Revista Cientifica Estudiantil MedEs

MedEst|2026 | Vol.6: e491| ISSN: 2789-7567 |RNPS: 2524| RESEARCH ARTICLE

Academic health and pedagogical practices in Higher Education: implications for teacher and student well-being

Salud académica y prácticas pedagógicas en Educación Superior: implicaciones para el bienestar docente y estudiantil

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How to cite this article: Álvarez-Ayala D. Academic health and pedagogical practices in Higher Education: implications for teacher and student well-being. MedEst. [Internet]. 2026 [cited accesd date]; 6:e491. Available in: https://revmedest.sld.cu/index.php/medest/article/view/491

Palabras Clave: Salud Académica; Prácticas Pedagógicas; Bienestar Educativo; Educación Superior.

Keywords: Academic Well-Being; Teaching Practices; Educational Well-Being; Higher Education.

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Received: 04/02/2026

Accepted: 08/04/2026

Published: 10/04/2026

Editor(s) in charge: MSc. Yuniel Rosales Alcántara

Translator: Lic. Yamilka González Gómez.

Layout designer: Lismar Ledián Hernández Arias

RESUMEN

Introducción: la salud académica y las prácticas pedagógicas constituyen elementos fundamentales en la Educación Superior, al influir directamente en el bienestar docente y estudiantil y en la calidad del proceso educativo. **Objetivo:** analizar la relación entre la salud académica y las prácticas pedagógicas, identificando sus implicaciones para el bienestar en el ámbito universitario. **Métodos:** se desarrolló una investigación con enfoque mixto, diseño no experimental, transversal y alcance descriptivo-correlacional, con una muestra de 180 participantes (60 docentes y 120 estudiantes) de instituciones de Educación Superior en Ecuador. Se aplicó un cuestionario tipo Likert (α=0,89), complementado con entrevistas semiestructuradas y grupos focales; los datos fueron analizados mediante estadística descriptiva, correlación de Pearson y análisis de contenido. **Resultados:** los resultados evidenciaron niveles moderados-altos de salud académica (M=3,78), con afectaciones en estrés y carga laboral, así como una valoración positiva de las prácticas pedagógicas (M=3,95), destacando la interacción docente-estudiante. Se identificó una relación significativa entre ambas variables (r=0,68; p<0,01). **Conclusiones:** se concluye que las prácticas pedagógicas inciden directamente en el bienestar académico, evidenciando la necesidad de fortalecer enfoques educativos centrados en el estudiante y el cuidado emocional.

ABSTRACT

Introduction: academic health and pedagogical practices are fundamental elements in Higher Education, directly influencing faculty and student well-being and the quality of the educational process. **Objective:** to analyze the relationship between academic health and pedagogical practices, identifying their implications for well-being in the university setting. **Methods:** a mixed-methods, non-experimental, cross-sectional, descriptive-correlational study was conducted with a sample of 180 participants (60 faculty members and 120 students) from Higher Education institutions in Ecuador. A Likert-type questionnaire (α=0.89) was administered, supplemented by semi-structured interviews and focus groups. Data were analyzed using descriptive statistics, Pearson correlation, and content analysis. **Results:** the results showed moderate-to-high levels of academic well-being (M=3.78), with some impact on stress and workload, as well as a positive assessment of teaching practices (M=3.95), particularly highlighting teacher-student interaction. A significant relationship was identified between both variables (r=0.68; p<0.01). **Conclusions:** it is concluded that teaching practices directly influence academic well-being, highlighting the need to strengthen student-centered educational approaches and emotional support.

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ISSN: 2789-7567 | RNPS: 2524

INTRODUCTION

In the contemporary context of Higher Education, social, technological, and organizational transformations have generated new demands on educational systems, directly impacting the working conditions of teaching staff and the learning experiences of students [1]. In this scenario, the concept of academic health emerges as a comprehensive construct that articulates cognitive, emotional, and organizational dimensions, oriented towards well-being and performance within university institutions [2]. Academic health implies not only the absence of discomfort but also the presence of conditions that favor personal development, motivation, and commitment to the educational process.

