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Explanatory model of managerial leadership and its influence on the teaching performance of Peruvian regular basic education

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A B S T R A C T

School leadership is a strategic factor in strengthening educational quality due to its influence on teachers' professional performance and the achievement of institutional objectives. This study aimed to analyze the explanatory model of school leadership and its influence on teacher performance in regular basic education institutions in the Junín region of Peru. A quantitative, non-experimental, explanatory, cross-sectional study was conducted. The sample consisted of 358 teachers, selected through stratified sampling. Structural Equation Modeling using Partial Least Squares (SEM- PLS) was employed to analyze the relationships between the variables. The results showed that institutional planning exerts a positive and significant influence on task performance ($\beta = 0.62$; $p < 0.001$), followed by pedagogical support ($\beta = 0.56$; $p < 0.001$) and decision-making ($\beta = 0.31$; $p < 0.001$). Likewise, pedagogical support ($\beta = 0.51$; $p < 0.001$) and decision-making ($\beta = 0.45$; $p < 0.001$) showed significant effects on organizational civic behaviors. The model demonstrated substantial explanatory power, reaching R^2 values of 0.64 for task performance and 0.59 for organizational civic behaviors. The effect sizes indicated a moderate to high contribution from the dimensions of managerial leadership. It is concluded that managerial leadership constitutes a key mechanism to strengthen teacher performance since the findings support instructional and transformational leadership approaches; while, in practical terms, they suggest strengthening institutional planning, pedagogical support and teacher participation in decision-making to promote continuous improvement and educational quality.

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1. Introduction

In the contemporary educational context, school leadership has become one of the most influential strategic pillars for strengthening school quality, due to its capacity to guide institutional processes, mobilize pedagogical resources, and consolidate organizational cultures focused on continuous improvement (González & José, 2020). Internationally, numerous studies agree that effective school leadership transcends operational administration to become a pedagogical force capable of impacting teaching practices and student learning. From this perspective, the leadership of school administrators not only defines organizational goals but also establishes conditions for educational innovation, professional collaboration, and the sustainability of institutional change (Saputro et al., 2023). However, evidence also indicates that its effectiveness depends on factors such as specialized training, pedagogical vision, participatory management, and the ability to respond to complex educational contexts; in the absence of these conditions, its influence on teacher performance can be considerably limited. In Latin America, the analysis of school leadership has gained increasing importance due to persistent challenges related to educational inequality, structural reforms, and the need for improvement in school systems (Rojas et al., 2024b). Several regional studies maintain that schools with strong pedagogical leadership exhibit higher levels of professional commitment, better institutional coordination, and more favorable conditions for teacher development. In countries such as Chile, Colombia, and Mexico, it has been observed that leadership focused on pedagogical support and collaborative decision-making fosters

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more consistent school transformation processes. However, the results are not uniform, as the impact of leadership varies according to structural factors such as institutional autonomy, sustained educational policies, and available resources, demonstrating that the role of the school leader does not operate in isolation, but rather within complex organizational systems (Arendse et al., 2024).

In Peru, school leadership has been progressively incorporated as a key component in policies to strengthen school management, especially following reforms aimed at professionalizing educational leadership and improving institutional performance. Despite these advances, various national studies show that in many school contexts, leadership approaches remain predominantly focused on administrative functions, with limited impact on pedagogical support and the effective improvement of teachers' work (Huamaní, 2021). This problem is particularly significant in the central region of the country, where regular basic education institutions face challenges associated with territorial diversity, structural inequalities, and the need to strengthen organizational capacities (Nurtjahjani et al., 2025). In this context, understanding how the leadership exercised by school leaders influences teacher performance becomes an analytical priority for promoting sustainable improvements in educational quality .

From a conceptual perspective, school leadership can be defined as a process of strategic influence through which school leaders guide the educational community toward shared goals, promoting institutional conditions conducive to teacher professional development and pedagogical improvement (Murga, 2025). Its relevance lies in the fact that it is not limited to bureaucratic supervision, but rather involves a transformational vision, the strengthening of collective capacities, and the creation of school environments that enhance teaching. Consequently, effective school leadership constitutes a mechanism that links management, institutional culture, and educational outcomes.

On the other hand, teacher performance represents a multidimensional construct encompassing pedagogical competencies, curriculum planning, classroom management, methodological innovation, professional commitment, and responsiveness to student needs (Calderón et al., 2021). Currently, teacher performance can no longer be understood solely as the fulfillment of academic duties, but rather as a complex practice influenced by organizational, emotional, and contextual variables. This comprehensive view allows us to recognize that the quality of teaching depends both on individual capabilities and on institutional environments that foster continuous professional development.

