

THE IMPACT OF TRAINING AND COMPENSATION ON EMPLOYEE PERFORMANCE: THE MODERATING ROLE OF HUMAN RESOURCE QUALITY

Raden Fatchul Hilal¹, Djoko Widagdo

Manajemen Transportasi Udara, Sekolah Tinggi Teknologi Kedirgantaraan Yogyakarta
Jl. Parangtritis No.5 No.KM.4, The Special Region of Yogyakarta 55187, Indonesia

Article history:

Received

12 March 2025

Revised

14 April 2025

Accepted

2 July 2025

Available online

30 September 2025

This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>)



Abstract:

Background: The quality of human resources (HR) is a key determinant of organizational success, especially in structured work environments.

Purpose: This study endeavored to ascertain the efficacy of performance-based training and compensation as a means of enhancing the quality of the human resources of the company.

Design/Methodology/Approach: A quantitative survey was conducted on 60 employees of the Aviation Security Company in Yogyakarta, selected using simple random sampling. Data were collected through a closed-ended questionnaire and analyzed using PLS-SEM.

Result: The analysis yielded results that indicated a significant impact of training on employee performance at the Yogyakarta branch of the Aviation Security company. Furthermore, the findings suggest a direct impact of compensation on employee performance within the same context.

Conclusion: The findings of this study indicate a direct effect of training and compensation on employee performance at the Yogyakarta branch of the Aviation Security company. While HR quality also contributes to performance outcomes, the study did not find sufficient evidence to support its role as a moderating variable. These results suggest that training and compensation remain central components in enhancing employee performance, regardless of variations in HR quality levels.

Originality/Value (State of the art): This study introduces an integrated HRM model and reveals that HR quality, while impactful, does not moderate training or compensation effects within structured work systems.

Keywords: training, compensation, employee performance, human resources quality, aviation security

How to Cite:

Hilal, R. F., & Widagdo, D. (2025). The impact of training and compensation on employee performance: The moderating role of human resource quality. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, 11(3), 1038. <https://doi.org/10.17358/jabm.11.3.1038>

¹ Alamat Korespondensi:
Email: radenfatchul@gmail.com

INTRODUCTION

The quality of human resources constitutes a pivotal element in attaining organizational success. A recognition of the dearth of quality in work is concomitant with the underperformance of human resources. Consequently, there is a continuous development and enhancement of efforts to cultivate the quality of human resources, accompanied by an augmentation in the comprehension of work competencies. Conversely, a robust understanding of quality work practices will invariably effect the contribution of human resources. Employees must demonstrate commendable performance. Organizations that can leverage the capabilities of their high-performing employees will be better positioned to compete in the market and pursue continuous improvement. A multitude of factors effect individual performance, necessitating that companies prioritize these elements to ensure optimal fulfillment (Mangkunegara, 2020).

In an era of increasingly intense business competition, Human Resource Management (HRM) has become a strategic factor in enhancing organizational performance. One of the key efforts to improve the quality of human resources is through structured and continuous training. Training not only enhances employees knowledge of corporate culture and external dynamics, but also supports them in mastering new technologies and working effectively in teams to deliver high-quality products and services (Yimam., 2022 and Achackzai et al. 2024). Furthermore, HRM is required to implement the four phases of the training process design, assessment, delivery style, and evaluation optimally to foster employee performance improvement. Numerous studies have also indicated that training has a positive impact on productivity, job satisfaction, and skill development. In addition to training, compensation also plays a crucial role in driving employee performance. Compensation is not only an employees entitlement but also a form of recognition for their contributions to the achievement of organizational goals. Clare and Dingel. (2021) and Sorn et al. (2023) revealed that appropriately administered compensation can restore or even enhance the performance of employees experiencing a decline. Nevertheless, compensation is not the sole factor influencing motivation and retention. Therefore, a more comprehensive approach is needed one that takes into account other relevant factors for employees, including the quality of the human resources themselves.

Yogyakarta International Airport is undergoing continuous development of its facilities and infrastructure with the objective of ensuring the provision of optimal service, with a core focus on safety and customer satisfaction. Aviation Security (AVSEC) personnel play a pivotal role within the airport infrastructure. The personnel responsible for this critical function are known as Aviation Security (AVSEC) officers, who are required to possess either a license or an Officer Proficiency Certificate (SKTP). These certifications confer upon them the authority and responsibility to carry out duties and assume responsibilities within the domain of aviation security. This directive is further reinforced by the provisions outlined in the Regulation of the Director General of Air Transportation, Number: SKEP/2765/XII/2010, Chapter I, point 9). Aviation Security Officers (AVSEC) at the airport frequently experience overtime work due to various factors, including flight delays, office pickets that require employees to maintain the airport environment when the airport is closed, and other such circumstances.

A case study of an incident that occurred during the peak hours of flight operations provides a useful illustration. In this incident, a passenger complained about items that had been detained by Aviation Security officers. The passenger's belongings included a backpack containing 4 boxes of 100 ml refill perfume bottles and a 15,000 mAh Power Bank. The passenger was not provided with an explanation for why these items were detained. Furthermore, there was no indication as to when the passenger would be permitted to retrieve their belongings. Consequently, the passenger expressed dissatisfaction with the service provided by the Aviation Security officer, who seemingly only took the passenger's belongings. The passenger did not feel compelled by the officer to take back the detained items. This is undoubtedly problematic for the performance of Aviation Security personnel and engenders dissatisfaction with the services provided to passengers at Yogyakarta International Airport. The existing challenges have the potential to exert a detrimental effect on the performance of AVSEC employees, both directly and indirectly, if not addressed in a timely manner. This is particularly salient given the critical role that AVSEC plays in ensuring the security of an airport. It is imperative for employees to demonstrate a strong sense of job security, as this is a key indicator of effective human resource management within an organization. Effective human resource management is a critical component of organizational success.

