

Optimizing Human Resources and Organizational Culture to Enhance Educational Service Quality: The Mediating Role of Employee Performance

Optimalisasi Sumber Daya Manusia dan Budaya Organisasi untuk Meningkatkan Kualitas Layanan Pendidikan: Peran Mediasi Kinerja Pegawai

^{*1}Heri Murtiyoko, ²Siti Zubaidah, ³Moch Bayu Ibrahim S

Universitas Pamulang, Indonesia

*e-mail : dosen01036@unpam.ac.id

Abstract: *This study analyzes the roles of human resource optimization and organizational culture in improving educational service quality, with employee performance as a mediating variable. A quantitative, explanatory design was applied to all 32 teachers of SMK Sasmita Jaya 2, who were selected through total sampling. Data were collected using a five-point Likert-scale questionnaire and analyzed with Partial Least Squares–Structural Equation Modeling (PLS-SEM). Human resource optimization ($\beta = 0.471$; $p < 0.001$) and organizational culture ($\beta = 0.348$; $p = 0.004$) had positive and significant effects on employee performance. Both variables also had significant direct effects on educational service quality ($\beta = 0.181$; $p = 0.039$ and $\beta = 0.207$; $p = 0.021$, respectively), while employee performance had the strongest direct effect ($\beta = 0.519$; $p < 0.001$). Employee performance partially mediated the effects of both variables on educational service quality. These findings imply that schools should integrate human resource management and organizational culture with performance improvement as a strategy for strengthening service quality. The small sample from a single school, the cross-sectional design, and the self-reported data limit the generalizability of the findings, so the results should be interpreted with caution.*

Keywords: *human resource optimization, organizational culture, employee performance, educational service quality, mediation*

Abstrak: *Penelitian ini menganalisis peran optimalisasi sumber daya manusia dan budaya organisasi dalam meningkatkan kualitas layanan pendidikan, dengan kinerja pegawai sebagai variabel mediasi. Penelitian menggunakan pendekatan kuantitatif dengan desain eksplanatori terhadap seluruh 32 guru SMK Sasmita Jaya 2 yang dipilih melalui total sampling. Data dikumpulkan menggunakan kuesioner skala Likert lima poin dan dianalisis dengan Partial Least Squares–Structural Equation Modeling (PLS-SEM). Optimalisasi sumber daya manusia ($\beta = 0,471$; $p < 0,001$) dan budaya organisasi ($\beta = 0,348$; $p = 0,004$) berpengaruh positif dan*

signifikan terhadap kinerja pegawai. Kedua variabel tersebut juga berpengaruh langsung secara signifikan terhadap kualitas layanan pendidikan (masing-masing $\beta = 0,181$; $p = 0,039$ dan $\beta = 0,207$; $p = 0,021$), sedangkan kinerja pegawai memiliki pengaruh langsung terkuat ($\beta = 0,519$; $p < 0,001$). Kinerja pegawai memediasi sebagian pengaruh kedua variabel tersebut terhadap kualitas layanan pendidikan. Temuan ini menyiratkan bahwa sekolah perlu mengintegrasikan pengelolaan sumber daya manusia dan budaya organisasi dengan peningkatan kinerja sebagai strategi penguatan kualitas layanan. Sampel yang kecil pada satu sekolah, desain potong lintang, dan data laporan mandiri membatasi generalisasi temuan, sehingga hasil penelitian perlu ditafsirkan dengan hati-hati.

Kata kunci: optimalisasi sumber daya manusia, budaya organisasi, kinerja pegawai, kualitas layanan pendidikan, mediasi

Introduction

Educational service quality is a critical aspect of educational institution management because the experiences of students, parents, and other stakeholders are shaped not only by the learning process but also by the quality of academic and administrative services delivered across the organization. Research on academic services indicates that internal organizational factors, including organizational culture, motivation, discipline, and leadership, are associated with the quality of services provided to education users (Hantono & Lubis, 2024). Educational service quality is also closely connected to organizational culture because interpersonal relationships, the academic environment, and administrative practices can influence how an institution performs its service functions (Alcalá Basurto et al., 2023).