In this context, leadership emerges as a determining factor in explaining differences in teacher performance, given its potential to strengthen variables such as professional motivation, self-efficacy, peer collaboration, and institutional commitment (Hidalgo, 2017). Studies have identified that leaders with a pedagogical orientation create greater opportunities for professional development, increase organizational trust , and foster better educational practices . Conversely, leadership styles focused exclusively on control or administrative management can restrict pedagogical creativity and weaken teacher engagement (Churampi-Cangalaya et al., 2024).

Traditionally, the relationship between school leadership and teacher performance has been addressed using simple correlational models; however, this approach is insufficient to understand the complexity of current school processes. New research perspectives highlight the need to develop explanatory models that allow us to identify how leadership practices affect internal and external dimensions of teaching (Rojas et al., 2024a). This theoretical evolution makes it possible to move beyond linear relationships and toward more robust interpretations of the mechanisms by which school leadership impacts the professional quality of teachers.

Although several studies have demonstrated significant associations between leadership and teacher performance, most have employed traditional correlational approaches, merely identifying the existence of relationships between the two variables. Consequently, there is limited evidence based on explanatory models that allow us to understand the specific effects of leadership dimensions on the various components of teacher performance. This situation is particularly relevant in the Peruvian educational context, where research using structural equation modeling to simultaneously analyze the causal relationships between institutional planning, pedagogical support, decision-making, and teacher performance is still scarce. Therefore, it is necessary to develop studies that allow us to deepen our understanding of these explanatory mechanisms and provide empirical evidence for improving educational management. Despite advances in international literature, significant limitations persist in explanatory studies applied to basic education in Peru, especially in regions outside major urban centers (Inga-ávila et al., 2023). The central region of Peru is a particularly relevant area due to its socio-geographic characteristics, educational diversity, and the need to strengthen contextualized leadership processes (Arendse et al., 2024). The scarcity of specific research in this area limits the generation of empirical evidence for designing policies and strategies tailored to regional realities.

Under this premise, analyzing leadership as an explanatory variable of teacher performance allows us not only to identify relationships between both dimensions, but also to understand how institutional leadership can become a driver of pedagogical transformation (Rojas et al., 2024b). This approach is key to strengthening educational management from an evidence-based perspective, especially in contexts where school quality requires contextualized strategic interventions (Churampi-Cangalaya et al., 2023).

Therefore, this study aims to propose an explanatory model of school leadership and its influence on teacher performance in basic education in the central region of Peru (González & José, 2020). Through this approach, it seeks to provide scientific evidence that contributes to understanding the dynamics between leadership and professional teaching practice, offering a foundation for the design of institutional strategies aimed at improving school management and raising the quality of education in the region.

2. Literature review

2.1. Executive leadership

School leadership is one of the most influential constructs in contemporary educational management due to its capacity to articulate an institutional vision, guide pedagogical processes, and mobilize the school community toward shared strategic objectives (Yachi-Mendoza, 2024). From an academic perspective, it is defined as the process by which school leaders intentionally influence teachers, students, and organizational structures to promote sustained improvements in educational quality. This conception far surpasses the traditional notion of school administration focused on bureaucratic functions, as it positions the principal as a transformative agent capable of building institutional cultures based on collaboration, innovation, and continuous learning (Peche et al., 2023). In this sense, school leadership involves not only management skills but also the ability to inspire, make strategic decisions, and create conditions that foster teacher professional development and institutional achievement.

From contemporary perspectives, school leadership is understood as a multidimensional practice that integrates pedagogical, organizational, and relational components, where the effectiveness of the school leader depends on their ability to balance administrative management with pedagogical support and the creation of positive school climates (Simbron-Espejo & Sanabria-Boudri, 2020). Under this view, the effective school leader does not merely supervise processes, but rather guides teaching, strengthens collective capacities, and promotes a shared vision that directly impacts the improvement of educational practices. Recent research highlights that effective school leadership is characterized by fostering cultures of high expectations, encouraging collaborative work, and responding strategically to the contextual challenges of each institution. Therefore, their influence does not operate solely through formal authority, but also through the capacity to generate organizational commitment and institutional cohesion (Maya et al., 2019).

