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Communicational Leadership in Higher Education: Examining Its Predictive Role in Teaching Performance from Students' Perspectives

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Abstract

This study examined the predictive influence of communicational leadership on university teaching performance from the perspective of students. A quantitative approach was adopted through a correlational-predictive research design, involving a sample of 330 students from the National University of the Altiplano during the 2025 academic period. Linear regression analyses revealed that communicational leadership constitutes a statistically significant predictor of teaching performance, accounting for 41.2% of its variance (R^2 = 0.412, p < 0.001). Regarding its dimensions, pedagogical communication demonstrated a strong association with planning competence (R = 0.798), whereas motivational communication emerged as the most influential predictor across the dimensions of teaching practice, assessment, and classroom interaction. These findings highlight the pivotal role of communicational leadership in fostering effective teaching performance, suggesting that communicative clarity, motivational capacity, and pedagogical enthusiasm positively shape students' perceptions and contribute to more comprehensive and effective instructional practices in higher education contexts.

Keywords: Communicational leadership, teaching performance, pedagogical communication, higher education, student perception.

Introduction

The communicational leadership of university teaching staff has increasingly been recognized as a strategic axis in higher education contexts characterized by accelerated transformations and growing demands for teaching quality. Daily teacher–student interaction not only structures the teaching–learning process but also shapes students' perceptions of pedagogical competence, professional commitment, and instructional effectiveness. In this regard, a growing body of research concurs that communication constitutes a core dimension of pedagogical action and teacher professional development, insofar as teachers' communicative practices guide classroom dynamics and condition opportunities for student participation (Gutiérrez & Granda, 2025). From the student perspective, instructors who demonstrate effective communicational leadership—characterized by clarity in the presentation of objectives, timely feedback, empathy, and the promotion of respectful classroom environments—tend to foster higher levels of motivation, engagement, and satisfaction with the educational experience (Ravdansuren et al., 2025).

Across different educational levels, evidence suggests that the ways in which leaders and educators communicate exert a significant influence on team integration, institutional climate, and academic outcomes. Research in educational management has shown that communication strategies associated with leadership contribute not only to academic achievement but also to the strengthening of mutual understanding among educational actors and the construction of relationships grounded in trust and collaboration (Gutiérrez & Granda, 2025; Malpartida Santos, 2020). Within higher education, communicative competencies among academic leaders and faculty members have been identified as essential for managing complex academic processes, fostering engagement within the university community, and adapting to rapidly changing institutional environments. Consequently, communication has become a key resource for the exercise of effective leadership and the continuous improvement of educational quality (Sierra Villamil, 2016; Peñalver-Higuera, 2024). Likewise, classroom-focused studies indicate that teachers' discourse—including communicative tone, assertiveness, and listening capacity—significantly influences how future professionals develop discursive-communicative competencies and construct perceptions regarding teaching performance (Hinojosa Torres et al., 2023).

Despite these advances, important gaps remain in the literature. A considerable proportion of existing studies focus on managerial leadership or teaching leadership in broad terms, without clearly delimiting communicational leadership as a specific pedagogical construct or examining the communicative dimensions that configure it—such as expository clarity, assertiveness, empathy, active listening, and the promotion of participation—which may underpin students' evaluations of teaching performance (Arias Solís, 2024). Furthermore, previous research has predominantly emphasized organizational outcomes, including institutional climate, cohesion, educational quality, and general academic achievement, thereby relegating the

analysis of the direct relationship between university teachers' communicative practices and teaching performance as perceived by students (Ravdansuren et al., 2025).

Against this backdrop, the present study seeks to contribute to reducing this gap through a focused analysis of communicational leadership and its relationship with university teaching performance from the perspective of students. Communication is conceptualized as a structuring axis of teacher leadership within classroom interactions, insofar as it shapes instructional, participatory, and feedback processes. By examining the value students attribute to different communicative dimensions of teaching and their relationship with perceived instructional performance, this study aims to generate empirical evidence that complements approaches centered on general or managerial leadership by situating communicational leadership within the everyday dynamics of teacher–student interaction (Hinojosa Torres et al., 2023; Cueva-Pérez et al., 2022).

In line with the foregoing, the objective of this study is to determine the predictive capacity of communicational leadership on university teaching performance from the perspective of students at the National University of the Altiplano, as well as to identify the communicative dimensions that contribute most substantially to explaining teachers' professional performance in higher education settings (Mamani-Flores et al., 2025).

In this study, communicational leadership is understood as the teacher's capacity to intentionally guide, motivate, and structure pedagogical interaction through strategic communicative practices oriented toward learning, participation, and the development of classroom relationships (Quispe-Mamani et al., 2022). Unlike instructional communication, which primarily emphasizes the transmission and clarity of academic content, communicational leadership incorporates relational, motivational, and participatory dimensions that influence how students perceive teaching effectiveness and pedagogical authority (Incacutipa-Limachi et al., 2024). Similarly, although communicational leadership shares certain characteristics with transformational leadership—particularly motivation and interpersonal influence—it specifically emphasizes communicative processes embedded within classroom interactions, including feedback, dialogic exchange, empathy, and participatory mediation. Therefore, communicational leadership is conceptualized as a multidimensional pedagogical construct integrating communicative competence and leadership practices within higher education contexts.

