

The Influence of Human Resource Training and Development on Employee Performance Through Job Satisfaction as a Mediating Variable

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Article Info

ABSTRACT

Keywords:

Training,
Human Resource Development,
Job Satisfaction,
Employee Performance

This study aims to analyze the effect of human resource (HR) training and development on employee performance, with job satisfaction as a mediating variable at PT Pelabuhan Indonesia (Persero) Regional IV Ambon. The main problem raised is how HR training and development can improve employee performance directly and indirectly through increased job satisfaction. This study uses a quantitative approach with the Partial Least Square (PLS) analysis method through the assistance of SmartPLS 3.0 software. The research sample consisted of 50 permanent employees obtained through a purposive sampling technique. The analysis results show that training significantly influences job satisfaction, but does not directly impact employee performance. Conversely, human resource development has a significant impact both directly on performance and indirectly through job satisfaction. Furthermore, job satisfaction has been shown to act as a significant mediating variable in the relationship between training and human resource development and employee performance. These findings emphasize the importance of improving the quality of human resource training and development, as well as maintaining job satisfaction, to support optimal employee performance.

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INTRODUCTION

Human resource (HRM) management is a key aspect of organizational success, as people are strategic assets that determine a company's productivity and competitiveness. In the context of PT Pelabuhan Indonesia (Persero) Regional IV Ambon, which operates in the port logistics sector, HRM management through training and development programs is crucial for improving employee performance. Training is defined as a systematic, short-term educational process to provide technical knowledge and skills, while HRM development is a

planned effort to improve employee competency comprehensively, including moral, conceptual, technical, and theoretical aspects. Job satisfaction, as a positive emotional state toward work, acts as a mediator connecting HRM training and development with employee performance. Employee performance itself reflects work results achieved based on quality, quantity, timeliness, and initiative.

The phenomenon at PT Pelabuhan Indonesia (Persero) Regional IV Ambon shows that despite the implementation of training programs, such as P-KPI, P-RKM, X-Ray certification, and risk management, employee performance is still suboptimal. Employees often experience difficulty completing tasks on time, and there are obstacles in achieving company goals due to weak human resources. This is supported by previous research, such as that of Indra Setiawan et al. (2021) who found that training influences performance through job satisfaction, and Melvin Grady Lolowang et al. (2016) who showed that human resource development significantly influences performance. However, there are inconsistencies in the results, such as the study by Tsalis Baiti Nur Andayani (2021) who found that training had no direct effect on performance. Therefore, this study uses job satisfaction as a mediating variable to fill this research gap.

The main problem is how HR training and development can improve employee performance directly and indirectly through increased job satisfaction. The purpose of this study is to analyze this influence, with theoretical benefits to enrich the HR management literature and practical benefits to provide recommendations to PT Pelabuhan Indonesia (Persero) Regional IV Ambon in improving HR quality.

METHODS

This study uses a quantitative approach with the Partial Least Square (PLS) analysis method through SmartPLS 3.0 software. The quantitative approach was chosen because it aims to test hypotheses and measure relationships between variables numerically, in accordance with the philosophy of positivism. This study is explanatory, namely explaining the causal relationship between the independent variable (HR training and development), the mediating variable (job satisfaction), and the dependent variable (employee performance). The study was conducted from April to May 2025, located at PT Pelabuhan Indonesia (Persero) Regional IV Ambon. The study population consisted of 50 permanent employees of the company, selected using a saturated sampling technique (enumeration) because the population size is small and allows data collection from all members. Thus, the study sample also amounted to 50 respondents, who met the purposive sampling criteria based on their status as permanent employees.

The type of data used is primary data, obtained through questionnaires distributed directly to respondents. The questionnaire consists of closed-ended statements with a 5-

point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). The research instrument includes 4 indicators for training variables (participant responses, increased learning, changes in attitudes and behavior, impact on the company), 4 indicators for HR development (increased employee competence, work effectiveness and productivity, employee satisfaction and loyalty, innovation and creativity), 4 indicators for job satisfaction (employee engagement, motivation level, turnover rate, attendance and absenteeism), and 4 indicators for employee performance (work quality, work quantity, punctuality, initiative and creativity).