This study situates itself within the field of Human Resource Management (HRM), particularly in the area of enhancing employee performance through internal organizational factors such as training and compensation, as well as the development of human resource quality as a variable that strengthens this relationship. In the scientific literature, most prior research has tended to separate the focus between employee performance improvement and human resource quality development. Several studies, such as those by Yimam. (2022) and Achackzai et al. (2024), have shown that training has an impact on employee performance. Similarly, Clare & Dingel. (2021) and Sorn et al. (2023) emphasize the importance of compensation as a factor in enhancing performance. On the other hand, studies by Entego et al. (2023) and Setiawan & Nurkhin (2024) highlight that the quality of human resources can improve competence and productivity.

Previous studies have consistently highlighted the importance of training and compensation in improving employee performance through the enhancement of competencies and motivation. Several studies have also emphasized the role of human resource (HR) quality as a moderating factor. However, the majority of these studies have been conducted in relatively flexible organizational settings. In contrast, the aviation security (AVSEC) sector operates within a highly structured and tightly regulated work system, where the moderating influence of HR quality remains underexplored. Furthermore, Faizah et al. (2024) presented contradictory findings, indicating that HR quality developed through training does not always directly correspond with work productivity. Acknowledging this research gap, the present study offers a novel scholarly contribution by integrating the three variables—training, compensation, and HR quality into a comprehensive analytical model, positioning HR quality as a moderating variable. This approach is not only confirmatory of prior findings but also expands the theoretical understanding of how internal organizational variables interact to influence employee performance, particularly within high-pressure environments such as AVSEC in the air transportation sector. Based on these considerations and in order to address the existing gap in the literature, a comprehensive study is needed to examine the interrelationship among these variables within an integrated model.

Therefore, this study aims to analyze the effect of training and compensation on employee performance, as well as to investigate the mediating role of human resource quality in this relationship. In addition, the study seeks to formulate conclusions and recommendations to support the advancement of HRM research and practice in the future.

METHODS

This study employed a quantitative survey design based on the positivist paradigm, which focuses on testing hypotheses using measurable data (Sugiyono, 2021). The population consisted of 150 employees of the Aviation Security Company branch. A simple random sampling technique was used to ensure each member of the population had an equal chance of being selected. Using the Slovin formula, the sample size was determined to be 60 respondents

The data collection technique employed a closed ended questionnaire using a five point Likert scale (1 = strongly disagree to 5 = strongly agree). The questionnaire contains indicators as previously stated to analyze the effect between variables. The composition of the questionnaire questions has been tested previously with a limited scope to obtain data that describes the desired research objectives. The measurement scale used in this study is the Likert scale. The Likert scale is a research scale used to measure attitudes and opinions. Definition of variables in Table 1.

The data analysis technique was conducted using the Structural Equation Modeling (SEM) approach with the assistance of the SMART-PLS software version 3.5. According to Ghozali and Latan (2020), the purpose of PLS is to help researchers obtain variable values for prediction purposes. The formal model defines latent variables as linear aggregates of their indicators. Weight estimates to create latent variable score components are obtained based on how the inner model (a structural model that connects latent variables) and the outer model (a measurement model, namely the relationship between indicators and their constructs) are specified.

Measurement Model (Outer Model)

Outer model analysis is used to ensure that the measurements used are suitable for use as measurements (valid and reliable) with the following indicators (Table 2).

Structural Model Specification (Inner Model)

The design of the structural model of the relationship between latent variables is based on the formulation of the problem or research hypothesis. In the evaluation of this model, estimation can be done through several stages. The use of R-square for dependent constructs, Stone-Geisser Q-Square test for predictive relevance and t-test and significance of the structural path parameter coefficients.

Moderation Variable Analysis

The testing of the moderation hypothesis was carried out using moderated regression analysis (MRA) estimated by SEM-PLS. A variable can be said to be a moderation variable and will be declared meaningful or

significant if the significant t value is less than or equal to 0.05 (5%).

Training enhances employee skills, understanding, and efficiency in performing job tasks (Awal & Abrian, 2020; Niati et al. 2021). According to learning theory, training improves performance through better knowledge and ability application (Kanapathipillai & Azam, 2020; Fontova-Almató et al. 2020; Alnawfleh, 2020).

H1: Training positively influences employee performance at the Aviation Security company, Yogyakarta branch.

Compensation is a performance-based motivator that increases employee responsibility and commitment (Hosnan et al. 2023). Fair compensation improves satisfaction and encourages productivity (Rodriguez-Clare & Dingel, 2021; Wellem & Djawoto, 2022; Kim & Jang, 2020).

H2: Compensation positively influences employee performance at the Aviation Security company, Yogyakarta branch.

Table 1. Definition of variables

Variable	Definition of Variable	Dimensions
Compensation (X1)	Compensation as a form of appreciation by companies or organizations for services seen from the contribution and performance made during the work process	Compensation is normative Compensation is policy-based
Training (X2)	Training is a process or pathway in a company or organization to learn and study specific attitudes, abilities, skills, knowledge and behavior related to the job.	Training System Materials Training Instructors Training Benefits
Employee Performance (Y)	Performance is a result of work or work achievement carried out by a person or group of people in carrying out their functions in accordance with the responsibilities given to them which are based on experience and ability.	Quality Quantity Timeliness Cooperation
Quality of HR (Z)	Quality HR (human resources) are employees who have high knowledge, abilities and skills in completing their work optimally, and are able to make a positive contribution to the company.	Understanding the Employee's Field Knowledge Abilities Work Spirit Planning or Organizing Ability

Tabel 2. Measurement Model Specification (Outer Model)

Measurement Model	Specification
Convergent Validity	> 0.70
Discriminant Validity	AVE > 0.50
Composite Reliability	> 0.70

HR quality reflects employee competence, integrity, and adaptability, which are essential for achieving organizational goals. It influences motivation and teamwork (Faizi et al. 2022; Pratidina et al. 2024). Higher HR quality contributes directly to better individual and team performance.

