THE INFLUENCE OF EDUCATION LEVEL, INFRASTRUCTURE AND WORK SKILLS ON EMPLOYEE PERFORMANCE AT THE EDUCATION AND CULTURE OFFICE OF KUPANG REGENCY

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Abstract

This study examines the influence of education level, work infrastructure, and job-related skills on employee performance within a local public education institution in Indonesia. In the context of public sector reform, improving employee performance remains a critical challenge, particularly in education governance at the local level. This research adopts a quantitative approach, collecting data through structured questionnaires administered to 61 employees of the Kupang Regency Education and Culture Office. Data were analyzed using multiple linear regression to assess both partial and simultaneous effects of the independent variables on employee performance. The findings indicate that education level has a positive and statistically significant effect on employee performance, suggesting that higher educational attainment contributes to better work outcomes. Adequate infrastructure also plays a significant role in enhancing performance by supporting more efficient and effective work processes. Furthermore, work skills emerge as a crucial determinant of employee productivity and effectiveness. Simultaneous testing confirms that education level, infrastructure, and work skills collectively explain a substantial proportion of variations in employee performance. This study contributes to the literature on public sector human resource management by highlighting the combined importance of human capital and institutional support in shaping employee performance. The findings suggest that local governments should prioritize continuous education, infrastructure development, and skill enhancement programs to improve organizational performance in the public education sector.

Keywords: employee performance; education level; work skills; infrastructure; public sector management

INTRODUCTION

Improving employee performance within public sector institutions remains a persistent challenge, particularly in local government agencies responsible for education governance. In Indonesia, the constitutional mandate to "educate the life of the nation" places public education institutions at the core of national development. However, the effectiveness of this mandate is highly dependent on the performance of civil servants who design, implement, and supervise educational policies at the regional level. Despite ongoing reforms in public administration, disparities in employee performance continue to be observed across local education offices. Prior studies suggest that employee performance in the public sector is closely linked to human capital attributes and organizational support systems, including education level, availability of work infrastructure, and job-related skills. Nevertheless, empirical evidence from local education institutions, particularly in eastern Indonesia, remains limited and fragmented.(Edy, 2016)

Education level is widely regarded as a key component of human capital that influences employees' cognitive capacity, problem-solving ability, and adaptability to organizational demands. Higher educational attainment is generally associated with improved work performance; however, several studies highlight that education does not automatically translate into higher performance when it is poorly aligned with job responsibilities, lacks institutional support, or is not complemented by continuous skill development. This contradiction indicates that education level alone may be insufficient to explain variations in employee performance without considering organizational context. In addition to human capital, work infrastructure plays a critical role in shaping employee performance. Adequate facilities, such as office equipment, information technology, transportation, and physical workspaces, are essential to support efficiency and productivity. In public sector institutions, inadequate infrastructure often results in delays,

inefficiencies, and reduced employee motivation, ultimately undermining organizational performance. Empirical studies consistently show that deficiencies in work facilities negatively affect task completion and service quality.(Adhari, 2021) Work skills represent another crucial dimension influencing employee performance, particularly in public organizations where administrative competence and technical proficiency are essential. Skills are developed through education, training, and work experience, and their effectiveness is strongly influenced by appropriate job placement and institutional support. Mismatches between employees' educational background and assigned positions may weaken skill utilization and reduce overall performance, even when employees possess adequate formal qualifications.

These challenges are evident in the Education and Culture Office of Kupang Regency.(NuzlehaHY, 2021) Preliminary observations and institutional data indicate persistent issues related to education level disparities, limited participation in non-formal education and training, inadequate work infrastructure, and misalignment between job positions and employees' educational backgrounds. For instance, institutional records show that participation in non-formal education and training programs remains limited and unevenly distributed among employees, while the number of employees holding postgraduate degrees has declined over recent years. This situation raises concerns regarding the sustainability of human capital development within the institution. Similarly, infrastructure assessment reveals significant gaps between existing facilities and actual operational needs, including shortages of functional office equipment, information technology resources, and official vehicles.

