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THE EFFECT OF PERFORMANCE-BASED TRAINING (PBK) AND WORK ENVIRONMENT ON EMPLOYEE COMPETENCY THROUGH EMOTIONAL INTELLIGENCEFOR DISTRIBUTION EMPLOYEES OF PT PLN (PERSERO) UID NORTH SUMATERA

Abdullah Sani Samosir[1)] , Sri Rahayu[2)]
Universitas Pembangunan Panca Budi, Medan, North Sumatera [1,2]
Corresponding email: *sani.sdm@gmail.com* ,
Author email : *srirahayu@dosen.pancabudi.ac.id*

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ABSTRACT

This study seeks to analyze the influence of Performance-Based Training (PBT) and the Work Environment on Employee Competence, with Emotional Intelligence serving as a mediating variable among distribution employees at PT PLN (Persero) UID North Sumatra. A quantitative research design was applied, with data collected through questionnaires distributed to 40 respondents. The data were analyzed using Partial Least Square Structural Equation Modeling (PLS-SEM) to examine both direct and indirect relationships among the research variables. The findings reveal that Performance-Based Training and the Work Environment have a positive and significant effect on Emotional Intelligence as well as Employee Competence. Moreover, Emotional Intelligence is proven to mediate the relationship between Performance-Based Training and the Work Environment on Employee Competence. These results emphasize the importance of effective performance-based training programs and the creation of a supportive work environment in enhancing employee competence through the development of emotional intelligence.

Introduction

Human resources (HR) play a strategic role in supporting the success of an organization, particularly in companies engaged in public services such as PT PLN (Persero). Organizational success is largely determined by the level of employee competency in carrying out tasks professionally, effectively, and efficiently. Employee competency reflects not only technical abilities but also behavioral, social, and emotional aspects that contribute to optimal performance. Therefore, employee competency development is a key focus in human resource management at PT PLN (Persero), particularly in the Distribution Division, which has a significant responsibility in maintaining the reliability of electricity supply to the public. One strategic effort that can

be undertaken to improve employee competency is through the implementation of performance-based training (PBK). Performance-based training is designed with an emphasis on achieving measurable work results and in accordance with organizational needs. Performance-based training is a systematic approach aimed at improving work skills and behaviors that directly contribute to organizational performance (Noe, 2019). Through the implementation of PBK, employees not only acquire new knowledge but are also able to optimally implement it in carrying out daily operational tasks.

In addition to training, the work environment is also a crucial factor influencing the formation and development of employee competencies. A conducive work environment can create a sense of security and comfort, increase motivation, and encourage employees to work productively. A good work environment encompasses physical conditions, social relationships between employees, and organizational support for employee well-being (Robbins & Judge, 2020). In the context of PT PLN (Persero) UID North Sumatra, Distribution employees face various operational challenges such as power grid disruptions, extreme field working conditions, and demands for work completion within a limited timeframe. Therefore, a safe, supportive, and communicative work environment is essential for employees to work with focus and continuously improve their competencies. However, improving employee competency is not only influenced by external factors such as training and the work environment, but also by an individual's internal factor, namely emotional intelligence. Emotional intelligence is an individual's ability to recognize, understand, and manage their own and others' emotions in a work context (Goleman, 2017).

Employees with high levels of emotional intelligence tend to be better at managing stress, maintaining work motivation, building teamwork, and adapting to dynamic work environment changes. In a complex organization like PT PLN (Persero), emotional intelligence plays a crucial role in linking the effectiveness of training and work environment conditions with tangible improvements in employee competency. Empirically, several studies have shown that emotional intelligence serves as a mediating variable in the relationship between training and employee competency. Employees with high emotional intelligence are better able to utilize training outcomes to optimally improve their work skills and abilities (Rahmawati & Siregar, 2020). Furthermore, a positive work environment can enhance employees' emotional intelligence, ultimately strengthening their competency in the workplace (Handoko & Nurhayati, 2021). These findings suggest that emotional intelligence plays a role in linking organizational development efforts and individual competency achievement.

The actual conditions at PT PLN (Persero) UID North Sumatra show that although various training programs have been implemented routinely, employee competency improvement in the Distribution Sector has not been fully optimal. Some employees still experience difficulties in applying training results to their daily work and face emotional stress due to the high workload and complexity of the field work environment. This phenomenon indicates the need for a more comprehensive human resource development approach that considers the role of emotional intelligence as a determining factor in the success of training implementation and adaptation to the work environment. Based on this description, this study is important to conduct to analyze the effect of performance-based training and the work environment on employee competency with emotional intelligence as a mediating variable in the Distribution Sector employees of PT PLN (Persero) UID

North Sumatra. To strengthen the research analysis, the researcher presents employee competency assessment data for the period 2023 to 2024 which is presented in the following table.

