. To test and analyze the influence of Workload on Performance at PT PLN (Persero) UP3 North Medan.
2. To test and analyze the influence of the Work Environment on Performance at PT PLN (Persero) UP3 North Medan.
3. To test and analyze the influence of Workload on Career Development at PT PLN (Persero) UP3 North Medan.
4. To test and analyze the influence of the Work Environment on Career Development at PT PLN (Persero) UP3 North Medan.
5. To test and analyze the influence of Career Development on Target Achievement at PT PLN (Persero) UP3 North Medan.
6. To test and analyze the influence of Workload on Performance through Career Development at PT PLN (Persero) UP3 North Medan.
7. To test and analyze the influence of the Work Environment on Performance through Career Development at PT PLN (Persero) UP3 North Medan.

LITERATURE REVIEW

Performance

According to Afandi (2018) Performance is the work results that can be achieved by a person or group of people in a company in accordance with their respective authorities and responsibilities in an effort to achieve organizational goals illegally, without violating the law and without conflicting with morals and ethics.

According to Afandi (2018), Performance Indicators are:

1. Quantity of work results
2. Quality of work results

3. Efficiency in carrying out tasks
4. Work discipline
5. Initiative
6. Accuracy
7. Leadership
8. Honesty
9. Creativity

Workload

According to Anastasia (2019), workload is a task with detailed tasks that must be completed within a specific timeframe. Furthermore, workload is defined in the form of company work standards based on the type of work. Workload is not only related to work overload but also to the same or, conversely, too little work (work underload).

According to Anastasia (2019), workload indicators are:

1. Working hours
   Working hours are the time to do work, which can be done during the day and/or at night.
2. Time pressure
   A condition where employees are under pressure from their workplace to complete their tasks within the specified time.
3. Role Ambiguity
   Role ambiguity is a condition in which employees do not receive clarity regarding their duties, special rights and obligations in carrying out a job.
4. A lot of incoming information
   The large amount of information an employee receives simultaneously can increase their workload. The more information an employee receives, each with a different impact, the more it can affect their concentration.
5. Responsibility
   Responsibility is human self-awareness of all intentional or unintentional behavior.

Work environment

According to Budiasa (2021), the work environment is everything that is around employees while working, whether physical or non-physical, directly or indirectly, which can affect the employee and their work while working.

According to Budiasa (2021) the Work Environment Indicators are as follows:

1. Working atmosphere
   The conditions surrounding employees create an atmosphere and influence the implementation of the work.
2. Relationships with coworkers

Relationships with coworkers can be characterized by harmony without putting each other down. Harmonious work relationships help employees stay with the company, which naturally impacts their performance.

3. Availability of work facilities or equipment
   Equipment to support smooth workflow. Having complete work facilities is a crucial support for work execution and improves employee performance.

Career Development

According to Putri (2019), career development is a decision made now about what to do in the future. This means that someone who has already established a career plan needs to take certain steps to realize that plan. These steps can be taken on the employee's own initiative but can also be in the form of activities sponsored by the organization, or a combination of the two.

According to Putri (2019), career development indicators are:

1. Assessment and Evaluation
2. Work performance
3. Educational background
4. Training that has been attended
5. Work experience
6. Loyalty to the company

Conceptual Framework

The conceptual framework is a visual representation of the relationships between the variables in this study. Within this framework, workload and work environment are factors influencing employee goal achievement, with career advancement acting as an intervening variable mediating this relationship.