Within this context, human resources (HR) are a strategic organizational component because organizational quality is largely determined by employees' ability to perform their responsibilities and deliver services (Rusmidi et al., 2026). HR competence and organizational culture significantly influence employee performance, which indicates that human capability and the organizational environment are two important internal factors in achieving performance outcomes (Mariyani et al., 2023). HR competence encompasses not only knowledge but also employees' ability to apply professional skills effectively in completing their work. Research in service organizations shows that competence positively affects employee performance, which makes HR capacity development a relevant strategy for improving organizational effectiveness (Amanda & Probosari, 2024).

Empirical evidence from the education sector also supports the relationship between HR competence and service quality. Employee competence has been found to influence service quality at the West Bandung Regency Education Office, both partially and jointly with organizational culture (Helmina et al., 2024). This finding indicates that HR capabilities are associated not only with the achievement of internal organizational targets but also with the service experiences of users. This perspective is particularly relevant to educational institutions because teachers and educational staff interact directly with students and other users of school services.

Beyond competence, organizational culture shapes employees' work behavior and orientation. It provides values, norms, and behavioral patterns that guide employees in performing their work and can therefore influence the consistency of organizational performance. In educational settings, organizational culture has been associated with educational service quality, which suggests that a supportive organizational environment is an important condition for delivering better services ([Rivera Velarde & Sánchez Pinedo, 2024](#)). Other research in educational institutions indicates that particular cultural orientations, especially relational and developmental cultures, positively affect the quality of services delivered by educators ([Lee, 2024](#)).

Organizational culture is also associated with employee performance. Research in madrasah institutions indicates that organizational culture and HR competence are important factors in efforts to improve employee performance ([Muslim Mahridi, 2022](#)). Other research has likewise found that HR competence and organizational culture influence employee performance ([Risal et al., 2024](#)). These relationships suggest that competence and organizational culture should not be viewed as isolated factors but as potential components of an internal mechanism through which organizational capacity is translated into service quality.

Employee performance is important in this relationship because competence and organizational culture ultimately need to be manifested in observable work behaviors and outcomes ([Novriansyah et al., 2024](#)). Research on HR competence, organizational culture, and performance indicates that the relationship between HR-related factors and performance may involve specific organizational mechanisms, so their effects are not necessarily direct ([Aulia et al., 2022](#)). Research on work culture also shows that the implementation of professionalism, collaboration, service orientation, and innovation is associated with HR performance and organizational service quality ([Ointu et al., 2025](#)). Accordingly, employee performance can be positioned as a mechanism that explains how HR capacity and organizational conditions are translated into service quality.

This perspective is reinforced by research that integrates staff competence, organizational culture, and service performance within a single model. [Imaniyati et al. \(2024\)](#) found that staff competence and organizational culture positively influence service performance, while organizational innovativeness mediates these relationships. Research on HR management from a learning-organization perspective also indicates that HR management development is associated with employee performance and HR service quality, particularly during organizational transformation ([Alzadjali et al., 2023](#)). These findings indicate that service-quality research should move beyond identifying causal factors toward understanding the mechanisms through which HR and organizational factors generate service quality.

In the Indonesian educational context, previous research at SMK Sasmita Jaya 2 found a very strong and significant relationship between organizational culture and educational service quality, with a Pearson correlation coefficient of 0.960 and a significance value of 0.000 ([Zubaidah & Murtiyoko, 2025](#)). This finding provides important empirical evidence from the same school context and creates an opportunity to develop a more comprehensive research model. However, previous research primarily emphasized the direct relationship between organizational culture and service quality, whereas the mechanism through which HR capacity

and organizational culture are translated into service quality via employee performance remains insufficiently examined.

Addressing this gap, the present study develops a model that positions human resource optimization and organizational culture as strategic factors, employee performance as a mediating variable, and educational service quality as the outcome. The model is intended to explain the mechanism underlying service-quality formation rather than merely establish relationships among variables. This perspective is supported by research showing that talent management, leadership, and organizational culture can contribute to service excellence through service quality (Sudaryono et al., 2024).

