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TO WHAT EXTENT WOULD AI TAKE OVER THE ROLES OF TEACHERS AND UNIVERSITY PROFESSORS - A PERCEPTION OF DIGITALIZATION AND AI INTEGRATION IN ROMANIA'S EDUCATIONAL ENVIRONMENT

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INTRODUCTION

The rapid advancement of Artificial Intelligence has moved from the peripheral margins of educational technology into the core structural fabric of modern learning environments (Anamaria-Mirabela et.al., 2024). In the contemporary era, AI is no longer merely a tool for distributing information; it has become an independent mediator between information and human cognition (Georgescu et.al., 2025). This paradigm shift is particularly pronounced in Romania, where the educational system is navigating a complex transition from traditional pedagogical models to a digitalized infrastructure accelerated by post-pandemic imperatives (Fleaca et al., 2022). As generative AI and adaptive learning systems become ubiquitous, a fundamental question emerges: to what extent will these technologies supplement, or perhaps eventually supersede, the professional roles of teachers and university professors?

In the Romanian context, the integration of AI is not occurring in a vacuum but is part of a broader European trend toward "digital readiness" and the closing of digital gaps between rural and urban education sectors (Moroianu et.al., 2023). Higher education institutions, in particular, are facing unprecedented pressure to adapt to technological interconnections that redefine what it means to be an educator (Fleaca et al., 2022). While some scholars argue that AI will revolutionize the classroom by fostering inclusive and equitable quality education, others express profound concern regarding the potential harm to the human element of pedagogy (Anamaria-Mirabela et.al., 2024). The perception of digitalization in Romania is therefore characterized by a duality: the recognition of AI as a strategic ally for efficiency and personalization, versus the fear of a cognitive disengagement where human interaction and critical thinking are diminished (Voicu et. al., 2026). The role of the professor is currently evolving from being the primary distributor of knowledge to a mentor who must cultivate ethical discernment and collaborative inquiry (Georgescu et. al., 2024). This transition is fraught with challenges, as the advantages of AI are often unevenly distributed, potentially reinforcing existing social disparities within the Romanian educational landscape (Georgescu et.al., 2024). Furthermore, the integration of AI chatbots and large language models into the academic workflow has raised significant questions regarding academic integrity and the erosion of intellectual autonomy among students (Malița et.al., 2025).

This article aims to investigate the perceptions of Romanian educators and students regarding this transformative process. By analyzing the current state of digitalization and the specific cultural and structural barriers present in Romania, this research seeks to determine whether AI is perceived as a replacement for the human educator or as a sophisticated augmentation of the teaching profession. The following sections will explore the theoretical frameworks of AI integration, the specific challenges of the Romanian digital transition, and the shifting identity of the academic professional in the age of automation.

LITERATURE REVIEW

The historical trajectory of educational technology has consistently altered how knowledge is organized and internalized, moving from the printing press to the internet (Anamaria-Mirabela et.al., 2024). However, the current AI turn represents a qualitative shift because AI participates in decision-making processes rather than just information delivery. Research indicates that AI tools, such as chatbots and adaptive systems, enhance student engagement most effectively when they are embedded within interactive pedagogies like flipped classrooms and project-based learning (Long et.al, 2026). This has led to the conceptualization of models such as the PMAISE (Pedagogical Mediation of AI for Student Engagement), which emphasizes that the teacher's role as a "mediator" is more crucial than ever to maximize AI's benefits (Long et.al, 2026). A central theme in recent literature is the power of AI to provide individualized learning trajectories. Adaptive learning platforms identify patterns in learner behavior to provide real-time adjustments, which has a

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transformative effect on student performance and self-efficacy (Vieriu & Petrea, 2025). However, these benefits are countered by significant cognitive risks. Studies among Romanian and Moldovan students show that while 70% endorse AI for education, 58% worry about plagiarism and the weakening of critical thinking (Malița et.al., 2025). There is a growing concern that an over-reliance on automated solutions encourages shallow thinking and a cognitive disengagement that undermines higher-order reflection (Voicu et.al., 2026). Romania's educational environment presents a unique case study in digitalization. While there are positive premises for the system to recover the digital gap compared to Western European standards, barriers remain (Stan et.al., 2025). Digital transformation in Romania is often hindered by uneven infrastructure, particularly in rural areas, leading to digital exclusion for socially disadvantaged groups. Furthermore, Romanian higher education institutions are increasingly identifying "AI literacy" as the most influential factor for the successful formal integration of these technologies. Without a robust framework for digital skills, the integration of AI risks reinforcing social disparities rather than bridging them (Fleaca et al., 2022). As seen in another study conducted on over 150 students in Romania, It is showcased that the students are concerned also with the lack of social skills that the digital education seems to be encouraging, not being fully present physically in the process of education leading to difficulties in communication. (Stan, 2026)