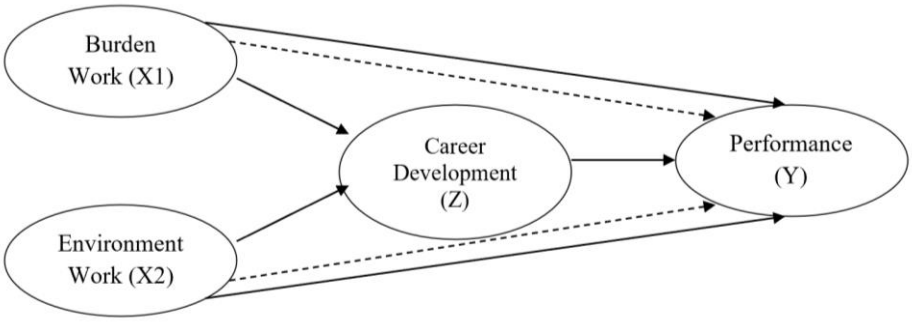

Figure 1. Conceptual Framework

Hypothesis

1. Workload has a negative and significant effect on Performance at PT PLN (Persero) UP3 North Medan.

2. The work environment has a positive and significant influence on performance at PT PLN (Persero) UP3 North Medan.
3. Workload has a negative and significant effect on Career Development at PT PLN (Persero) UP3 North Medan.
4. The work environment has a positive and significant influence on career development at PT PLN (Persero) UP3 North Medan.
5. Career Development has a positive and significant impact on Performance at PT PLN (Persero) UP3 North Medan.
6. Workload has a negative and significant effect on Performance through Career Development at PT PLN (Persero) UP3 North Medan.
7. The work environment has a positive and significant influence on performance through career development at PT PLN (Persero) UP3 North Medan.

METHOD

Types of research

According to Sugiyono (2018), quantitative data is a research method based on positivity (concrete data), research data in the form of numbers that will be measured using statistics as a calculation test tool, related to the problem being researched to produce a conclusion.

Time and Place of Research

This research was conducted in May 2025 for 2 months at PT PLN (Persero) UP3 North Medan Jalan KL. Yos Sudarsso No. 115 Medan.

Data source

The data sources used in this research are:

1. Primary data**,**The data were obtained directly from respondents through a questionnaire consisting of questions related to variables such as workload, work environment, career advancement, and target achievement. This questionnaire was distributed to employees of PT PLN (Persero) UP3 North Medan who were respondents in this study.
2. Secondary data**,**This is data obtained from readily available sources, such as company annual reports, employee data, and references from previous research relevant to this topic. Secondary data will be used to enrich the research discussion and analysis.

Research Population and Sample

Population

Population is a generalization area consisting of objects/subjects that have certain qualities and characteristics that are applied by researchers to be studied and draw conclusions (Sugiyono, 2016). The population used in this study was all employees at PT PLN (Persero) UP3 North Medan, totaling 69 employees.

Sample

According to Sugiyono (2016), a research sample is a portion of the population's size and characteristics. The sample in this study was 69 employees of PT PLN (Persero) UP3 North Medan (Saturated Sample).

Data collection technique

The data collection technique used is a questionnaire. Researchers will distribute questionnaires to sample respondents. According to Sugiyono (2018), a questionnaire is a data collection technique carried out by providing a set of written questions or statements to respondents to answer.

Data Analysis Model

In this study, to analyze the relationships between variables, the researcher will use Path Analysis, which allows researchers to determine the direct, indirect, and total effects of the variables studied. Path Analysis was chosen because this model can describe the relationships between several variables in a more complex system, taking into account intervening variables.

In this model, Workload and Work Environment will be independent variables that influence Career Development as an intervening variable, which in turn will influence Performance.

1. Direct Effect:
   Direct influence is an influence that occurs directly from one variable to another without going through other variables. It shows the direct influence of Workload (X1) on Performance (Y), or the direct influence of Work Environment (X2) on Target Achievement (Y).
2. Indirect Effect:
   Indirect influence is an influence that occurs through an intervening variable (mediating variable). Shows an indirect influence.Workload (X1) on Performance (Y) through Career Development (Z).
3. Total Effect:
   The total effect is the sum of the direct and indirect effects between two variables. It shows the total effect of Workload (X1) on Performance (Y), which is calculated from the direct influence and indirect influence involving Career Development (Z).

RESULTS AND DISCUSSION

Outer Model Analysis

The details of the relationship between latent and manifest variables can be determined using measurement model testing, also known as external model testing. This test has reliability, discriminant validity, and convergent validity.

