

Examining the Influence of Educational and Field Training Programs on Employee Competency at PT. Kereta Api Indonesia (Persero)

Berti Dwi Rolanda*, Efan Elpanso

Universitas Bina Darma, Palembang, Indonesia

Corresponding Author: bertirolanda@gmail.com

efan.elpanso@binadarma.ac.id

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Abstract

Organizations face intensified competition in the era of globalization, making effective Human Resources (HR) management crucial for success. This study investigates the impact of education and field training on employee competency at PT. Kereta Api Indonesia (Persero) Divre III Palembang, an enterprise aiming to enhance its railway services. The problem identified is the discrepancy between educational qualifications and practical competencies, exacerbated by insufficient training resources. This research aims to examine how education and field training influence employee competency and to provide recommendations for improving HR practices. Using a quantitative approach, data were collected from 122 employees through questionnaires and observations, supplemented by a literature review. Hypotheses were tested using multiple regression analysis and statistical tests. The findings reveal that education significantly and positively affects competency, which means that higher education levels necessarily equate to higher competency. Then, field training also significantly improves competency, highlighting its effectiveness in developing practical skills. The study also found that both education and field training, when considered together, significantly impact employee competency. Based on these findings, it is recommended that PT. Kereta Api Indonesia (Persero) should consider further evaluating job assignments, differentiating the training materials to meet the competency needs of each position better, and strengthening training programs that focus on developing critical thinking and independent problem-solving skills.

Keywords: Education, Employee Competency, Field Training, HR Management, PT. Kereta Api Indonesia.

JEL Codes: M41, M49, L25

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1. Introduction

In the context of modern business, organizations, whether engaged in goods or services, are primarily oriented towards profit generation. The intensity of competition among companies has surged in the era of globalization, necessitating the proactive development of Human Resources (HR) (Bustanto et al., 2024). Employees must embrace continuous learning and diligent work to unlock their full potential. HR plays a pivotal role in the success of an organization, with high-quality HR contributing optimally to the achievement of corporate goals, while subpar HR can impede progress. Effective HR management is essential for the smooth operation of all organizational activities, making it crucial to manage HR efficiently to ensure operational success (Gunawan & Hasanah, 2024).

The responsibility for maintaining quality HR lies significantly with educational institutions. To sustain HR quality, institutions must implement effective HR management strategies. HR management involves utilizing individuals to achieve organizational goals efficiently. Adequate and high-quality HR must be aligned with the workload to avoid both shortages and surpluses (Nasution et al., 2023). Furthermore, HR should meet the required qualifications to manage assets effectively and achieve the desired welfare. One concrete method to enhance HR productivity is through education and training, enabling employees to perform their tasks effectively (Handoko et al., 2021).

Education is a deliberate and planned effort to develop individuals' intellectual and emotional potential to achieve independence and meet life's demands. In Indonesia, citizens are mandated to complete a minimum of nine years of education, comprising six years of primary education and three years of secondary education, as stipulated in Article 6, Paragraph (1) of Law No. 20 of 2003 (Astari et al., 2022). However, many individuals pursue further education to enhance their knowledge and improve their employability in major companies. Education is a gateway to employment and an avenue for enhancing HR quality (Wakila, 2021).

Training and education are processes designed to improve employee competence. These processes involve organizing a series of activities aimed at achieving specific objectives. Competence encompasses the ability to perform tasks or duties, supported by skills, knowledge, and work attitudes required for the job (Pamungkas et al., 2022). Training and field education significantly influence employee competence, providing a cost-effective method to develop and enhance employee capabilities, thereby reducing expenses and improving job proficiency (Wahyuningsih, 2019).

PT. Kereta Api Indonesia (Persero), a state-owned enterprise in the railway transportation sector, aims to be the leading provider of railway services, focusing on passenger service and stakeholder satisfaction. The company's mission is to deliver high-value services and ensure environmental sustainability based on four main pillars: Safety, Timeliness, Service, and Comfort. The company's evolution from PJKA to PERUMKA and eventually to PT. Kereta Api Indonesia (Persero) has led to updated visions and missions, emphasizing values such as Trustworthiness, Competence, Harmony, Loyalty, Adaptability, and Collaboration. These values underscore the importance of skilled HR in achieving company goals and improving performance.

Data from PT. Kereta Api Indonesia (Persero) Divre III Palembang reveals the current educational background of its employees, highlighting a significant number of graduates. Despite this, formal education alone does not always equate to high-quality outcomes. The company's training data from 2021 to 2023 shows that training targets were not fully met, partly

due to a shortage of skilled trainers and aging instructors. This gap has resulted in new employees lacking the practical skills needed for their roles, affecting overall performance and adherence to company values. This highlights the need for targeted research on the impact of education and field training on employee competence.