H3: HR quality positively influences employee performance at the Aviation Security company, Yogyakarta branch.

Improving HR quality is a long-term strategic process. High-quality HR enhances training outcomes through better learning absorption and application (Gustiana, 2022; Entengo et al. 2023; Setiawan & Nurkhin, 2024).
H4a: HR quality moderates the relationship between training and employee performance at the Aviation Security company, Yogyakarta branch.

While compensation is typically regulated, HR quality can influence its effectiveness. Compensation based on fairness may not fully reflect individual quality, but high-quality HR can strengthen its impact on performance (Djaya, 2021; Oktikasari & Suyanto, 2023; UmpuSinga, 2022).

H4b: HR quality moderates the relationship between compensation and employee performance at the Aviation Security company, Yogyakarta branch.

The framework of thought that the researcher used can be seen in Figure 1.

RESULTS

The subsequent phase of testing will entail conducting a structural analysis employing the SEM method through the utilization of the Partial Least Square (PLS) application. The analysis in Partial Least Square (PLS) is divided into two parts: the outer model (measurement model) and the inner model (structural model).

The evaluation of the outer model (measurement model)

In accordance with the findings of the outer model analysis, the subsequent results have been obtained:

Convergent validity

First, the employee performance variable consisted of 10 items, each with a loading factor ≥ 0.50 , thus meeting the criteria for validation. Secondly, the compensation variable consisted of 8 items, each with a loading factor ≥ 0.50 , thus confirming its validity. The third training variable consisted of 6 items, each of which had a loading factor ≥ 0.50 , to be considered valid. The quality of human resources was also assessed, with 10 items having a loading factor ≥ 0.50 , thus confirming its validity. Consequently, all indicators are declared feasible or valid for research use and can be used for further analysis.

Composite Reliability

It has been established that the composite reliability value of all research variables is > 0.6 . Employee performance was measured at 0.900, compensation at 0.894, training at 0.915, and HR quality at 0.905. These findings suggest that each variable has met the composite reliability criterion, thereby affirming the conclusion that all variables exhibit a high degree of reliability.

Testing the Structural (Inner) Model

In evaluating the inner model (structural model), three components are identified: Firstly, the path coefficient is utilized to demonstrate the strength of the effect or effect of exogenous variables on endogenous variables. Secondly, a model goodness-of-fit test is employed to ascertain the contribution of the effect of exogenous variables to endogenous variables. Lastly, hypothesis testing is implemented to ascertain the level of significance of the hypothesis being tested. The Inner Model (Structural Model) in Figure 2.

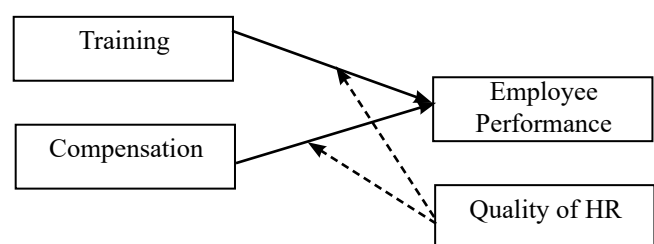


Figure 1. Conceptual Framework (→ : Direct Effect; - -> : Moderation Effect)

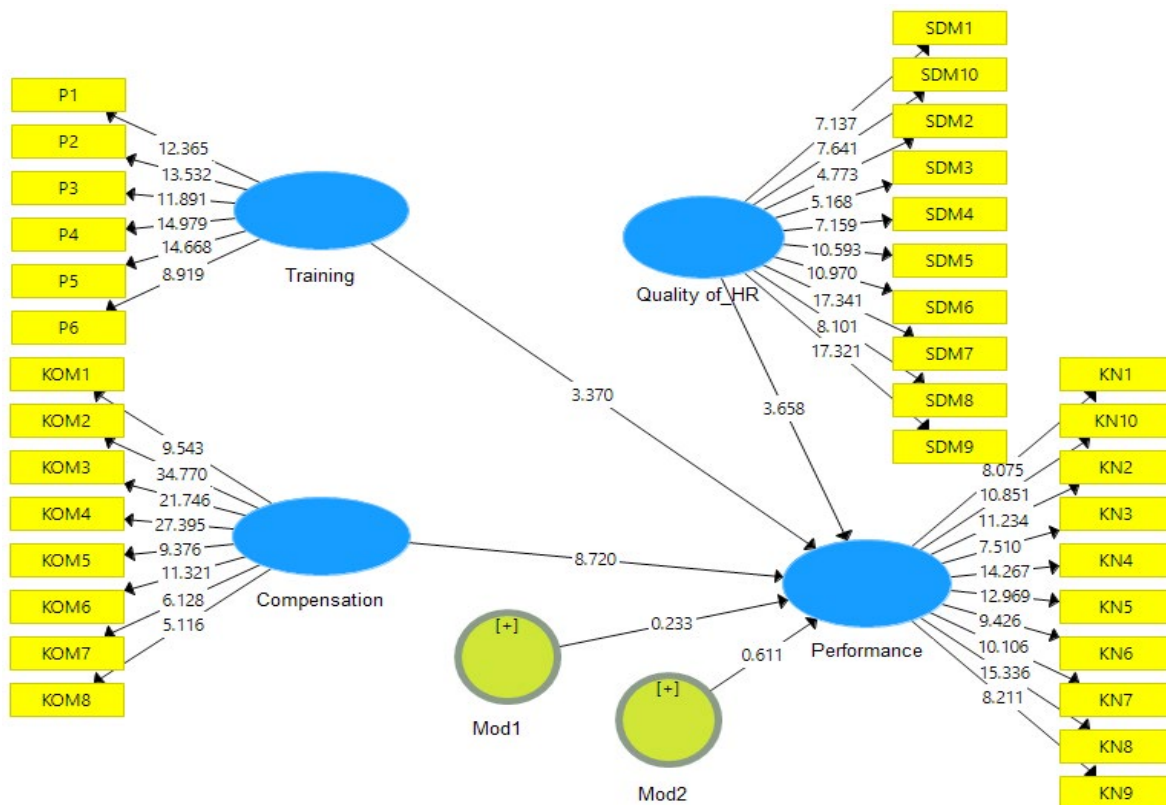


Figure 2. The inner model (structural model)