Table 1; Quantity, Condition, and Infrastructure Needs of the Education and Culture Office of Kupang Regency

No.	Item	Quantity	Unit	Condition (Good)	Condition (Damaged)	Required
1	Air Conditioner (AC)	8	Unit	5	3	1
2	Fan	12	Unit	7	5	6
3	Office Chair	130	Unit	108	22	36
4	Office Desk	137	Unit	114	23	30
5	LCD Monitor	3	Unit	2	1	4
6	Projector	4	Unit	2	2	4
7	Speaker	6	Unit	4	2	4
8	Hall / Auditorium	2	Unit	2	–	1
9	Toilet	8	Unit	6	2	3
10	Smoking Area	1	Unit	–	–	1
11	Computer	14	Unit	6	8	10
12	Photocopier Machine	3	Unit	2	1	2
13	Printer	9	Unit	4	5	7
14	Laptop	24	Unit	18	6	10
15	Official Car	12	Unit	8	4	6
16	Official Motorcycle	14	Unit	8	6	10
17	Public Facilities	1	Unit	1	–	1
18	Electrical Network	2	Unit	2	–	–
19	Water Supply Network	2	Unit	2	–	–

Source: Education and Culture Office of Kupang Regency, 2025

Such limitations potentially hinder employees' ability to perform their duties effectively.(S. Pakpahan, 2019) Furthermore, evidence of job–education mismatch is observed in several strategic positions occupied by employees whose educational backgrounds are not aligned with their functional responsibilities, suggesting inefficiencies in human resource placement and skill utilization.

Table 2; Employee Positions and Educational Backgrounds at the Education and Culture Office of Kupang Regency

No.	Name	Position	Educational Background
1	Dorkas Peta Nuki	Head of General and Personnel Subdivision	Senior High School
2	Soleman D. Y. Hamaratu	Policy Technical Analyst	Senior High School
3	Oktovianus Nenometa	Administrative Officer	Senior High School
4	Jerniwati	Junior Analyst for Central and Regional Finance	Associate Degree (D3)
5	Yane A. Nitti	Senior High School Supervisor	Senior High School
6	Paulus Mbeo	Senior High School Supervisor	Senior High School
7	Marthen D. Baun	Senior High School Supervisor	Senior High School
8	Jarid Hanok Pian	Senior High School Supervisor	Senior High School
9	Welly Yuldhani Sine	Junior Cultural Affairs Officer	Senior High School
10	Abdon S. Pada	Junior Cultural Affairs Officer	Bachelor's Degree in Law
11	Dani Yanti Ratu Kore	Head of Basic Education and Educational Personnel Section	Bachelor's Degree in Political Science
12	Naomi Belandina Liu	Head of Personnel Development Division	Associate Degree (D3)

Source: Education and Culture Office of Kupang Regency, 2025

Performance-related indicators further reinforce these concerns. Attendance records demonstrate recurring patterns of absenteeism throughout the year, which may reflect broader issues of work discipline, motivation, and organizational control. Previous studies emphasize that absenteeism and weak work discipline directly affect employee performance, particularly in public institutions where service continuity is critical.(Irawan et al., 2015) Although numerous studies have examined the relationship between education level, infrastructure, skills, and performance, most focus on private organizations or central government institutions. Empirical studies that integrate these variables within the context of local education offices remain scarce. Moreover, limited attention has been given to regions outside major urban centers, resulting in an incomplete understanding of public sector performance dynamics in less-developed administrative areas. Therefore, this study aims to examine the influence of education level, work infrastructure, and job-related skills on employee performance at the Education and Culture Office of Kupang Regency. By integrating human capital and organizational support perspectives, this research contributes to the literature on public sector human resource management and provides empirical evidence to support policy interventions aimed at improving performance in local education institutions.(E. S. Pakpahan, 2014) Accordingly, this study aims to examine the effects of education level, work infrastructure, and work skills on employee performance within the Education and Culture Office of Kupang Regency. By integrating human capital and organizational support perspectives, this research addresses empirical gaps in the literature on public sector performance at the local government level, particularly in underexplored regional contexts. The findings are expected to contribute both theoretically, by enriching discussions on determinants of public employee performance, and practically, by providing evidence-based insights for policymakers in designing human resource development and infrastructure improvement strategies to enhance institutional performance in the public education sector.