The novelty of this study lies in its integrated mediation model. Whereas previous research at the same school focused primarily on the direct relationship between organizational culture and educational service quality (Zubaidah & Murtiyoko, 2025), this study examines human resource optimization and organizational culture simultaneously as antecedents of educational service quality and tests employee performance as the mechanism that links them. The study also estimates direct and indirect effects within a single PLS-SEM framework, which makes it possible to distinguish the contribution of each pathway. Accordingly, this study aims to analyze the role of human resource optimization and organizational culture in improving educational service quality, with employee performance serving as a mediating variable.

Method

This study employed a quantitative approach with an explanatory research design to analyze the relationships among human resource optimization, organizational culture, employee performance, and educational service quality. This design was selected because the study examines the relationships among the variables while explaining the mediating role of employee performance. The data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM), which is appropriate for research models that involve multiple latent constructs and both direct and indirect relationships (Hair & Alamer, 2022; Ringle et al., 2023; Sarstedt et al., 2023).

The study population comprised 32 teachers at SMK Sasmita Jaya 2, South Tangerang. Total sampling (census sampling) was applied, so all 32 teachers were included as respondents. The eligibility criterion was a minimum of one year of work experience at the school. Data were collected using a closed-ended questionnaire with a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The instrument was developed from theoretical indicators for each construct and adapted to the context of educational organizations (Table 1). All four constructs (human resource optimization, organizational culture, employee performance, and educational service quality) were measured using self-reported responses collected from the same respondents during the same data-collection period. The possibility of common method bias was therefore considered when interpreting the findings.

Table 1. Research Constructs and Indicators

Construct	Code	Measured dimensions/indicators
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Human Resource Optimization	X1	Competency development, utilization of potential, empowerment, professional development, appropriate placement
Organizational Culture	X2	Organizational values, work norms, collaboration, communication, service orientation
Employee Performance	Z	Work quality, work quantity, timeliness, responsibility, task achievement
Educational Service Quality	Y	Reliability, responsiveness, assurance, empathy, tangibles

1. Structural Model

The relationships among the variables were specified using the following equations:

Equation 1: Effect on Employee Performance

$$Z = \beta_1 X_1 + \beta_2 X_2 + \zeta_1$$

Notes:

- Z = Employee Performance
- X1 = Human Resource Optimization
- X2 = Organizational Culture
- β = Path coefficient
- ζ = Residual

Equation 2: Effects on Educational Service Quality

$$Y = \beta_3 X_1 + \beta_4 X_2 + \beta_5 Z + \zeta_2$$

Notes:

- Y = Educational Service Quality
- X1 = Human Resource Optimization
- X2 = Organizational Culture
- Z = Employee Performance
- β = Path coefficient
- ζ = Residual

Indirect effects were calculated as follows:

$$IE_{X1} = \beta_1 \times \beta_5$$

$$IE_{X2} = \beta_2 \times \beta_5$$

Accordingly, the analysis determines whether employee performance mediates the effect of human resource optimization on educational service quality and whether it mediates the effect of organizational culture on educational service quality.

2. PLS-SEM Analysis Procedure

The analysis consisted of two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model). The outer model evaluation covered

convergent validity, construct reliability, and discriminant validity. The inner model evaluation included the coefficient of determination, effect size, predictive relevance, and path-coefficient testing (Sarstedt et al., 2022).

Table 2. PLS-SEM Model Evaluation Criteria

Assessment	Indicator	General criterion
Convergent validity	Outer loading	≥ 0.70
Convergent validity	AVE	≥ 0.50
Reliability	Cronbach's Alpha	≥ 0.70
Reliability	Composite Reliability	≥ 0.70
Discriminant validity	HTMT	< 0.90
Coefficient of determination	R^2	Higher values indicate better explanatory power
Effect size	f^2	0.02 small; 0.15 medium; 0.35 large
Predictive relevance	Q^2	> 0 indicates predictive relevance
Path significance	p-value	< 0.05

Hypotheses were tested through bootstrapping to obtain path coefficients, t-statistics, and p-values. Mediation was assessed based on the significance of the indirect effect, so conclusions about the mediating role of employee performance were not based solely on the direct relationships among the variables.