Path coefficient test

The R-Square Adjust value for the employee performance variable was 0.561. This finding indicates that employee performance can be enhanced by 56.1% through training, compensation, and HR quality factors. This finding underscores the notion that the magnitude of the path coefficient value on one independent variable on the dependent variable is directly proportional to the strength of the effect between the independent variables and the dependent variable.

The Goodness-of-Fit

The SRMR value is indicative of the mean square root difference between the observed correlation and the observed model. A model is deemed suitable if the SRMR value (0.125) is greater than 0.08. Additionally, the d_ULS value must exceed 2,000, as evidenced by the findings that $9,353 > 2,000$, thereby indicating a suitable model. The NFI value must be > 0.1 , where the model is $0.490 > 0.1$, the model is considered ideal and good, which is a measure of the suitability of the model descriptively the data is acceptable and fit. It can be concluded that the alignment model or relationship criteria between constructs can be tested.

Hypothesis Test

Hypothesis 1 Testing: The effect of training on employee performance at the Aviation Security company, Yogyakarta branch. Based on the Table 3, the t-statistic value is 3.370 with a p-value of 0.001. Since the t-statistic ≥ 1.962 and the significance value ≤ 0.05 , it can be concluded that Hypothesis 1 is accepted. The original sample (O) value of 0.316 indicates a positive effect of training on employee performance. This means that an increase in training outcomes will improve employee performance at the Yogyakarta branch of the Aviation Security company by 0.316 units, assuming other variables remain constant

Hypothesis 2 Testing: The effect of compensation on employee performance at the Aviation Security company, Yogyakarta branch. The Table 3 shows a t-statistic value of 8.720 and a p-value of 0.000. Since the t-statistic ≥ 1.962 and the significance value ≤ 0.05 , it can be concluded that Hypothesis 2 is accepted. The original sample (O) value is 0.675, indicating a positive effect of compensation on employee performance. This implies that the implementation of compensation policies will enhance employee performance at the Yogyakarta branch of the Aviation Security company by 0.675 units, assuming other variables remain constant.

Hypothesis 3 Testing: The effect of human resource quality on employee performance at the Aviation Security company, Yogyakarta branch. As shown in the Table 3, the t-statistic value is 3.658 with a p-value of 0.000. Since the t-statistic ≥ 1.962 and the significance value ≤ 0.05 , it can be concluded that Hypothesis 3 is accepted. The original sample (O) value is 0.394, indicating a positive effect of human resource quality on employee performance. This means that higher human resource quality will improve employee performance at the Yogyakarta branch of the Aviation Security company by 0.394 units, assuming other variables remain constant.

Hypothesis 4 Testing: The moderating effect of human resource quality as a supporting factor in the effect of training and compensation on employee performance at the Aviation Security company, Yogyakarta branch. Moderation hypothesis testing was conducted using Moderated Regression Analysis (MRA) estimated through SEM-PLS. The results for the moderating variable human resource quality are as follows:

1. H4a: There is a moderating effect of human resource quality in supporting the effect of training on employee performance at the Aviation Security company, Yogyakarta branch. According to the Table 3, the t-statistic value is 0.233 with a p-value of 0.817. Since the t-statistic is < 1.962 and the significance value is > 0.05 , it can be concluded that Hypothesis 4a is rejected. The original sample (O) value is 0.022, indicating a positive effect; however, it is not strong enough to be considered statistically or practically significant due to its very weak effect. This suggests that regardless of the level of human resource quality, the relationship between training and employee performance does not change significantly. Training still has an effect on performance, but it is neither effectd nor strengthened by the level of HR quality at the Aviation Security company, Yogyakarta branch.

2. H4b: There is a moderating effect of human resource quality in supporting the effect of compensation on employee performance at the Aviation Security company, Yogyakarta branch. Based on the Table 3, the t-statistic value is 0.611 with a p-value of 0.543. Since the t-statistic is < 1.962 and the significance value is > 0.05 , it can be concluded that Hypothesis 4b is rejected. The original sample (O) value is 0.078, indicating a positive effect, but the effect is very small and weak, and therefore not strong enough to be considered statistically significant. This implies that the level of HR quality does not substantially affect the relationship between compensation and performance at the Yogyakarta branch of the Aviation Security company. Employees receiving high compensation tend to perform well regardless of whether their HR quality is high or low.

The Effect of Training on the Performance of Aviation Security (AVSEC) Employees

Based on the analysis results, it can be concluded that training has a positive effect on the performance of employees at the Yogyakarta branch of the Aviation Security (AVSEC) company. This finding demonstrates that structured and relevant training such as the Diklat Initial Junior Aviation Security (AVSEC) program conducted by the STTKD Training Center can significantly improve employee work quality. The training program not only equips participants with technical knowledge and skills but also instills the professionalism required to carry out aviation security responsibilities effectively. The improvement in performance can be explained through several aspects. First, training that is designed to align with field operational needs ensures that the material is easily applicable in daily work practices. Second, the training process builds employee confidence and readiness in facing dynamic and high-responsibility work situations. Third, the discipline and loyalty fostered during the training serve as a strong foundation for developing consistent and productive work behavior.