Convergent Validity

The loading factor indicates this test, the cutoff value is 0.7, and the extracted cutoff value is Average.Variance.(AVE) set at 0.5; values above this indicate validity. This shows that if the indicator value > 0.7 is able to explain the construct variable, then the indicator value is considered valid. The structural model of the study is depicted in the following figure:

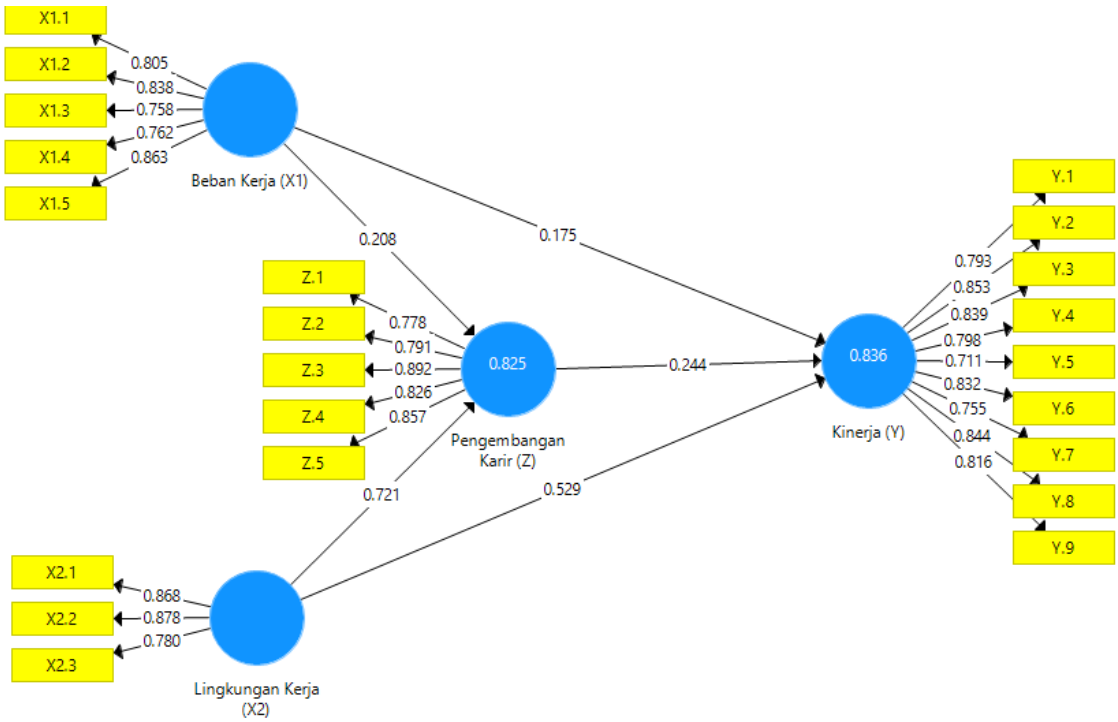

Figure 2. Outer Model

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

$Z = b1X1 + b2X2 + e1$

$Z = 0.208 + 0.721 + e1$

For substructure 2

$Y = b4X1 + b5X2 + b7Z + e2$

$Y = 0.175 + 0.529 + 0.244 + e2$

Table 1. Outer Loadings

	Workload (X1)	Performance (Y)	Work Environment (X2)	Career Development (Z)
X1.1	**0.805**			
X1.2	**0.838**			
X1.3	**0.758**			

X1.4	0.762			
X1.5	0.863			
X2.1			0.868	
X2.2			0.878	
X2.3			0.780	
Y.1		0.793		
Y.2		0.853		
Y.3		0.839		
Y.4		0.798		
Y.5		0.711		
Y.6		0.832		
Y.7		0.755		
Y.8		0.844		
Y.9		0.816		
Z.1				0.778
Z.2				0.791
Z.3				0.892
Z.4				0.826
Z.5				0.857

In the table above, the value of each variable is stated in such a way that the indicator of each variable is more than or equal to 0.7, this shows that each indicator item has a value of less than or equal to 0.7, meaning that the data is valid and can continue with further analysis.

Discriminant Validity

The next step in the analysis is to determine which data is valid in terms of discriminant validity. The goal is to determine whether the cross-loading value is greater than the other variables, thereby determining the indicator's sensitivity to height correction. This is related to the construction of the table below, which presents the validity assessment results as follows:

Table 2. Discriminant Validity

	Workload (X1)	Performance (Y)	Work Environment (X2)	Career Development (Z)
X1.1	0.805	0.656	0.719	0.635
X1.2	0.838	0.698	0.683	0.648
X1.3	0.758	0.644	0.675	0.644
X1.4	0.762	0.637	0.634	0.689
X1.5	0.863	0.745	0.794	0.749
X2.1	0.794	0.730	0.868	0.772
X2.2	0.805	0.867	0.878	0.791
X2.3	0.591	0.670	0.780	0.718

