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"PERCEPTIONS OF FINAL-YEAR UNIVERSITY STUDENTS REGARDING AI TOOLS FOR ACADEMIC EXCELLENCE IN HIGHER EDUCATION"

[1]Ayesha Tabassum
STEM Education, Lahore College for Women University
Email: afysh23@gmail.com
[2]Dr. Uzma Quraishi
Professor, Vice Chancellor, Lahore College for Women University
Email: uzmaquraishi@yahoo.com
[3]Dr. Tayybba Batool
Assistant Professor, Lahore College for Women University

Abstract

This study explores the perceptions of final-year university students regarding the role of Artificial intelligence (AI) tools in achieving academic excellence in higher education. The research was conducted in Punjab, Pakistan, which hosts the country's largest concentration of universities. Using a multistage sampling technique, 375 students were selected from different academic disciplines and institutional types, ensuring representativeness. Data were collected through a structured and validated questionnaire adapted from Almaraz-López, Almaraz-Menéndez, and López-Esteban (2023), with reliability confirmed by a Cronbach's alpha 0.867. Analysis was performed using SPSS, applying descriptive statistics to summarize responses and inferential tests (t-test and ANOVA) to identify differences across gender and disciplines. Findings indicate that while students broadly recognize AI as a facilitator of academic excellence, perceptions vary significantly across disciplines, with engineering and technology students reporting more favorable attitudes compared to those in arts and education. These results suggest that disciplinary context shapes the way AI is perceived in higher education. The study contributes to global and local debates on AI integration, highlighting the need for capacity-building initiatives and equitable access to AI tools. It also identifies a research gap in preparing students across diverse disciplines for effective engagement with AI in academic settings.

Keywords: *Artificial Intelligence, AI tools in education, student perceptions, academic excellence, higher education*

Introduction

The COVID-19 pandemic has left an unforgettable mark on the global education system, leading to a transformative shift in teaching and learning practices. This unexpected situation accelerated the widespread adoption of digital technologies, particularly Artificial Intelligence (AI), as essential tools to ensure the continuity of education (Abbas, 2023). AI, broadly defined as the machine ability to perform cognitive functions associated with human intelligence (Ali, Naeem & Bhatti, 2021), has emerged as a significant facilitator in higher education, offering multimodal learning experiences, enhancing engagement, and providing globally standardized educational solutions (Aldosari, 2020).

In the 21st century, AI continues to expand across all domains of life, including higher education, where it holds potential to enhance students' learning aptitude and academic outcomes (Sapci, 2020). As universities seek to meet the evolving demands of the modern world, AI tools are becoming increasingly central in equipping students with the skills required for innovation, adaptability, and critical thinking. These tools reshape how students' access, process, and apply

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knowledge in academic contexts, thus directly influencing the concept of academic excellence in higher education (Dai, Chai, Lin, Jong, Guo & Qin, 2020).

Despite the growing global emphasis on AI, its integration into higher education curricula remains uneven and often restricted to traditional STEM disciplines (Cantú-Ortiz, Galeano Sánchez, Garrido, Terashima-Marin & Brena, 2020). Scholars argue that effective incorporation of AI within curricula can empower students with the skills necessary for future workplaces, ensuring competitiveness in the digital economy (Ng, Leung, Chu & Qiao, 2021; Long & Megerko, 2020). Moreover, students themselves must be adequately prepared to not only use AI tools effectively but also to critically evaluate their implications for personal, academic, and professional success (Markauskaite et al., 2022). Understanding students' perceptions is therefore essential, as they are the direct beneficiaries of AI integration in education, and their voices provide insight into the effectiveness and acceptance of such technologies.

This article specifically focuses on exploring the perceptions of final-year university students regarding the role of AI tools in achieving academic excellence in higher education. By investigating students' views across different disciplines, the study seeks to determine how students evaluate the importance of AI in shaping their academic journeys. In doing so, the paper addresses a significant gap in existing literature, where much of the research has emphasized the perspectives of educators and institutions, leaving student-centered insights underexplored.