Several studies have shown that pedagogical practices constitute a determining factor in the configuration of both teacher and student well-being. Student-centered didactic strategies, inclusive environments, and active methodologies contribute significantly to academic satisfaction and the development of socio-emotional competencies [3–5]. However, in many university contexts, traditional teaching models persist that prioritize content transmission over comprehensive student support, which limits the transformative potential of the educational process.

Likewise, teacher well-being has been compromised by factors such as work overload, pressure for scientific productivity, and constant adaptation to digital environments, especially after the COVID-19 pandemic, which has increased levels of stress and professional burnout [6,7]. These conditions directly affect the quality of teaching, since the emotional state of the teaching staff influences their pedagogical practices and interaction with students.

On the other hand, student well-being is also closely linked to the quality of learning experiences. Recent research highlights the increase in problems associated with anxiety, academic stress, and demotivation in university students, which affects their performance and retention in the educational system [4]. In this sense, academic health becomes a key axis for promoting sustainable and humanized educational environments.

From a systemic perspective, the relationship between academic health and pedagogical practices evidences the need to rethink educational models based on the integral well-being of educational actors [8,9]. The integration of approaches such as emotional education, pedagogy of care, and meaningful learning allows strengthening the links between teachers and students, favoring more equitable and effective educational processes [4,10]. Within this framework, pedagogical innovation is oriented towards improving learning and also towards

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building healthy environments that promote the integral development of the university community [11–13].

However, despite the growing interest in well-being in Higher Education, there is still limited articulation between institutional policies, pedagogical practices, and the real conditions of teaching work [14,15]. This disconnect generates a gap between academic discourse and educational practice, which raises the need for research that deepens the understanding of these phenomena and proposes viable alternatives for their improvement [16]. Furthermore, the lack of integration between methodological approaches and educational practices limits the generation of solid scientific evidence to guide decision-making in the university field [15,17].

Consequently, the scientific problem motivating this research lies in the insufficient integration between academic health and pedagogical practices in Higher Education, which has repercussions on teacher and student well-being, affecting the quality of the educational process.

In this context, the relevance of the study is based on the need to generate theoretical and practical evidence to guide decision-making in the university field, contributing to the design of pedagogical strategies that promote healthy, inclusive, and sustainable environments. Likewise, the study adds value to the field of educational management and teacher training by integrating well-being as a central component of the teaching-learning process.

Therefore, the central objective proposed is to analyze the relationship between academic health and pedagogical practices in Higher Education, identifying its implications for teacher and student well-being.

METHODS

This research was developed in the context of public and private Higher Education institutions in Ecuador, specifically considering university environments with disciplinary diversity. The study was carried out during the period between January and December 2025, which allowed for a contextualized analysis of pedagogical dynamics and their relationship with academic health in contemporary scenarios.

From a methodological point of view, the research is framed within a mixed approach, with a non-experimental, cross-sectional design and a descriptive-correlational scope, which made it possible to integrate quantitative and qualitative data for a broader understanding of the phenomenon studied [18]. This approach is relevant in complex

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educational research, where human, social, and contextual variables interact dynamically [19].

The study universe consisted of teachers and students from Higher Education institutions, with an estimated population of approximately 1,200 subjects. From this universe, a sample of 180 participants was selected, distributed into 60 teachers and 120 students. The sampling method used was non-probabilistic convenience sampling, due to the accessibility of the participants and their voluntary willingness to be part of the study, which is common in applied educational research [20].

The inclusion criteria considered: (a) teachers with at least one year of experience in Higher Education, (b) students enrolled in undergraduate programs, and (c) availability to participate voluntarily. The exclusion criteria were established as: (a) participants who did not complete the data collection instruments, (b) teachers in exclusively administrative positions, and (c) students who had already completed their coursework but not yet graduated. No cases required additional elimination criteria during the analysis process.