Table 3. Path coefficient results

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Description
Training → Performance	0.316	3.370	0.001	H1: Accepted
Compensation → Performance	0.675	8.720	0.000	H2: Accepted
Quality of_HR → Performance	0.394	3.658	0.000	H3: Accepted
Compensastion_HR (Mod2) → Performance	0.078	0.611	0.543	H4a: Rejected
Training_HR (Mod1) → Performance	0.022	0.233	0.817	H4b: Rejected

From a theoretical perspective, these findings are consistent with Human Capital Theory, which posits that organizational investment in employee development through training enhances individual competencies and productivity. This result also supports the Resource-Based View (RBV), where training is seen as a strategic means to develop competitive advantage by strengthening internal resources in this case, the quality of human resources. Moreover, the findings reinforce the idea that organizations that adopt a culture of continuous learning and development are more capable of preparing a workforce that can meet job challenges with optimal performance. This study is in line with research by Awal and Abrian. (2020) and Niati et al. (2021), who found that increased training for employees leads to improved performance, whereas a lack of skill and knowledge upgrades results in performance decline. Nguyen & Duong. (2020) emphasized that employees believe comprehensive training and development in technical and professional skills is among the best strategies to attract and retain employees. This is due to the sense of engagement and job fit employees feel after benefiting from such programs, which in turn positively impacts long-term performance. Similarly, Lloyd. (2021), using frequency and percentage analysis, concluded that employee training has a positive impact on job performance. Kanapathipillai and Azam. (2020); Fontova-Almato et al. (2020); and Alnawfleh. (2020) also demonstrated that training affects both employee performance and job satisfaction. Training plays a vital role because the knowledge and skills transferred particularly in new management techniques improve performance and satisfaction. Furthermore, training acts as a pathway to personal improvement and professional development, which subsequently enhances work performance and instills job satisfaction.

The Effect of Compensation on the Performance of Aviation Security (AVSEC) Employees

Based on the analysis results, it is concluded that compensation has a positive effect on the performance of employees at the Yogyakarta branch of the Aviation Security (AVSEC) company. This finding indicates that the compensation system implemented by the organization successfully drives work motivation and enhances employees' sense of responsibility in carrying out their duties. Compensation is perceived not only as a form of recognition for employees' contributions but also as a motivating factor to achieve better performance.

The company's goal in providing compensation is to foster a sense of awareness and ownership toward one's work, as well as to strengthen the collaborative relationship between employees and the organization. Fair and appropriate compensation is considered effective in increasing job satisfaction, reinforcing loyalty, and encouraging individual productivity. This is reflected in the actual conditions within the company, where employees receive compensation that is proportional to their responsibilities and job positions. Most AVSEC positions under the supervision of the Ministry of Transportation of the Republic of Indonesia receive compensation based on a rank-based system, which includes base salary and position allowances. This system provides a clear and tiered structure that motivates employees to continually improve their performance in pursuit of recognition and promotion.

From a theoretical, this finding supports various theories in human resource management that emphasize the importance of compensation systems as tools to enhance performance. According to Expectancy Theory (Vroom), for instance, employees are more likely to be motivated when they believe that good performance will lead to appropriate rewards. Similarly, Equity Theory suggests that employees' perceptions of fairness in compensation are critical to their satisfaction and performance. When employees perceive that their compensation is proportional to their workload and responsibilities, they are more likely to exhibit positive and productive work behavior. Sirili & Simba. (2021) highlight that each organization has its own compensation policies and practices, which determine the amount and types of compensation received by employees. Financial benefits such as travel allowances, housing allowances, and others often depend on an employee's position and rank within the organization. Katabalo & Mwita. (2024) further explain that there is a relationship between compensation and employee performance, noting that compensation includes both financial and non-financial elements. When managed effectively, both can significantly enhance employee performance. Organizations with well-designed compensation policies stand to benefit from improved employee outcomes. Consistent with the findings of Clare & Dingel. (2021); Wellem & Djawato. (2022), the results of this study demonstrate that compensation has a positive and significant effect on employee performance. Kim & Jang. (2020) argue that achieving strong performance requires motivation from various supportive factors that foster productivity

aligned with organizational expectations. Overall, the findings reinforce the understanding that an effective compensation system not only provides financial benefits to employees but also contributes to a healthy and performance-oriented work environment. Fair, transparent, and role-appropriate compensation remains a strategic factor in human resource management particularly in fostering a loyal, motivated, and high performing workforce.

The Effect of Human Resource (HR) Quality on the Performance of Aviation Security (AVSEC) Employees

Based on the analysis results, it is concluded that the quality of human resources significantly effects employee performance at the Yogyakarta branch of the Aviation Security (AVSEC) company. This finding affirms that the higher the individual quality of employees reflected in their knowledge, skills, and work attitudes the better their performance outcomes. HR quality is a fundamental factor within organizations, especially in the aviation security sector, which requires precision, discipline, and a high level of readiness. In this context, employees who possess adequate technical competencies, a clear understanding of operational procedures, and demonstrate professional attitudes and a strong sense of responsibility are more capable of carrying out their tasks efficiently and effectively. This directly contributes to the achievement of operational targets and the enhancement of airport security service quality.