Given these observations, this study aims to explore the influence of education and field training on employee competence at PT. Kereta Api Indonesia (Persero) Divre III Palembang. The research will examine how educational attainment and training programs contribute to improving employee skills and performance, thereby providing insights into enhancing HR management practices within the organization.

2. Literature Review

2.1 Education

According to Hidayat & Abdillah (2019), there are ten key characteristics of education. Firstly, holistic education encompasses intellectual, emotional, social, and spiritual development, addressing the whole student rather than just cognitive aspects. Education should also be relevant to real-life situations, bridging classroom learning with everyday experiences. Empowerment is crucial, as it enables students to actively participate in their learning, fostering confidence and success. Inclusivity ensures that educational environments accommodate diverse learners, making them feel valued and accepted. Character development goes beyond knowledge transfer to instill strong moral values and ethics. According to Andriani (2024), Collaborative education promotes interaction among students, teachers, parents, and the community. Skill-based education focuses on essential 21st-century skills, such as critical thinking, creativity, communication, and collaboration. Effective technology integration enhances accessibility and quality in learning processes. A critical approach to knowledge encourages students to question, analyze, and intelligently synthesize information. Lastly, sustainability in education emphasizes environmental and social responsibility, preparing future generations to be responsible change-makers.

2.2 Field Training

Field training is a process designed to enhance employee competence, involving the organization of a series of activities systematically arranged to achieve specific objectives (Sutrisno & Sunarsi, 2019). It represents a systematic effort by organizations to transfer knowledge, values, attitudes, and skills to specialists in the field. This structured approach aims to strengthen and develop individual potential and facilitate human change (Iswan, 2021).

2.3 Competence

According to Wibowo in Asmara (2021), competence is defined as the ability to perform tasks or duties based on a combination of skills, knowledge, and work attitudes required for the job. Furthermore, Indonesian Labor Law No. 13 of 2003 outlines that work competence encompasses an individual's capabilities in terms of knowledge, skills, and work attitudes in alignment with established standards. In essence, competence can be understood as a fundamental characteristic or deeply ingrained aspect of one's personality, which manifests in predictable behaviors across various situations and job tasks. This inherent trait drives an individual to achieve excellence and strive to perform tasks effectively (Fauziah, 2023).

2.4 Framework of Thought

The goal of the framework of thought is to assist researchers in methodically outlining the

primary issues in their work. The following graphic represents this conceptual framework:

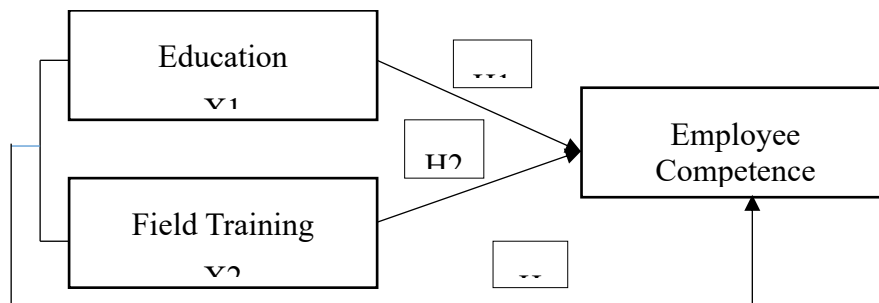


Figure 1. Framework of Thought

Source: Author data (2024)

Based on the conceptual framework shown in Figure 1, the present study endeavours to concentrate the discourse on the potential influence of service quality, trust, and satisfaction on customer loyalty. In the framework of thought, it is stated that the independent variable is Employee Competence (Y), while the dependent variables are Education (X1) and Field Training (X2). The following are the study's hypotheses:

2.5 Development Hypothesis

1. Hypothesis 1: Ho: Education has no effect on employee competence.
Ha: Education has an effect on employee competence.
2. Hypothesis 2: Ho: Field training has no effect on employee competence.
Ha: Field training has an effect on employee competence.
3. Hypothesis 3: Ho: There is no simultaneous effect of education and field training on employee competence.
Ha: There is a simultaneous effect of education and field training on employee competence.