Regarding the study variables, academic health was defined as the independent variable, understood as the set of emotional, cognitive, and organizational conditions that affect well-being in the educational environment; and pedagogical practices as the dependent variable, operationalized through dimensions such as didactic strategies, teacher-student interaction, and learning environment. Likewise, intervening variables such as the level of teaching experience and academic training area were considered.

For data collection, quantitative and qualitative techniques were employed. In the quantitative component, a structured questionnaire with a Likert-type scale was applied, validated through expert judgment and a pilot test, achieving a Cronbach's Alpha reliability coefficient of 0.89, which indicates high internal consistency [21]. In the qualitative component, semi-structured interviews directed at teachers and focus groups with students were used, allowing for a deeper interpretation of experiences related to academic well-being.

The quantitative data analysis was performed using descriptive statistics (frequencies, means, and standard deviation) and correlational analysis (Pearson's coefficient), using Jamovi statistical software. Qualitative data were analyzed through the content analysis technique, following a process of open coding, categorization, and information triangulation [22].

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Regarding ethical aspects, the research was conducted in accordance with the principles established in the Declaration of Helsinki, guaranteeing respect for the dignity, confidentiality, and informed consent of the participants. The study had the approval of an institutional Ethics Committee and a university Scientific Council, ensuring compliance with current regulations on research involving human beings. Likewise, the anonymity of the participants and the exclusive use of the information for academic purposes were guaranteed.

The detailed description of the methodological procedures ensures the replicability of the study in similar contexts, contributing to the validity and reliability of the results obtained.

RESULTS

1. Characterization of the sample

The sample consisted of 180 participants, distributed among teachers and students from Higher Education institutions. Table 1 presents the general characterization of the sample.

Table 1. Sample by categories

Variable	Category	Frequency (n)	Percentage (%)
Role	Teachers	60	33.3
	Students	120	66.7
Teaching experience	1–5 years	25	42
	More than 5 years	35	58
Academic area (students)	Social Sciences and Education	78	65
	Technical/Administrative	42	35

Source: own elaboration.

The data reflect a heterogeneous sample that allows analyzing the phenomenon from diverse perspectives, strengthening the interpretation of the results.

2. Level of academic health

Prior to the analysis of the results, the reliability of the applied instrument was verified, obtaining a Cronbach's Alpha coefficient of

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0.89, which demonstrates high internal consistency of the scales used and guarantees the reliability of the data obtained.

In relation to the academic health variable, the results show moderate to high levels in both groups, although with differences between teachers and students, as shown in Table 2.

Table 2. Distribution according to academic health level by group

Group	Mean	Standard deviation
Teachers	3.62	0.58
Students	3.86	0.52
Total	3.78	0.55

Source: own elaboration.

It is observed that students have a slightly more favorable perception of their academic well-being compared to teachers.

When analyzing by specific dimensions (Table 3), critical areas related to stress and academic workload are identified.

Table 3. Distribution according to dimensions of academic health

Dimension	Mean
Emotional well-being	3.95
Academic motivation	4.02
Academic stress	3.21
Workload	3.08

Source: own elaboration.

The lowest values in academic stress and workload evidence factors that negatively affect the well-being of the participants. From the qualitative analysis, these results are complemented by perceptions expressed by the participants. Teachers stated: "Administrative demands and academic production affect our personal and professional balance." While students noted: "Many times the problem is not the content, but the accumulation of tasks."

3. Evaluation of pedagogical practices

The results show an overall positive assessment of pedagogical practices, with an overall mean of 3.95.

Table 4. Distribution according to evaluation of pedagogical practices

Dimension	Mean

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Teacher-student interaction	4.12
Classroom climate	4.05
Methodological innovation	3.54
Active strategies	3.48

Source: own elaboration.

The highest-rated dimensions correspond to interaction and classroom climate, while the lowest relate to pedagogical innovation.

The qualitative findings reinforce these results. Students highlighted: "When the teacher cares about us, learning improves."

However, they also noted limitations: "Some classes are still very theoretical."

For their part, teachers acknowledged: "There is a lack of time and training to innovate in the classroom."