Theoretical Framework

Communicational leadership variable

The construct of communicational leadership was operationalized through three complementary dimensions: pedagogical communication, motivational communication, and participatory communication. These dimensions were selected

based on contemporary theoretical and empirical approaches to pedagogical interaction and teacher communicative competence in higher education (El Jai, 2023; Brynko & Kravchenko, 2023; Volkova et al., 2025). Pedagogical communication refers to the teacher's capacity to organize, structure, and convey academic content in a clear, coherent, and pedagogically meaningful manner. Motivational communication encompasses the communicative strategies employed to foster student engagement, stimulate enthusiasm, and strengthen emotional involvement in the learning process. Participatory communication, in turn, emphasizes dialogic interaction, active listening, and the promotion of collaborative knowledge construction through reciprocal exchanges between teachers and students. Collectively, these dimensions enable communicational leadership to be conceptualized as a multidimensional pedagogical construct that integrates instructional, motivational, and relational functions, thereby shaping the quality of classroom interaction and influencing students' perceptions of teaching effectiveness in higher education contexts.

Pedagogical communication

Pedagogical communication is conceived as an intentional, formative, and bidirectional process of interaction between teachers and students. Beyond the mere transmission of information, this communicative process is oriented toward the construction of meaningful learning, insofar as it articulates academic content, shared meanings, and educational experiences within the pedagogical context. In this regard, effective pedagogical communication requires not only disciplinary expertise but also the development of communicative competencies that enable teachers to adapt, structure, and mediate knowledge in pedagogically relevant and context-sensitive ways (El Jai, 2023). Furthermore, pedagogical communication extends beyond its cognitive dimension by shaping the emotional and relational conditions that foster students' active participation and facilitate deep learning processes. In particular, verbal communicative strategies contribute to the stimulation of critical thinking, reflection, and classroom interaction, whereas non-verbal resources may either reinforce or weaken the intended message, thereby directly influencing the quality and effectiveness of the communicative process (Степаненко, 2024). Consequently, pedagogical communication is positioned as a fundamental determinant of educational quality, given its influence on both teaching–learning processes and the holistic formative experience of students.

Participatory communication

Participatory communication, according to Akhanova (2022), is conceived as an interactive process oriented toward the holistic development of students, in which active involvement in communicative exchange fosters not only knowledge acquisition but also the development of social, cognitive, and interpersonal competencies. This perspective is grounded in a logic of horizontal interaction among educational actors, whereby both teachers and students assume active roles in the co-construction of ideas, experiences, and meanings, thereby contributing to the

establishment of more democratic, inclusive, and dialogic educational environments (Szőke-Milinte, 2021). In contrast to traditional transmissive models of instruction, participatory communication promotes students' direct engagement in knowledge construction, enhancing the development of critical thinking, autonomy, reflective capacity, and collaborative problem-solving skills (Volkova et al., 2025). From this perspective, participatory communication emerges as a fundamental component in strengthening meaningful learning, fostering student agency and autonomy, and improving the overall quality of educational processes within contemporary higher education contexts.

Motivating Communication

Motivational communication, according to Volkova et al. (2025), is conceived as an essential component of teachers' professional communicative competence, as it contributes to strengthening students' engagement, commitment, and active involvement in the educational process. In this regard, it is considered a determining factor in the effectiveness of educational practices, given its direct influence on students' attitudes, interest, academic engagement, and performance (Brynko & Kravchenko, 2023). Furthermore, motivational communication fosters the development of intrinsic motivation by promoting more dynamic, supportive, and intellectually stimulating learning environments. This form of communication extends beyond the effective use of verbal language and incorporates non-verbal communicative resources capable of conveying enthusiasm, encouragement, confidence, and emotional support—elements that are fundamental for sustaining students' active participation and persistence in learning activities (Brynko & Kravchenko, 2023). From this perspective, motivational communication not only enhances meaningful learning experiences but also contributes to the development of student autonomy, self-regulation, and academic self-efficacy, thereby consolidating its role as a key determinant of educational quality and the effectiveness of the training process in higher education contexts.

Variable teacher performance

Teaching performance was conceptualized as the set of pedagogical, communicative, and relational practices through which university teachers plan, implement, assess, and manage the teaching–learning process. In accordance with higher education evaluation frameworks and contemporary models of teaching quality, the construct was operationalized into four interrelated dimensions: pedagogical planning, teaching implementation, learning assessment, and pedagogical interaction. These dimensions were selected because they represent fundamental components consistently recognized in the literature on university teaching effectiveness, instructional quality, and faculty performance evaluation. From this perspective, teaching performance extends beyond the mere transmission of disciplinary content and encompasses the teacher's capacity to design meaningful learning experiences, facilitate active participation, foster constructive classroom relationships, and

provide timely and effective feedback to support student learning. Consequently, teaching performance is understood as a multidimensional construct that integrates instructional, evaluative, and relational competencies essential for promoting educational quality in higher education settings.