3. Research Method

The research was conducted at PT Kereta Api Indonesia (Persero) Divre III Palembang, with the study focusing on the impact of education and field training on employee competence. The research employed an associative methodology, aiming to identify relationships or effects between the variables involved. Primary data was collected through direct observations, questionnaires, and field notes, while secondary data was gathered from relevant literature and previous studies. The population consisted of all 174 employees of PT Kereta Api Indonesia Divre III Palembang, and a sample size of 122 employees was selected using the Slovin formula for random sampling. Data collection methods included observations, where it was noted that the education levels among employees varied, with 42 employees having completed high school, 117 holding bachelor's degrees, and 15 with master's degrees. Questionnaires were distributed via Google Forms to collect employees' perspectives on education, field training, and competence. A literature review was also conducted to support the analysis, focusing on previous research related to the key variables of the study. The data were analyzed using

quantitative methods, including multiple regression analysis, to examine the factors influencing employee competence. Various statistical tests were employed to ensure the validity and reliability of the data, including validity tests, reliability tests using Cronbach's alpha, and classical assumption tests such as normality, multicollinearity, and heteroscedasticity tests. Hypothesis testing was conducted using t-tests and F-tests to evaluate the significance of the relationship between variables. Providing insights into how education and field training influence employee competence at PT Kereta Api Indonesia (Persero) Divre III Palembang.

4. Findings and Discussions

The paragraph afterward explains the study's conclusions and analysis. General respondent data, validity, reliability, normality, multicollinearity tests, regression analysis, and ANOVA test findings, including t-test- and f-test results, are all included in this conclusion.

4.1 Findings

4.1.1 General Information of Respondents

The demographic data presented in Table 1 provides a detailed profile of the employees, covering aspects such as gender, age, education level, and length of employment. A thorough understanding of this data helps contextualize the research sample and its relevance to the study's objectives. Firstly, the gender distribution reveals a slight majority of male employees at 53.3%, compared to 46.7% of female employees. This near balance suggests a relatively equitable gender representation within the office, which is crucial as diverse gender perspectives can influence the dynamics of training and competency development. Such diversity can enrich the training environment and potentially enhance the effectiveness of competency-building programs.

Table 1. Respondents Information

Variables	Unit	Percentage (%)
Gender	Male	53.3
	Female	46.7
Age	20-30 years	20.5
	31-40 years	50.0
	41-50 years	23.8
	>50 years	5.7
Education	Primary School	32.8
	Bachelor	61.5
	Master	5.7
Length of Employment	1-5 years	86.21
	6-10 years	21.3
	11-15 years	45.9
	>15 years	28.7

Source: Survey Author (2024)

Secondly, the analysis based on age shows that the largest age group is between 31-40 years, representing 50% of the employees. The 41-50 age group also has a significant proportion, accounting for 23.8%. Meanwhile, only 20.5% of the employees are in the 20-30 age range, and those over 50 years old accounted for just 5.7%. This data reflects that the majority of employees are in a mature career phase, likely with considerable work experience, yet still

within a productive age range that allows for continued learning and development through training.

Lastly, the data on length of employment reveals that a significant portion of employees have substantial experience, with 45.9% having worked for 11-15 years and 28.7% exceeding 15 years. This extensive tenure indicates a deep familiarity with the company and industry, likely facilitating the absorption and application of new knowledge gained through training. Additionally, 21.3% of employees with 6-10 years of service represent those in a mid-career phase, continuing to refine their skills and competencies. Overall, this diverse and experienced workforce provides a solid foundation for the development and implementation of effective education and training programs, crucial for enhancing employee competency at Kereta Api Indonesia (Persero) Divre III Palembang.

4.1.2 Validity Test

The below data in Table 2 presents the Pearson correlation coefficients for three variables: Education (X1), Field Training (X2), and Competence (Y), with each variable's sub-questions showing their correlation against a critical r-value of 0.178.

Table 2. Validity Test Result

Variable	Questions	Pearson Correlation	r table	Description
Education (X1)	My job in this company is in accordance with my educational background.	0.932	0.178	Valid
	The education that I have achieved makes it easier for me to understand the work given by the company.	0.944	0.178	Valid
	My educational background makes me able to understand the job.	0.934	0.178	Valid
	The company provides jobs according to the educational major taken.	0.923	0.178	Valid
Field Training (X2)	The type of training I took helped in completing the work.	0.679	0.178	Valid
	The type of training I received was relevant to the job.	0.642	0.178	Valid
	My skills increased with job training.	0.645	0.178	Valid
	The training I attended can increase my knowledge and skills in carrying out my work.	0.700	0.178	Valid
	The training I attended was in accordance with the competency requirements	0.565	0.178	Valid