Table 3. Hypothesized Relationships

Code	Relationship
H1	Human Resource Optimization → Employee Performance
H2	Organizational Culture → Employee Performance
H3	Human Resource Optimization → Educational Service Quality
H4	Organizational Culture → Educational Service Quality
H5	Employee Performance → Educational Service Quality
H6	Human Resource Optimization → Employee Performance → Educational Service Quality
H7	Organizational Culture → Employee Performance → Educational Service Quality

Results and Discussion

This section presents the results of the analysis and discusses each finding in relation to relevant theory and previous research. The sequence follows the stages of PLS-SEM evaluation: respondent characteristics and the measurement model, the structural model and hypothesis testing, and finally the mediation analysis.

1. Respondent Characteristics and Descriptive Statistics

The study was conducted among teachers at SMK Sasmita Jaya 2. Based on the school profile data, the research population consisted of 32 teachers. Their characteristics are

presented in terms of gender, educational qualification, and teacher certification status in Table 4.

Table 4. Characteristics of Teachers at SMK Sasmita Jaya 2

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	17	53.13
	Female	15	46.87
Educational Qualification	Below D1	7	21.88
	Bachelor's degree (S1)	24	75.00
Teacher Certification	Certified	14	43.75
	Not certified	18	56.25
Total Teachers		32	100.00

Source: School profile data of SMK Sasmita Jaya 2.

Table 4 shows that the 32 teachers consisted of 17 male teachers (53.13%) and 15 female teachers (46.87%). In terms of educational qualification, most teachers held a bachelor's degree (S1), namely 24 teachers (75.00%), while seven teachers (21.88%) had qualifications below D1. Meanwhile, 14 teachers (43.75%) were certified, whereas 18 teachers (56.25%) were not yet certified. Most teachers had thus attained a bachelor's degree, although some held qualifications below the bachelor level and more than half had not yet obtained professional certification. This profile provides an important context for examining human resource optimization, employee performance, and educational service quality at the school.

Descriptive analysis was used to describe respondents' response tendencies for the four research variables. Because the study involved the entire teacher population, the analysis was based on 32 observations (Table 5).

Table 5. Descriptive Statistics of the Research Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Human Resource Optimization	32	3.20	5.00	4.18	0.43
Organizational Culture	32	3.00	5.00	4.11	0.49
Employee Performance	32	3.20	5.00	4.23	0.41
Educational Service Quality	32	3.00	5.00	4.16	0.46

As shown in Table 5, all research variables had mean scores above 4.00. Employee performance had the highest mean score (4.23; SD = 0.41), which indicates that teachers generally perceived their task performance, responsibility, discipline, and work achievement positively.

Human resource optimization had a mean score of 4.18 and educational service quality a mean score of 4.16, whereas organizational culture had the lowest mean score (4.11). This score still reflects a generally positive perception.

Substantively, human resource management and teacher performance were perceived as relatively strong. However, organizational culture warrants further attention, particularly

regarding the consistency of organizational values, internal communication, collaboration, and the development of a work environment that supports educational service quality.

2. Measurement Model Evaluation

The measurement model was evaluated to ensure that the indicators validly and reliably measured the intended constructs. The assessment covered convergent validity, construct reliability, and discriminant validity. Convergent validity was first examined through the outer loading of each indicator (Table 6).

Table 6. Outer Loading Values

Construct	Indicator	Outer Loading	Assessment
Human Resource Optimization (X1)	X _{1.1}	0.812	Valid
	X _{1.2}	0.846	Valid
	X _{1.3}	0.789	Valid
	X _{1.4}	0.874	Valid
	X _{1.5}	0.821	Valid
Organizational Culture (X2)	X _{2.1}	0.801	Valid
	X _{2.2}	0.836	Valid
	X _{2.3}	0.773	Valid
	X _{2.4}	0.858	Valid
	X _{2.5}	0.819	Valid
Employee Performance (Z)	Z ₁	0.824	Valid
	Z ₂	0.871	Valid
	Z ₃	0.803	Valid
	Z ₄	0.846	Valid
	Z ₅	0.789	Valid
Educational Service Quality (Y)	Y ₁	0.815	Valid
	Y ₂	0.849	Valid
	Y ₃	0.881	Valid
	Y ₄	0.794	Valid
	Y ₅	0.833	Valid

As presented in Table 6, the outer loadings ranged from 0.773 to 0.881, so all indicators met the criterion for convergent validity and adequately represented the constructs of human resource optimization, organizational culture, employee performance, and educational service quality. Construct reliability and average variance extracted are reported in Table 7.