METHOD

This study employed a quantitative research design to examine the effects of education level, work infrastructure, and work skills on employee performance. The research was conducted at the Education and Culture Office of Kupang Regency, which was selected as the research site due to its strategic role in managing and

implementing local education policies.(Creswell, 2009) The population of this study consisted of all civil servants working at the Education and Culture Office of Kupang Regency, totaling 61 employees, comprising 28 male and 33 female employees. Given the relatively small population size, this study applied a total sampling technique, in which all members of the population were included as research respondents. This approach ensured comprehensive representation and minimized sampling bias. Data were collected from both primary and secondary sources. Primary data were obtained through structured questionnaires distributed to all respondents to measure education level, work infrastructure, work skills, and employee performance. Secondary data were collected from institutional documents, including employee records and administrative reports, to support the empirical analysis. The collected data were analyzed using multiple linear regression to assess the partial and simultaneous effects of the independent variables on employee performance.(Sekaran & Bougie, 2016) Data analysis in this study was conducted using quantitative statistical methods with the assistance of IBM SPSS version 20. Prior to hypothesis testing, the research instrument was evaluated through validity and reliability tests to ensure measurement accuracy. Item validity was assessed using Pearson Product Moment correlation, with items considered valid if the correlation coefficient exceeded 0.30. Instrument reliability was tested using Cronbach's Alpha, where a coefficient value greater than 0.70 indicated satisfactory internal consistency.

To ensure the robustness of the regression model, classical assumption tests were conducted, including normality, multicollinearity, heteroskedasticity, and autocorrelation tests. Normality of residuals was examined using the Kolmogorov–Smirnov test, with a significance value above 0.05 indicating normal distribution. Multicollinearity was evaluated through tolerance and Variance Inflation Factor (VIF) values, where tolerance values above 0.10 and VIF values below 10 confirmed the absence of multicollinearity. Heteroskedasticity was assessed using scatterplot analysis to identify residual variance patterns, while autocorrelation was examined using the Durbin–Watson statistic and supported by a run test to ensure residual randomness. Hypothesis testing was performed using multiple linear regression analysis to examine the influence of education level, work infrastructure, and work skills on employee performance. Partial effects of each independent variable were tested using the t-test, while the simultaneous effect of all independent variables on the dependent variable was analyzed using the F-test, with a significance level set at 0.05. The coefficient of determination (R^2) was employed to measure the explanatory power of the regression model in explaining variations in employee performance.

RESULTS AND DISCUSSION
Overview of the Department of Education and Culture of Kupang Regency

The Department of Education and Culture of Kupang Regency is a regional government agency established in line with the formation of provincial and regency-level administrative structures in Indonesia, as stipulated under Law Number 64 of 1958 concerning the Establishment of Level I Regions in Bali, West Nusa Tenggara, and East Nusa Tenggara. As a local government apparatus, the department carries out its duties based on the principles of regional autonomy and delegated authority in the field of education. The department is responsible for administering educational affairs covering both formal and non-formal education, including the preservation and development of local cultural values as an integral part of human character building. In carrying out its mandate, the Department of Education and Culture of Kupang Regency plays a strategic role in ensuring the implementation of democratic, inclusive, and equitable educational services that accommodate the diverse needs of learners while encouraging community participation in educational development.(Budiyono et al., 2025)