Table 1.Employee Competency Assessment

No	Assessment Aspects	Weight	Short Description
1	Technical Knowledge	20%	Mastery of the electricity distribution system, PLN work procedures, and the ability to understand technical instructions correctly.
2	Work Skills	20%	Ability to apply technical expertise in the field, speed in completing work, and attention to safety and operational standards.
3	Discipline	15%	Punctual attendance, compliance with work schedules and company rules, and responsibility for assigned tasks.
4	Teamwork & Communication	15%	Ability to collaborate in a team, communicate effectively with colleagues and superiors, and help achieve common goals.
5	Innovation & Initiative	10%	Willingness to provide new ideas, find creative solutions to technical problems, and take the initiative to improve work efficiency.
6	Work Ethics & Behavior	10%	Demonstrate professionalism, honesty, courtesy and moral responsibility in carrying out duties.
7	Emotional Intelligence	10%	The ability to control emotions, empathy towards coworkers, and maintain harmonious working relationships.

The competency assessment of employees in the Distribution Division of PT PLN (Persero) UID North Sumatra is carried out based on seven main dimensions. The technical knowledge aspect (20%) is used to measure the level of employee mastery of the electricity distribution system, PLN operational procedures, and understanding of applicable technical instructions. The work skills aspect (20%) assesses employees' ability to apply expertise in the field quickly, accurately, and in accordance with occupational safety standards.

Furthermore, the discipline aspect (15%) is evaluated through punctuality, compliance with regulations, and responsibility in completing tasks. The cooperation and communication aspect (15%) focuses on the employee's ability to collaborate and communicate effectively with both colleagues and superiors. The innovation and initiative aspect (10%) describes the employee's willingness to generate new ideas, offer creative solutions, and demonstrate a proactive attitude in efforts to improve performance. The work ethics and behavior aspect (10%) reflects professionalism, integrity, and polite and responsible work behavior. Meanwhile, the emotional intelligence aspect (10%) is used to assess the employee's ability to manage emotions, show empathy, and maintain harmonious working relationships in the workplace.

To strengthen the research foundation, the researchers conducted a pre-survey involving 20 employees out of a total of 40. The results of this pre-survey are preliminary and do not

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

directly reflect the results of the main research to be conducted. The pre-survey aimed to obtain an initial overview of employee competency conditions and to support the formulation and strengthening of the research. The results of the pre-survey in this study are presented as follows:

Table 2 . Performance Based Training (X1)

No	Related Statements Performance	Yes	Percentage	No	Percentage
1	The training objectives at my place are clear and measurable.	5	25%	15	75%
2	The training materials are in line with my job needs.	8	40%	12	60%
3	The training instructor has good skills in delivering the material.	7	35%	13	65%

Based on the pre-survey results on the Performance-Based Training variable, it can be seen that the majority of respondents assessed that the training implementation was still not running optimally. As many as 75% of employees stated that the training objectives had not been formulated clearly and measurably, while only 25% of respondents assessed that the training objectives were clear. In addition, 60% of respondents believed that the training material was not fully relevant to job needs, and 65% of respondents assessed that the instructors did not have adequate skills in delivering the training material. These findings indicate that aspects of training planning, material suitability, and instructor competency still require improvement so that the training conducted can be more effective in supporting employee performance improvement.

Table 3 .Work Environment (X2)

No	Related Statements Performance	Yes	Percentage	No	Percentage
1	The physical condition of my work environment supports productivity.	8	40%	12	60%
2	I have a good relationship with my coworkers.	4	20%	16	80%
3	My supervisor provides adequate support and direction .	6	30%	14	70%

Based on the pre-survey results on the Work Environment variable, it can be seen that the condition of the employee work environment is not fully supportive of optimal work performance. As many as 60% of respondents stated that the physical condition of the work environment does not support increased productivity, while 40% of respondents considered the condition to be adequate. In addition, 80% of respondents stated that working relationships between employees are not yet harmonious, and 70% of respondents

considered that support and direction from superiors are still not optimally provided. These findings indicate that the work environment, both viewed from the physical aspect and social relations, still requires improvement to encourage increased employee performance.

Table 4 .Emotional Intelligence (Z)

No	Related Statements Performance	Yes	Percentage	No	Percentage
1	I am able to recognize my own feelings while working.	3	15%	17	85%
2	I can control my emotions in difficult situations.	7	35%	13	65%
3	I have high motivation to achieve work goals.	9	45%	11	55%

Based on the questionnaire results on the Emotional Intelligence variable, it can be seen that employees' emotional management skills still need improvement. As many as 85% of respondents stated that they were unable to recognize and understand their own feelings when carrying out their work, while only 15% of respondents stated that they were able to do so. Furthermore, 65% of respondents stated that they were unable to control their emotions when facing difficult work situations, and 55% of respondents stated that internal motivation to achieve work targets was still relatively low. These findings indicate that aspects of self-awareness, emotional control, and work motivation of employees are still not optimal and need to be developed to support more effective performance improvements.

Table 5 Employee Competence (Y)

No	Related Statements Performance	Yes	Percentage	No	Percentage
1	I have enough knowledge to do my job.	4	20%	16	80%
2	I have the technical skills required in my job.	10	50%	10	50%
3	I demonstrate a positive attitude towards the work I do.	8	40%	12	60%

Based on the questionnaire results on the Employee Competency variable, it can be seen that the level of employee competency still needs to be improved. As many as 80% of respondents stated that their knowledge was inadequate to support the implementation of the work, while only 20% of respondents felt their knowledge was sufficient. In the aspect of technical skills, the assessment results showed a relatively balanced condition, where 50% of respondents felt they had the required skills, while the other 50% considered their skills to be inadequate. In addition, 60% of respondents showed a less positive work attitude, while 40% of respondents had a positive work attitude. These findings indicate

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

that aspects of employee knowledge, skills, and work attitudes still require development to support optimal performance.