Table 7. Construct Validity and Reliability

Construct	Cronbach's Alpha	Composite Reliability	AVE	Assessment
Human Resource Optimization	0.884	0.915	0.684	Valid and Reliable
Organizational Culture	0.873	0.907	0.663	Valid and Reliable
Employee Performance	0.881	0.913	0.678	Valid and Reliable
Educational Service Quality	0.891	0.919	0.696	Valid and Reliable

Table 7 shows that Cronbach's Alpha and Composite Reliability for all constructs exceeded the required thresholds, and the AVE values also met the criterion for convergent validity. The research instrument therefore demonstrated good internal consistency and was suitable for structural model testing.

Discriminant validity was assessed to ensure that the constructs in the model were empirically distinct from one another, using the Heterotrait–Monotrait ratio (HTMT) (Table 8).

Table 8. HTMT Results

Construct	X1	X2	Z	Y
X1 Human Resource Optimization	-	0.742	0.801	0.736
X2 Organizational Culture	0.742	-	0.768	0.754
Z Employee Performance	0.801	0.768	-	0.823
Y Educational Service Quality	0.736	0.754	0.823	-

As shown in Table 8, HTMT values ranged from 0.736 to 0.823, all below the threshold of 0.90. Each construct therefore demonstrated adequate discriminant validity, which allows the structural relationships among the constructs to be interpreted.

3. Structural Model Evaluation

After the measurement model satisfied the validity and reliability criteria, the structural model was evaluated using the coefficient of determination (R^2) and the effect size (f^2). The R^2 values are presented in Table 9.

Table 9. R^2 Values

Endogenous Variable	R^2	Adjusted R^2
Employee Performance (Z)	0.681	0.659
Educational Service Quality (Y)	0.729	0.700

As shown in Table 9, the R^2 value for employee performance was 0.681. This indicates that human resource optimization and organizational culture jointly explained 68.1% of the variance in employee performance, while the remaining 31.9% was explained by factors outside the research model. For educational service quality, the R^2 value was 0.729, which means that human resource optimization, organizational culture, and employee performance jointly explained 72.9% of its variance, while 27.1% was attributable to variables outside the model. The research model therefore has strong explanatory power for educational service quality at SMK Sasmita Jaya 2.

The effect size of each path is presented in Table 10.

Table 10. Effect Size (f^2)

Relationship	f^2	Interpretation
$X_1 \rightarrow Z$	0.271	Medium
$X_2 \rightarrow Z$	0.165	Medium
$X_1 \rightarrow Y$	0.082	Small

$X_2 \rightarrow Y$	0.106	Small
$Z \rightarrow Y$	0.314	Medium

Human resource optimization had a medium effect size on employee performance ($f^2 = 0.271$), as did organizational culture ($f^2 = 0.165$). Both variables therefore make substantive contributions to changes in employee performance. Their direct effects on educational service quality were small, with f^2 values of 0.082 and 0.106, respectively. In contrast, employee performance had an f^2 of 0.314 on educational service quality, the largest substantive contribution in the model.

4. Hypothesis Testing of Direct Effects

Hypothesis testing was conducted to determine the significance of the relationships among the variables at the 5% significance level. As shown in Table 11, all five direct relationships (H1 to H5) were positive and statistically significant, so all of them were supported. The following subsections interpret each relationship and relate it to previous research.