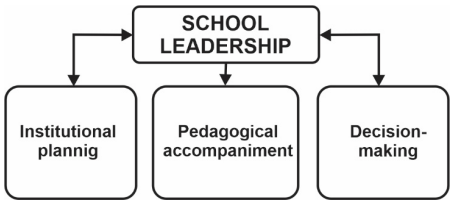

Fig. 1. Dimensions of managerial leadership

a. Institutional planning

Institutional planning is an essential dimension of leadership, representing the strategic process through which school leadership defines goals, organizes resources, establishes priorities, and guides the institution's overall functioning toward sustainable educational objectives (Alonzo Yaranga et al., 2023). From a transformational management perspective, this dimension involves the leader's ability to anticipate needs, project improvement scenarios, and articulate actions consistent with the institutional vision, ensuring that organizational decisions respond to clearly defined pedagogical purposes . In the educational sphere, planning is not limited to the creation of formal documents, but rather involves constructing strategic pathways that integrate contextual diagnosis, collective participation, and continuous evaluation, enabling the school to respond effectively to pedagogical, administrative, and social challenges (Maya et al., 2019). Thus, sound institutional planning strengthens organizational coherence, improves the distribution of responsibilities, and fosters structural conditions for teacher performance and student learning.

From contemporary perspectives, effectively led institutional planning is conceived as a strategic management tool that connects vision, management, and organizational culture, consolidating more efficient and results-oriented school processes (Yachi-Mendoza, 2024). Its relevance lies in its ability to transform general objectives into measurable operational actions, promoting alignment between educational policies, local needs, and pedagogical practices. Recent research suggests that principals with greater competence in institutional planning create more organized schools with a greater capacity for adaptation and a higher probability of achieving sustained improvement (Sanchez, 2019).

b. Pedagogical support

Pedagogical support represents a fundamental dimension of school leadership, constituting a set of systematic actions aimed at strengthening teachers' professional capacities through guidance, monitoring, feedback, and ongoing support in their educational practice. From a pedagogical leadership perspective, this dimension transcends traditional supervision to become

a formative process that seeks to optimize teaching through professional dialogue, critical reflection, and the continuous improvement of teaching strategies. Within this framework, the school leader acts not only as an evaluator but also as a facilitator of professional development, promoting collaborative learning spaces that allow teachers to refine their performance based on student needs and institutional objectives (Yachi-Mendoza, 2024). The effectiveness of pedagogical support, therefore, lies in its capacity to generate contextualized support, strengthen professional confidence, and consolidate a school culture centered on continuous improvement.

In contemporary educational settings, pedagogical support is recognized as a strategic practice for translating leadership into a real impact on the quality of teaching, as it allows principals to intervene directly in the pedagogical processes that occur within the classroom. Various studies show that when support is developed in a planned, reflective manner, focused on professional development, it increases methodological innovation, teacher self-efficacy, and institutional commitment. (Simbron-Espejo & Sanabria-Boudri, 2020)Haga clic o pulse aquí para escribir texto.This implies that pedagogical support should not be understood as administrative control, but as a joint construction process that promotes the professional growth of teachers and the alignment of teaching practices with educational quality standards.

c. decision making

Decision-making constitutes a strategic dimension of leadership, as it expresses the school manager's ability to analyze contexts, evaluate alternatives, and select relevant actions aimed at achieving institutional and pedagogical objectives. (Alonzo Yaranga et al., 2023)In the educational field, effective decision-making involves much more than resolving operational situations; it entails interpreting information, anticipating consequences, prioritizing needs, and guiding the school organization using ethical, technical, and strategic criteria (Peche et al., 2023). From this perspective, managerial decision-making is closely linked to the leadership capacity to respond to complex scenarios, manage resources efficiently, and ensure coherence between the institutional vision, educational policies, and contextual demands. A manager with high decision-making competence not only addresses immediate problems but also guides sustainable improvement processes through well-founded decisions that strengthen educational quality.

In contemporary models of school leadership, effective decision-making is associated with participatory, evidence-based practices oriented toward organizational learning, where the principal incorporates pedagogical, administrative, and social information to develop more relevant institutional responses (Simbron-Espejo & Sanabria-Boudri, 2020). Recent literature highlights that the most effective leadership decisions are those that promote the participation of key stakeholders, strengthen organizational trust, and foster an institutional culture of shared responsibility. This means that decision-making in education is not limited to the hierarchical exercise of authority, but rather involves reflective leadership capable of integrating diverse perspectives to enhance institutional well-being and teacher performance.