Problem Identification

Based on the results of observations and questionnaire data on employees in the Distribution Sector of PT PLN (Persero) UID North Sumatra, a number of problems can be identified related to the influence of Performance-Based Training (PBK) and the Work Environment on Employee Competence through Emotional Intelligence, namely as follows:

1. Performance Based Training (PBK) has not been running optimally
    a. Most employees believe that training objectives have not been formulated clearly and measurably.
    b. The training materials are not yet fully relevant to the needs of work in the field.
    c. Instructors' competence in delivering training materials is still considered inadequate. This situation indicates that the implementation of PBK has not had the maximum impact on improving employee abilities and skills.
2. The work environment is less supportive of work implementation
    a. The physical condition of the work environment is considered not to fully support employee productivity.
    b. Working relationships between employees have not been established harmoniously.
    c. Support and direction from superiors are still perceived as less than optimal. This situation has the potential to reduce employee morale and overall performance.
3. The emotional intelligence of employees is still relatively low
    a. Most employees are not yet able to recognize and control their emotions in work situations.
    b. Employee work motivation still needs to be improved. Low emotional intelligence can hinder the effectiveness of training and employees' ability to adapt to the work environment.
4. Employee competencies are not evenly distributed
    a. Employees technical knowledge and skills do not fully support optimal task implementation.
    b. Only a small portion of employees still possess a positive work attitude. This situation highlights the need to improve employee competency through enhanced performance-based training, the creation of a conducive work environment, and the development of emotional intelligence.

Formulation of the problem

The problem formulation in this research is as follows:

Problem Formulation

1. Does Performance-Based Training (PBT) have a positive and significant effect on Employee Competence at PT PLN (Persero) UID North Sumatra?
2. Does the Work Environment have a positive and significant effect on Employee Competence at PT PLN (Persero) UID North Sumatra?

3. Does Performance-Based Training (PBT) have a positive and significant effect on the Emotional Intelligence of employees at PT PLN (Persero) UID North Sumatra?
4. Does the Work Environment have a positive and significant effect on the Emotional Intelligence of employees at PT PLN (Persero) UID North Sumatra?
5. Does Emotional Intelligence have a positive and significant effect on Employee Competence at PT PLN (Persero) UID North Sumatra?
6. Does Performance-Based Training (PBT) have a positive and significant effect on Employee Competence through Emotional Intelligence at PT PLN (Persero) UID North Sumatra?
7. Does the Work Environment have a positive and significant effect on Employee Competence through Emotional Intelligence at PT PLN (Persero) UID North Sumatra?

Research objectives

The purpose of this research is to:

1. To test and analyze the effect of performance-based training (PBT) on the emotional intelligence of Distribution Division employees at PT PLN (Persero) UID North Sumatra.
2. To test and analyze the effect of the work environment on the emotional intelligence of Distribution Division employees at PT PLN (Persero) UID North Sumatra.
3. To test and analyze the effect of performance-based training (PBT) on the competence of Distribution Division employees at PT PLN (Persero) UID North Sumatra.
4. To test and analyze the effect of the work environment on the competence of Distribution Division employees at PT PLN (Persero) UID North Sumatra.
5. To test and analyze the effect of emotional intelligence on the competence of Distribution Division employees at PT PLN (Persero) UID North Sumatra.
6. To test and analyze the effect of performance-based training (PBT) on competence through emotional intelligence among Distribution Division employees at PT PLN (Persero) UID North Sumatra.
7. To test and analyze the effect of the work environment on competence through emotional intelligence among Distribution Division employees at PT PLN (Persero) UID North Sumatra.

Benefits of research

1. Theoretical Benefits

1. This research is expected to enrich the scientific knowledge in the field of human resource management, especially regarding the influence of performance-based training and work environment on employee competency with emotional intelligence as a mediating variable.
2. Providing a contribution of thought to the development of theories that explain the relationship between training, work environment, and emotional intelligence in encouraging increased employee competence, especially in public sector organizations such as PT PLN (Persero).

3. To be an academic reference material for further researchers who are interested in studying similar topics, both in the BUMN company environment and other public service institutions.

2. Practical Benefits

1. For PT PLN (Persero) UID North Sumatra, the results of this study can be used as a basis for evaluation and recommendations in the preparation and development of performance-based training programs that are more effective and in accordance with operational needs in the Distribution Sector.
2. Providing input to management in creating a conducive work environment and supporting the development of employee emotional intelligence, thus impacting on increasing competence and performance on an ongoing basis.
3. For leaders and employees, this research is expected to increase understanding of the importance of emotional intelligence in dealing with work pressure and dynamics, so that training results can be applied more optimally.
4. For other researchers, the findings of this study can be used as an empirical reference for the development of further research that examines similar variables with different approaches, methods, or organizational contexts.

Employee Competence

According to Wibowo (2016), competence is an individual's ability to perform a job or task well based on knowledge, skills, and work attitudes according to standards set by the organization. According to Spencer and Spencer (2017), competence is a fundamental characteristic of a person that is directly related to performance effectiveness in a job. Competence includes motive, trait, self-concept, knowledge, and skills.