Table 11. Hypothesis Testing Results

Hypothesis	Relationship	β	t-statistic	p-value	Decision
H ₁	$X_1 \rightarrow Z$	0.471	3.982	<0.001	Supported
H ₂	$X_2 \rightarrow Z$	0.348	2.864	0.004	Supported
H ₃	$X_1 \rightarrow Y$	0.181	2.071	0.039	Supported
H ₄	$X_2 \rightarrow Y$	0.207	2.316	0.021	Supported
H ₅	$Z \rightarrow Y$	0.519	4.637	<0.001	Supported

5. Human Resource Optimization and Employee Performance

Human resource optimization has a positive and significant effect on employee performance ($\beta = 0.471$; $t = 3.982$; $p < 0.001$), so H1 is supported. The effect size is medium ($f^2 = 0.271$), and this path has the largest coefficient among the antecedents of employee performance. The finding indicates that more effective human resource management is associated with better teacher performance. In the school context, HR optimization extends beyond the availability of personnel to how teachers' competencies and potential are developed, utilized, and aligned with organizational needs. Competency development, appropriate task allocation, work support, and opportunities for professional growth create conditions that enable teachers to perform their responsibilities more effectively.

This finding is consistent with [Arzain et al. \(2024\)](#), who reported an association between human resource development and employee performance, and with [Syafitri and Adiwaty \(2025\)](#), who showed that HR training and development are important factors in shaping employee performance within a supportive organizational environment. [Fauzi \(2025\)](#) likewise indicates that human resource development is associated with improved employee performance. Taken together, these studies suggest that HR optimization should be understood not merely as the provision of personnel but as a continuous process of developing and appropriately deploying individual capabilities in line with organizational needs.

For schools, this implies that improving teacher performance should be an integral component of HR management strategy. Professional development should not stop at training activities but should be followed by opportunities for teachers to apply and further develop their competencies in daily work. School managers also need to align teachers' capabilities with assigned responsibilities and provide adequate organizational support, so that investment in HR development translates into actual improvements in teacher performance.

6. Organizational Culture and Employee Performance

Organizational culture has a positive and significant effect on employee performance ($\beta = 0.348$; $t = 2.864$; $p = 0.004$), so H2 is supported, with a medium effect size ($f^2 = 0.165$). The finding indicates that a stronger organizational culture can promote better teacher performance. Organizational values, norms, communication, collaboration, discipline, and a shared orientation toward organizational goals are important components of a work environment that supports performance. This is consistent with [Diah et al. \(2022\)](#), who identify organizational culture as an important factor in shaping employee performance.

Organizational culture operates through the formation of work behavior. When organizational values are understood and consistently applied, employees have clear guidance on the behaviors expected of them. [Meylandari et al. \(2024\)](#) found an effect of organizational culture on employee performance, and in school settings a work culture that emphasizes responsibility, collaboration, communication, and shared goal attainment can encourage teachers to perform their duties more consistently. [Niken et al. \(2022\)](#) also found that organizational culture can be associated with performance through motivational mechanisms, which suggests that the organizational environment not only shapes behavior but also strengthens employees' internal motivation to perform better.

Nevertheless, empirical findings on the effect of organizational culture on performance are not entirely consistent. [Darmawan \(2022\)](#), for example, found that organizational culture was not always a significant predictor when examined alongside other organizational factors. This difference suggests that the strength of the cultural effect may depend on organizational characteristics and on the extent to which organizational values are actually implemented. In the present study, the positive effect indicates that the culture developed in the school plays a meaningful role in supporting teacher performance.

7. Human Resource Optimization and Educational Service Quality

Human resource optimization has a positive and significant direct effect on educational service quality ($\beta = 0.181$; $t = 2.071$; $p = 0.039$), so H3 is supported, although the effect size is small ($f^2 = 0.082$). The finding indicates that HR management is associated not only with improved internal performance but also with the quality of services received by students. Teachers who receive support for competency development and effective task management have greater capacity to provide educational services aligned with students' needs, for example by understanding those needs, communicating effectively, and responding to problems.

[Mohamad et al. \(2024\)](#) found that HR competence and organizational culture are associated with service quality, which suggests that service quality depends substantially on the capacity of individuals at the frontline of service delivery. In educational settings, teachers are

central to this process because they interact directly with students. [Basri \(2025\)](#) likewise highlighted the importance of HR competence in shaping service quality, although that study was conducted in the banking sector.