2.2. Teaching performance

Teacher performance is one of the most decisive variables in education due to its direct influence on the quality of learning, the holistic development of students, and the achievement of institutional goals. From a contemporary perspective, this construct transcends the narrow notion of job fulfillment to be defined as the set of pedagogical, professional, ethical, and interpersonal competencies that enable teachers to effectively plan, implement, evaluate, and improve teaching processes (Al-Rsa'i et al., 2024). In this sense, teacher performance is not limited to delivering content but also involves the ability to generate meaningful learning experiences, respond to diverse contexts, and promote the cognitive, social, and emotional development of students. Thus, it is configured as a complex practice that integrates disciplinary knowledge, teaching skills, and sustained professional commitment.

From an educational quality perspective, teacher performance is understood as a multidimensional practice that encompasses curriculum planning, pedagogical expertise, classroom management, formative assessment, methodological innovation, and institutional participation (Al-Zoubi et al., 2023). This view recognizes that teacher effectiveness depends not only on technical knowledge but also on their ability to adapt strategies, create inclusive learning environments, and maintain reflective processes of continuous improvement. Consequently, professional performance becomes an observable manifestation of how teachers transform individual capabilities into concrete pedagogical outcomes, responding to both institutional standards and the contextual needs of their students .

International literature agrees that teacher performance is profoundly influenced by organizational, emotional, and contextual variables, implying that its improvement requires more than initial training or accumulated experience (Esmat & Amasha, 2025). Factors such as leadership, institutional climate, professional development opportunities, collaborative culture, and organizational support play a decisive role in consolidating effective pedagogical practices. Thus, teachers do not operate as isolated agents, but rather as part of an institutional ecosystem where structural conditions can either enhance or limit their professional capacity. This systemic understanding allows us to analyze teacher performance as a result of the interaction between individual competencies and organizational dynamics.

In educational settings characterized by technological transformation, sociocultural diversity, and increasing demands for quality, teacher performance also incorporates the capacity for innovation, adaptation, and ongoing professional development (Alzoraiki et al., 2024). High-performing teachers are those capable of integrating active methodologies, utilizing relevant resources, managing heterogeneous classrooms, and responding flexibly to new educational demands. This perspective reinforces the idea that effective teaching involves a dynamic, constantly evolving professional practice, where continuous professional development becomes an essential requirement to guarantee pedagogical relevance and sustainable learning outcomes.

Furthermore, teacher performance possesses an ethical and socio-emotional dimension that is fundamental to understanding its overall impact. Beyond academic results, teachers influence values formation, school climate, student motivation, and the development of citizenship, which significantly broadens their role within the educational institution (Ccoto Tacusi, 2023). In this context, quality performance also implies a commitment to equity, sensitivity to diversity, and the ability to build positive pedagogical relationships. Therefore, evaluating teacher performance requires considering not only technical indicators but also human dimensions related to student support and holistic development.

In summary, teacher performance can be understood as a strategic and multidimensional construct that reflects teachers' capacity to transform knowledge, skills, and values into effective, sustainable, and contextualized pedagogical practices (Ccoto, 2023). Its analysis is essential for understanding educational quality, as it constitutes one of the main mechanisms through which policies, institutional leadership, and organizational conditions translate into real learning experiences . In this sense, studying this variable allows us not only to evaluate teachers' professional practice but also to identify key explanatory factors for strengthening more effective, inclusive, and excellence-oriented educational systems.

2.3. Structural Models (SEM)

Structural equation models (Structural Equation Systems modeling (SEM) constitutes one of the most robust and sophisticated analytical tools in contemporary scientific research, especially in the social sciences and education, due to its capacity to examine complex relationships between observable variables and latent constructs within the same explanatory system (Romero-Sánchez & Barrios, 2023). Unlike traditional statistical approaches focused on bivariate associations or simple linear regressions, SEM allows for the simultaneous analysis of multiple dependency relationships, direct, indirect, and mediating effects, providing a more comprehensive understanding of complex phenomena. This methodology is particularly valuable in educational research, where variables such as leadership, performance, motivation, or institutional climate cannot be adequately understood through isolated relationships, but rather through interconnected theoretical frameworks (Rodríguez et al., 2023). From a methodological perspective, structural models combine confirmatory factor analysis and multivariate regression models, allowing the validation of theoretical constructs and the evaluation of the quality of fit between the hypothesized model and the empirical data.

In the context of studies on school leadership and teacher performance, the use of SEM (Social Evaluation Models) is particularly relevant because it allows for the construction of explanatory models that integrate multiple institutional dimensions into a single analytical framework, strengthening the scientific validity of the inferences (Gonzales & Cevallos, 2022). Its application makes it possible to evaluate the extent to which variables such as institutional planning, pedagogical support, and decision-making explain the behavior of constructs such as teacher professional performance.