4. Relationship between academic health and pedagogical practices

The correlational analysis evidenced a moderate-high and statistically significant positive relationship between both variables ($r = 0.68$; $p < 0.01$), indicating that better pedagogical practices correspond to higher levels of academic health, as expressed in Table 5.

Table 5. Distribution according to correlation between variables

Variables	Coefficient r	Significance (p)
Academic health – Pedagogical practices	0.68	< 0.01

Source: own elaboration.

It is observed that pedagogical interaction has a greater impact on academic health.

From the qualitative analysis: "A good classroom environment reduces stress." "Teacher empathy influences motivation."

5. Analysis according to intervening variables

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In order to deepen the understanding of the phenomenon studied, an analysis was carried out considering the intervening variables defined in the research. The results are reflected in Tables 6 and 7.

Table 6. Academic health according to teaching experience

Teaching experience	Mean
1–5 years	3.81
More than 5 years	3.55

Source: own elaboration.

The results show that teachers with less experience have a slightly more favorable perception of their academic health compared to those with longer careers. This finding may be related to factors such as the accumulation of workload, professional burnout, and institutional demands that increase with years of service.

Table 7. Pedagogical practices according to academic area

Academic area	Mean
Social Sciences and Education	4.02
Technical/Administrative	3.78

Source: own elaboration.

Regarding the disciplinary area, it is observed that careers in the social and educational fields present a higher evaluation of pedagogical practices. This could be explained by a greater incorporation of participatory approaches, active methodologies, and student-centered strategies.

6. Triangulation of results

In order to strengthen the validity of the findings, a methodological triangulation process was carried out that allowed the integration of the results obtained from the quantitative and qualitative analysis. This process facilitated the identification of convergences, complementarities, and divergences in relation to academic health and pedagogical practices in the context of Higher Education.

Firstly, the quantitative results evidenced moderate levels of academic health, particularly affected by dimensions such as academic stress and workload. These findings correspond with the qualitative analysis, where both teachers and students expressed perceptions associated with exhaustion, activity overload, and institutional pressure. This coincidence reinforces the internal consistency of the results and

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demonstrates that academic well-being is conditioned by structural factors of the educational environment.

Secondly, a positive evaluation of pedagogical practices was identified, especially regarding teacher-student interaction and classroom climate. These quantitative results are complemented by the qualitative discourses, in which participants highlighted the importance of empathy, teacher support, and effective communication as fundamental elements for learning and well-being. Thus, it is confirmed that relational aspects constitute a central axis in the educational experience.

Moreover, the significant correlation between academic health and pedagogical practices found in the statistical analysis is supported by the emerging categories from the qualitative analysis, particularly regarding the influence of teaching practices on student motivation, commitment, and emotional stability. This relationship demonstrates that the quality of pedagogical practice not only affects academic outcomes but also the integral well-being of educational actors.

Likewise, a convergence was identified around the limitations related to pedagogical innovation. While the quantitative results showed lower scores in this dimension, the qualitative analysis allowed for a deeper understanding of the causes, highlighting factors such as lack of time, workload overload, and insufficient teacher training in active methodologies. This complementarity allows for a broader understanding of the phenomenon.

The triangulation made it evident that academic health and pedagogical practices cannot be analyzed in isolation, but rather as interdependent dimensions that shape the quality of the educational process in Higher Education. The integration of both methodological approaches provides a holistic vision of the phenomenon studied, strengthening the validity and reliability of the results obtained.

DISCUSSION

The results obtained in this research demonstrate that academic health and pedagogical practices maintain a significant relationship in the context of Higher Education, which confirms the relevance of addressing both constructs in an integrated manner. In this sense, the moderate levels of academic health identified in teachers and students coincide with recent studies that point to the presence of acceptable well-being conditions, although conditioned by structural factors such as workload and academic stress [4,9].

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In particular, the findings show that students have a more favorable perception of their well-being compared to teachers. This result can be explained by the demands faced by teaching staff in the current university context, characterized by the intensification of academic work, pressure for scientific productivity, and adaptation to digital environments [7,11]. Previous research has shown that these conditions negatively affect the emotional health of teachers, generating professional burnout and affecting their pedagogical performance [12,13].