Pedagogical planning

According to Lisovyi et al. (2025), pedagogical planning extends beyond the mere organization of content, objectives, and instructional activities, encompassing the intentional design of communicative interactions that take place within the classroom. This process involves careful consideration of the educational context, students' characteristics, and intended learning outcomes, integrating pedagogical methods, instructional resources, and communicative strategies that foster dialogue, feedback, and active participation. In doing so, pedagogical planning contributes to strengthening teachers' communicative competence and enhancing the effectiveness of classroom interaction. Along similar lines, effective planning requires anticipating the most appropriate modes of communication according to students' needs, learning profiles, and contextual particularities, while incorporating strategies that promote message clarity, mutual understanding, and meaningful interaction. Such an approach contributes to reducing communication barriers, facilitating content comprehension, and fostering more inclusive learning environments (El Jai, 2023). Consequently, pedagogical planning emerges as a fundamental mechanism for articulating communication with educational purposes, promoting more organized, meaningful, and student-centered teaching–learning processes in higher education contexts.

Teaching Development

According to Yuzkiv et al. (2021), teaching implementation in higher education is conceived as a process closely associated with the mastery of pedagogical competencies and teachers' communicative skills. Within this framework, the effectiveness of the educational process depends substantially on teachers' ability to apply pedagogical knowledge in context-sensitive ways, integrating communicative strategies that facilitate interaction, enhance clarity in content delivery, and encourage students' active participation in learning activities. In a similar vein, previous research has emphasized that clear, empathetic, and bidirectional communication fosters student motivation, engagement, and meaningful learning, thereby constituting a fundamental element for the effective implementation of teaching practices (Nigmatova, 2024). Furthermore, communicative competence enables teachers to adapt instructional processes to diverse educational needs and rapidly changing academic environments, thereby enhancing the responsiveness and inclusiveness of pedagogical practice. Consequently, strengthening teachers' communicative skills emerges as a critical factor for fostering innovation in educational practices, improving the quality of the training process, and responding effectively to the challenges of contemporary higher education contexts.

Learning assessment

According to Sikström et al. (2022), learning assessment is conceived as a process that transcends the mere measurement of academic outcomes, as it is grounded in the provision of personalized, adaptive, and continuous feedback by both pedagogical agents and students themselves, enabling the educational process to be adjusted to individual learning needs. Within this framework, the authors emphasize that communicative characteristics—such as tone, clarity, responsiveness, and interactivity—play a decisive role in fostering trust and facilitating meaningful learning experiences. In this regard, clear, empathetic, and constructive communication during assessment processes enhances students' understanding of evaluative criteria, strengthens their confidence, and promotes active involvement in their own learning trajectories (Stepanenko, 2024). Consistent with this perspective, Zare and Derakhshan (2021) argue that communicative behaviors characterized by clarity, interpersonal closeness, and constructive emotional support contribute to the creation of a supportive climate of trust, reducing evaluative anxiety and encouraging greater student engagement in the educational process. Consequently, empathetic and positive pedagogical communication significantly influences the extent to which assessment is perceived as a fair, transparent, and developmental process oriented toward students' holistic learning and integral development.

Pedagogical interaction

According to Akhanova (2022), pedagogical interaction is conceived as a complex process that integrates psychological and pedagogical dimensions, in which communication between teacher and students occupies a central place in the development of learning. In this framework, it is not reduced to the transmission of content, but implies the ability of teachers to interact effectively, establishing relationships based on understanding, respect, and cooperation (Kuchai, 2024). Likewise, pedagogical interaction is configured as a dynamic process of exchange that favors motivation, the development of critical thinking, and the active involvement of students (Brynko & Kravchenko, 2023). In this sense, the teacher assumes a guiding role that guides, accompanies and motivates the student, promoting their active participation and integral development (Melnyk & Zaremba, 2020). Consequently, pedagogical interaction is consolidated as a bidirectional and constructive process that favors the co-construction of knowledge, the strengthening of communication skills and the consolidation of the educational link, constituting a key element for the quality of higher education.

Methodology

Research Approach, Type, Level, and Design

This study adopted a quantitative approach, oriented toward the objective measurement of variables and the statistical analysis of numerical data to examine the relationship between communicational leadership and teaching performance.

Quantitative research enables the testing of hypotheses through systematic measurement and statistical procedures, thereby facilitating the objective examination of relationships among educational phenomena (Hernández Sampieri et al., 2014).

The study corresponds to a basic research type, as it seeks to expand theoretical understanding of the relationship between communicational leadership and teaching performance without an immediate practical intervention purpose. In this regard, the study contributes to the generation and advancement of scientific knowledge concerning pedagogical communication and teacher effectiveness in higher education settings (Tamayo, 2004).

The research was conducted at a correlational-predictive level, given that it aimed not only to identify the degree of statistical association between the study variables but also to estimate the predictive contribution of communicational leadership dimensions to teaching performance. This level of analysis is appropriate for examining explanatory relationships among educational variables and estimating their predictive capacity (Hernández Sampieri et al., 2014).