	of my position.			
	The training materials are easy to understand and apply to the job.	0.510	0.178	Valid
Competence (Y)	I can think creatively in carrying out work.	0,559	0.178	Valid
	I am able to solve problems that occur at work.	0,619	0.178	Valid
	The knowledge I have affects my level of success in my work.	0,706	0.178	Valid
	I have sufficient knowledge to carry out the work.	0,581	0.178	Valid
	I am able to work in a team.	0,596	0.178	Valid
	I have the ability to communicate well with coworkers.	0,438	0.178	Valid
	I am a smart person in working.	0,488	0.178	Valid
	I am able to choose the right action.	0,544	0.178	Valid
	When deciding something, I am not easily influenced by anything.	0,456	0.178	Valid
	I can comply with guidelines and SOPs (standard operating procedures) in carrying out work.	0,468	0.178	Valid

For the Education variable, all sub-questions (X1.1 to X1.4) have high Pearson correlation coefficients, ranging from 0.923 to 0.944, indicating a strong and valid relationship between the sub-questions and the Education variable, well above the critical value. This suggests that the items used to measure Education are highly consistent and significantly related.

In the Field Training variable, sub-questions X2.1 through X2.6 show moderate to strong correlations, with coefficients ranging from 0.510 to 0.700. These values indicate that each aspect of Field Training is positively related to the variable itself, with all coefficients surpassing the critical r-value of 0.178, affirming the validity of these measurements. The moderate correlation strengths imply that while there is a positive relationship between field training aspects and the variable, the strength of the relationship varies across different sub-questions.

The Competence variable's sub-questions (Y.1 to Y.10) exhibit a range of Pearson correlation coefficients from 0.438 to 0.706, all of which are above the critical r-value of 0.178. This indicates that the sub-questions effectively measure different dimensions of competence, with varying degrees of strength. The highest correlations, such as Y.3 (0.706), show a robust relationship with the Competence variable, while lower correlations, such as Y.6 (0.438), still validate the measure but indicate a weaker relationship. Overall, the data supports the validity

of the constructs being measured, as all correlations are above the critical threshold, confirming the reliability of the measurement instruments used.

4.1.3 Reliability Test

Table 3 outlines Cronbach's Alpha values for three variables in a study examining the impact of education and field training on employee competency at PT. Kereta Api Indonesia (Persero) in the Divre III Palembang Office. Cronbach's Alpha is a critical indicator of reliability, measuring the consistency of items within a survey or questionnaire. The values range from 0 to 1, with higher values indicating better internal consistency among the items.

Table 3. Reliability Test of Variables X1, X2, and X3

Variable	Cronbach's Alpha	Standard	Description
Education (X1)	0,951	0,6	reliable
Field Training (X2)	0,685	0,6	reliable
Competence (Y)	0,723	0,6	reliable

For the Education variable (X1), the Cronbach's Alpha is 0.951, which is exceptionally high. This indicates that the measurement instrument for education has excellent internal consistency, meaning that the questions used to assess employees' education levels are very consistent in the responses they elicit. This high level of reliability is crucial for ensuring that the results related to the impact of education on employee competency are both dependable and valid.

The Field Training variable (X2) has a Cronbach's Alpha of 0.685, which, while lower than that of Education, still reflects an acceptable level of reliability. This suggests that the field training measurement instrument is consistent, though there may be some variability in responses. Meanwhile, the Competency variable (Y) shows Cronbach's Alpha of 0.723, indicating a moderate level of reliability. Although not as high as the Education variable, this value still supports the reliability of the competency data. Overall, these values affirm the validity of the instruments used in the study, providing a solid foundation for further analysis.

4.1.4 Normality Test Result

Table 4 presents the results of the normality test using the One-Sample Kolmogorov-Smirnov Test for unstandardized residuals in a study on the impact of education and field training on employee competency at PT. Kereta Api Indonesia (Persero). This normality test is essential for verifying whether the residuals follow a normal distribution, which is a fundamental assumption in many statistical analyses. The sample size (N) used for this test is 122, indicating that the analysis was conducted on 122 residuals from the model. The calculated normal parameters show that the mean of the residuals is 0, which is expected when the model fits well. The standard deviation of the residuals is 0.7453, reflecting the variability of the residuals around the mean, with a lower standard deviation indicating more consistency.

Table 4. Normality and Multi-collinearity Test Results

		Unstandardized Residual
N		122
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	.74529551
Most Extreme Differences	Absolute	.106

	Positive	.106
	Negative	-.100
Test Statistic		.100
Asymp. Sig. (2-tailed)		.131 ^{c,d}

Note: a. Test distribution is Normal. b. Calculated from data.
c. Lilliefors Significance Correction. d. This is a lower bound of the true significance.