Indicators of Employee Competence

According to Spencer and Spencer (2017), indicators of employee competence include:

1. Knowledge.
2. Skills.
3. Attitude or Behavior.
4. Work Motives
5. Values and Self-concept

Factors Affecting Employee Competence

In this study, the factors affecting employee competence are as follows (Spencer & Spencer, 2017)

1. Performance-Based Training
    a. Forms technical abilities and work behaviors through measurable learning processes.
    b. Increases knowledge, skills, and attitudes according to job demands.
    c. Fosters professional abilities that can be applied directly in tasks.
2. Work Environment
    a. Encompasses physical, social, and psychological conditions that affect work effectiveness.

b. A safe, comfortable, and supportive work environment encourages competency development.
c. Harmonious work relationships increase employee motivation and learning spirit.

3. Emotional Intelligence
    a. The ability to recognize and manage one's own emotions and understand the emotions of others.
    b. Helps employees control stress, adapt, and maintain positive work relationships.
    c. Strengthens the application of competence through emotional stability and interpersonal skills.

Performance-Based Training (PBT)

According to Dessler (2020), performance-based training is a systematic approach to developing employee capabilities through structured learning measured based on tangible results in the workplace. Its goal is to ensure that every training provided has a direct impact on improving individual and organizational performance.

According to Noe (2019), performance-based training is a training program designed to improve employee work competence by focusing on skills relevant to job needs and organizational goals. This training not only provides knowledge but also encourages changes in work behavior according to expected performance standards.

Indicators of Performance-Based Training

According to Noe (2019), indicators of performance-based training include:

1. Relevance of training to job needs.
2. Active involvement of participants in the training process.
3. Measurability of training results on performance improvement.
4. Application of training results in work.
5. Organizational support for the continuity of training.

Work Environment

According to Robbins and Judge (2020), the work environment is a set of external conditions that affect employee behavior, motivation, and productivity, including physical aspects (lighting, temperature, cleanliness) as well as non-physical aspects such as inter-employee relationships and organizational work culture. According to Sedarmayanti (2017), the work environment is the entire facilities and infrastructure that influence employees in carrying out their work, both physical, psychological, and social conditions. A good work environment will create a safe, comfortable, and productive work atmosphere.

Indicators of the Work Environment

According to Sedarmayanti (2017), indicators of the work environment consist of:

1. Lighting or illumination in the workplace.
2. Air circulation or ventilation.
3. Cleanliness and safety of the environment.

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

4. Work relationships among employees.
5. Availability of adequate work facilities.

Emotional Intelligence

According to Robbins and Judge (2019), emotional intelligence is the ability to detect and manage emotions in oneself and others, so that individuals can make better decisions and are able to cooperate effectively in teams.

According to Goleman (2017), emotional intelligence includes self-awareness, self-control, motivation, empathy, and social skills that enable a person to interact effectively with their environment.

Indicators of Emotional Intelligence

According to Goleman (2017), indicators of emotional intelligence include:

1. Self-awareness.
2. Self-regulation.
3. Self-motivation.
4. Empathy.
5. Social skil

Conceptual Framework

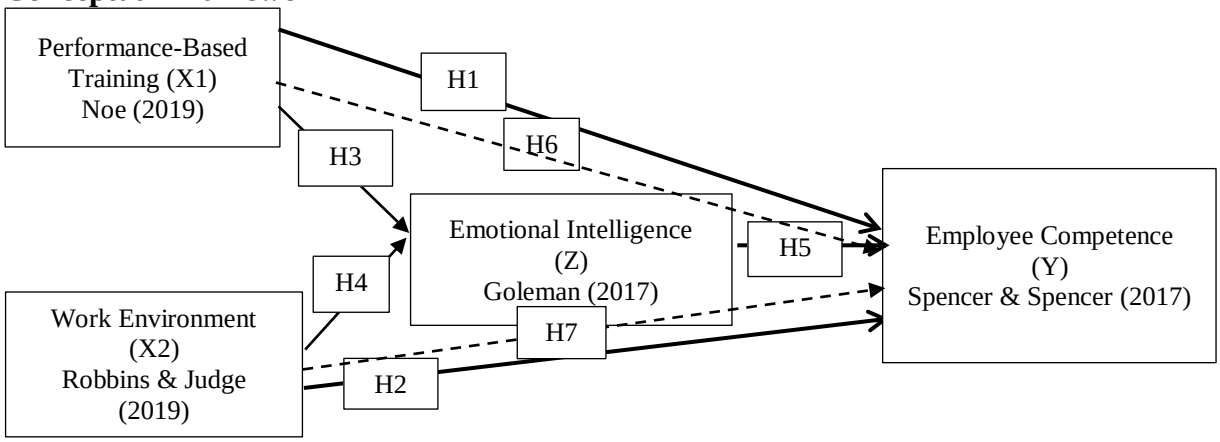

Figure I. Conceptual Framework

Research Hypothesis

The research hypothesis is formulated as follows:

H1 Performance-Based Training (PBT) has a positive and significant effect on Employee Competence at PT PLN (Persero) UID North Sumatra.

H2 H_2: The Work Environment has a positive and significant effect on Employee Competence at PT PLN (Persero) UID North Sumatra.