The perception of AI among Romanian academic staff is strongly linked to institutional support and leadership efficacy (Bejinariu et.al., 2025). Ethical concerns persist regarding surveillance, data privacy, and the fairness of algorithmic assessments (Stan, 2025). Scholars argue that for AI integration to be sustainable, universities must treat it as a strategic ally while keeping human interaction and academic integrity at the center. This requires the development of ethical literacy among both students and professors to navigate the tensions created by generative AI. Current research suggests that AI is not a direct threat to the existence of the teaching profession but rather a stimulus for pedagogical and institutional restructuring (Bejinariu et.al., 2025). While AI can automate administrative tasks and provide data-driven insights, it lacks the empathy, creativity, and nuanced understanding of human educators. The consensus in recent literature is that the most significant legacy of AI will be psychological rather than technological, requiring a shift in teacher identity from a source of knowledge to a moderator of learning and designer of the educational experience.

METHODOLOGY

The present research adopts a rigorous quantitative methodological framework designed to investigate the multifaceted dynamics within the Romanian higher education ecosystem. To ensure the reliability and validity of the findings, the study follows a structured deductive approach, transitioning from theoretical constructs to empirical verification. The following sections detail the research design, participant demographics, data collection instruments, and the comprehensive statistical suite employed for data interrogation.

This study is situated within the positivist paradigm, emphasizing objectivity, measurability, and the identification of statistically significant relationships between variables. A cross-sectional quantitative research design was selected to capture a comprehensive snapshot of the internal climate, attitudes, and behaviors of the academic community at a singular point in time. This design is particularly effective for large-scale data collection where the primary objective is to generalize findings from a representative sample to a broader institutional population. The study targeted the diverse stakeholders of the Romanian higher education system. A non-probability convenience and snowball sampling technique was utilized to ensure broad reach across various geographic and institutional contexts within the country. The final sample comprised N = 1132 valid respondents. To ensure a holistic representation of the academic environment, the inclusion criteria spanned four distinct professional and educational categories:

- Students: Representing the primary service users and the largest demographic.
- PhD Candidates: Providing a bridge between student perspectives and early-career research insights.
- Professors/Academic Staff: Offering expert views on teaching, research, and institutional policy.
- Administrative Staff: Providing essential data on the operational and bureaucratic functionality of the universities

The diversity of this cohort allows for a comparative analysis of institutional experiences, facilitating the identification of shared challenges and disparate perceptions across different hierarchical levels. Data collection was facilitated through an online survey instrument, distributed between 11.12.2025 and 11.01.2026. This medium was selected to maximize the response rate while minimizing social desirability bias, as participants could complete the questionnaire in an anonymous and self-paced environment. The survey was disseminated via institutional email lists, academic social media groups such as LinkedIn, ResearchGate, and internal university communication portals. Prior to participation, all respondents were presented with an Informed Consent form outlining the study's objectives, the voluntary nature of their participation, and the strict adherence to GDPR protocols regarding data anonymity and confidentiality.

The survey instrument was developed based on a synthesis of existing literature, tailored to the specific socio-cultural context of Romanian academia. To ensure the robustness of the psychometric properties, the following steps were taken:

- Reliability Analysis: The internal consistency of the scales was evaluated using Cronbach's Alpha. This measure ensures that the items within each construct are interrelated and reliably measure the intended underlying concept.

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• Construct Validity: Exploratory Factor Analysis (EFA) was performed to identify the underlying factor structure of the dataset. This step was crucial for reducing data dimensionality and confirming that the observed variables loaded significantly onto their respective latent constructs.