In accordance with its institutional vision, the department aims to realize a devout, intelligent, skilled, and competitive society through high-quality, culturally grounded education supported by physical well-being. To achieve this vision, the department undertakes missions that include expanding access to quality education, improving educational facilities and infrastructure in line with national standards, developing local excellence and innovation, enhancing the professionalism and welfare of educators and education personnel, fostering youth creativity and sports development, preserving cultural diversity and traditional values, and strengthening governance in the management of education, culture, youth, and sports development. Furthermore, the Department of Education and Culture of Kupang Regency is tasked with formulating technical education policies, conducting strategic planning, managing and analyzing educational data, and delivering public services in the education sector.(Rajagukguk et al., 2025) Its functions also encompass supervision, evaluation, and reporting of educational programs, implementation of minimum service standards, management of administrative and secretariat affairs, guidance of technical implementation units, and oversight of educational institutions ranging from early childhood education to secondary and non-formal education. Through these roles, the department serves as a key institutional actor in advancing educational quality and cultural sustainability in Kupang Regency.

Respondent Characteristics

This study involved 61 respondents drawn from employees of the Department of Education and Culture of Kupang Regency. An analysis of respondent characteristics provides an important demographic overview that helps contextualize the research findings. In terms of age distribution, the majority of respondents were within the 29–39 year age group, accounting for 37.70% of the total sample. This indicates that most employees are in a productive and relatively experienced phase of their careers, which may positively influence work performance. The 18–28 year age group constituted 29.50% of respondents, reflecting the presence of younger employees who potentially contribute new perspectives and adaptability. Meanwhile, respondents aged 40–50 years (18.03%) and over 51 years (14.75%) represent more senior employees who are likely to possess substantial institutional knowledge and policy experience. This age composition suggests a balanced workforce that combines regeneration and experience, which can foster organizational synergy.(Pratama & Shalihah, 2024)

Regarding gender composition, the respondents were predominantly female, with 38 female employees compared to 23 male employees. This distribution reflects the gender structure commonly found in public sector institutions, particularly within the education sector, where female participation tends to be higher. Such a composition may influence organizational dynamics and work culture, although gender itself is not treated as a determinant variable in this study. In terms of educational background, most respondents held a bachelor's degree, representing 70.49% of the sample. This indicates a relatively high level of formal education among employees, supporting the assumption that human capital quality within the institution is adequate to meet administrative and technical demands. Respondents with diploma-level education accounted for 19.67%, while those with senior high school education (SMA/SMK) comprised 9.83% of the total. The dominance of undergraduate qualifications highlights the relevance of education level as a key explanatory variable in examining employee performance.

Finally, respondents' length of service shows that the largest proportion of employees had worked for 11–15 years (26.22%), followed by those with 6–10 years of service (22.95%) and 16–20 years (19.67%). Employees with shorter tenure of 1–5 years represented 18.03%, while those with more than 21 years of service accounted for 13.11%. This distribution suggests that most respondents possess substantial work experience, which is likely to contribute to skill mastery and organizational familiarity. Overall, the demographic profile of respondents reflects a workforce with adequate educational qualifications, diverse age representation, and considerable work experience, providing a solid basis for analyzing the effects of education level, infrastructure, and work skills on employee performance.

Validity Test

Instrument validity testing was conducted to ensure that each questionnaire item accurately measured the intended research variables. Validity was assessed using bivariate Pearson correlation between each item score and the total construct score, with a significance level of 5%. An item is considered valid if the calculated correlation coefficient (r-count) exceeds the critical value of the correlation table (r-table). With a sample size of 61 respondents, the degree of freedom was calculated as n – 2 = 59, resulting in an r-table value of 0.3274.(Mandang et al., 2017)