Accordingly, HR optimization in schools should focus on capabilities that directly support service delivery. Competency development should encompass communication, problem solving, educational technology use, responsiveness to students' needs, and the ability to provide appropriate academic services. [Emria and Nurhidayati \(2025\)](#) emphasize the importance of HR competence and organizational culture for service quality and performance. Improving service quality therefore cannot be separated from the quality of the HR responsible for delivering the service.

8. Organizational Culture and Educational Service Quality

Organizational culture has a positive and significant direct effect on educational service quality ($\beta = 0.207$; $t = 2.316$; $p = 0.021$), so H4 is supported, with a small effect size ($f^2 = 0.106$). The finding indicates that a culture that supports collaboration, communication, responsibility, and service orientation creates conditions conducive to better educational service quality. Service quality is therefore not solely a matter of individual teacher capability but is also shaped by the values and routines that develop within the school organization.

[Orbegoso Ayala et al. \(2025\)](#) found a relationship between organizational culture and educational service quality in an educational institution, which reinforces the view that organizational culture shapes patterns of interaction and behavior that are ultimately reflected in users' service experiences. [Pardiyanto et al. \(2026\)](#) likewise found that organizational culture can serve as a predictor of service quality in educational organizations.

This finding is particularly relevant because previous research at SMK Sasmita Jaya 2 identified a very strong relationship between organizational culture and educational service quality ([Zubaidah & Murtiyoko, 2025](#)). The present study extends that evidence by showing that the relationship is not isolated and can be explained in part through employee performance as a mediating mechanism. [Habsari et al. \(2025\)](#) also provide supporting evidence from vocational schools in South Tangerang, highlighting the importance of organizational culture for school service quality.

9. Employee Performance and Educational Service Quality

Employee performance has the strongest direct effect on educational service quality ($\beta = 0.519$; $t = 4.637$; $p < 0.001$), so H5 is supported. Its effect size ($f^2 = 0.314$) is also the largest among the direct relationships in the model. The finding underscores that educational service quality is ultimately shaped by how teachers perform their duties, fulfill their responsibilities, maintain discipline, and provide services to students: the better teachers perform, the higher the service quality that can be achieved.

[Emria and Nurhidayati \(2025\)](#) argue that the relationships among HR competence, organizational culture, service quality, and performance should be understood in an integrated manner. [Mon and Ferina \(2024\)](#) likewise demonstrate linkages among organizational culture, service quality, and performance within a structural model. These findings reinforce the present

conclusion that service quality is a manifestation of employees' actual performance in carrying out service functions.

From an educational management perspective, improving service quality cannot be achieved solely by refining service procedures. Schools need to ensure that teachers demonstrate strong performance in their day-to-day responsibilities, because employee performance is the most dominant factor explaining educational service quality in the present model.

10. The Mediating Role of Employee Performance in the Relationship between Human Resource Optimization and Educational Service Quality

Mediation analysis was conducted to examine employee performance as an intervening variable in the relationships of human resource optimization and organizational culture with educational service quality. The indirect effects are presented in Table 12.

Table 12. Indirect Effects

Hypothesis	Mediation Path	Indirect Effect	t-statistic	p-value	Assessment
H ₆	X1 → Z → Y	0.244	3.421	0.001	Partial mediation
H ₇	X2 → Z → Y	0.181	2.587	0.010	Partial mediation

Human resource optimization has a significant indirect effect on educational service quality through employee performance (indirect effect = 0.244; $t = 3.421$; $p = 0.001$), while its direct effect remains significant ($\beta = 0.181$; $p = 0.039$). Employee performance therefore partially mediates this relationship, so H₆ is supported. The finding indicates that HR optimization improves service quality through enhanced performance, while part of its effect also occurs directly.

Substantively, the mechanism can be understood as a sequence in which improved HR management increases teachers' capacity and readiness, these capacities are manifested in stronger performance, and stronger performance in turn produces higher-quality educational services (Chairani, 2024). This sequence is consistent with Arzain et al. (2024), who support the relationship between HR development and performance from an organizational perspective, and with Syafitri and Adiwaty (2025), who indicate that HR development can be associated with performance through organizational mechanisms.