The data were processed and analyzed using a dual-software approach to leverage the strengths of both GUI-based statistical packages and programmatic data manipulation. IBM SPSS Statistics version 31.0.0 was employed for primary inferential testing, while Python was utilized for data cleaning, advanced visualization, and cross-validation of results. The analytical workflow was categorized into three distinct phases:

- Initial data screening involved descriptive statistics to summarize the demographic profile of the sample. Univariate analysis (frequencies, means, standard deviations) provided a baseline understanding of individual variable distributions. Bivariate analysis was subsequently used to explore the initial relationships between pairs of variables.
- To determine the strength and direction of relationships between continuous and ordinal variables, the research employed: Pearson Correlation Coefficient: Used for normally distributed parametric data to assess linear relationships and Spearman's Rank Correlation: Utilized as a non-parametric alternative for ordinal data or variables that violated the assumption of normality.
- To examine differences between groups (comparing perceptions across different staff roles or student levels), a robust suite of comparative tests was implemented:

I. Parametric Tests: Independent Samples T-Test: Used for comparing the means of two independent groups.
   • One-Way Analysis of Variance (ANOVA): Applied when comparing means across three or more groups (Students vs. PhDs vs. Professors).

II. Non-Parametric Tests: In instances where data skewed significantly or failed the Levene's test for equality of variances, non-parametric equivalents were used to maintain the integrity of the results:
   • Mann-Whitney U Test: For comparing two independent groups.
   • Wilcoxon Signed-Rank Test: Used for comparing related samples or paired observations.
   • Kruskal-Wallis H Test: The non-parametric alternative to ANOVA for comparing multiple independent groups.

The research was conducted in strict accordance with the ethical guidelines for human subject research. All participants were informed of their right to withdraw at any stage without penalty. To eliminate the risk of deductive identification, data were aggregated, and any specific identifiers (such as specific university names or department titles) were coded into broader categories.

The use of a large sample size (1132 respondents) significantly enhances the statistical power of the tests performed. By utilizing both SPSS 31.0.0 and Python, the study ensures high computational accuracy. Furthermore, the combination of parametric and non-parametric testing demonstrates a nuanced approach to data distribution, ensuring that the findings are not merely artifacts of statistical assumptions but represent genuine trends within the Romanian academic landscape. While the use of an online survey may introduce a degree of self-selection bias, the breadth of the demographic categories included serves to mitigate this, providing a comprehensive and multidimensional view of the research problem.

RESULTS

Based on data from 1,132 respondents, central tendencies reveal a highly consistent mindset regarding AI in education. For practical advantages and AI's supportive role, the median and mode are strictly 4 (Agree). Specifically, respondents agree AI increases academic efficiency (mean = 4.19), will play a major future role (mean = 4.14), and acts mainly as a support tool (mean = 4.04). Conversely, statements suggesting AI will fully replace professors (mean = 2.18) or diminish teachers' importance (mean = 2.47) show clear disagreement, with medians and modes anchoring at 2. Traditional teaching methods remain highly valued (mean = 4.12, median/mode = 4). Meanwhile, views on AI's absolute reliability are more neutral; trusting AI for accurate information (mean = 3.25) and its overall reliability (mean = 3.18) both resulted in a median and mode of 3. The interquartile range (IQR) demonstrates an incredibly high consensus. For nearly every question, the IQR is exactly 1. This exceptionally low dispersion on a 5-point scale means the middle 50% of responses are tightly clustered (typically spanning just one response category), indicating very little polarization among Romanian students and academic staff. The only notable exception is the question asking if AI can support students in understanding complex topics (Q7). This yielded an IQR of 2 (25th percentile = 3, 75th percentile = 5)—the widest spread in the dataset—alongside a mean of 3.88, a median of 4, and a mode of 4. This higher variance highlights that while respondents generally agree AI can help, there is significantly more debate and polarization over its actual capability to handle complex, higher-level educational content compared to basic administrative tasks.