A non-experimental, cross-sectional research design was employed. The non-experimental nature of the study is justified because the variables were observed in their natural academic context without manipulation or intervention by the researchers. Likewise, the cross-sectional design involved collecting data at a single point in time during the 2025 academic period, enabling the analysis of relationships between communicational leadership and teaching performance from the students' perspective (Hernández Sampieri et al., 2014).

Population and Sample

The target population consisted of undergraduate students enrolled in different professional schools at the National University of the Altiplano during the 2025 academic year. The final sample comprised 330 students, selected through non-probabilistic convenience sampling, considering accessibility, voluntary participation, and participant availability during the data collection process. Although this sampling strategy may limit the generalizability of findings, it is frequently employed in educational and social science research when access to the entire population is constrained (Otzen & Manterola, 2017).

Data collection was conducted during the second academic semester of 2025, and participation was both anonymous and voluntary. Prior to participation, students were informed about the academic purpose of the research, the confidentiality of their responses, and the voluntary nature of their involvement.

Regarding the demographic profile of the sample, participants represented diverse academic programs and years of study, allowing the inclusion of varied perspectives concerning teaching performance and communicational leadership. The sample included both male and female students aged between 17 and 29 years,

predominantly enrolled in undergraduate programs related to the social sciences, engineering, and health sciences. This diversity contributed to obtaining broader and more representative perceptions regarding communicative practices and teacher performance within higher education contexts.

Data Collection Techniques and Instruments

Data were collected using the survey technique, which enables the systematic gathering of information regarding participants' perceptions, attitudes, and experiences. The research instrument consisted of a structured questionnaire employing a five-point Likert scale, ranging from 1 ("Never") to 5 ("Always"), an approach widely recognized as appropriate for measuring perceptions and attitudinal constructs (Likert, 1932).

The questionnaire comprised 34 Likert-scale items organized into two principal variables and seven analytical dimensions. Communicational leadership was assessed through three dimensions: pedagogical communication (5 items), motivational communication (5 items), and participatory communication (5 items). Teaching performance, in turn, was operationalized into four dimensions: pedagogical planning (5 items), teaching implementation (5 items), learning assessment (5 items), and pedagogical interaction (4 items).

The construction of the instrument was guided by the theoretical and empirical literature on pedagogical communication, teacher leadership, communicative competence, and university teaching performance (Xie & Derakhshan, 2021; El Jai, 2023; Akhanova, 2022). The operationalization process involved the prior conceptual definition of each construct, followed by its translation into observable indicators and measurable Likert-scale items, thereby ensuring coherence between the theoretical framework, analytical dimensions, and empirical measurement procedures.

Examples of questionnaire items included statements such as: "The teacher uses clear and understandable language during class sessions" and "The teacher provides timely feedback regarding assessments."

Validity and Reliability

Content validity was established through expert judgment, involving the participation of three specialists holding doctoral degrees in education and experience in university management, who evaluated the instrument in terms of relevance, clarity, coherence, and conceptual adequacy of the items.

To determine the instrument's reliability, Cronbach's alpha coefficient was calculated for the seven analytical dimensions, obtaining values above 0.80, with an overall coefficient of $\alpha = 0.821$, indicating high internal consistency according to the criteria proposed by Cronbach (1951). Since coefficients above 0.70 are generally considered acceptable, these results provide empirical support for the reliability and measurement stability of the instrument.

Additionally, the instrument design emphasized theoretical correspondence between dimensions and indicators, ensuring conceptual coherence and alignment between the operational definitions and observable manifestations of communicational leadership and teaching performance from the students' perspective. Although the present study prioritized content validity and reliability analysis, future research could incorporate exploratory and confirmatory factor analyses to provide further evidence regarding construct validity and dimensional stability.

Table 1. Reliability Statistics

Cronbach's Alfa	N of elements
,821	7

Data Analysis Techniques

Data processing and statistical analysis were conducted using IBM SPSS Statistics version 26.0, a widely recognized software package in social science research due to its robustness and reliability in quantitative data analysis. Initially, descriptive statistics were employed to summarize the distribution and central tendencies of the variables and analytical dimensions examined.

Subsequently, inferential statistical techniques were applied to examine the predictive relationships between communicational leadership and teaching performance. Specifically, simple linear regression analysis was performed to estimate the overall predictive effect of communicational leadership on teaching performance. Additionally, multiple linear regression models were employed to assess the specific contribution of the dimensions of communicational leadership—pedagogical communication, motivational communication, and participatory communication—in explaining variations in teaching performance.

Linear regression analysis was considered appropriate because it enables the estimation of the extent to which one or more independent variables explain the variability of a dependent variable and allows the identification of predictive relationships between constructs (Montgomery et al., 2012). To ensure the robustness and validity of the statistical estimations, the principal assumptions of regression analysis were verified, including normality, linearity, homoscedasticity, and independence of residuals. The verification of these assumptions ensured the adequacy of the statistical models and strengthened the reliability of the inferential findings.