On the other hand, the results related to pedagogical practices show a positive evaluation in dimensions such as teacher-student interaction and classroom climate, which coincides with studies that highlight the importance of interpersonal relationships in the educational process [8,22]. Indeed, the literature indicates that the quality of pedagogical interaction directly influences student motivation, commitment, and well-being, consolidating itself as a key element in the construction of meaningful learning environments [5,10].

However, one of the most relevant findings of the study lies in the limitations identified in methodological innovation and the use of active strategies. This result is consistent with research that warns of the persistence of traditional teaching models in Higher Education, despite advances in educational innovation [5,23]. In this sense, the lack of continuous pedagogical training and teacher workload overload emerge as barriers that hinder the implementation of innovative practices, which has repercussions on the quality of the educational process.

Likewise, the correlational analysis confirmed the existence of a moderate-high positive relationship between academic health and pedagogical practices, which reinforces the idea that well-being cannot be understood in isolation from the educational context. This finding coincides with studies that suggest that pedagogical practices influence not only academic performance but also the emotional and social development of students [4,9]. Thus, it is evident that the quality of teaching is a determining factor in promoting integral well-being.

Regarding the intervening variables, the results show that teachers with more experience present lower levels of academic health, which may be associated with accumulated professional burnout. This finding aligns with research indicating that seniority in teaching can increase levels of stress and exhaustion, especially in contexts of high institutional demand [7,11]. On the other hand, the differences observed according to disciplinary area show that careers in the social and

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educational fields tend to incorporate student-centered pedagogical approaches more frequently, which favors academic well-being.

From the qualitative analysis, the results allow for a deeper understanding of the phenomenon, showing that both teachers and students recognize the importance of emotional support, empathy, and effective communication in the educational process. These findings coincide with contemporary approaches that promote a pedagogy of care and person-centered education [8,10], where well-being is conceived as a fundamental element for learning.

In this sense, the triangulation of results confirmed the coherence between the quantitative and qualitative data, strengthening the validity of the study and providing a comprehensive vision of the analyzed phenomenon. The convergence of findings demonstrates that academic health and pedagogical practices are interdependent dimensions that must be addressed from a systemic perspective.

Finally, this study provides relevant evidence for the field of Higher Education, by highlighting the need to promote pedagogical practices that integrate well-being as a central axis of the educational process. However, some limitations are recognized, such as the use of non-probabilistic sampling and the cross-sectional nature of the study, which limits the generalization of the results. Consequently, the development of future research with longitudinal designs and broader samples is suggested to deepen the relationship between these variables.

CONCLUSIONS

The research confirms a significant relationship between academic health and pedagogical practices in Higher Education. Levels of academic health are moderate-high, but critical factors such as stress, workload overload, and institutional pressure persist, particularly affecting teaching staff. Pedagogical practices are positively valued in terms of teacher-student interaction and classroom climate, although limitations are evident in active methodologies. The correlational analysis demonstrates that better pedagogical practices are associated with greater academic well-being, confirming that the quality of teaching directly influences the emotional and motivational well-being of students. It was identified that teaching experience and disciplinary area influence the perception of well-being, with student-centered approaches favoring healthier environments. Finally, it is concluded that both dimensions must be addressed in an articulated manner, and it is essential that institutions implement policies of emotional support,

continuous pedagogical training, and educational innovation to guarantee quality of life in the university environment.

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AUTHOR CONTRIBUTIONS

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ISSN: 2789-7567 | RNPS: 2524

DAA: Conceptualization, data curation, investigation, methodology, project administration, supervision, data collection, formal analysis (quantitative and qualitative), writing – original draft, review, and editing.

CONFLICTS OF INTEREST

The author declares no conflicts of interest.

FUNDING SOURCES

The author received no funding for this article.

USE OF ARTIFICIAL INTELLIGENCE

The author declares that artificial intelligence was not used in the writing of this manuscript.