The next section of the table details the Kolmogorov-Smirnov test results, highlighting the most extreme differences between the cumulative distribution of the residuals and the theoretical normal distribution. The maximum absolute difference is 0.106, with positive and negative differences of 0.106 and -0.100, respectively. The Kolmogorov-Smirnov Z value is 1.167, which measures how much the residuals deviate from a normal distribution. This value provides insight into how much the residual distribution diverges from normality.

Finally, the Asymp. Sig. (2-tailed) value is 0.131, representing the probability associated with the test results. In the context of normality testing, this value helps determine the statistical significance of the residuals' deviation from a normal distribution. Since the p-value (0.131) is greater than the commonly used significance level of 0.05, the study fails to reject the null hypothesis that the residuals follow a normal distribution. This indicates that the residuals do not significantly deviate from normality, supporting the assumption that the model used in the study meets the normality requirement, allowing the research to proceed.

The statement below describes the visual characteristics of a normal distribution as represented in a histogram in Figure 2 where the data forms a symmetric bell-shaped curve. In a normal distribution, data points are evenly spread around the mean, with most values concentrated in the center and fewer values appearing as they move away from the mean in either direction. This bell-shaped curve indicates that the mean, median, and mode are aligned, and there is no skewness, meaning the distribution is balanced and symmetrical. This normal distribution is crucial in statistics because many hypothesis tests and statistical inferences are based on the assumption that data follows this pattern. When a histogram displays a perfect bell curve, it suggests that the data adheres to a normal distribution, allowing for effective use of the mean and standard deviation in further analysis. Additionally, normality in the data distribution simplifies the application of statistical models, such as linear regression, which assumes a normal distribution of residuals for more accurate results.

The statement in Figure 3 discusses the interpretation of normality testing through visual tools like the Q-Q (Quantile-Quantile) plot, which is used to determine if data follows a normal distribution. In a Q-Q plot, data points are plotted against the expected theoretical values if the data were normally distributed. If the data points closely align with the diagonal line on the plot, it suggests that the data approximates a normal distribution, as the observed values match the expected ones. The diagonal line represents the ideal normal distribution, and a close alignment of data points with this line indicates no significant deviations from normality.

This alignment suggests that the data does not exhibit significant skewness or kurtosis, meaning the distribution is symmetric and adheres to a normal pattern. Ensuring normality is crucial for many statistical tests, such as regression analysis or ANOVA, which assume that the data is normally distributed. By confirming that the data meets the normality assumption, the validity and reliability of the statistical analysis are enhanced, leading to more accurate and dependable conclusions.

Figure 2. Histogram Regression Standardized Residual

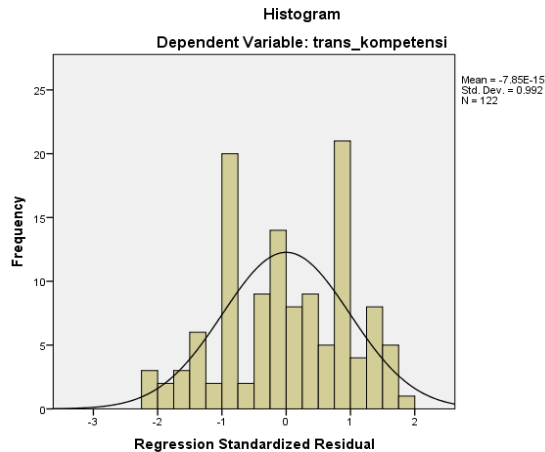
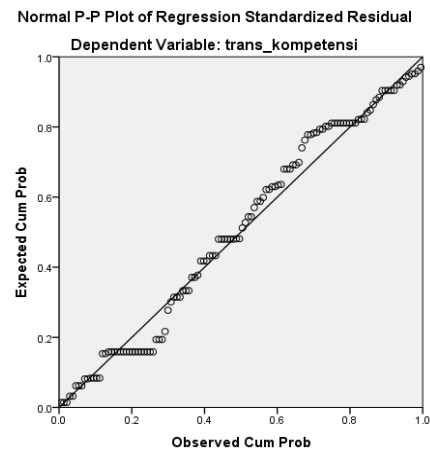


Figure 3. Normal P-Plot of Regression Standardized Residual Dependent Variable



The results of the multicollinearity test presented in Table 5 are crucial in ensuring that there is no excessively high linear relationship between the independent variables, specifically the education and field training variables, in the regression model. High multicollinearity can distort regression analysis results, leading to unstable regression coefficients and inaccurate model interpretation. In this context, two key indicators which are Tolerance and Variance Inflation Factor (VIF) are used to assess multicollinearity. The Tolerance values for both variables are 0.947, close to 1, indicating minimal correlation between the independent variables. Similarly, the VIF values for both variables are 1.056, well below the threshold of 10, confirming the absence of multicollinearity.