H3 H_3: Performance-Based Training (PBT) has a positive and significant effect on the Emotional Intelligence of employees at PT PLN (Persero) UID North Sumatra.

H4 H_4: The Work Environment has a positive and significant effect on the Emotional Intelligence of employees at PT PLN (Persero) UID North Sumatra.

H5 H_5: Emotional Intelligence has a positive and significant effect on Employee Competence at PT PLN (Persero) UID North Sumatra.
H6 H_6: Performance-Based Training (PBT) has a positive and significant effect on Employee Competence through Emotional Intelligence at PT PLN (Persero) UID North Sumatra.
H7 H_7: The Work Environment has a positive and significant effect on Employee Competence through Emotional Intelligence at PT PLN (Persero) UID North Sumatra.

Research Methodology

Research Type

According to Creswell (2018), a quantitative approach is used to test theories by measuring relationships between variables through data that can be analyzed statistically. This study uses a quantitative approach with a causal associative type of research, namely research that aims to determine the influence between two or more variables.

Research Location and Time

This research was conducted at PT PLN (Persero) Main Distribution Unit (UID) North Sumatra, Jl. KL. Yos Sudarso No.284, Glugur Kota, Medan Barat District, Medan City, North Sumatra 20238 (PLN UID North Sumatra Office), specifically in the Distribution Division. The research time is planned to take place from October to December 2025, starting from questionnaire distribution, data collection, to analysis of results.

Research Population and Sample

Population is the entire subject or object that has certain characteristics relevant to the research problem (Sekaran & Bougie, 2019).
The population in this study were all employees of the Distribution Division of PT PLN (Persero) UID North Sumatra, totaling 40 employees.

Sample

The sampling technique used is saturated sampling (census sampling), namely all members of the population are used as research samples totaling 40 employees. According to Hair et al. (2018), this technique is appropriate to use if the population size is relatively small and all elements are considered capable of providing relevant information for structural model analysis.

Data Types and Sources

The data used in this study consisted of primary and secondary data. Primary data were obtained directly from respondents through questionnaires distributed to employees of the Distribution Division of PT PLN (Persero) UID North Sumatra. Meanwhile, secondary

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

data were obtained from company reports, internal documents, and various relevant scientific literature that supported the theoretical basis and previous research findings. The simultaneous use of primary and secondary data aimed to strengthen the validity and accuracy of the research results (Sekaran & Bougie, 2019).

Data collection technique

The data collection technique in this study was conducted through a survey method using a questionnaire, namely a list of questions systematically compiled and filled out directly by respondents. The survey method allows researchers to obtain data in a relatively short time with a high level of reliability if the research instrument is carefully designed (Creswell & Creswell, 2018). The research instrument used a five-point Likert scale, with a response range ranging from 1 = strongly disagree to 5 = strongly agree. This scale is used to measure respondents' perceptions, attitudes, and opinions regarding statements related to the indicators of each research variable.

Data Analysis Techniques

The data analysis technique in this study used the Partial Least Squares–Structural Equation Modeling (PLS-SEM) method processed with the help of SmartPLS software version 3.0. The PLS-SEM method is a multivariate analysis technique used to analyze the simultaneous relationship between latent variables and their constituent indicators, especially in studies with relatively small sample sizes and non-normal data distribution (Hair et al., 2019).

The stages of data analysis using PLS-SEM in this study include several main steps, namely:

1. Measurement Model Evaluation (Outer Model). Measurement model evaluation is carried out to assess the level of validity and reliability of each indicator in measuring latent variables. The tests carried out include:

a. Convergent validity indicated by the outer loading value ≥ 0.70 and the Average Variance Extracted (AVE) value ≥ 0.50 (Hair et al., 2019).

b. Discriminant validity evaluated using the cross loading value and Heterotrait–Monotrait Ratio (HTMT) (Hair et al., 2019).

c. Construct reliability measured by the Composite Reliability value with criteria ≥ 0.70 (Hair et al., 2019).

2. Structural Model Evaluation (Inner Model) Structural model evaluation is conducted to test the causal relationships between latent variables in the research model. This test includes:

a. The R^2 value as the coefficient of determination to see the ability of exogenous variables to explain endogenous variables (Hair et al., 2019).

b.The f^2 value is used to measure the magnitude of the influence of the independent variable on the dependent variable (Hair et al., 2019).

c. Q^2 value to assess the predictive relevance of the research model (Hairet al., 2019).

d. Path coefficient significance test through bootstrapping procedure with criteria of t-statistic value > 1.96 or p-value < 0.05 (Hair et al., 2019).

3. Mediation Effect Test

The mediation effect test was conducted using the bootstrapping method on the indirect effect to determine the indirect influence of the mediating variable, namely Emotional Intelligence, on the relationship between PBK and Work Environment on Employee Competence (Hair et al., 2019).

Instrument Validity and Reliability Test

Validity testing aims to ensure that each indicator accurately represents and measures the research variables. Validity testing is conducted by examining the outer loading and Average Variance Extracted (AVE) values (Hair et al., 2019). Reliability testing is conducted to assess the consistency of the measuring instrument in producing stable and reliable data. Instrument reliability is measured using Cronbach's Alpha and Composite Reliability values (Hair et al., 2019). A research instrument is considered reliable if the Composite Reliability value is ≥ 0.70 and the Cronbach's Alpha value is ≥ 0.60 (Hair et al., 2019).