From the perspective of human resource management theory, these findings support the Human Capital Theory, which posits that human quality is a vital organizational asset that directly contributes to performance. Individuals with high competencies not only complete their tasks effectively but also drive team performance and help cultivate a positive organizational culture. Faizi et al. (2022) revealed that HR quality effects employee performance at the Yogyakarta branch of the Aviation Security company by 22.7%, with the remaining 77.3% explained by other variables. Discussing human resource quality naturally involves measurable benchmarks that can serve as standards for identifying qualified individuals. According to Ngoc et al. (2023), high-quality human resources, in terms of attitude and professional competence, are those who behave according to ethical principles and professional awareness; demonstrate professional work styles and

discipline, teamwork, and a strong sense of collective and individual responsibility. Pratidina et al. (2024) emphasized that employee performance in completing assigned tasks is heavily effected by HR quality; when HR quality is inadequate, employees often face difficulties in handling workloads that are significantly higher than usual. Essentially, improving HR quality is a strategic investment in enhancing employee performance. Organizations that focus on developing human resources through training, mentoring, and a supportive work environment are better equipped to face operational challenges and achieve high and sustainable performance.

The Moderating Role of Human Resource (HR) Quality on the Effect of Training on the Performance of Aviation Security (AVSEC) Employees

Based on the analysis results, Human Resource (HR) quality was not found to moderate the effect of training on employee performance at the Yogyakarta branch of the Aviation Security (AVSEC) company. This means that the level of HR quality whether high or low does not significantly alter the strength of the relationship between training and performance improvement. Training continues to have a positive effect on performance, but this effect is neither amplified nor diminished by differences in HR quality. This finding suggests that the training programs implemented are comprehensively designed and standardized, thus delivering relatively uniform benefits to all employees, regardless of their initial competency levels. This suggests that employees with both high and moderate levels of HR quality tend to derive similar benefits from the training in terms of performance improvement. This may be due to the technical and procedural nature of the training, which emphasizes standardized understanding and operational efficiency. Consequently, the outcomes of training tend to be uniform across different levels of HR quality.

From a theoretical, these findings suggest that moderating factors do not always play a significant role in every relationship between variables particularly when training is normatively structured and implemented within highly systematized work environments, such as aviation security. This aligns with the Contingency Approach in human resource management, which posits that the effectiveness of a given policy or program depends heavily on the organizational context and the nature of the tasks

involved. Ayomi. (2023) emphasized that individuals differ in their levels of knowledge and skills, making it difficult to generalize or equalize HR quality across the workforce. This is supported by Sutrisno. (2022), who defines HR quality as the combination of knowledge, skills, and abilities that enable an individual to deliver professional services. Hajiali et al. (2022) also found that although employee performance is positively affected by competence, the effect was not statistically significant highlighting that competence, as a component of HR quality, remains a developmental issue, especially when innovation and technology are underutilized in enhancing employee outcomes. Essentially, training is one of the sub-dimensions of HR quality. However, participation in training alone does not automatically indicate a high level of HR quality. Therefore, it cannot be assumed that training participation equates to enhanced personal quality. This finding contrasts with Entego et al. (2023); Setiawan & Nurkhin. (2024) who assert that HR quality contributes to competence and productivity. Similarly, Faizah et al. (2024) found that HR quality, formed through knowledge, skills, and training, cannot reliably be used to assess work productivity. The implication of these findings is that organizations cannot automatically assume HR quality will always strengthen the outcomes of training. In some contexts particularly where training is based on regulatory standards or fixed technical procedures training may remain effective regardless of HR quality variations. Therefore, management should reconsider the design of advanced training and HR development programs, aiming for more personalized and adaptive approaches that could generate stronger synergistic effects on employee performance improvement.

The Moderating Role of Human Resource (HR) Quality on the Effect of Compensation on the Performance of Aviation Security (AVSEC) Employees

Based on the analysis results, Human Resource (HR) quality was not found to moderate the effect of compensation on employee performance at the Yogyakarta branch of the Aviation Security (AVSEC) company. This indicates that the level of HR quality possessed by employees whether high or moderate does not significantly strengthen or weaken the relationship between the compensation received and the resulting performance. The findings suggest that compensation

has a direct and consistent effect on performance improvement, regardless of variations in individual HR quality. This result may be attributed to the motivational and standardized nature of compensation, where all employees receive both financial and non-financial rewards based on a relatively fair and transparent system. In highly standardized organizational structures such as AVSEC, compensation is typically determined by formal ranks and job classifications rather than individual quality. As a result, perceptions of fairness and satisfaction with compensation tend to be balanced across different employee groups.

From a theoretical perspective, this finding provides an important insight into the application of Motivational and HR Management Theories. Within the framework of Equity Theory and Expectancy Theory, while appropriate compensation can enhance motivation and performance, its level of impact is not always mediated by HR quality particularly when the compensation system is designed to uphold consistent standards of fairness. Furthermore, in contexts where compensation is normative in nature (e.g., basic salaries and allowances based on rank), the resulting psychological and behavioral effects are relatively uniform and not strongly affected by individual competence or capabilities. Djaya. (2021); Oktikasari & Suyanto. (2023) emphasized that compensation received by most employees adheres to pre-established company standards, meaning that HR quality does not determine the amount of compensation. What differs, however, is the size of performance-based rewards provided to employees upon achieving specific organizational targets. According to UmpuSinga. (2022) the amount of compensation is determined by company regulations, not by individual employee quality, but it does have a direct impact on employee commitment and performance. The implication is that HR quality is not the sole factor enhancing the effect of compensation policies. To maximize the impact of compensation on performance in a more individualized manner, management may consider adopting performance based incentive systems, non-financial recognition, or more personalized compensation schemes. Such approaches would allow high-quality employees to receive rewards that are proportionate to their contributions. Not only would this support perceptions of fairness, but it could also stimulate healthy competition and encourage more targeted performance improvements.

Managerial Implications

The results of this study yield important managerial implications for organizations, particularly those operating within highly structured and high-pressure environments such as the aviation transportation sector. Firstly, the demonstrated positive and significant effects of training and compensation on employee performance highlight the necessity for management to prioritize continuous professional development and to implement fair, transparent compensation systems. Such strategies have been shown to effectively enhance employee motivation and overall job performance.