The operational definition of the variables is set as follows: Training (X1) is an integrated process to improve individual capabilities to support company goals; Human Resource Development (X2) is a systematic effort to improve employee knowledge according to job needs; Job Satisfaction (Z) is a positive emotional condition that reflects a sense of love for work; Employee Performance (Y) is the level of employee success in carrying out tasks based on quality, quantity, and timeliness criteria.

The data collection method was conducted through a survey using a questionnaire, which was distributed directly to respondents after obtaining research permission. Data were collected in numerical form (Likert scale) and processed using SmartPLS 3.0 software for PLS-SEM analysis.

RESULTS AND DISCUSSION

Table 1. Outer Loading Values

	Satisfaction Work	Performance	Training	Development HR
KJ1		0.930		
KJ2		0.927		
KJ3		0.919		
KJ4		0.904		
KP1	0.887			
KP2	0.844			
KP3	0.864			
KP4	0.690			
PGS1				0.788
PGS2				0.806
PGS3				0.785
PGS4				0.815
PLT1			0.864	
PLT2			0.871	
PLT3			0.822	
PLT4			0.901	

Source: Data Processing Results, 2025

Hypothesis Testing

Hypothesis testing to determine the existence of a significant relationship between constructs is carried out by first evaluating the direct influence.

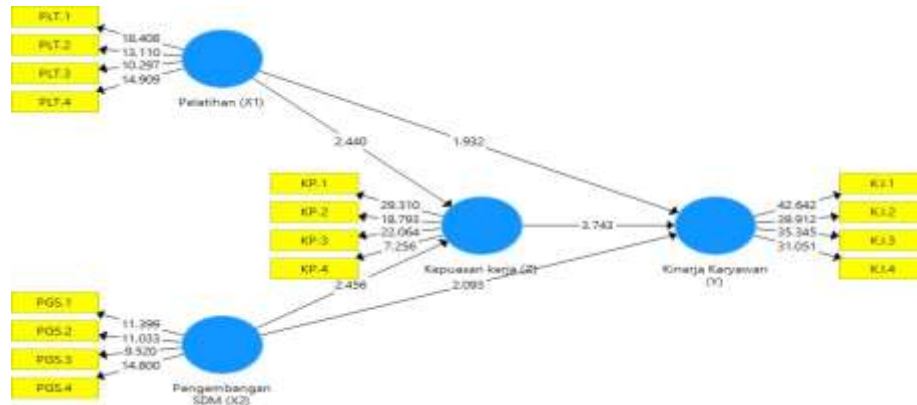


Figure 1. Results of Direct Effect Test and Significance Test

Source: Primary data processed by PLS, (2025)

From the results of data processing in Figure 1. It can be said that the influence of training on employee performance: Coefficient -0.260, $p = 0.054 (> 0.05)$, not significant, Not accepted. The influence of HR Development on Employee Performance: Coefficient 0.297, $p = 0.037 (< 0.05)$, significant. Accepted. The influence: Training on Job Satisfaction: Coefficient 0.335, $p = 0.015 (< 0.05)$, significant. Accepted. The influence of HR Development on Job Satisfaction: Coefficient 0.328, $p = 0.014 (< 0.05)$, significant. Accepted. The influence of Job Satisfaction on Employee Performance: Coefficient 0.492, $p = 0.000 (< 0.05)$, significant. Accepted.

Table 2. Results of the indirect effect test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Training (X1) -> Satisfaction Work (Z) -> Performance Employee (Y)	0.165	0.164	0.080	2,057	0.040
Human Resources Development (X2) -> Satisfaction Work	0.162	0.161	0.075	2,158	0.031

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
(Z) -> Performance Employee (Y)					

Source: Data Processing Results, 2025

From the results of data processing in table 2. It can be said that the influence of Training → Job Satisfaction → Employee Performance: Coefficient 0.165, $p = 0.040 (<0.05)$, significant. Accepted. Then the influence of Human Resource Development → Job Satisfaction → Employee Performance: Coefficient 0.162, $p = 0.031 (<0.05)$, significant. Accepted.