Y.1	0.730	0.793	0.710	0.751
Y.2	0.743	0.853	0.862	0.841
Y.3	0.646	0.839	0.682	0.627
Y.4	0.638	0.798	0.697	0.619
Y.5	0.627	0.711	0.638	0.601
Y.6	0.736	0.832	0.731	0.649
Y.7	0.625	0.755	0.680	0.704
Y.8	0.695	0.844	0.811	0.807
Y.9	0.635	0.816	0.687	0.644
Z.1	0.630	0.598	0.630	0.778
Z.2	0.704	0.701	0.741	0.791
Z.3	0.745	0.787	0.873	0.892
Z.4	0.641	0.715	0.756	0.826
Z.5	0.743	0.780	0.723	0.857

In table 2 there are cross loading values for workload variables where each cross loading factor is greater than the cross loading factor value on other latent variables, for the cross loading factor value on the performance variable is greater than the cross loading factor on other latent variables, for the cross loading factor value on the work environment variable is greater than the cross loading factor value on other latent variables, for the cross loading factor on the career development variable is greater than the cross loading factor value on other latent variables, so it can be concluded that this test is declared discriminant valid.

Composite reliability

Each variable in a composite reliability study is compared for its reliability value; if the variable's value is higher than 0.60, the study is considered reliable; if it is between 0.60 and 0.7, it is not. The table below shows the various blocks used to assess the validity and reliability of the study, including the AVE value, composite reliability, and Coranbach's alpha value:

Table 3. Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Workload (X1)	**0.865**	**0.903**	**0.650**
Performance (Y)	**0.932**	**0.943**	**0.649**
Work Environment (X2)	**0.795**	**0.880**	**0.711**
Career Development (Z)	**0.886**	**0.917**	**0.688**

As seen in Table 3, the value of each variable in the Cronbach's alpha column is greater than 0.7, indicating the reliability of the variable's data. Because the data is greater than 0.6, it can be explained that each variable is considered reliable in the Composite Reliability

column, which has a value greater than 0.6. Each variable in the AVE column has a value greater than 0.7, this indicates that the data is valid according to the AVE standard. Because all variables in the reliability, AVE, and Cronbach's alpha columns have values greater than 0.7 and 0.6, respectively, all are considered valid and reliable.

Inner Model Analysis

To ensure the developed fundamental model is reliable and accurate, the structural model, or deep model, is evaluated. A number of markers, including the following, indicate the stages of scrutiny performed during the primary model assessment:

Coefficient of Determination (R2)

Based on the data processing that has been carried out using the SmartPLS 3.0 program, the R Square value is obtained as follows:

Table 4. R Square Results

	R Square	Adjusted R Square
Performance (Y)	0.836	0.828
Career Development (Z)	0.825	0.820

This means that 83.6% of the variation in the Performance variable (Y) can be explained by independent variables (e.g., variables X or Z that influence Y, such as Competence, Work Environment, or Career Development if relevant). A very high R Square value (more than 80%) indicates that the model is very good at explaining changes in employee performance. This means that 82.5% of the variation in the Career Development variable (Z) can be explained by independent variables that influence it (e.g., organizational factors, leadership, or work motivation). This also indicates a very strong and effective model in explaining the Career Development variable.

Hypothesis Testing

The relationship between the variables and data in this example must be confirmed after the model is created. T-Statistics and P-Values are examined to conduct statistical analysis in this case study. To determine whether the P-Values are < 0.05 and T-Insights values are > 1.96, speculation is used. The impact of the Road Impact Coefficient over time is as follows:

Table 5. Path Coefficients (Direct Effect)

	Original Sample (O)	T Statistics (| O/STDEV |)	P Values	Results
Workload (X1) -> Performance (Y)	0.175	2,219	**0.013**	**Accepted**

Workload (X1) -> Career Development (Z)	0.208	1,555	**0.060**	**Rejected**
Work Environment (X2) -> Performance (Y)	0.529	3,960	**0,000**	**Accepted**
Work Environment (X2) -> Career Development (Z)	0.721	5,944	**0,000**	**Accepted**
Career Development (Z) -> Performance (Y)	0.244	1,904	**0.029**	**Accepted**

In table 5 there are the results of the hypothesis test which will be explained by the researcher, so the explanation in this study is as follows:

1. Workload has a positive and significant effect on performance with an original sample value of 0.175 and a p value of 0.013. An appropriate workload can improve employee performance, possibly due to the challenges that drive productivity.
2. Workload has a positive but insignificant effect on career development, with a value of 0.208 in the original sample and a p-value of 0.060. While workload may provide development opportunities, it is not strong enough or consistent enough to be considered significant. This could be because a high workload actually hinders employees' time and energy for self-development.
3. Work environment has a positive and significant effect on performance with an original sample value of 0.529 and p values of 0.000. A comfortable, safe, and supportive work environment can significantly improve employee performance.
4. Work Environment has a positive and significant effect on Career Development with an original sample value of 0.721 and p values of 0.000. A good work environment not only improves performance, but also supports employee career growth and development.
5. Career development has a positive and significant effect on performance with a value of 0.244 and a p-value of 0.029. Employees who feel their careers are developing tend to be more motivated and show better performance.

Table 6. Path Coefficients (Indirect Effect)

	Original Sample (O)	T Statistics (| O/STDEV |)	P Values	Results
Workload (X1) -> Career Development (Z) -> Performance (Y)	0.051	1,077	**0.141**	**Rejected**
Work Environment (X2) -> Career Development (Z) -> Performance (Y)	0.176	1,766	**0.039**	**Accepted**

6. Workload has a positive and insignificant effect on Performance through Career Development with an original sample value of 0.051 and p values of 0.141. □ The

mediation pathway from career development was not significant. This indicates that career development was unable to mediate the relationship between workload and performance. This is likely because workload is not sufficient to encourage career advancement (in line with the previous results on direct effects), so its effect on performance through career development is also insignificant.

7. Work Environment has a positive and significant effect on Performance through Career Development with an original sample value of 0.176 and p values of 0.039. Significant mediation pathway. This means that career development significantly mediates the influence of the work environment on performance. A supportive work environment encourages employee career development, which ultimately improves their performance.

CLOSING

Conclusion

Based on the results of the hypothesis testing shown in Table 5 and Table 6, it can be concluded that:

1. Workload has a positive and significant effect on employee performance.This means that a workload that is given proportionally and appropriately can increase productivity and performance, because it can encourage employees to work more optimally.
2. Workload has a positive but not significant effect on career development.This indicates that while workload tends to be positive, it isn't strong enough or consistent enough to encourage employee career development. Excessively high workloads can actually hinder employees' time and space to develop their competencies.
3. The work environment has a positive and significant influence on employee performance.A conducive, safe and supportive work environment can have a direct impact on increasing employee enthusiasm and work results.
4. The work environment also has a positive and significant influence on career development.This shows that a positive work atmosphere can better support the growth of employee competencies, experience, and career opportunities.
5. Career development has a positive and significant impact on employee performance.Employees who feel supported in their career development will be more motivated to deliver their best work results, which has a direct impact on improving performance.
6. Indirectly, workload does not significantly influence performance through career development. This suggests that career development cannot mediate the relationship between workload and performance, as workload is not sufficient to significantly encourage career development.
7. Conversely, the work environment has a positive and significant impact on performance through career development. This means that career development successfully mediates the relationship between the work environment and employee performance. A supportive work environment encourages career development, which ultimately improves overall employee performance.

Suggestion

The suggestions in this research are as follows:

1. Company management needs to manage the workload proportionally and realistically. Excessive workloads can reduce employee motivation and hinder career development. Therefore, it is recommended that managers allocate tasks fairly according to employee capacity and provide sufficient time for personal development.
2. Companies should continue to create and maintain a comfortable, safe and supportive work environment. The work environment has been proven to not only improve employees' immediate performance but also encourage career development, which positively impacts performance. Therefore, physical facilities, a positive work culture, and communication between employees need to be strengthened.
3. Career development should be a focus in HR management strategy.Providing training, coaching, fair promotions, and systematic career planning can improve employee competency and boost their performance. Companies can adopt competency- and performance-based career development programs.
4. It is necessary to conduct periodic evaluations of the work systems and organizational policies. This is crucial to ensure that workloads, work environments, and career development programs align with organizational goals and employee needs. This will enable sustainable organizational performance improvement.
5. Further research is recommended to expand other variables that may influence performance, such as leadership, motivation, and job satisfaction, in order to obtain a more comprehensive understanding in improving the quality of human resources in the future.

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