Although the moderating role of human resource (HR) quality was not statistically significant, the development of HR remains a critical strategic priority. Investments in targeted training programs, the promotion of an ethical organizational culture, and the implementation of performance-based reward systems are essential for strengthening human capital and improving organizational effectiveness. Accordingly, it is recommended that management adopt an integrated and context-sensitive HRM strategy that aligns training and compensation practices with the organization's long-term objectives and operational context.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the analysis, this study concludes that training, compensation, and HR quality each positively influence employee performance at the Yogyakarta branch of the Aviation Security (AVSEC) company. These findings are consistent with previous research (Yimam, 2022; Achackzai et al. 2024; Clare & Dingel, 2021), emphasizing the importance of training and compensation in enhancing organizational performance through improved competencies and motivation. However, HR quality was not found to significantly moderate the relationship between training and performance, suggesting that training yields consistent results regardless of HR quality variations. This supports the Contingency Approach, which views HR policy effectiveness as context-dependent, particularly in structured environments like aviation security. The results align with Hajiali et al. (2022) and Faizah et

al. (2024), yet contrast with Entego et al. (2023) and Setiawan & Nurkhin (2024), who stress the importance of HR quality in boosting productivity. The study also finds that HR quality does not significantly moderate the relationship between compensation and employee performance at the AVSEC Yogyakarta branch, indicating that compensation impacts performance directly and consistently, regardless of HR quality differences. Theoretically, this aligns with Equity and Expectancy Theories, which suggest that fair, standardized compensation enhances performance across employee groups. This view is supported by Djaya. (2021) and Oktikasari & Suyanto. (2023), who highlight that compensation is shaped by organizational standards rather than individual quality, as also affirmed by UmpuSinga. (2022).

The findings of this study have both practical and theoretical implications. Practically, training, compensation, and HR quality directly enhance employee performance, highlighting the need for structured and sustained HR policies, especially in aviation security. Although HR quality does not significantly moderate these effects, its development remains strategically important. Theoretically, the results support Contingency Theory, suggesting that in highly structured environments, individual factors like HR quality may have limited moderating roles. This adds to HRM knowledge by showing that contextual factors shape the strength of variable relationships.

Recommendations

Furthermore, this study opens avenues for the development of more adaptive theories and practices in human resource management. The moderating role of HR quality may be further explored within organizational contexts that are more flexible, dynamic, and innovation-driven. Future research could also investigate other potential moderating variables, such as organizational culture or employee engagement, and consider adopting longitudinal study designs to better understand how the relationships among variables evolve over time.

FUNDING STATEMENT: Not for profit sectors.

CONFLICTS OF INTEREST: The author declares no conflict of interest.

DECLARATION OF GENERATIVE AI STATEMENT: The authors used ChatGPT to check grammar and refine the text, and take full responsibility for the final content.

REFERENCES

- Achackzai, N., Siddiq, A., & Khishkai, A. (2024). The impact of training on employee's performance: A survey in the Ministry of Education, Afghanistan. *International Journal of Innovation and Research in Educational Sciences*, 11(3), 2349–5219.
- Alnawfleh, S. H. (2020). Effect of training and development on employee performance in the Aqaba Special Economic Zone Authority. *Journal of Business & Management (COES&RJ-JBM)*, 8(1), 20. <https://doi.org/10.25255/jbm.2020.8.1.20.34>
- Rodriguez-Clare, A., & Dingel, J. (2021). The effect of compensation, leadership style and work discipline on the performance of hospital employees in the United States. *Medalion Journal: Medical Research, Nursing, Health and Midwife Participation*, 2(1), 33–47. <https://doi.org/10.59733/medalion.v2i1.23>
- Awal, A., & Abrian, Y. (2020). Pengaruh pelatihan terhadap prestasi kerja karyawan di The Axana Hotel Padang. *Jurnal Kajian Pariwisata dan Bisnis Perhotelan*. <https://doi.org/10.24036/jkpbp.v1i1.2372>
- Ayomi, G. R. (2023). Pengaruh kualitas sumber daya manusia terhadap kinerja karyawan di Vouk Hotel Suites Penang. *Jurnal Ilmiah Wahana Pendidikan*, 9(24), 338–343.
- Djaya, S. (2021). Pengaruh motivasi kerja dan kompetensi terhadap kinerja karyawan di moderasi kompensasi. *Buletin Studi Ekonomi*, 26(1), 72. <https://doi.org/10.24843/bse.2021.v26.i01.p06>
- Duc, L. D. M., Tien, N. H., & Minh Ngoc, N. (2025). Solutions for development of high quality human resource in Binh Duong industrial province of Vietnam. *International Journal of Business and Globalisation*, 1(1), 1. <https://doi.org/10.1504/ijbg.2025.10056380>
- Entengo, R. M., Mahdalena, M., & Lukum, A. (2023). Pengaruh implementasi Siskeudes terhadap kualitas laporan keuangan desa dengan kompetensi SDM sebagai variabel moderasi. *Jurnal Mirai Management*, 8(2), 28–36. <https://journal.stieamkop.ac.id/index.php/mirai/article/view/4490>
- Faizah, N., Budiwitjaksono, G. S., & Vendy, V. (2024). Kualitas sumber daya manusia memoderasi determinan senjangan anggaran. *Ekonomis: Journal of Economics and Business*, 8(1), 26. <https://doi.org/10.33087/ekonomis.v8i1.1065>
- Faizi, A., Josiah, T., & Parela, E. (2022). Kualitas sumber daya manusia dan motivasi kerja terhadap kinerja pegawai pada Inspektorat Provinsi Lampung. *Dikombis: Jurnal Dinamika Ekonomi, Manajemen, dan Bisnis*, 1(3), 415–424. <https://doi.org/10.24967/dikombis.v1i3.1823>
- Fontova-Almató, A., Suñer-Soler, R., Salleras-Duran, L., Bertran-Noguer, C., Congost-Devesa, L., Ferrer-Padrosa, M., & Juvinyà-Canal, D. (2020). Evolution of job satisfaction and burnout levels of emergency department professionals during a period of economic recession. *International Journal of Environmental Research and Public Health*, 17(3), Article 921. <https://doi.org/10.3390/ijerph17030921>
- Ghozali, I., & Latan, H. (2020). Partial least square: Konsep, teknik dan aplikasi menggunakan program SmartPLS 3.0 (Edisi ke-2). Badan Penerbit Universitas Diponegoro.
- Gustiana, R. (2022). Pelatihan dan pengembangan sumber daya manusia: Suatu kajian literatur review ilmu manajemen sumber daya manusia. *JEMSI*, 3(6), 657–666. <https://doi.org/10.31933/jemsi.v3i6.1107>
- Hajiali, I., Fara Kessi, A. M., Budiandriani, B., Prihatin, E., Sufri, M. M., & Sudirman, A. (2022). Determination of work motivation, leadership style, employee competence on job satisfaction and employee performance. *Golden Ratio of Human Resource Management*, 2(1), 57–69. <https://doi.org/10.52970/grhrm.v2i1.160>
- UmpuSinga, H. A. (2022). Pengaruh komitmen organisasi terhadap kinerja karyawan dengan kompensasi sebagai variabel moderasi. *Derivatif: Jurnal Manajemen*, 16(1), 120–126.
- Hosnan, A., Leniwati, D., Wahyuni, E. D., & Mudrifah, M. (2023). Persepsi mahasiswa akuntansi terhadap minat profesi akuntan pendidik: Teori motivasi dan harapan berbasis akuntansi syariah. *AKURASI: Jurnal Riset Akuntansi dan Keuangan*, 5(3), 209–230. <https://doi.org/10.36407/akurasi.v5i3.913>
- Kanapathipillai, K., & Azam, S. M. F. (2020). The impact of employee training programs on