Training has a significant impact on the performance of employees of PT Pelabuhan Indonesia (Persero) Regional IV Ambon

Based on the results of the analysis of the relationship between Training (X1) and Employee Performance (Y) which shows a regression coefficient of -0.260 with a significance value of $p = 0.054 (> 0.05)$, it can be concluded that training does not directly have a significant effect on employee performance at PT Pelabuhan Indonesia (Persero) Regional IV Ambon. This indicates that even though training has been provided, the training has not been able to directly improve employee performance significantly. The T-statistic value of 1.932 which is slightly below the significance threshold (1.96) indicates that the effect is weak and not strong enough to be said to be statistically significant at the 95% confidence level. In the context of "The Effect of Training and Human Resource Development on Performance through Job Satisfaction", these results confirm that training should not only be assessed from its sustainability side, but also from its psychological and implementative impacts. Although training does not directly improve performance, it can increase job satisfaction which then has an impact on improving performance indirectly, as shown in other mediation pathways.

Human resource development has a significant impact on employee performance at PT Pelabuhan Indonesia (Persero) Regional IV Ambon.

Based on the analysis results showing that Human Resource Development (X2) has a positive and significant effect on Employee Performance (Y), with a coefficient value of 0.297 and a significance value of $p = 0.037 (<0.05)$, it can be concluded that the better the HR development program implemented, the higher the level of employee performance achieved. The T-statistic value of 2.093, which is greater than the critical value of 1.96, indicates that this effect is statistically significant at the 95% confidence level. This finding is in line with

the opinion of Werther and Davis (1996), who stated that human resource development is a process designed to improve employee knowledge, abilities, and attitudes so that they are able to work more effectively and efficiently. According to them, HR development does not only focus on improving technical skills,

Training has a significant influence on job satisfaction at PT Pelabuhan Indonesia (Persero) Regional IV Ambon.

Based on the results of the analysis of the relationship between Training (X1) and Job Satisfaction (Z) which shows a coefficient value of 0.335 with a significance value of $p = 0.015$ (<0.05), it can be concluded that training has a positive and significant effect on employee job satisfaction. This means that the better the implementation of the training program provided to employees, the higher the level of job satisfaction felt. The T-statistic value of 2.440 which is greater than 1.96 indicates that this effect is significant at the 95% confidence level. This finding is in line with the opinion of Simamora (2004), who stated that well-designed training not only improves employee technical competence but also creates a feeling of being appreciated and cared for by the organization. Simamora emphasized that effective training can foster self-confidence, expand career opportunities, and create psychological satisfaction with the work undertaken. In the context of the thesis entitled "The Effect of Training and Human Resource Development on Performance through Job Satisfaction," these results confirm that training is the initial element that encourages the emergence of job satisfaction, which ultimately contributes to improved performance.

Human resource development has a significant influence on job satisfaction at PT Pelabuhan Indonesia (Persero) Regional IV Ambon.

Based on the results of the path analysis which shows that Human Resource Development (X2) has a positive and significant effect on Job Satisfaction (Z) with a coefficient value of 0.328 and a significance value of $p = 0.014$ (<0.05), it can be concluded that HR development efforts undertaken by the company have an important role in increasing employee job satisfaction. The T-statistic value of 2.456, which is greater than 1.96, further strengthens the evidence that the relationship is significant at the 95% confidence level. This finding is in line with the opinion of Mathis and Jackson (2006), who stated that HR development is a process of increasing individual capacity in an organization through further education, job training, job rotation, coaching, mentoring, and providing career opportunities. According to them, strategically designed development programs not only improve technical and managerial competencies but also create a sense of appreciation, motivation, and high job satisfaction. Employees who feel attention is paid to their development tend to feel more emotionally attached to the company, which in turn has a positive impact on their work attitudes and behaviors.

Job satisfaction has a significant influence on the performance of employees of PT Pelabuhan Indonesia (Persero) Regional IV Ambon.