The demographic and inferential analysis of the 1,132 respondents indicates a sample heavily dominated by students (67.6%) and younger age brackets, with 78.8% of the total population falling into the two youngest age groups. Inferential testing reveals that AI adoption is primarily driven by age and academic role, as evidenced by a statistically significant relationship between age group and AI

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usage frequency (Pearson Chi-Square = 32.400, p = .009) and an even stronger correlation between academic role and AI usage (Pearson Chi-Square = 50.201, p < .001, Cramér's V = .122). Conversely, the data shows that AI integration is surprisingly universal across other variables; there are no statistically significant differences in AI usage frequency based on gender (p = .138), university type (p = .178), or specific field of study (p = .957), suggesting that AI tools have permeated all academic disciplines and institutions in Romania at similar rates. When examining group means by role, a clear divergence in perception emerges between students and academic staff. Students report higher familiarity (Q1 Mean = 3.79) and current tool usage (Q2 Mean = 3.48) compared to academic staff, who report lower levels (Q1 Mean = 3.56; Q2 Mean = 3.21). Academic staff exhibit much stronger resistance to the idea of AI replacement, yielding a Mean of 1.98 for Q9 ("AI can fully replace university professors"), whereas students are slightly more open with a Mean of 2.25. Furthermore, staff are more emphatic that AI should remain strictly a support tool (Q11 Mean = 4.21 vs. Student Mean = 4.01) and are more protective of traditional teaching methods (Q25 Mean = 4.22 vs. Student Mean = 4.10). Staff also express higher levels of concern regarding the loss of human interaction in education (Q20 Mean = 3.89) compared to the student population (Mean = 3.79). An analysis of perception based on the frequency of AI usage (D6_AIUse) shows that while heavy users feel significantly more comfortable with the technology (Q13 Mean = 3.77 for high users vs. 3.37 for low users) and are more willing to rely on it for learning (Q15 Mean = 3.39 vs. 3.00), their fundamental view of the human element remains unchanged. Notably, the data reveals that even the most frequent users of AI firmly disagree that the technology can replace professors (Q9 Mean = 2.24). Most significantly, both the lowest AI users and the highest AI users rate the essential nature of traditional teaching methods (Q25) almost identically at approximately 4.13. This indicates that increased exposure and usage of AI do not diminish the perceived value of human-led instruction, reinforcing the conclusion that the entire academic community, regardless of usage level or demographic background, views AI as a highly efficient administrative and educational aid that cannot replicate the core functions of human educators.

The reliability analysis and correlation matrix for the 25-item instrument reveal significant challenges regarding the internal consistency of the survey scales. Across all tested dimensions, the Cronbach's alpha values are exceptionally low, with the "AI Benefits and Effectiveness" scale yielding an alpha of .339, the "Trust and Acceptance" scale at .146, and the "Risks and Concerns" scale at .116. The most problematic dimension was "Replacement vs Support," which produced a near-zero alpha of .063 and a negative average covariance among items, specifically involving the relationship between the perceived support role of AI and the potential replacement of professors. Even the full 25-item instrument yielded an overall Cronbach's alpha of only .381. Statistically, these values fall well below the generally accepted threshold of .70, indicating that the individual questions within these subscales are not measuring a single unified construct. Instead, the respondents' views are highly multidimensional, meaning an individual's agreement with one specific benefit of AI does not reliably predict their agreement with another benefit or their perception of risk. The Pearson correlation matrix further supports this finding, as most relationships between variables are numerically weak, even when they are statistically significant due to the large sample size of 1,132. The strongest positive correlation in the entire dataset is between familiarity with AI and the actual use of AI tools, which yielded a coefficient of .244 (p < .001). Other notable but weak associations include the link between previous tool usage and a willingness to rely on AI for academic learning (.135, p < .001) and the relationship between the perceived presence of AI in higher education and previous usage (.108, p < .001). Conversely, the data shows almost no linear relationship between familiarity with AI and the belief that it can replace professors, or between the perceived role of AI and the demographic field of study variables. The evidence from this reliability analysis suggests that while the 1,132 respondents hold clear individual opinions on various aspects of AI, these opinions do not form cohesive, reliable "scales" as originally categorized. It should be noted that the questionnaire was designed as an exploratory instrument rather than a validated psychometric scale, which partly explains the low internal consistency across dimensions. The low reliability and weak correlations indicate that the academic community in Romania evaluates AI on a highly situational and pragmatic basis. Because attitudes toward efficiency, ethics, and trust do not correlate strongly with one another, the data suggests that perceptions are fragmented and driven by specific practical experiences rather than a single overarching "pro-AI" or "anti-AI" sentiment.