- job performance and job satisfaction in the telecommunication companies in Malaysia. *European Journal of Human Resource Management Studies*, 4(3), 1–17. <https://doi.org/10.46827/ejhrms.v4i3.857>
- Katabalo, C. V., & Mwita, K. M. (2024). The role of compensation on job satisfaction, employee performance and organisational performance. *Science Mundi*, 4(1), 137–148. <https://doi.org/10.51867/scimundi.4.1.12>
- Kim, H. S., & Jang, S. C. (Shawn). (2020). The effect of increasing employee compensation on firm performance: Evidence from the restaurant industry. *International Journal of Hospitality Management*, 88, 102513. <https://doi.org/10.1016/j.ijhm.2020.102513>
- Lloyd, J. E. (2021). The impact of training on employee job performance: A case study of Bayelsa State Civil Service. *International Journal of Public Administration and Management Research (IJPAMR)*, 6(3), 71–80.
- McKinsey & Company. (2021). The new possible: How HR can help build the organization of the future. *McKinsey Quarterly*, March, 1–11. <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-new-possible-how-hr-can-help-build-the-organization-of-the-future>
- Nguyen, C., & Duong, A. (2021). The impact of training and development, job satisfaction and job performance on young employee retention. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3906100>
- Niati, D. R., Siregar, Z. M. E., & Prayoga, Y. (2021). The effect of training on work performance and career development: The role of motivation as intervening variable. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2385–2393. <https://doi.org/10.33258/birci.v4i2.1940>
- Oktikasari, F. Y., & Suyanto. (2023). Analisis kompetensi dan motivasi terhadap kinerja pegawai melalui kompensasi sebagai variabel moderasi. *Journal of Economics and Business UBS*, 12(5), September–Oktober.
- Pratidina, G., Mulyawati, L., Seftiansyah, R., & Yeza, Z. (2024). Dalam meningkatkan kinerja karyawan PT Bank Rakyat Indonesia (Persero). *Jurnal XYZ*, 3, 9920–9932. (Catatan: Mohon dilengkapi nama jurnal resminya agar format bisa diperbaiki)
- Setiawan, F. A., & Nurkhin, A. (2024). Pengaruh SISKEUDES, SPI, dan partisipasi masyarakat terhadap kualitas laporan keuangan desa dengan kompetensi SDM sebagai variabel moderasi. *Business and Accounting Education Journal*, 5(1), 44–62. <https://doi.org/10.15294/baej.v5i1.4768>
- Sirili, N., & Simba, D. (2021). It is beyond remuneration: Bottom-up health workers' retention strategies at the primary health care system in Tanzania. *PLoS ONE*, 16(4), Article e0246262. <https://doi.org/10.1371/journal.pone.0246262>
- Sorn, M. K., Fienena, A. R. L., Ali, Y., Rafay, M., & Fu, G. (2023). The effectiveness of compensation in maintaining employee retention. *OALib*, 10(7), 1–14. <https://doi.org/10.4236/oalib.1110394>
- Sugiyono. (2021). Metode penelitian kuantitatif, kualitatif, dan R&D. CV Alfabeta.
- Wellem, I., & Djawoto. (2022). The effect of compensation on employee performance through job satisfaction as intervening variable. In *Proceeding 2nd International Conference on Business & Social Sciences (ICOBUSS) (Vol. 4, No. 1, pp. 1400–1411)*. www.ajhssr.com
- Yimam, M. H. (2022). Impact of training on employees' performance: A case study of Bahir Dar University, Ethiopia. *Cogent Education*, 9(1), Article 2107301. <https://doi.org/10.1080/2331186X.2022.2107301>