3. Methodology

3.1. Research methodology

This research was conducted using a quantitative, explanatory, non-experimental, cross-sectional design aimed at understanding the structural relationship between leadership and teacher performance in regular basic education institutions in the central region of Peru (Gallardo, 2017). This type of design allows for the analysis of phenomena in their natural context without deliberate manipulation of variables, which is relevant when seeking to identify associations and explanatory effects within real educational structures (Alberto, 2015).

The study is based on a theoretical model designed to evaluate the impact of leadership—through its dimensions of institutional planning, pedagogical support, and decision-making—on teacher performance, understood as a multidimensional construct of a pedagogical and professional nature (Gustems et al., 2017). A structured questionnaire was used, composed of items distributed across the dimensions of leadership and teacher performance, employing a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). This questionnaire was adapted from previous studies validated in the educational field and submitted to expert review to assess its relevance, clarity, and coherence, ensuring its content validity before its application. For data collection, the corresponding authorizations were obtained from the participating educational institutions. The questionnaires were administered both in person and virtually, after obtaining informed consent from the participants, guaranteeing confidentiality and the academic use of the information. The average response time was 15 to 20 minutes per respondent.

Data processing was carried out using Structural Equation Modeling (SEM) with the SmartPLS 4 program , a multivariate technique that allows simultaneous analysis of relationships between latent variables and observation of direct and indirect effects within an integrated theoretical model, which is especially relevant in educational research of an explanatory nature. Its application in the present study allows us to transcend simple correlational analyses, orienting ourselves towards the validation of a robust explanatory model that integrates organizational and pedagogical dimensions in the same analytical system. To assess the quality of the measurement model, reliability and convergent validity indicators were analyzed using Cronbach's alpha coefficient, composite reliability (CR), and mean variance extracted (AVE). The absence of collinearity problems was verified using the variance inflation factor (VIF), and the overall model fit was evaluated using the standardized root mean square residual (SRMR). Acceptance criteria included Cronbach's alpha and CR values greater than 0.70, AVE greater than 0.50, VIF less than 5, and SRMR less than 0.08.

Table 1
Study population – Teachers from Regular Basic Education institutions in the Junín region

Educational level	Teachers	Percentage (%)	Sample (n)
Early Childhood Education	1,487	28.73	103
Primary education	2,563	49.52	177
Secondary education	1,126	21.75	78
Total population (N)	5,176	100	358

Note. Population made up of teachers from Regular Basic Education institutions in the Junín region, according to official records of ESCALE-MINEDU.

The table presents the distribution of the study population and the calculation of the stratified sample, comprised of a total of 5,176 teachers from Regular Basic Education in the Junín region, according to official ESCALE-MINEDU records. The data are broken down into three educational levels: Primary Education represents the largest group with 2,563 teachers (49.52% of the population and a sample of 177), followed by Early Childhood Education with 1,487 teachers (28.73% of the population and a sample of 103), and finally Secondary Education with 1,126 teachers (21.75% of the population and a sample of 78); thus consolidating a total representative sample (n) of 358 educators proportionally distributed.

3.2. Research model

The model for the present research is presented in Fig. 2, which shows the relationship between the dimensions of managerial leadership such as institutional planning, pedagogical support and decision -making , as well as the dimensions of the job performance variable such as task performance and civic behavior.

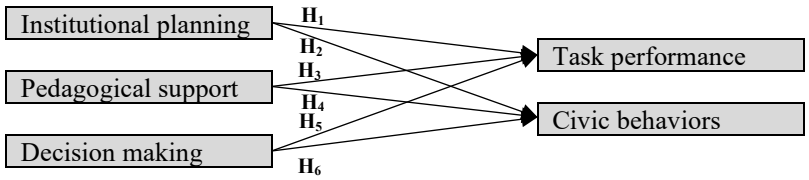

Fig. 2. Proposed research model

According to the proposed research model, the following hypotheses were formulated.

Hypothesis 1 (**H_1):** Institutional planning exercised by the management leadership directly and significantly influences the performance of teachers in Regular Basic Education.

Hypothesis 2 (**H_2):** Institutional planning exercised by the management leadership directly and significantly influences the organizational civic behaviors of teachers in Peruvian Regular Basic Education.

Hypothesis (**H_3):** The pedagogical support provided by the management leadership directly and significantly influences the performance of teachers in Regular Basic Education.