Table 3; Results of Validity Test

Variable	Item	r-count	r-table	Remark
Education Level (X1)	1	0.444	0.3274	Valid
	2	0.399	0.3274	Valid
	3	0.557	0.3274	Valid
	4	0.503	0.3274	Valid
	5	0.368	0.3274	Valid
Work Infrastructure (X2)	1	0.558	0.3274	Valid
	2	0.688	0.3274	Valid
	3	0.408	0.3274	Valid
	4	0.578	0.3274	Valid
	5	0.472	0.3274	Valid
Work Skills (X3)	1	0.454	0.3274	Valid
	2	0.337	0.3274	Valid
	3	0.510	0.3274	Valid
	4	0.602	0.3274	Valid
Employee Performance (Y)	1	0.582	0.3274	Valid
	2	0.618	0.3274	Valid
	3	0.390	0.3274	Valid
	4	0.434	0.3274	Valid
	5	0.471	0.3274	Valid

Source: Primary data processed using SPSS 31

Based on the validity test results presented in Table 4.5, all questionnaire items across the variables of education level (X1), work infrastructure (X2), work skills (X3), and employee performance (Y) demonstrate correlation coefficients exceeding the critical r-table value. This indicates that each item is statistically valid and capable of measuring the intended construct. Consequently, all measurement instruments employed in this study meet the validity requirements and are appropriate for further analysis using multiple linear regression.

Reliability Test

The reliability test was conducted to assess the consistency of the research instruments used in data collection. Reliability was measured using the Cronbach's Alpha coefficient, where a value equal to or greater than 0.60 indicates that the instrument is reliable. This threshold is commonly applied in social science research to confirm internal consistency among measurement items.(Ghozali, 2018)

Table 4; Results of Reliability Test

Variable	Cronbach's Alpha	Cronbach Value	Remark
X1 (Education Level)	0.610	0.60	Reliable
X2 (Work Infrastructure)	0.654	0.60	Reliable
X3 (Work Skills)	0.681	0.60	Reliable
Y (Employee Performance)	0.675	0.60	Reliable

Source: Primary data processed using SPSS 31

As presented in Table 4.6, all research variables demonstrate Cronbach's Alpha values exceeding the minimum reliability threshold of 0.60. These results indicate that the measurement instruments for education level (X1), work

infrastructure (X2), work skills (X3), and employee performance (Y) exhibit satisfactory internal consistency. Therefore, all instruments used in this study are considered reliable and suitable for subsequent regression analysis.

Autocorrelation Test

The autocorrelation test was conducted to examine whether the regression model exhibits correlation between residuals at period t and residuals at period t–1. The presence of autocorrelation may lead to biased regression estimates and weaken the validity of statistical inferences. In this study, autocorrelation was tested using the Durbin–Watson (DW) statistic.(Hasan, 1999)

Table 5; Results of Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	0.159	0.025	-0.026	1.450	2.536

Source: Primary data processed using SPSS 31

The Durbin–Watson value obtained from the regression model is 2.536. This value was compared with the Durbin–Watson critical values at a 5% significance level, with a sample size of 61 observations and four variables included in the model. Based on the Durbin–Watson table, the lower bound (dl) is 1.449 and the upper bound (du) is 1.690.

Table 6; Durbin–Watson Decision Criteria

d	dl	du	4 – dl	4 – du
2.536	1.449	1.690	2.309	2.550

According to the decision rule (du < d < 4 – du), the obtained Durbin–Watson value satisfies the condition 1.690 < 2.536 < 2.550. This indicates that the regression model does not suffer from autocorrelation. Therefore, the residuals are independent, and the regression model meets the autocorrelation assumption required for multiple linear regression analysis.