Ethical Considerations

This study adhered to the general ethical principles governing research involving human participants, including voluntary participation, informed consent, anonymity, confidentiality, and the responsible management of research data. Formal approval

from an Institutional Review Board (IRB) or equivalent ethics committee was not required, as the study employed a non-invasive survey design, posed minimal risk to participants, and did not involve the collection of sensitive, personal, or identifiable information.

Participation was entirely voluntary, and students were informed about the academic purpose of the study, the confidential treatment of the information provided, and their right to decline or withdraw participation without any consequences. All collected data were anonymized and analyzed exclusively for academic and scientific purposes, ensuring the privacy and protection of participants throughout the research process.RESULTS

Prediction of communicational leadership in teacher performance

Table 2. Model Overview

Model	R	R squared	R square adjusted	Standard Estimate Error
1	.642a	,412	,410	7,57550

a. Predictors: (Constant), Communication Leadership

The simple linear regression analysis (Table 2) revealed that communicational leadership significantly predicts teaching performance. The model yielded a correlation coefficient of R = 0.642, indicating a moderate positive association between communicational leadership and teaching performance. Furthermore, the coefficient of determination (R^2 = 0.412) indicates that 41.2% of the variance in teaching performance is explained by communicational leadership, demonstrating a substantial predictive contribution of the independent variable to the model. These findings suggest that higher levels of communicational leadership are associated with more favorable perceptions of teaching performance among university students.

Table 3. ANOVA[a]

Model		Sum of squares	df	Mean square	F	P-Value
1	Regression	13169,123	1	13169,123	229,474	,000b
	Residue	18823,350	328	57,388		
	Total	31992,473	329			

a. Dependent variable: Performance

b. Predictors: (Constant), Leadershipcom

The analysis of variance (ANOVA) table 3, indicates that the model is statistically significant (F = 229.474; p < 0.001), which confirms the validity of the model.

Table 4. Coefficient

Model		Non-standardized coefficients		Standardized coefficients		
		B	Std. Error	Beta	t	P-Value
1	(Constant)	25,357	2,435		10,416	,000
	Leadershipcom	,728	,048	,642	15,148	,000

a. Dependent variable: Performance

Regarding the regression coefficients (Table 4), communicational leadership exhibited a positive and statistically significant effect on teaching performance ($B = 0.728$; $\beta = 0.642$; $p < 0.001$). These results indicate that increases in communicational leadership are associated with corresponding increases in perceived teaching performance. Specifically, the positive standardized coefficient suggests that communicational leadership exerts a substantial predictive influence on the dependent variable. Therefore, the findings support the conclusion that communicational leadership significantly predicts teaching performance among university faculty from the students' perspective.

Analysis by dimensions

Prediction of leadership communication in the performance planning dimension

Table 5. Model Overview

Model	R	R squared	R square adjusted	Standard Estimate Error
1	,893a	,798	,796	1,53103

a. Predictors: (Constant), Motivating Communication, Pedagogical Communication, Participatory Communication

The multiple linear regression analysis revealed that the dimensions of communicational leadership significantly predict the pedagogical planning dimension of teaching performance (Table 5). The model yielded a correlation coefficient of $R = 0.893$, indicating a very strong positive relationship between the predictor variables and pedagogical planning. Furthermore, the coefficient of determination ($R^2 = 0.798$) indicates that 79.8% of the variance in pedagogical planning is explained by the dimensions of communicational leadership, suggesting a substantial explanatory capacity of the regression model.

These findings indicate that communicational leadership—through its pedagogical, motivational, and participatory dimensions—plays a significant role in explaining variations in teachers' pedagogical planning from the students' perspective.

Table 6. ANOVA[a]

Model		Sum of squares	df	Mean square	F	P-Value
1	Regression	3009,541	3	1003,180	427,971	,000b
	Residue	764,156	326	2,344		
	Total	3773,697	329			

a. Dependent variable: Pedagogical planning

b. Predictors: (Constant), Motivating Communication, Pedagogical Communication, Participatory Communication

The analysis of variance (ANOVA) table 6 indicates that the model is statistically significant ($F = 427.971$; $p < 0.001$), which confirms the validity of the model.

Table 7. Coefficient

		Non-standardized coefficients		Standardized coefficients		
Model		B	Std. Error	Beta	t	P-Value
1	(Constant)	2,279	,492		4,631	,000
	Pedagogical	,693	,034	,766	20,467	,000
	Participatory	,137	,033	,156	4,156	,000
	Motivating	,029	,020	,037	1,458	,146

a. Dependent variable: Pedagogical planning

Regarding the regression coefficients (Table 7), pedagogical communication exhibited a positive and highly significant predictive effect on pedagogical planning ($\beta = 0.766$; $p < 0.001$), emerging as the dimension with the strongest explanatory contribution to the model. This was followed by participatory communication, which also demonstrated a positive and statistically significant effect ($\beta = 0.156$; $p < 0.001$), although with considerably lower predictive strength. In contrast, motivational communication did not exhibit a statistically significant predictive effect on pedagogical planning ($p = 0.146$). Therefore, the findings suggest that pedagogical planning is primarily explained by pedagogical communication, highlighting the importance of communicative clarity, instructional organization, and pedagogical mediation in shaping students' perceptions of teacher planning.