Based on the results of the analysis of the relationship between Job Satisfaction (Z) and Employee Performance (Y) which shows a coefficient value of 0.492 with a significance value of $p = 0.000 (<0.05)$, it can be concluded that there is a positive and significant influence of job satisfaction on employee performance. This means that the higher the level of job satisfaction felt by employees, the better the performance produced. This finding is in line with the opinion of Hasibuan (2017), who stated that job satisfaction is one of the psychological factors that most influence the achievement of optimal performance. According to Hasibuan, when employees feel satisfied with their work—whether due to the reward system, work environment, interpersonal relationships, or opportunities for self-development—then they will be more motivated, loyal, and productive in their work. The T-statistic value of 3.743 which is greater than 1.96 further strengthens that the influence is significant at the 95% confidence level. This implies that in the context of the thesis entitled "The Effect of Human Resource Training and Development on Performance through Job Satisfaction," job satisfaction plays an important role as an intervening variable that bridges managerial activities (HR training and development) with the final result in the form of increased performance. Therefore, the company's efforts to improve performance should not only focus on technical aspects such as training and development, but must also consider the affective and psychological aspects of employees through increasing job satisfaction, as emphasized by the theory of motivation and organizational behavior proposed by Hasibuan.

Job satisfaction mediates the relationship between training and employee performance at PT Pelabuhan Indonesia (Persero) Regional IV Ambon.

Based on the results of the indirect path analysis between Training (X1) and Employee Performance (Y) through Job Satisfaction (Z), a coefficient of 0.165 was obtained with a p-value of 0.040 (<0.05) and a T-statistic of 2.057 (>1.96). This indicates that the indirect effect of training on employee performance through job satisfaction is significant. In other words, training provided to employees can improve their performance, but this effect occurs because the training is successful in increasing job satisfaction first. This finding is in line with the opinion of Robbins and Judge (2017), who explained that job satisfaction is a positive emotional state resulting from a person's assessment of their work. Robbins emphasized that good training provides a sense of confidence, competence, and fulfillment of personal and professional needs, which then creates a sense of satisfaction with the job. This

satisfaction influences work behavior, such as enthusiasm, productivity, and commitment to the task, which ultimately has an impact on increased performance. This mediation path shows that the success of training is not only measured by improving technical skills, but also by the extent to which training is able to create positive feelings about the job. This means that if training is unable to create satisfaction, then its impact on performance will likely be weak or even insignificant.

Job satisfaction mediates the relationship between human resource development and employee performance at PT Pelabuhan Indonesia (Persero) Regional IV Ambon.

Based on the results of the indirect path analysis, it was found that the effect of Human Resource Development (X2) on Employee Performance (Y) through Job Satisfaction (Z) showed a coefficient of 0.162 with a T-statistic value of 2.158 and a p-value of 0.031. Since the p-value <0.05 and T > 1.96, it can be concluded that this indirect effect is statistically significant. This means that HR development carried out by the company has an impact on improving employee performance through increasing their job satisfaction. This finding is in line with the opinion of Mangkunegara (2009), who stated that human resource development is a process of systematically improving individual quality through education, training, and work experience in order to achieve optimal performance. In this perspective, HR development not only aims to improve technical work competency, but also creates a sense of security, appreciation, and having good career prospects. These things are the main factors in forming job satisfaction, which ultimately affects the quality and productivity of employee work. This path shows that HR development does not always have to have a direct impact on performance, but can work effectively by increasing job satisfaction first. This means that if HR development is done well—for example through coaching, mentoring, promotion opportunities, and further training—employees will feel valued and more satisfied in their jobs, which then motivates them to perform better.

CONCLUSION

Based on the results of the data analysis that has been carried out, it can be concluded that that: a) Training did not have a direct significant effect on employee performance, as the p-value was slightly above 0.05. This suggests that training may impact performance through other variables, such as job satisfaction. b) Human resource development also has a significant direct impact on employee performance. Improving employee competency can improve their work results. c) Training has a significant impact on job satisfaction. This indicates that training can increase employee satisfaction with their work. d) Human resource development has a significant impact on job satisfaction. This means that efforts to improve

human resource quality can increase employee job satisfaction. e) Job satisfaction has a significant and positive impact on employee performance. This means that the higher the job satisfaction, the better the employee's performance. f) There is a significant indirect effect of training on performance through job satisfaction. This strengthens the role of job satisfaction as a mediating variable.g) Human resource development also indirectly influences performance through job satisfaction. This suggests that job satisfaction mediates the relationship between human resource development and employee performance.

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