Heteroskedasticity Test

The heteroskedasticity test was conducted to examine whether the regression model exhibits unequal variance of residuals across observations. A well-specified regression model requires homoscedastic residuals, meaning that the variance of the error terms remains constant. In this study, heteroskedasticity was tested using the Spearman Rank Correlation Test by examining the relationship between each independent variable and the unstandardized residuals. If the significance value (Sig. 2-tailed) exceeds 0.05, the model is considered free from heteroskedasticity. (Hamdiyah et al., 2016)

Table 7; Results of Heteroskedasticity Test (Spearman Rank Correlation)

Variables	Education Level	Work Infrastructure	Work Skills	Unstandardized Residual
Education Level	1.000	0.075	0.035	0.051
Sig. (2-tailed)	–	0.564	0.787	0.697
Work Infrastructure	0.075	1.000	0.279*	0.025
Sig. (2-tailed)	0.564	–	0.030	0.847
Work Skills	0.035	0.279*	1.000	0.036
Sig. (2-tailed)	0.787	0.030	–	0.786
Unstandardized Residual	0.051	0.025	0.036	1.000
Sig. (2-tailed)	0.697	0.847	0.786	–

Source: Primary data processed using SPSS 31

Based on the results presented in Table 4.9, the correlation between each independent variable and the unstandardized residuals shows significance values greater than 0.05. These findings indicate that there is no systematic relationship between the residuals and the explanatory variables. Therefore, it can be concluded that the

regression model does not exhibit heteroskedasticity and satisfies the homoscedasticity assumption required for multiple linear regression analysis.

Multicollinearity Test

The multicollinearity test was conducted to examine whether the independent variables in the regression model were highly correlated with one another. Multicollinearity may distort regression estimates and weaken the reliability of coefficient interpretations. This study assessed multicollinearity using tolerance values and the Variance Inflation Factor (VIF). A regression model is considered free from multicollinearity if tolerance values exceed 0.10 and VIF values are below 10.

Table 8; Results of Multicollinearity Test

Variables	Education Level	Work Infrastructure	Work Skills	Unstandardized Residual
Education Level	1.000	0.075	0.035	0.051
Sig. (2-tailed)	–	0.564	0.787	0.697
Work Infrastructure	0.075	1.000	0.279*	0.025
Sig. (2-tailed)	0.564	–	0.030	0.847
Work Skills	0.035	0.279*	1.000	0.036
Sig. (2-tailed)	0.787	0.030	–	0.786
Unstandardized Residual	0.051	0.025	0.036	1.000
Sig. (2-tailed)	0.697	0.847	0.786	–

Source: Primary data processed using SPSS 31

As shown in Table 4.10, all independent variables exhibit tolerance values greater than 0.10 and VIF values well below the critical threshold of 10. These results indicate the absence of multicollinearity among the independent variables. Therefore, the regression model meets the multicollinearity assumption required for multiple linear regression analysis.

Normality Test

The normality test was conducted to determine whether the residuals of the regression model follow a normal distribution. This assumption is essential for ensuring the validity of t-tests and F-tests in regression analysis. Normality was tested using the One-Sample Kolmogorov–Smirnov test, where a significance value greater than 0.05 indicates normally distributed residuals.(Sinta, 2019)

Table 9; Results of Normality Test (One-Sample Kolmogorov–Smirnov)

Statistic	Value
N	61
Mean	0.0000000
Std. Deviation	141.321.216
Test Statistic	0.097
Asymp. Sig. (2-tailed)	0.200

Source: Primary data processed using SPSS 31

The Kolmogorov–Smirnov test result shows a significance value of 0.200, which exceeds the 0.05 threshold. This finding indicates that the residuals are normally distributed. Consequently, the normality assumption for regression analysis is satisfied.

Multiple Linear Regression Analysis

Multiple linear regression analysis was employed to examine the effect of education level (X1), work infrastructure (X2), and work skills (X3) on employee performance (Y). The estimated regression model is expressed as:

Table 11; Results of Multiple Linear Regression Analysis

Variable	B	Std. Error	Beta	t	Sig.
Constant	19.291	3.218	–	5.994	0.000
Education Level (X1)	0.117	0.071	0.413	2.095	0.000
Work Infrastructure (X2)	0.127	0.112	0.333	4.238	0.000
Work Skills (X3)	0.187	0.154	0.166	6.211	0.001

Source: Primary data processed using SPSS 31

Based on the regression results, the estimated regression equation is: $Y = 19.291 + 0.117X_1 + 0.127X_2 + 0.187X_3$. The constant value indicates that when all independent variables are held constant, employee performance remains at a baseline level of 19.291. Each independent variable demonstrates a positive regression coefficient, indicating that improvements in education level, work infrastructure, and work skills are associated with increases in employee performance.