Prediction of leadership communication in the dimension of performance teaching

Table 8. Model Overview

Model	R	R squared	R square adjusted	Standard Estimate Error
1	,472a	,223	,215	2,69062

a. Predictors: (Constant), Motivating communication, Pedagogical communication, Participatory communication

The multiple linear regression analysis revealed that the dimensions of communicational leadership significantly predict the teaching implementation dimension of teaching performance (Table 8). The model yielded a correlation coefficient of R = 0.472, indicating a moderate positive relationship between communicational leadership dimensions and teaching implementation. Furthermore, the coefficient of determination (R^2 = 0.223) indicates that 22.3% of the variance in teaching implementation is explained by the dimensions of communicational leadership, suggesting a moderate explanatory capacity of the regression model.

These findings indicate that communicational leadership contributes meaningfully to explaining variations in teaching implementation, although its predictive strength is lower compared to the pedagogical planning dimension.

Table 9. ANOVA[a]

Model		Sum of squares	df	Mean square	F	P-Value
1	Regression	675,636	3	225,212	31,109	,000b
	Residue	2360,061	326	7,239		
	Total	3035,697	329			

a. Dependent variable: Teaching

b. Predictors: (Constant), motivating communication, pedagogical communication, participatory communication

The analysis of variance (ANOVA) table 9 shows that the model is statistically significant (F = 31.109; p < 0.001), confirming the validity of the model.

Table 10. Coefficients

Model		Non-standardized coefficients		Standardized coefficients		
		B	Std. Error	Beta	t	P-Value
1	(Constant)	8,089	,865		9,350	,000
	Pedagogical	,161	,059	,199	2,709	,007
	Participatory	,088	,058	,111	1,512	,131
	Motivating	,241	,035	,341	6,949	,000

a. Dependent variable: Teaching

Regarding the regression coefficients (Table 10), motivational communication exhibited a positive and statistically significant predictive effect on teaching implementation ($\beta = 0.341$; $p < 0.001$), emerging as the dimension with the strongest predictive contribution to the model. This was followed by pedagogical communication, which also demonstrated a positive and statistically significant effect ($\beta = 0.199$; $p = 0.007$), although with comparatively lower explanatory strength. In contrast, participatory communication did not exhibit a statistically significant predictive effect on teaching implementation ($p = 0.131$). Consequently, the findings indicate that teaching implementation is primarily explained by motivational communication, highlighting the relevance of communicative strategies aimed at fostering student engagement, enthusiasm, and active involvement in the teaching–learning process.

Prediction of leadership communication in the performance evaluation dimension

Table 11. Model Overview

Model	R	R squared	R square adjusted	Standard Estimate Error
1	,467a	,218	,210	2,76357

a. Predictors: (Constant), Motivating Communication, Pedagogical Communication, Participatory Communication

The multiple linear regression analysis revealed that the dimensions of communicational leadership significantly predict the learning assessment dimension of teaching performance (Table 11). The model yielded a correlation coefficient of $R = 0.467$, indicating a moderate positive relationship between communicational leadership dimensions and learning assessment. Furthermore, the coefficient of determination ($R^2 = 0.218$) indicates that 21.8% of the variance in learning

assessment is explained by the dimensions of communicational leadership, suggesting a moderate explanatory capacity of the regression model.

These findings indicate that communicational leadership contributes significantly to explaining variations in the assessment practices perceived by students, although its predictive effect appears to be moderate.

Table 12. ANOVA[a]

Model		Sum of squares	df	Mean square	F	P-Value
1	Regression	692,605	3	230,868	30,229	,000b
	Residue	2489,759	326	7,637		
	Total	3182,364	329			

a. Dependent variable: Evaluation

b. Predictors: (Constant), Motivating Communication, Pedagogical Communication, Participatory Communication

The analysis of variance (ANOVA) indicates that the model is statistically significant ($F = 30.229$; $p < 0.001$), which validates the model (Table 12).

Table 13. Coefficient

		Non-standardized coefficients		Standardized coefficients		
Model		B	Std. Error	Beta	t	P-Value
1	(Constant)	8,623	,889		9,705	,000
	Pedagogical	,280	,061	,337	4,583	,000
	Participatory	-,103	,060	-,128	-1,734	,084
	Motivating	,269	,036	,372	7,548	,000

a. Dependent variable: Evaluation

Regarding the regression coefficients (Table 13), motivational communication exhibited a positive and statistically significant predictive effect on learning assessment ($\beta = 0.372$; $p < 0.001$), emerging as the dimension with the strongest predictive contribution to the model. This was followed by pedagogical communication, which also demonstrated a positive and statistically significant effect ($\beta = 0.337$; $p < 0.001$), although with slightly lower explanatory strength. In contrast, participatory communication did not exhibit a statistically significant predictive effect on learning assessment ($p = 0.084$). Consequently, the findings suggest that learning assessment is primarily explained by motivational communication, underscoring the

importance of communicative practices that foster encouragement, trust, and student engagement in shaping students' perceptions of assessment processes.