Results and Discussion

Outer Model Analysis

Testing the relationship between latent and manifest variables is done through evaluation of the measurement model or outer model. This test aims to ensure that the model meets the criteria of convergent validity, discriminant validity, and construct reliability (Hair et al., 2019).

Convergent Validity

Convergent validity is demonstrated by the correlation between indicator scores and construct scores in the reflexive measurement model. An indicator is considered to have good convergent validity if its outer loading value is greater than 0.70. However, during the model development stage, outer loading values between 0.50 and 0.60 are still acceptable. Based on the test results, several indicators had outer loading values below 0.60, thus being declared insignificant and requiring elimination from the research model. The structural model of the research is further presented in diagram form in the following figure.

Table 1. Outer Loadings 1

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

	Emotional Intelligence_(Z)	Employee Competence_(Y)	Work Environment_(X2)	Performance Based Training (X1)
X1.1				0.785
X1.2				0.838
X1.3				0.862
X1.4				0.611
X2.1			0.818	
X2.2			0.910	
X2.3			0.938	
X2.4			0.720	
Y.1		0.861		
Y.2		0.951		
Y.3		0.915		
Y.4		0.854		
Y.5		0.769		
Z.1	0.837			
Z.2	0.763			
Z.3	0.822			
Z.4	0.898			
Z.5	0.853			

Source : Smart PLS 3.3.3.

Based on the test results in Table 1 Outer Loadings Stage 1, indicator X1.4 in the Performance-Based Training variable (X1) shows an outer loading value of 0.611, which is the lowest value compared to other indicators and is at the minimum limit of the acceptance criteria. This condition indicates that indicator X1.4 has not been able to represent the construct optimally, so the indicator is removed from the research model. Meanwhile, other indicators in all research variables have outer loading values above 0.70, so they are declared to meet the validity criteria and are still used in the next analysis stage.

Table 2 Outer Loading 2

	Emotional Intelligence_(Z)	Employee Competence_(Y)	Work Environment_(X2)	Performance Based Training (X1)
X1.1				0.813
X1.2				0.874
X1.3				0.869
X2.1			0.818	
X2.2			0.909	
X2.3			0.938	
X2.4			0.720	
Y.1		0.862		
Y.2		0.951		
Y.3		0.915		
Y.4		0.852		
Y.5		0.770		
Z.1	0.837			
Z.2	0.764			
Z.3	0.822			
Z.4	0.897			
Z.5	0.853			

Source : Smart PLS 3.3.3.

Based on Table 2, after the X1.4 indicator was removed, all indicators in stage 2 showed outer loading values above 0.70. The outer loading values for the Performance-Based Training variable (X1) were in the range of 0.813–0.874, the Work Environment variable (X2) ranged from 0.720–0.938, the Employee Competence variable (Y) ranged from 0.770–0.951, and the Emotional Intelligence variable (Z) had a value between 0.764–0.897. These results indicate that all indicators have met the convergent validity requirements and are declared feasible, so that the measurement model can be used in the next stage of structural analysis.

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

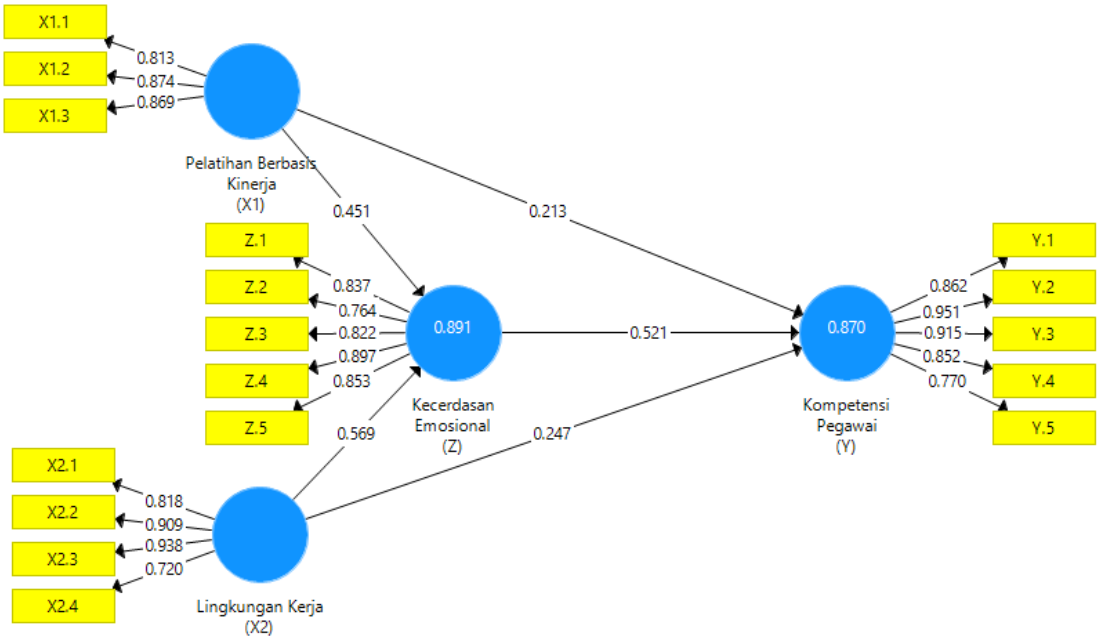

Figure 2. Outer Model

Source: Smart PLS 3.3.3

The Smart PLS output for loading factors gives the results in the following table: Outer Loadings