Table 5. Multi-Collinearity Test Results

Variable	Standardized Coefficients	<i>Tolerance</i>	<i>VIF</i>
Education (X1)	.327	.947	1.056
Field Training (X2)	.268	.947	1.056

The standardized beta coefficients indicate the extent of the influence each independent variable has on the dependent variable, in this case, employee competence. The beta value for the education variable (0.327) shows that education has a positive impact on improving employee competence, and the beta value for field training (0.268) also indicates that field training has a positive impact on improving employee competence.

Overall, the multicollinearity test results confirm that both education and field training can be used in the regression model without concerns about multicollinearity. This ensures that the regression analysis involving these variables will yield stable and reliable results in evaluating their impact on employee competency at PT. Kereta Api Indonesia (Persero) at the Divre III Palembang Office. These findings provide a solid foundation for further analysis, such as significance testing or multiple regression analysis, to gain a deeper understanding of how education and training influence employee competency.

4.1.5 Regression Analysis Tests Result

The data in Table 6 below presents the results of a multiple linear regression test conducted to assess the influence of independent variables, namely Education and Field Training, on the dependent variable, Employee Competence at PT. Kereta Api Indonesia (Persero) at the Divre III Palembang Office. This test aims to determine the extent to which education and field training impact the improvement of employee competence within the organization.

Table 6. Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.541	1.444		4.529	.000
Education (X1)	1.295	.330	.327	3.924	.000
Field Training (X2)	.286	.089	.268	3.225	.002

Note: a. Dependent Variable: TY

Based on the regression results, the constant (intercept) value of 6.541 indicates the baseline level of employee competence when the education and field training variables are zero. The coefficient for Education is 1.295, with a T-value of 3.924 and a significance level of 0.000. This means that education has a positive and significant influence on employee competence. Each one-unit increase in education will increase employee competence by 1.295 units, indicating that education is an important factor in the development of competence. Furthermore, the Field Training variable also shows a positive impact on employee competence, with a coefficient of 0.286, a T-value of 3.225, and a significance level of 0.002.

The T-test results show that the Education variable has a T-value of 3.924 with a significance level of 0.000. With this level of significance, it can be concluded that we reject the Null Hypothesis (H_0) and accept the Alternative Hypothesis (H_a). This means that there is a significant influence of education on employee competence. The unstandardized coefficient of 1.295 indicates that an increase in education positively contributes to the improvement of employee competence, suggesting that the education received by employees directly impacts their competence.

For the Field Training variable, the T-value obtained is 3.225 with a significance level of 0.002. This result also indicates that we reject the Null Hypothesis (H_0) and accept the Alternative Hypothesis (H_a), which means there is a significant influence of field training on employee competence. The unstandardized coefficient of 0.286 shows that field training has a positive impact on employee competence, although its effect is relatively smaller compared to education. These results emphasize the importance of the roles of education and field training in enhancing employee competence at PT. Kereta Api Indonesia (Persero).

4.1.6 ANOVA Test Results

The ANOVA Table 7 below presents the results of the simultaneous F-test to assess the combined effect of education and field training variables on employee competency. From the table, the calculated F-value is 16.678 with a significance value (Sig.) of 0.000. This indicates that the regression model used is statistically significant, meaning that there is a joint or simultaneous influence of the education and field training variables on employee competency. The high F-value suggests that the variability in the data explained by the regression model 18.839 is substantially greater than the variability unexplained by the model or error 67.211. Thus, this provides strong evidence that the factors of education and field training together

influence employee competency.

Table 7. ANOVAa Test Results

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.839	2	9.420	16.678	.000 ^b
	Residual	67.211	119	.565		
	Total	86.051	121			

a. Dependent Variable: TY

b. Predictors: (Constant), Employee Commitment, HR Competence

In the simultaneous F-test, the null hypothesis (H_0) states that there is no simultaneous influence of the independent variables (education and field training) on the dependent variable (employee competency). Conversely, the alternative hypothesis (H_a) asserts that independent variables have a simultaneous influence on the dependent variable. Based on the F-test results, where the significance value is 0.000 (less than 0.05), we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_a). This means that education and field training have a significant simultaneous effect on employee competency.