The Exploratory Factor Analysis (EFA) performed on the 25-item instrument confirms that the data lacks a cohesive underlying structure, reinforcing the earlier findings from the reliability analysis. While the Kaiser-Meyer-Olkin (KMO) measure of .619 and a significant Bartlett's Test (p < .001) technically suggest the data is factorable, the subsequent extraction reveals significant methodological fragmentation. The analysis identified 10 distinct factors with eigenvalues greater than 1.0, yet these 10 factors collectively explain only 47.7% of the total variance. In psychometric research, a 10-factor solution that fails to explain even half of the total variance is a strong indicator that the survey items are measuring isolated opinions rather than broad, latent constructs. The lack of a meaningful structure is further evidenced by the extremely low communalities, where many items show extraction values well below .10, such as Q14 at .046 and Q25 at .068, meaning the factors explain almost none of the variance for those specific questions. Methodologically, the data proved difficult to process; an initial Direct Oblimin rotation failed to converge within the standard 25 iterations. Even when the iteration limit was increased, the rotation required 74 iterations to converge and resulted in a pattern matrix where very few items loaded strongly or logically onto any single factor. Switching to a Varimax rotation allowed for faster convergence in 33 iterations, but it produced the same poor results, effectively ruling out the rotation method as the cause of the issue.

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Ultimately, the factor analysis leads to the conclusion that there is no unified "AI perception" scale within this dataset. The fact that the items do not group together into interpretable factors, regardless of whether an oblique or orthogonal rotation is used, confirms that the 1,132 respondents are evaluating each statement as an independent concept. This reinforces the finding that the instrument functions as an exploratory collection of individual attitudes rather than a multidimensional scale, suggesting that perceptions of AI in Romanian higher education are driven by specific, situational reactions to different facets of the technology rather than a single, underlying psychological framework.

The non-parametric inferential testing provides definitive evidence of the demographic divides and universalities within the Romanian academic environment. Regarding the comparison between students and academic staff, the Mann-Whitney U tests confirm that Hypothesis 3 is partially supported because significant differences exist in how these groups perceive the ultimate role of AI. Students yielded significantly higher mean ranks for the belief that AI can fully replace professors ($p < .001$ for Q9) and that the role of teachers will become less important ($p = .024$ for Q10). Conversely, academic staff were significantly more emphatic in viewing AI as a support tool rather than a replacement ($p < .001$ for Q11). However, there was no significant difference ($p = .611$) in how students and staff view AI's ability to take over some tasks, suggesting a shared baseline for AI as a functional assistant despite differing views on its long-term impact on the profession.

Hypothesis 7, which posits that age influences AI acceptance, is fully supported by the Kruskal-Wallis analysis. Statistically significant differences were found across age groups regarding comfort with using AI tools ($H = 13.56$, $p = .009$ for Q13), willingness to rely on AI for learning ($H = 23.11$, $p < .001$ for Q15), and the belief that AI will play a major future role ($H = 22.55$, $p < .001$ for Q24). These results confirm that age is a primary driver of technological receptivity in higher education, with younger cohorts demonstrating higher levels of trust and acceptance. It should be noted that while these Kruskal-Wallis results indicate significant differences exist between groups, specific post-hoc pairwise comparisons were not conducted to isolate which exact age groups differ from one another. Nevertheless, the results reinforce that one's specific position within the university hierarchy and age demographic significantly dictates their stance on AI integration. In contrast, the data reveals a surprising degree of universality across other demographic variables. The Kruskal-Wallis tests for field of study showed no significant differences on any item, with p-values ranging from .080 to 1.000, indicating no meaningful variation across academic disciplines on any item. This suggests that a respondent's academic discipline, whether they are in STEM, humanities, or social sciences, does not fundamentally change their perception of AI. Similarly, Mann-Whitney U tests confirmed that gender and university type are not significant factors in determining AI attitudes, with almost all comparisons yielding non-significant results. Ultimately, these inferential tests isolate age and academic role as the primary demographic predictors of AI perception, while suggesting that the broader academic community holds a unified view regardless of their gender, discipline, or institution type. The Spearman correlation analysis of the 1,132 respondents reveals that behavior and knowledge are the only strongly connected variables in the study, while attitudes toward AI remain largely isolated. Hypothesis 2 is partially supported because the frequency of AI usage shows moderate and statistically significant correlations with familiarity ($rho = .419$, $p < .001$) and prior tool usage ($rho = .473$, $p < .001$). However, the frequency of use only weakly predicts actual attitudes or trust, with coefficients sitting between .110 and .187. This indicates that while using AI makes a person more familiar and comfortable with the tools, it does not lead to a significantly more favorable ideological view of the technology.