In this research there is an equation and the equation consists of two substructures for substructure 1

$Z = b1X1 + b2X2 + e1$

$Z = 0.451 + 0.569 + e1$

For substructure 2

$Y = b3X1 + b4X2 + b5Z + e2$

$Y = 0.213 + 0.247 + 0.521 + e2$

Discriminant Validity

This section presents the results of discriminant validity testing. The test was conducted using *cross-loading values* , where an indicator is declared to have good discriminant validity if its *cross-loading value* on the measured construct is higher than the *cross-loading value* on the other constructs. Therefore, a comparison of *cross-loading values* between variables is used to ensure that each indicator is able to accurately differentiate the construct it represents. The *cross-loading values* for each indicator are presented as follows:

Table 3. *Discriminant Validity*

	Emotional Intelligence_(Z)	Employee Competence_(Y)	Work Environment_(X2)	Performance Based Training (X1)
X1.1	0.638	0.641	0.523	**0.813**
X1.2	0.695	0.655	0.539	**0.874**
X1.3	0.827	0.811	0.722	**0.869**
X2.1	0.634	0.610	**0.818**	0.564
X2.2	0.799	0.814	**0.909**	0.598
X2.3	0.888	0.884	**0.938**	0.726
X2.4	0.666	0.563	**0.720**	0.498
Y.1	0.761	**0.862**	0.655	0.763
Y.2	0.899	**0.951**	0.888	0.788
Y.3	0.834	**0.915**	0.836	0.774
Y.4	0.782	**0.852**	0.745	0.631
Y.5	0.735	**0.770**	0.597	0.669
Z.1	**0.837**	0.778	0.811	0.706
Z.2	**0.764**	0.637	0.687	0.614
Z.3	**0.822**	0.693	0.691	0.614
Z.4	**0.897**	0.892	0.791	0.764
Z.5	**0.853**	0.823	0.727	0.844

Source: Smart PLS 3.3.3

Table 3 shows that each indicator has the highest *loading value* on the construct it measures when compared to other constructs. This is evident in all indicators of Performance-Based Training (X1), Work Environment (X2), Employee Competence (Y), and Emotional Intelligence (Z), which show the largest *loading values* on their respective original variables. Thus, all constructs in this study have met the criteria *for discriminant validity* , so it can be concluded that each latent variable is able to clearly differentiate its indicators from other latent variables.

Composite Reliability

Reliability testing in this study was conducted using two approaches, namely *Composite Reliability* and *Cronbach's Alpha* . *Composite Reliability* is used to assess the level of internal consistency of a construct more accurately, while *Cronbach's Alpha* indicates the lower limit of a construct's reliability. Based on these considerations, this study focuses on the *Composite Reliability value for reliability testing* . In general, a construct is considered reliable if it has a reliability value above 0.70, although a value of

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

0.60 is still acceptable. *The Composite Reliability* and *Cronbach's Alpha values* for each construct are presented in the following table.

Table 4 . *Construct Reliability and Validity*

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Emotional Intelligence_(Z)	**0.892**	**0.920**	**0.699**
Employee Competence_(Y)	**0.920**	**0.941**	**0.761**
Work Environment_(X2)	**0.870**	**0.912**	**0.723**
Performance Based Training (X1)	**0.812**	**0.888**	**0.726**

Source: Smart PLS 3.3.3

Table 4 shows that all constructs have *Cronbach's Alpha values* exceeding 0.70 and *Composite Reliability values* above 0.80. This indicates that each variable in this study has a good level of internal consistency. Furthermore, *the Average Variance Extracted* (AVE) value for each construct has exceeded 0.50, indicating that convergent validity criteria have been met. Therefore, the variables Emotional Intelligence, Employee Competence, Work Environment, and Performance-Based Training are declared valid and reliable, making them suitable for use in the next analysis stage.

Inner Model Analysis

Evaluation of the structural model (*inner model*) was conducted to ensure that the relationships between the latent variables established in this study were accurate and reliable. The structural model was assessed using several evaluation measures, one of which was the coefficient of determination (R^2).

Coefficient of Determination (R^2)

Based on the results of data processing using SmartPLS 3.0 software, the *R Square value was obtained* for each endogenous variable as presented in the following table.

Table 5. R Square Results

	R Square	Adjusted R Square
Emotional Intelligence_(Z)	0.891	0.885
Employee Competence_(Y)	0.870	0.859

Source: Smart PLS 3.3.3

Table 5 shows that the *R Square value* for the Emotional Intelligence (Z) variable is 0.891 with *an Adjusted R Square* of 0.885. These results indicate that 89.1% of the variation in Emotional Intelligence can be explained by the independent variables contained in the research model. Meanwhile, the Employee Competence (Y) variable has an *R Square value* of 0.870 and *an Adjusted R Square* of 0.859, which means that 87.0% of changes in Employee Competence can be explained by the variables in the model, while the remainder is influenced by other factors outside the scope of the research.