In conclusion, these results indicate that the education and field training programs implemented by the company play an important role in enhancing employee competency. The significance of these results strengthens the argument that efforts to improve employee education and training can have a significant positive impact on their ability to perform work tasks. Therefore, company management should continue to develop and enhance more structured and relevant training and education programs to ensure continuous improvement in employee competency.

4.2 Discussions

After conducting several tests and data analyses and linking theories and previous research to outline the discussion, the researcher can obtain a scientific overview of the discussion.

4.2.1 The Influence of Education on Competence

The results obtained from Hypothesis 1, where H_0 states that there is no influence of education on employee competence, and H_a states that there is an influence of education on employee competence, show that the regression test results indicate that the coefficient of the education variable is 1.295 with a significance level of 0.000. Since this Sig. value is less than 0.05, the researcher rejects H_0 and accepts H_a . This is consistent with previous research by Asmara (2021), which provided similar results, showing that education has an impact on employee competence, with a value of 5.637 and a significance level of 0.000. It can be said that in the organizational commitment variable, the t-value is greater than the t-table or $5.637 > 2.042$, accompanied by a significance value less than 0.05 or $0.000 < 0.05$.

4.2.2 The Influence of Field Training on Competence

The data obtained from Hypothesis 2, where H_0 states that there is no influence of field training on employee competence, and H_a states that there is an influence of field training on employee competence, show that the regression results indicate that the coefficient for field training is 0.286 with a significance level of 0.002. The Sig. value, which is also less than 0.05, indicates that the researcher rejects H_0 and accepts H_a . This means there is a positive and significant influence of field training on employee competence. This is consistent with previous research by Barus et al., (2020) and Zuhendri & Henmaidi (2021), where the training variable partially

had a significant effect on the competence of agricultural extension workers, with a significance value of 0.000 or ($0.000 < 0.05$).

4.2.3 The Influence of Education and Field Training on Competence

For Hypothesis 3, the results show that H_0 states that there is no simultaneous influence of education and field training on employee competence, and H_a states that there is a simultaneous influence of education and field training on employee competence. The F-test results show that the calculated F-value is 16.678 with a significance level of 0.000. Since this Sig. value is less than 0.05, we reject H_0 and accept H_a . These results indicate that, simultaneously, education and field training have a significant influence on employee competence. These findings are consistent with research conducted by Barus et al., (2020), which indicates that the education and training variables can explain 49.1% of employee competence, while the remaining 49.1% can be explained by other factors not examined in this study. The ability of the dependent variable to explain the independent variables in this study is 21.9%, with 78.1% explained by other variables not examined in this study, such as work experience, personality characteristics, organizational culture, intellectual ability, and so on. The relationship interval in this study is categorized as low, with a range of 0.200 - 0.399.

5. Conclusion

To sum up, this study shows that both education and field training have a significant influence on employee competence, both individually and simultaneously. However, the direction of the influence of education differs from that of field training, indicating the complexity of how education and field training impact employee competence at PT. Kereta Api Indonesia (Persero) at the Divre III Palembang Office. This research is intended to serve as a reference for future studies, with the hope that more high-quality research can be presented. The following are some recommendations for the company:

1. The company should consider further evaluating job assignments, especially for employees who feel their work does not align with their educational background. By identifying and adjusting tasks to better match employees' education, the company can enhance job satisfaction and improve employee performance.
2. It is suggested that PT. Kereta Api Indonesia (Persero) at the Divre III Palembang Office further adjusts or differentiates the training materials to better meet the competency needs of each position. One approach could be conducting a more in-depth and specific training needs analysis for each position, ensuring the materials are more relevant and have a more significant impact on improving employee competence.
3. Strengthen training programs that focus on developing critical thinking and independent problem-solving skills. This could include simulations of complex situations that require quick and accurate decision-making, as well as providing greater recognition and rewards for the initiative and intelligence demonstrated by employees in the workplace. By doing so, employees will feel more valued and encouraged to continuously develop their competencies in various aspects of their work.
4. For future research, it is recommended to include additional variables that can provide a more comprehensive understanding of the factors influencing employee competence. Variables such as work experience, personality characteristics, organizational culture, and intellectual ability should be considered in the analysis.