Specific Hypothesis 4 (**H_4):** The pedagogical support provided by the management leadership directly and significantly influences the organizational civic behaviors of teachers in Regular Basic Education.

Specific Hypothesis 5 (**H_5):** The decision-making of the management leadership directly and significantly influences the task performance of teachers in Regular Basic Education.

Hypothesis Specific 6 (**H_6):** The decision-making of the management leadership directly and significantly influences the organizational civic behaviors of teachers in Regular Basic Education.

4. Results

4.1. Evaluation of the measurement model

Before evaluating the proposed structural relationships, the quality of the measurement model was verified by analyzing internal reliability, convergent validity, and collinearity of the constructs.

Table 2
Reliability, convergent validity, and collinearity of constructs

Construct	Cronbach's alpha	CR	BIRD	VIF
Institutional planning	0.912	0.931	0.731	2.145
Pedagogical support	0.924	0.941	0.758	2,387
Decision making	0.889	0.918	0.691	1954
Task performance	0.937	0.949	0.788	2,764
Civic behaviors	0.918	0.936	0.747	2,512

Cronbach's alpha and CR values are greater than 0.70, while AVE values exceed 0.50. Likewise, VIF values are less than 5, confirming the absence of collinearity problems.

Table 3
Discriminant validity using the Heterotrait-Monotrait Ratio (HTMT) criterion

Constructs	Institutional planning	Pedagogical support	decision making	Teaching performance
Institutional planning	—			
Pedagogical support	0.68	—		
Decision making	0.63	0.71	—	
Teaching performance	0.74	0.79	0.67	—

The results of the HTMT matrix show that the correlations between the model constructs remain below the reference value of 0.85, the criterion recommended by Henseler et al. to confirm discriminant validity in PLS -SEM models. The highest value is observed between pedagogical support and teacher performance (HTMT = 0.79), followed by institutional planning and teacher performance (HTMT = 0.74), without exceeding the established limit. These results indicate that each construct represents a theoretically distinct concept and that the associated indicators adequately measure different dimensions of the phenomenon under study.

Furthermore, the evidence obtained allows us to affirm that there is no significant conceptual overlap between the latent variables analyzed, guaranteeing that institutional planning, pedagogical support, decision-making and teacher performance maintain their own identity within the structural model.

4.2. Evaluation of the overall fit of the model

Table 4
Global model fit index

Indicator	Value obtained	Reference value
SRMR	0.056	< 0.08

The evaluated model shows a good overall fit, as the SRMR indicator (Standardized The Root Mean Square Residual) yielded a value of 0.056. This result is optimally below the established reference value of < 0.08, which statistically demonstrates that the discrepancies between the observed and modeled covariance matrix are low enough to validate the proposed model structure.

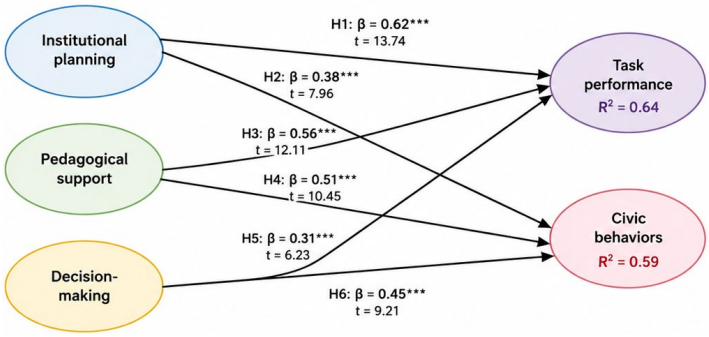

Fig. 3. Structural model and path coefficients

Structural equation modeling (SEM) for educational management presents three fundamental axes:

First, the model assesses the direct impact of three key management dimensions on task performance ($R^2 = 0.64$). The statistical results reveal that Institutional Planning is the most robust predictor for optimizing this performance ($^{\beta} = 0.62$, t = 13.74), demonstrating that establishing clear objectives and a solid strategic direction is essential for the effective execution of the educational center's activities. Pedagogical Support follows closely behind ($\beta = 0.56$, t = 12.11), confirming that teacher support and mentoring directly impact learning outcomes, while Decision-Making shows a smaller but equally significant influence ($\beta = 0.31$, t = 6.23).