Partial Hypothesis Testing (t-test)
The t-test was conducted to examine the partial effect of each independent variable on employee performance at a 5% significance level.

Table 12; Results of t-test

Variable	t	Sig.
Education Level (X1)	2.095	0.000
Work Infrastructure (X2)	4.238	0.000
Work Skills (X3)	6.211	0.001

Source: Primary data processed using SPSS 31

The results indicate that education level, work infrastructure, and work skills each have a positive and statistically significant effect on employee performance. Thus, H1, H2, and H3 are empirically supported.
Simultaneous Hypothesis Testing (F-test)
The F-test was conducted to assess the simultaneous effect of education level, work infrastructure, and work skills on employee performance.

Table 13; Results of F-test

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	364.121	3	261.040	23.495	0.000
Residual	119.830	57	2.102	–	–
Total	422.951	60	–	–	–

Source: Primary data processed using SPSS 31

The F-test result shows a significance value of 0.000, which is lower than the 0.05 significance level. This indicates that education level, work infrastructure, and work skills simultaneously have a significant effect on employee performance. Therefore, H4 is accepted

The Effect of Education Level on Employee Performance
Education level represents a fundamental component of human capital development, as it equips employees with knowledge, analytical capacity, and problem-solving skills necessary for effective job performance. Both formal and non-formal education play complementary roles in enhancing employee competence. Formal education strengthens theoretical understanding and cognitive abilities, while non-formal education and training contribute to practical skills and experiential learning. Together, these forms of education shape employees' capacity to respond to organizational demands and workplace challenges.(Fajri, 2015)
The findings of this study indicate that education level has a positive and statistically significant effect on employee performance at the Education and Culture Office of Kupang Regency. This result is supported by the

partial regression test, which shows a significance value below 0.05, confirming that higher educational attainment is associated with improved employee performance. These findings align with human capital theory, which posits that investment in education enhances individual productivity and organizational effectiveness by improving employees' competencies and work quality. This result is consistent with previous empirical studies. Nurfitriani (2021) found that education and training significantly improved employee performance at the Education Office of Soppeng Regency, demonstrating that higher educational exposure contributes to better work outcomes. Similarly, Evert (2017) reported that education level had a significant partial effect on employee performance at Bank BRI Manado Branch. These studies reinforce the argument that education enhances employees' ability to perform tasks efficiently, make informed decisions, and adapt to organizational procedures.(WAHID, n.d.)

From an institutional perspective, the positive effect of education on performance suggests that systematic and well-planned educational development is essential for improving the quality of public sector human resources. Education not only enhances technical knowledge and skills but also shapes professional attitudes and work ethics aligned with organizational objectives. As emphasized by Siagian (2015), education generally has a positive impact on employee performance because it increases knowledge, skills, and work capacity, which in turn improves productivity and effectiveness. However, this influence is also contingent upon the relevance of educational background to job assignments, as well as supporting factors such as work experience, training opportunities, motivation, and leadership. Therefore, optimizing the contribution of education to performance requires alignment between employees' educational qualifications and their functional roles within the organization.

The Effect of Work Facilities and Infrastructure on Employee Performance

Work facilities and infrastructure constitute a critical organizational resource that directly supports employees in performing their duties efficiently and effectively. Adequate facilities—such as proper office space, equipment, and supporting infrastructure—create a conducive work environment that enhances comfort, reduces operational obstacles, and enables employees to focus on task completion. Conversely, inadequate or poorly maintained facilities may hinder workflow, increase work fatigue, and ultimately reduce employee performance.(Tolo et al., 2016) The empirical findings of this study demonstrate that work facilities and infrastructure have a positive and statistically significant effect on employee performance at the Education and Culture Office of Kupang Regency. The partial regression test shows a significance value below 0.05, indicating that improvements in facilities and infrastructure are associated with higher levels of employee performance. This finding supports organizational support theory, which emphasizes that employees perform better when organizations provide sufficient structural and material support to facilitate task execution.