References (APA Style)

- Andriani, T. S. (2024). *Hubungan Diklat dengan Kinerja Guru MI Pembangunan UIN Jakarta*. Universitas Islam Negeri Syarif Hidayatullah.
- Asmara, A. (2021). Pengaruh Pendidikan dan Pelatihan terhadap Peningkatan Kompetensi Karyawan pada Kantor Pusat Credit Union Semandang Jaya di Balay Semandang Kecamatan Simpang Hulu Kabupaten Ketapang. *Bisma*, 5(10), 2150–2160.
- Astari, A. R. N., Khairiah, & Mindani. (2022). Peran Manajemen Sumber Daya Manusia dalam Proses Implementasi Kompetensi Pedagogik Dosen pada Pembelajaran Tatap Muka Terbatas di Fakultas Tarbiyah dan Tadris UIN Fatmawati Sukarno Bengkulu. In *P*.
- Barus, H. B., Tarigan, U., & Angelia, N. (2020). The Effect of Education and Training on Employee Competence at the Secretariat of the Office of Highways and Construction of North Sumatra Province. *Jurnal Ilmu Pemerintahan, Administrasi Publik, Ilmu Komunikasi (JIPIKOM)*, 2(2), 79–85. <http://jurnal mahasiswa.uma.ac.id/index.php/jipikom>
- Bustanto, T., Abbas, B., & Asraf. (2024). Analisis Pengaruh Pendidikan Dan Pelatihan Terhadap Peningkatan Kemampuan Kerja Pegawai Pada Badan Pendapatan Daerah Kabupaten Kolaka. *YUME : Journal of Management*, 7(1), 525–532.
- Fauziah, A. (2023). Pengaruh Pendidikan Karyawan dan Pelatihan Karyawan terhadap Kualitas Kerja Karyawan (Studi Kasus Karyawan PT. Anugerah Mandiri Sejahtera). *Journal of Research and Multidisciplinary*, 02(02), 200–213.
- Gunawan, & Hasanah, N. U. (2024). Pengaruh Tingkat Pendidikan dan Kompetensi Pegawai dalam Meningkatkan Pelayanan di RSAU dr. Norman T. Lubis Lanud Sulaiman. *Manajemen: Jurnal Ekonomi USI*, 7(1), 131–142.
- Handoko, B., Azhmy, M. F., & Nabila, S. (2021). Kesesuaian Penempatan Kerja dan Kompetensi terhadap Prestasi Kerja yang Dimoderasi oleh Tingkat Pendidikan pada Badan Pengelola Pajak dan Retribusi Daerah Kota Medan. *Target : Jurnal Manajemen Dan Bisnis*, 3(1), 25–36. <https://doi.org/10.30812/target.v3i1.1046>
- Hidayat, R., & Abdillah. (2019). *Ilmu Pendidikan Konsep, Teori dan Aplikasinya* (C. Wijaya & Amiruddin, Eds.). Lembaga Peduli Pengembangan Pendidikan Indonesia (LPPPI).
- Iswan. (2021). *Manajemen Pendidikan dan Pelatihan* (R. Mirsawati, Ed.; 1st ed., Vol. 1).
- Nasution, H., Elvina, & Halim, A. (2023). The Influence Of Individual Characteristics, Competence, Motivation And Work Stress On Employee Performance At The Public Works And Spatial Planning Office Of Labuhanbatu Regency. *Management Studies and Entrepreneurship Journal*, 4(4), 4545–4565. <http://journal.yrpiiku.com/index.php/msej>
- Pamungkas, I. B., Zaman, M. B., & Wibowo, W. A. (2022). Pengaruh Pendidikan dan Pelatihan terhadap Kinerja: Tinjauan Literatur. *Scientific Journal of Reflection: Economic, Accounting, Management and Business*, 5(4), 903–913.
- Sutrisno, & Sunarsi, D. (2019). The Effect of Work Motivation and Discipline on Employee Productivity at PT. Anugerah Agung in Jakarta. *Jurnal Administrare*:

Jurnal Pemikiran Ilmiah Dan Pendidikan Administrasi Perkantoran, 6(2), 187–196. <http://ojs.unm.ac.id/index.php/administrare/index>

Wahyuningsih, S. (2019). Pengaruh Pelatihan dalam Meningkatkan Produktivitas Kerja Karyawan. *Jurnal Warta Edisi*: 60.

Wakila, Y. F. (2021). Konsep dan Fungsi Manajemen Pendidikan. *Equivalent: Jurnal Ilmiah Sosial Teknik*, 3(1), 49–62.

Zulhendri, A., & Henmaidi. (2021). Pengaruh Pendidikan Dan Pelatihan Terhadap Kompetensi Penyuluh Pertanian Di Kabupaten Pasaman. *Jurnal Niara*, 14(2), 35–43.

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