Secondly, the influence of these same predictor variables on the civic behaviors of the educational community is analyzed (Civic behaviors , $R^2 = {}^{0.59}$). In this scenario, Pedagogical Support emerges as the most important determining factor ($\beta = 0.51$, $t = 10.45$), suggesting that a culture oriented towards mentoring and constructive feedback directly strengthens cohesion, civic engagement, and voluntary collaboration within the institution. Furthermore, Decision-Making plays a highly influential role in this variable ($\beta = 0.45$, $t = 9.21$), surpassing the impact of Institutional Planning ($\beta = 0.38$, $t = 7.96$) on the development of these collective behaviors.

Finally, the analysis of overall significance and explained variance consolidates the empirical validity of the entire theoretical construct. All the hypotheses (H1 to H6) have an extremely high level of confidence with a p-value less than one thousandth ($p < 0.001$), supported by critical t-values substantially higher than the standard thresholds. The coefficients of determination indicate that the model explains a robust 64% of the variability in performance and 59% of organizational civic behaviors, confirming that the synergistic articulation between planning, decision-making leadership, and pedagogical support constitutes the main driver for achieving the proposed standards of educational quality and equity.

Table 5

Structural relationships

Hypothesis	Structural Relationship	β	t- value	p- value
H_1	Institutional planning → Task performance	0.62	13.74	< 0.001
H_2	Institutional planning → Civic behaviors	0.38	7.96	< 0.001
H_3	Pedagogical support → Task performance	0.56	12.11	< 0.001
H_4	Pedagogical support → Civic behaviors	0.51	10.45	< 0.001
H_5	Decision-making → Task performance	0.31	6.23	< 0.001
H_6	Decision-making → Civic behaviors	0.45	9.21	< 0.001

Based on the statistical data presented in the table of structural relationships, the direct and differentiated impact of the management dimensions on the evaluated organizational results is evident. When analyzing which factors drive task performance , Institutional Planning emerges as the most powerful and indispensable tool, closely followed by Pedagogical Support, while Decision-Making exerts a positive but lesser influence. In contrast, when the objective is to foster civic and collaborative behaviors within the community (Civic) behaviors), the order of relevance changes significantly: Pedagogical Support becomes the main determining factor, surpassing the influence of Decision Making and leaving Institutional Planning in last place.

From a methodological perspective, the analyzed model boasts outstanding empirical validity and high reliability. All of the hypotheses (from H_1 to H_6) show maximum statistical significance, confirmed by the p- value ($p < 0.001$), which completely rules out the possibility that the observed effects are due to chance. This extremely low probability value demonstrates that the influence of planning, leadership in decision-making, and teacher support on performance and the human climate is highly accurate, constituting a comprehensive and statistically proven strategy for educational management.

Table 6

Effect size (f^2)

Relationship	f^2	Interpretation
Institutional planning → Task performance	0.38	Big
Institutional planning → Civic behaviors	0.18	Small-Medium
Pedagogical support → Task performance	0.31	Big
Pedagogical support → Civic behaviors	0.26	Medium
Decision-making → Task performance	0.12	Small-Medium
Decision-making → Civic behaviors	0.2	Medium

The effect size results (f^2) allow us to evaluate the specific contribution of each predictor variable on the endogenous variables, revealing a differentiated impact depending on the outcome being analyzed. With respect to task performance , Institutional Planning and Pedagogical Support demonstrate critical relevance in the model, achieving an effect size classified as Large (0.38 and 0.31, respectively), which confirms that both dimensions constitute fundamental pillars for enhancing technical performance, while Decision Making exerts a more discreet impact categorized as Small-Medium (0.12).

On the other hand, when examining organizational civic behaviors (Civic (behaviors), the model's dynamics are reconfigured towards a more balanced structure where the pedagogical and leadership factors dominate. In this case, Pedagogical Support is positioned as the predictor with the greatest individual explanatory power, showing a Medium impact (0.26), closely followed by Decision Making, which also achieves a Medium effect (0.20), while Institutional Planning takes on a complementary role with a rating of Small-Medium (0.18), demonstrating that the culture of collaboration is mainly nurtured by teacher support and participatory management.

The adequacy of the sample size was assessed following the recommendations of Hair et al. (2022) for structural equation models based on partial least squares (PLS -SEM). Considering that the proposed model presents three structural relationships directed toward the endogenous variables, the sample of 358 teachers far exceeds the minimum size required according to the

"10-times rule," which states that the sample size should be at least ten times the maximum number of structural relationships that point to an endogenous construct.