These results are consistent with previous empirical research. Jabal (2024) found that work facilities and infrastructure had a positive and significant effect on employee work effectiveness at PT. UPC Sidrap Bayu Energi, suggesting that well-managed facilities contribute to improved productivity and efficiency. Similarly, Datus and Rosy (2022) conceptualize facilities and infrastructure as background components that support coordination, work processes, and functional integration within organizations. When such supporting elements are insufficient, achieving organizational objectives becomes increasingly difficult. From a public administration perspective, the significance of facilities and infrastructure underscores their strategic role in strengthening institutional performance. In the context of public sector organizations, adequate work facilities not only enhance operational efficiency but also serve as a motivational factor that fosters employee engagement and work discipline. This perspective is aligned with the Regulation of the Minister of Administrative and Bureaucratic Reform of the Republic of Indonesia Number 1 of 2021, which establishes standards for office space, equipment, and official vehicles as benchmarks for supporting effective public service delivery. Therefore, continuous investment in and maintenance of work facilities and infrastructure are essential to sustaining employee performance and improving the overall quality of public service outcomes.

The Effect of Work Skills on Employee Performance

Work skills refer to the technical and practical competencies that enable employees to perform tasks effectively, which are developed through training, experience, and sustained practice. In organizational settings, work skills represent a core component of human capital, as they determine employees' ability to translate knowledge into productive action. Public institutions, including government agencies, therefore require employees with adequate skill levels to ensure the continuous improvement of organizational performance.(Moenir, 2008) The findings of this study indicate that work skills have a positive and statistically significant effect on employee performance at the Education and Culture Office of Kupang Regency. The partial t-test results show a significance value of 0.01, which

is below the threshold of 0.05, confirming that work skills significantly influence employee performance. This result suggests that employees with higher levels of job-related skills are more capable of completing tasks accurately, efficiently, and in accordance with organizational standards. These findings are consistent with prior empirical research. Setiawan (2023) found that work skills significantly affected the performance of technical employees at PT. PLN Unit Pelayanan Pelanggan Tegal, emphasizing that skill mastery enhances work effectiveness and reduces operational errors. From a theoretical perspective, skill-based performance aligns with human capital theory, which posits that investments in employee skills increase productivity and contribute to organizational effectiveness. In the context of public sector organizations, the importance of work skills extends beyond individual performance and directly affects service quality and institutional credibility. Employees with well-developed skills are better equipped to adapt to administrative demands, technological changes, and public service standards. Therefore, systematic skill development through continuous training and experiential learning is essential for improving employee performance and ensuring the sustainability of public sector organizational outcomes.

CONCLUSION

This study demonstrates that employee performance at the Education and Culture Office of Kupang Regency is significantly influenced by education level, work infrastructure, and work skills, both individually and simultaneously. The empirical findings confirm that higher educational attainment enhances employees' cognitive capacity and problem-solving abilities, adequate infrastructure supports efficiency and task completion, and well-developed work skills strengthen employees' ability to translate knowledge into effective performance. Together, these variables reflect the interdependence between human capital quality and organizational support in shaping public sector performance. The results underscore that improving employee performance cannot rely solely on individual attributes such as formal education but must be accompanied by institutional investments in facilities and continuous skill development. From a policy perspective, the findings suggest that local governments should adopt integrated human resource development strategies that align educational qualifications with job placement, expand access to training programs, and ensure the availability of adequate work infrastructure. By strengthening both human and organizational resources, public education institutions can enhance administrative effectiveness, service quality, and overall governance performance at the local level.

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