Hypothesis 4 and Hypothesis 5 are only very weakly supported. The data shows that trust in AI systems yielded a statistically significant but practically negligible correlation with the willingness to rely on them for learning ($rho = .092$, $p = .002$). Similarly, perceived usefulness shows a significant but negligible correlation with adoption willingness, with coefficients remaining below .090. These results suggest that even when respondents find the tools useful or trustworthy, these factors are not the primary drivers behind their actual willingness to adopt the technology in an academic setting. Hypothesis 6 is not supported. The analysis shows no statistically significant relationship between perceived risks, such as the loss of human interaction or the lack of emotional intelligence, and the acceptance or comfort level of using AI. All p-values for these correlations were non-significant, ranging from .110 to .970, meaning that concerns about AI do not actually reduce a person's willingness to use it in this population. This suggests that ethical concerns and acceptance of AI coexist independently in this population, meaning respondents can simultaneously hold concerns about AI while remaining willing to use it. The most compelling extraction from the correlation matrix is that the two strongest relationships in the entire dataset are purely behavioral and cognitive. The high correlation between AI usage frequency, familiarity, and prior use stands in stark contrast to the near-total lack of correlation between attitudes and concerns. This confirms the findings from the reliability and factor analyses that perceptions of AI in Romanian higher education are fragmented. Respondents evaluate the technology on a situational basis, where their practical use of the tools is disconnected from their broader ethical or trust-based assessments.

The one-sample t-tests, one-way ANOVA, and Wilcoxon signed-rank tests provide a conclusive validation of the core research hypotheses. The one-sample t-tests definitively support the main hypothesis by showing that respondents firmly reject the idea of artificial intelligence as a replacement while simultaneously embracing it as a support tool. Specifically, the belief that AI can fully

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replace professors yielded a mean of 2.18, which is significantly below the neutral midpoint with a t-statistic of negative 32.054 and a p-value of less than .001. Conversely, the view of AI as a support tool yielded a mean of 4.04, which is significantly above the midpoint with a t-statistic of 45.433. Notably, respondents did agree that AI can replace some specific tasks currently performed by teachers with a mean of 3.27 and a t-statistic of 10.358. These results demonstrate that the Romanian academic environment has formed a very strong and unified consensus that AI is a permanent and helpful addition to education that allows for partial task automation but will not displace human educators.

The one-way ANOVA further demonstrates that this mindset is universal across all academic disciplines. There were no statistically significant differences found between different fields of study on any key item, with p-values ranging from .113 to as high as .999. Levene's test confirmed that the variances were equal across all groups, and post hoc analysis placed all six fields of study into a single homogeneous subset. This indicates that the perception of AI in higher education is not a discipline-specific phenomenon. Whether a person is involved in technical sciences or the humanities, the level of agreement regarding the role, presence, and reliability of AI remains constant across the entire university system. Finally, the Wilcoxon signed-rank tests provide definitive support for the hypothesis that AI is perceived as far more suitable for administrative and efficiency-related tasks than for core teaching functions. The data shows that respondents rated AI's ability to reduce workload and increase efficiency dramatically higher than its potential to replace professors or diminish the importance of the teaching role. In the comparison between AI's efficiency and its ability to diminish the importance of the teacher, there were 954 negative ranks and only 33 positive ranks, resulting in a Z-score of negative 26.931 and a p-value of less than .001. This confirms that the academic community has a very clear and statistically significant hierarchy for AI integration. They prioritize operational and administrative efficiency while strictly guarding the human and emotional core of the teaching profession.