Table 7
Coefficients of determination (R^2)

Endogenous Variable	R^2	Interpretation
Task performance	0.64	High
Civic behaviors	0.59	Moderate-High

The coefficients of determination (R^2) demonstrate that the predictive model has a robust explanatory capacity for the outcome variables. Specifically, the model's independent variables explain 64% of the variance in task performance , which is classified as a high level, confirming that the proposed structure is a highly effective predictor of technical effectiveness. Likewise, the model explains 59% of the variability in civic behavior. behaviors), a capacity rated as Moderate-High that confirms the suitability and direct impact of management dimensions on the development of collaborative and civic behaviors within the organization.

5. Discussion

The results obtained confirm that leadership is a key explanatory factor for teacher performance in regular basic education institutions in the Junín region. The structural model showed a high explanatory capacity for task performance ($R^2 = 0.64$) and a moderately high capacity for organizational civic behaviors ($R^2 = 0.59$), demonstrating that the analyzed dimensions explain a substantial proportion of the variability observed in both variables. Specifically, institutional planning presented the highest trajectory coefficient for task performance ($\beta = 0.62$; $t = 13.74$; $p < 0.001$), demonstrating that the clear definition of institutional objectives, goals, and guidelines significantly enhances teacher professional effectiveness. These results align with the findings of Gustems et al. (2017), who maintain that strategic planning is one of the fundamental pillars for guiding pedagogical work toward achieving sustainable educational outcomes. Furthermore, the findings support the instructional leadership theory, which holds that managers influence learning and professional performance through the effective organization of resources, the definition of institutional priorities, and the ongoing supervision of educational processes.

Regarding pedagogical support, the results reveal that this dimension exerts a significant influence on both task performance ($\beta = 0.56$; $t = 12.11$; $p < 0.001$) and organizational civic behaviors ($\beta = 0.51$; $t = 10.45$; $p < 0.001$), becoming the most important predictor of the latter variable. These findings confirm that guidance, mentoring, feedback, and professional support strengthen not only teachers' pedagogical skills but also their institutional commitment and willingness to collaborate voluntarily for the benefit of the organization. These results are consistent with the contributions of Alzoraiki et al. (2024), who highlight that educational environments characterized by ongoing support foster innovation, continuous learning, and professional adaptation. They also support the arguments of Esmat and Amasha (2025), who maintain that teacher performance should be understood from a systemic perspective in which leadership, organizational climate and professional development opportunities interact to enhance the individual capabilities of educators.

Decision-making showed positive and statistically significant effects on task performance ($\beta = 0.31$; $t = 6.23$; $p < 0.001$) and on organizational civic behaviors ($\beta = 0.45$; $t = 9.21$; $p < 0.001$), although with a smaller magnitude than that observed for institutional planning and pedagogical support. Nevertheless, the effect size demonstrates a relevant contribution to explaining civic behaviors ($f^2 = 0.20$), suggesting that participatory processes and the inclusion of teachers in institutional management strengthen organizational cohesion and a collaborative culture. These results align with the tenets of transformational leadership theory, according to which effective leaders promote participation, trust, and collective commitment through shared decision-making processes. They also coincide with the findings of Rodríguez et al. (2023), who point out that organizational dynamics should be analyzed as interrelated structures where managerial decisions generate both technical and socio-emotional effects on the members of the organization.

The validation of the model using SEM- PLS confirms the theoretical and empirical soundness of the proposed explanatory framework. All formulated hypotheses were accepted with high levels of statistical significance ($p < 0.001$), while the HTMT values ranged from 0.63 to 0.79, remaining below the recommended threshold of 0.85 and guaranteeing the discriminant validity of the analyzed constructs. These results corroborate the findings of Romero-Sánchez and Barrios (2023), who state that structural equation models allow for the understanding of complex educational phenomena through the simultaneous analysis of multiple causal relationships.

Conclusions

- ✓ School leadership exerts a direct, positive, and statistically significant influence on teacher performance in regular basic education institutions in central Peru. Institutional planning emerged as the most important predictor of task performance ($\beta = 0.62$), demonstrating that strategic orientation and adequate institutional organization significantly enhance teachers' professional effectiveness.

- ✓ Pedagogical support constitutes the leadership dimension with the greatest capacity to strengthen organizational civic behaviors (β = 0.51), demonstrating that actions of guidance, feedback and professional support contribute to the development of a collaborative, committed school culture oriented towards continuous improvement.
- ✓ The proposed structural model demonstrated a high explanatory power, accounting for 64% of the variability in teacher performance and 59% of organizational civic behaviors. These results empirically validate the importance of integrating institutional planning, pedagogical support, and decision-making as essential components for strengthening educational management and improving the quality of schools.

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