Prediction of leadership communication in the dimension Performance interaction

Table 14. Model Overview

Model	R	R squared	R square adjusted	Standard Estimate Error
1	,486a	,236	,229	2,16023

a. Predictors: (Constant), Motivating Communication, Pedagogical Communication, Participatory Communication

The multiple linear regression analysis revealed that the dimensions of communicational leadership significantly predict the pedagogical interaction dimension of teaching performance (Table 14). The model yielded a correlation coefficient of R = 0.486, indicating a moderate positive relationship between communicational leadership dimensions and pedagogical interaction. Furthermore, the coefficient of determination (R^2 = 0.236) indicates that 23.6% of the variance in pedagogical interaction is explained by the dimensions of communicational leadership, suggesting a moderate explanatory capacity of the regression model.

These findings indicate that communicational leadership contributes significantly to explaining variations in teacher–student interaction, highlighting the relevance of communicative practices in shaping relational and participatory dynamics within higher education classrooms.

Table 15. ANOVA[a]

Model		Sum of squares	df	Mean square	F	P-Value
1	Regression	470,677	3	156,892	33,620	,000b
	Residue	1521,311	326	4,667		
	Total	1991,988	329			

a. Dependent variable: Interaction

b. Predictors: (Constant), Motivating Communication, Pedagogical Communication, Participatory Communication

The analysis of variance (ANOVA) indicates that the model is statistically significant (F = 33.620; p < 0.001), confirming the validity of the model (table 15).

Table 16. Coefficient

Model		Non-standardized coefficients		Standardized coefficients		
		B	Std. Error	Beta	t	P-Value
1	(Constant)	6,318	,695		9,097	,000
	Pedagogical	,055	,048	,084	1,159	,247
	Participatory	,164	,047	,257	3,524	,000
	Motivating	,188	,028	,328	6,731	,000

a. Dependent variable: Interaction

Regarding the regression coefficients (Table 16), motivational communication exhibited a positive and statistically significant predictive effect on pedagogical interaction ($\beta = 0.328$; $p < 0.001$), emerging as the dimension with the strongest predictive contribution to the model. This was followed by participatory communication, which also demonstrated a positive and statistically significant effect ($\beta = 0.257$; $p < 0.001$), although with comparatively lower explanatory strength. In contrast, pedagogical communication did not exhibit a statistically significant predictive effect on pedagogical interaction ($p = 0.247$). Consequently, the findings indicate that pedagogical interaction is primarily explained by motivational and participatory communication, highlighting the importance of communicative practices that foster engagement, dialogic exchange, interpersonal closeness, and active student participation within classroom dynamics.

Discussion

The findings of this study demonstrate that communicational leadership significantly predicts teaching performance, explaining a moderate proportion of its variance ($R^2 = 0.412$). This result is consistent with the specialized literature that recognizes communication as a structuring axis of teacher leadership and pedagogical effectiveness in higher education contexts. In this regard, previous studies have emphasized that the way teachers communicate directly influences students' motivation, engagement, and perceptions of teaching quality, reinforcing the notion that communication extends beyond the mere transmission of information to shape the educational experience as a whole.

From a theoretical perspective, these findings are supported by the principles of pedagogical communication, understood as an intentional, bidirectional, and formative process that influences the quality of teaching–learning interactions and educational outcomes (El Jai, 2023). Consistent with this perspective, the present study confirms that communicational leadership constitutes a highly relevant factor in teaching performance, insofar as it contributes to structuring, guiding, and

energizing classroom interactions, thereby facilitating more effective pedagogical processes (Mamani-Flores et al., 2026a).

When examining the dimensions of communicational leadership, the results indicate that pedagogical communication and motivational communication exhibit statistically significant predictive effects on teaching performance, whereas participatory communication does not demonstrate a significant effect at the global level. This finding partially aligns with previous studies emphasizing the relevance of expository clarity, feedback, emotional support, and motivation in teaching practice (Brynko & Kravchenko, 2023; Xie & Derakhshan, 2021). However, it diverges from theoretical perspectives that position participation as a central component of collaborative learning and dialogic educational environments (Volkova et al., 2025; Szőke-Milinte, 2021). This discrepancy may be explained by contextual factors, including the persistence of teacher-centered pedagogical practices or limitations in the effective implementation of participatory strategies within university classrooms.

Regarding the dimensions of teaching performance, pedagogical planning exhibited the highest explanatory level ($R^2 = 0.798$), with pedagogical communication emerging as the strongest predictor. This finding is consistent with the arguments proposed by El Jai (2023) and Lisovyi et al. (2025), who suggest that effective planning depends substantially on teachers' ability to organize, structure, and clearly communicate educational objectives, content, and instructional strategies. Therefore, the strong predictive effect observed reinforces the centrality of pedagogical communication in the organization and effectiveness of the teaching process (Mamani-Flores et al., 2026b).