CONCLUSIONS

The present study examined the extent to which artificial intelligence is perceived as a transformative or replacement force within Romanian higher education, drawing on responses from 1,132 students, PhD candidates, teachers, and administrative staff. Across eight research hypotheses and a comprehensive analytical framework encompassing descriptive statistics, reliability testing, factor analysis, non-parametric group comparisons, correlation analysis, and parametric hypothesis testing, the data converges on a consistent and empirically supported conclusion: the Romanian academic community perceives AI as a viable and permanent instrument for educational support and administrative efficiency, while firmly rejecting the premise that it can substitute for the human educator in core teaching functions.

The main hypothesis of the study, H1, is fully supported by the parametric tests. One-sample t-tests conducted against the neutral midpoint of 3 demonstrate that respondents significantly reject the notion of full AI replacement of professors (Q9: mean = 2.18, $t = -32.054$, $p < .001$) and the diminished importance of the teaching role (Q10: mean = 2.47, $t = -19.521$, $p < .001$), while simultaneously affirming that AI functions primarily as a support tool rather than a replacement (Q11: mean = 4.04, $t = 45.433$, $p < .001$). A critical nuance within this finding is that respondents also agree, to a statistically significant degree, that AI is capable of assuming some specific tasks currently performed by teachers (Q8: mean = 3.27, $t = 10.358$, $p < .001$). This distinction between the acceptance of partial task automation and the rejection of professional displacement constitutes the central finding of the study and provides the conceptual framework within which all subsidiary analyses should be interpreted. The descriptive analysis establishes this pattern at the level of raw data. Central tendency measures indicate that for items relating to AI's practical benefits and supportive functions, the median and mode consistently anchor at 4 on the five-point Likert scale, while items relating to replacement anchor at 2. The interquartile range equals 1 for 24 of the 25 items, indicating a notably tight clustering of responses and minimal dispersion across the sample. The sole exception is Q7, which addresses AI's capacity to support students in understanding complex topics and yields an IQR of 2, suggesting that respondents hold more varied views regarding the boundaries of AI's cognitive applicability in higher-order educational contexts. This finding is consistent with the broader pattern in the data whereby practical and administrative applications of AI receive strong and consistent endorsement, while its role in intellectually demanding and interpersonally complex educational tasks remains a subject of greater uncertainty.

The demographic composition of the sample requires methodological acknowledgment when interpreting these results. With 67.6% of respondents identifying as students and 78.8% falling within the two youngest age groups, the sample is not representative of the full spectrum of Romanian higher education stakeholders in proportional terms. This distributional skew should be noted as a limitation when generalising findings to the broader academic population. Notwithstanding this constraint, the core findings demonstrate considerable robustness across demographic subgroups, which is itself a substantive and analytically relevant result. Bivariate and inferential analyses confirm that gender, university type, and academic field of study do not exert a statistically significant influence on AI attitudes or usage frequency, with all relevant p-values exceeding the .05 threshold. The one-way ANOVA corroborates this finding at the parametric level, detecting no significant differences across six academic fields on any key attitudinal variable, with Levene's test

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confirming homogeneity of variance and post-hoc analysis placing all fields within a single homogeneous subset. The consistency of AI-related perceptions across disciplines ranging from economics and engineering to social sciences and medicine suggests that attitudes toward AI in education are not mediated by domain-specific knowledge or professional culture, but rather reflect a more general orientation that transcends disciplinary boundaries within the Romanian academic context. The two demographic variables that do produce statistically significant results are age and academic role. Hypothesis H7 is fully supported: Kruskal-Wallis tests reveal significant differences across age groups in comfort with AI tools ($H = 13.56$, $p = .009$), willingness to rely on AI for academic learning ($H = 23.11$, $p < .001$), and belief in AI's future role in higher education ($H = 22.55$, $p < .001$). While post-hoc pairwise comparisons were not conducted to isolate specific inter-group differences, the directional pattern of mean ranks is consistent with the hypothesis that younger respondents demonstrate higher levels of acceptance and technological receptivity. Hypothesis H3 is partially supported: Mann-Whitney U tests identify significant divergences between students and academic staff on questions concerning the long-term professional implications of AI. Students assign significantly higher mean ranks to the possibility of AI fully replacing professors ($p < .001$) and reducing the importance of the teaching role ($p = .024$), while academic staff are significantly more emphatic in their endorsement of the support-tool framing of AI ($p < .001$). Notably, no significant difference was detected between the two groups on the question of whether AI can replace some existing teaching tasks ($p = .611$), indicating a shared baseline regarding AI's functional applicability despite divergent views on its long-term professional implications.