The partial mediation implies that HR development should not stop at capacity building. Schools need to ensure that newly developed capabilities are actually used in work practices. HR investment is therefore likely to have a greater impact when it is accompanied by work systems, performance evaluation, and responsibility structures that enable competencies to be applied in practice.

11. The Mediating Role of Employee Performance in the Relationship between Organizational Culture and Educational Service Quality

Employee performance also partially mediates the relationship between organizational culture and educational service quality, so H₇ is supported. The indirect effect is significant (indirect effect = 0.181; $t = 2.587$; $p = 0.010$), and the direct effect also remains significant ($\beta =$

0.207; $p = 0.021$). Organizational culture thus influences service quality through the formation of employee performance while also contributing directly to service quality.

This mechanism indicates that organizational values and norms need to be translated into observable work behaviors. [Ismartaya et al. \(2024\)](#) found that organizational culture can be associated with performance through an intervening mechanism, and [Fiorentino et al. \(2024\)](#) showed that the relationship between organizational culture and performance can operate through specific organizational behaviors. These findings support the argument that organizational culture is not merely an abstract concept but a force that operates through the behavior of organizational members.

In schools, a strong service-oriented culture is more effective when it is reflected in teacher performance, including discipline, responsibility, task quality, collaboration, and responsiveness to students' needs. [Marvel and Jayanagara \(2026\)](#) also highlight the importance of cultural factors and service quality in explaining organizational performance. Strengthening organizational culture should therefore be directed toward developing concrete and measurable work behaviors.

12. Theoretical and Managerial Implications

Theoretically, the findings indicate that educational service quality can be understood as an outcome formed through the interaction of HR factors, organizational culture, and employee performance. The research model shows that human resource optimization and organizational culture have both direct effects on service quality and indirect effects through employee performance. Employee performance thus constitutes an important mechanism linking HR optimization and organizational culture to service quality, which means that service quality should be analyzed not only from the perspective of service users but also from the capabilities and behaviors of the HR that produce the service.

Managerially, the findings indicate that improving educational service quality cannot rely solely on direct improvements in HR management and organizational culture; these improvements must be translated into stronger teacher performance. Teacher management at SMK Sasmita Jaya 2 should therefore be pursued in an integrated manner. Schools can strengthen competency development, use teachers' potential effectively, ensure appropriate task allocation, foster a collaborative work culture, and conduct periodic performance evaluations. Because employee performance has the largest direct effect on service quality, performance improvement should be a central focus of service-quality enhancement strategies.

Conclusion

This study shows that human resource optimization and organizational culture are important factors in improving educational service quality at SMK Sasmita Jaya 2, both directly and through employee performance. Both variables have positive and significant effects on employee performance ($\beta = 0.471$ and $\beta = 0.348$, respectively) and on educational service quality ($\beta = 0.181$ and $\beta = 0.207$, respectively), while employee performance has the strongest direct effect on service quality ($\beta = 0.519$). Employee performance partially mediates the effects of

human resource optimization (indirect effect = 0.244; $p = 0.001$) and organizational culture (indirect effect = 0.181; $p = 0.010$) on educational service quality, because the direct effects of both variables remain significant. These findings address the research objective and show that employee performance is the mechanism through which HR capacity and organizational conditions are translated into service quality.

Theoretically, the study contributes an integrated mediation model that explains educational service quality as the outcome of HR, cultural, and performance factors rather than of direct relationships alone. Practically, schools need an integrated strategy that combines competency development, effective use of teachers' potential, a collaborative work culture, performance evaluation, and a stronger service orientation. The study has several limitations: it involved only 32 teachers from a single vocational high school, which limits generalizability and calls for caution in interpreting the PLS-SEM results; it used a cross-sectional design; and all variables were self-reported by the same respondents during the same period, which creates the possibility of common method bias. Future research should use larger and more diverse samples from multiple schools, longitudinal designs, and multiple data sources, such as supervisor assessments, administrative performance records, and student or parent evaluations.

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