Hypothesis Testing

The next step after evaluating *the inner model* is to analyze the relationships between the latent constructs in this study. Testing is performed using *T-statistics* and *P-values* . A relationship is considered significant if the *P-value* is less than 0.05 and the *T-statistic* is greater than 1.96. The results of the direct influence path coefficient test are presented below.

Table 6. *Path Coefficients* (Direct Effect)

	Original Sample (O)	T Statistics (| O/STDEV |)	P Values	Results
Emotional Intelligence_(Z) -> Employee Competence_(Y)	0.521	2,723	**0.003**	**Accepted**
Work Environment_(X2) -> Emotional Intelligence_(Z)	0.569	7,358	**0,000**	**Accepted**
Work Environment_(X2) -> Employee Competence_(Y)	0.247	1,651	**0.050**	**Accepted**
Performance Based Training(X1) -> Emotional Intelligence(Z)	0.451	5,569	**0,000**	**Accepted**
Performance-Based Training (X1) -> Employee Competence (Y)	0.213	1,745	**0.041**	**Accepted**

Source: Smart PLS 3.3.3

1. Hypothesis 1 (H1): The Effect of Emotional Intelligence on Employee Competence The test results show that Emotional Intelligence (Z) has a positive and significant effect on Employee Competence (Y) with a coefficient value of 0.521, T-statistic 2.723, and p-value 0.003. This means that the better the employee's emotional intelligence, the more employee competence will increase, so the hypothesis is accepted.
2. Hypothesis 2 (H2): The Influence of Work Environment on Emotional Intelligence Work Environment (X2) is proven to have a positive and significant influence on Emotional Intelligence (Z) with a coefficient of 0.569, T-statistic of 7.358, and p-value of 0.000. A conducive work environment can increase employee emotional intelligence, so the hypothesis is accepted.
3. Hypothesis 3 (H3): The Influence of Work Environment on Employee Competence The results of the analysis show that the Work Environment (X2) has a positive and

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 1, 2026, 807-828

significant influence on Employee Competence (Y) with a coefficient value of 0.247, T-statistic of 1.651, and p-value of 0.050. This indicates that a good work environment can encourage increased employee competence, so the hypothesis is accepted.

4. Hypothesis 4 (H4): The Effect of Performance-Based Training on Emotional Intelligence
   Performance-Based Training (X1) has a positive and significant effect on Emotional Intelligence (Z) with a coefficient of 0.451, T-statistic of 5.569, and p-value of 0.000. This means that performance-oriented training is able to improve employees' emotional intelligence, so the hypothesis is accepted.
5. Hypothesis 5 (H5): The Effect of Performance-Based Training on Employee Competence
   The test results show that Performance-Based Training (X1) has a positive and significant effect on Employee Competence (Y) with a coefficient of 0.213, a T-statistic of 1.745, and a p-value of 0.041. This indicates that effective training can improve employee competence, so the hypothesis is accepted.

Table 7. *Path Coefficients* (Indirect Effect)

	Original Sample (O)	**T Statistics (| O/STDEV |)**	**P Values**	**Results**
Work Environment_(X2) -> Emotional Intelligence_(Z) -> Employee Competence_(Y)	0.296	2,493	**0.006**	**Accepted**
Performance-Based Training_(X1) -> Emotional Intelligence_(Z) -> Employee Competence_(Y)	0.235	2,394	**0.009**	**Accepted**

Source: Smart PLS 3.3.3

6. Hypothesis 6 (H6): The Influence of Work Environment on Employee Competence through Emotional Intelligence

The test results show that the Work Environment (X2) has a positive and significant effect on Employee Competence (Y) through Emotional Intelligence (Z), with a coefficient value of 0.296, a T-statistic of 2.493, and a p-value of 0.006. This indicates that emotional intelligence acts as a mediating variable that is able to strengthen the influence of the work environment on employee competence, so the hypothesis is accepted.

7. Hypothesis 7 (H7): The Effect of Performance-Based Training on Employee Competence through Emotional Intelligence

Performance-Based Training (X1) is proven to have a positive and significant effect on Employee Competence (Y) through Emotional Intelligence (Z), with a coefficient value of 0.235, a T-statistic of 2.394, and a p-value of 0.009. These results indicate that emotional intelligence is able to mediate the relationship between performance-based training and employee competence, so the hypothesis is accepted.

Conclusion

After explaining the results obtained, the conclusions of this study are as follows:

1. Emotional intelligence has a positive and significant influence on employee competence, so that increasing emotional intelligence can increase employee competence.
2. The work environment has a positive and significant influence on emotional intelligence, which means that a conducive work environment can increase employees' emotional intelligence.
3. The work environment has a positive and significant influence on employee competence, so that a good work environment can encourage increased employee competence.
4. Performance-based training has a positive and significant effect on emotional intelligence, which shows that effective training can improve employees' emotional intelligence.
5. Performance-based training has a positive and significant impact on employee competence, so that performance-oriented training can improve employee competence.
6. The work environment has a positive and significant influence on employee competence through emotional intelligence, so that emotional intelligence acts as a mediating variable.
7. Performance-based training has a positive and significant effect on employee competence through emotional intelligence, which shows that emotional intelligence mediates the relationship between training and employee competence.

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