In contrast, the dimensions of teaching implementation, learning assessment, and pedagogical interaction demonstrated moderate explanatory levels, with motivational communication showing the strongest predictive contribution across these dimensions. This result is consistent with findings reported by Xie and Derakhshan (2021), who argue that motivational communication strengthens student engagement, participation, and academic performance. Similarly, Brynko and Kravchenko (2023) emphasize that teachers' communicative support contributes to the construction of positive and stimulating learning environments. Accordingly, motivational communication emerges as a transversal component of teaching performance, particularly in dimensions requiring direct teacher–student interaction.

Concerning pedagogical interaction, the findings indicate that both motivational communication and participatory communication exert statistically significant predictive effects. This result is aligned with theoretical approaches that conceptualize classroom interaction as a bidirectional process grounded in dialogue, cooperation, mutual respect, and collaborative participation (Akhanova, 2022; Melnyk & Zaremba, 2020). Thus, although participatory communication does not significantly predict overall teaching performance, it appears to play a relevant role

in specific pedagogical contexts where interaction constitutes a core dimension of the educational process.

Overall, the findings suggest that communicational leadership does not exert a homogeneous influence on teaching performance; rather, its predictive contribution varies according to the dimension analyzed (Mamani-Flores et al., 2025). This result provides empirical evidence addressing a gap identified in the literature, which has highlighted the need to examine the communicative dimensions of teacher leadership in differentiated ways within higher education contexts. In this sense, the study demonstrates that each communicative dimension fulfills distinct pedagogical functions: pedagogical communication contributes to the organization and clarity of instructional processes, motivational communication strengthens student engagement and commitment, whereas participatory communication reinforces dialogic and interactional dynamics within the classroom.

Nevertheless, the findings should be interpreted with caution. Although the coefficient of determination ($R^2 = 0.412$) indicates that communicational leadership explains 41.2% of the variance in teaching performance, a substantial proportion (58.8%) remains attributable to factors not incorporated into the model. Variables such as teachers' disciplinary expertise, digital pedagogical competencies, management of virtual learning environments, students' academic workload, classroom size, or the broader institutional climate may also significantly influence students' perceptions of teaching performance and should therefore be considered in future research. Furthermore, given the cross-sectional and non-experimental nature of the study, the findings should be interpreted in predictive rather than causal terms. Future studies employing longitudinal or mixed-method designs could provide a more comprehensive understanding of the mechanisms through which communicational leadership shapes teaching performance in higher education contexts.

Limitations

It should be noted that, due to the cross-sectional nature of the design, the findings should be interpreted in terms of association and statistical predictive capacity, avoiding establishing inferences of causality. In this sense, the absence of temporality in the measurement of the variables prevents the determination of direct causal relationships, so the confirmation of causal effects would require the development of longitudinal studies or experimental designs that allow the analysis of the evolution and directionality of the relationships between the variables.

Conclusions

The present study allows us to conclude that communicational leadership constitutes a significant predictor of teaching performance in higher education, specifically in the context of the National University of the Altiplano, by explaining a relevant proportion of its variability from the student perspective. This finding reaffirms the centrality of

communication as the structuring axis of the teaching practice, as it not only mediates the transmission of knowledge, but also configures the pedagogical, emotional and relational conditions that sustain the teaching-learning process.

Likewise, it is evident that the predictive capacity of communicational leadership is not homogeneous, but varies according to the different dimensions of teaching performance. In particular, pedagogical communication is consolidated as the fundamental component in the organization and structuring of curricular planning, by guaranteeing clarity in the objectives, contents and teaching strategies. On the other hand, motivating communication emerges as the main dynamic factor in the development phases of teaching and learning assessment, as it has a positive impact on intrinsic motivation, reduces academic anxiety and strengthens student engagement. These results highlight the transversal role of communicative motivation as a catalyst for more effective educational processes.

In relation to pedagogical interaction, the findings indicate that a quality teaching practice requires the convergence of both motivating and participatory communication strategies. Although participatory communication does not show a significant effect on overall performance, its influence is relevant in contexts where interaction constitutes the core of the educational process, contributing to the construction of a pedagogical bond based on dialogue, cooperation and mutual respect.

From an integrative perspective, the results allow us to affirm that communicational leadership operates as a system of differentiated but complementary practices, in which each dimension fulfills a specific function: pedagogical communication organizes and gives meaning to the training process, motivating communication promotes involvement and performance, and participatory communication strengthens the dynamics of interaction and collective construction of knowledge. This differentiation provides empirical evidence of the need to address communicational leadership as a multidimensional construct in the university environment.

In terms of implications, the findings suggest the need to systematically strengthen the communicative competencies of university teachers, not only as a didactic resource, but as a structural condition for the improvement of educational quality. In this sense, it is recommended to incorporate teacher training programs focused on the development of advanced communication skills —expository clarity, effective feedback, motivating communication and participatory strategies— that contribute to optimizing the professional performance and learning experience of students.

Finally, it is concluded that the strengthening of communicational leadership not only affects the perception of teacher performance, but also constitutes a strategic factor for pedagogical innovation and the improvement of learning outcomes in higher education. Consequently, its integration into institutional policies and teaching

evaluation models is key to moving towards more effective, inclusive and student-centred university teaching.

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