Hypothesis H8 is fully supported and produces the most asymmetric quantitative evidence in the study. Wilcoxon signed-rank tests comparing efficiency-oriented items against replacement-oriented items yield Z-scores of -27.871 and -26.931 respectively, both significant at $p < .001$, with 1,017 and 954 negative ranks against only 18 and 33 positive ranks. The scale of this asymmetry provides strong empirical support for the conclusion that respondents perceive a categorical distinction between AI's role in administrative and operational domains and its role in core pedagogical functions. The former is broadly accepted; the latter is broadly rejected. The correlational analyses, conducted using both Pearson and Spearman methods, qualify the strength of several theorised relationships. Hypothesis H2 receives only partial support: while AI usage frequency correlates moderately with familiarity ($rho = .419$, $p < .001$) and prior tool usage ($rho = .473$, $p < .001$), its relationship with attitudinal and trust outcomes is considerably weaker, with coefficients ranging between .110 and .187. This pattern suggests that behavioural engagement with AI predicts cognitive familiarity reliably, but does not translate into proportionally more favourable attitudinal dispositions toward the technology. Hypotheses H4 and H5 receive only very weak support, with trust and perceived usefulness correlating with adoption willingness at practically negligible levels, all below .092. Hypothesis H6 is not supported: concerns regarding the loss of human interaction, deficiencies in AI's emotional intelligence, and broader ethical considerations show no statistically significant relationship with acceptance or comfort levels, with p-values ranging from .110 to .970. This null finding is theoretically noteworthy, as it indicates that ethical concern and practical acceptance function as independent rather than competing constructs within this population. Respondents who hold concerns about AI do not, on the basis of this evidence, exhibit reduced willingness to use or accept the technology.

The reliability and factor analyses yield results that fall below conventional psychometric thresholds, though these findings are interpretable within the study's exploratory design. Cronbach's alpha coefficients range from .063 to .381 across all proposed subscales and the full 25-item instrument. Exploratory factor analysis using Principal Axis Factoring with both Direct Oblimin and Varimax rotations extracts 10 factors explaining 47.7% of total variance, with near-zero communalities for the majority of items and no interpretable simple structure in the pattern matrix. These results are consistent with the broader analytical finding that AI-related perceptions within this sample do not cluster into coherent latent dimensions. Rather than constituting a psychometric failure, this outcome reflects the genuine multidimensionality and situational specificity of the attitudinal data. As the questionnaire was designed as an exploratory instrument rather than a validated psychometric scale, the absence of factorial coherence is methodologically anticipated and substantively informative. It confirms that respondents evaluate discrete aspects of AI, such as its efficiency, its reliability, its ethical implications, and its potential for professional displacement, as largely independent judgments that do not reduce to a single underlying construct. The cumulative evidence across all analyses supports several conclusions that are directly relevant to the research questions and the broader literature on AI adoption in higher education. First, the perception of AI as a support tool rather than a replacement agent is not a marginal or contested view within the Romanian academic community but a statistically dominant consensus, held with uniform strength across gender, institutional type, and academic discipline. Second, this consensus is not simply a product of limited AI exposure: even the most frequent users of AI in the sample firmly reject the replacement narrative, with the highest-use group yielding a mean of 2.24 on the full-replacement item, and both the lowest- and highest-use groups rating the continued importance of traditional teaching methods identically at 4.13. Third, the primary sources of attitudinal variation within the sample are generational and role-based, with age and academic position constituting the only demographic variables that produce statistically significant differences in AI perception. Fourth, the absence of significant associations between ethical concern and AI acceptance suggests that the relationship between normative evaluation and behavioural or attitudinal disposition toward AI is more complex than linear models of technology acceptance would predict, and warrants further investigation in future research.

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These findings contribute to the empirical understanding of AI adoption dynamics in higher education systems that are in earlier stages of institutional AI integration relative to Western European or North American contexts. The uniformity and robustness of the observed consensus, combined with the granular pattern of partial task acceptance alongside core-role protection, offers a methodologically grounded basis for informing institutional policy, curriculum design, and professional development frameworks in Romanian higher education.

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