Statement of the Problem

This study aims to examine the perceptions of final-year university students regarding the role of AI tools in achieving academic excellence in higher education, by utilizing latest research and technological advancements. It also seeks to investigate whether there are significant differences in these perceptions across various academic disciplines.

Objectives of the Study

The present study is guided by the following objectives:

1. To examine the perceptions of final-year university students regarding the role of AI tools in achieving academic excellence in higher education.
2. To investigate whether there are significant differences in students' perceptions of AI tools across various academic disciplines.

Research Hypotheses

Based on the objectives, the following null hypotheses were formulated:

- **H_o1:** Final-year university students perceive that AI tools have no significant role in achieving academic excellence in higher education.
- **H_o2:** There are no significant differences in the perceptions of final-year students from different academic disciplines regarding the role of AI tools in academic excellence.

Significance of the Study

This study is significant because it highlights final-year students' perspectives on AI tools, offering insights into how such technologies contribute to academic excellence. By focusing on students as the direct beneficiaries of AI integration, the research provides evidence of how effectively these tools support learning outcomes across disciplines. The findings will assist universities and policymakers in developing student-centered strategies for effective AI adoption, while also preparing graduates with the digital competencies required for success in a technology-driven world.

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Delimitations of the Study

The study was delimited to public and private universities located in Punjab, Pakistan. Only final-year undergraduate students were included, as they have sufficient exposure to teaching and learning practices within their institutions. Furthermore, the scope was restricted to commonly available faculties (Arts and Social Sciences, Management and Administrative Sciences, Engineering and Technology, Education, and Science and Technology) to ensure comparability across institutions.

Literature Review

The term Artificial Intelligence (AI) was first introduced in 1956 by McCarthy, marking the beginning of research into how machines could replicate human cognitive processes (Tuomi, 2018). Baker and Smith (2019) define AI as "supercomputers that execute mental tasks, commonly accompanied by human cognitions" (p. 10), highlighting that AI is not a single technology but a broad category encompassing machine learning, natural language processing, neural networks, and algorithms.

The integration of Artificial Intelligence (AI) into education has attracted increasing scholarly attention, with researchers exploring its potential to transform teaching, learning, and assessment processes. Theoretically, AI adoption in education can be situated within the Technology Acceptance Model (TAM) (Davis, 1989), which emphasizes that learners' perceptions of usefulness and ease of use determine their willingness to adopt new technologies. Similarly, constructivist learning theories highlight the role of technology in supporting personalized, student-centered learning environments (Vygotsky, 1978; Luckin et al., 2016). Within these frameworks, AI has been recognized as a catalyst for enhancing 21st-century skills, including problem-solving, collaboration, and critical thinking (Chan, 2019).

AI and machine learning are often discussed together, with machine learning functioning as a technique within AI to analyze and categorize data. For example, it can predict student outcomes such as dropout risks or academic performance (Popenici & Kerr, 2017). This ability makes AI a powerful tool in higher education, enabling personalized learning pathways for students across various disciplines.

The field of Artificial Intelligence in Education (AIED) emerged in the 1970s, aiming to provide more flexible, inclusive, and engaging learning experiences (Gulson, Murphie, Taylor & Sellar, 2018). Through processes such as automated feedback and assessment, AI supports individualized learning and offers students real-time guidance (Porayska, 2016). These tools integrate with technologies like virtual assistants and smart classrooms to enhance student engagement and address disparities in achievement (Luckin, Holmes, Griffiths & Forcier, 2016; Coccoli, Maresca & Stanganelli, 2016).

AI also transforms learning by providing adaptive, multimodal, and globally accessible educational experiences. For example, intelligent tutoring systems and adaptive learning platforms create opportunities for personalized support, while AI-driven translation tools open access to global classrooms (Boulay, 2016; Chan, 2019). Such developments enable final-year university students to acquire competencies that align with the demands of the 21st-century workforce, preparing them to operate effectively in technology-driven environments (Southgate, 2020).

Despite these opportunities, research highlights several challenges for students. Traditional teaching methods often fail to accommodate diverse learning styles, leading to uneven academic success (Freeman et al., 2014). Similarly, conventional assessments may not adequately capture students' learning progress (Schuetzler et al., 2020). AI offers solutions to these issues by enabling

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real-time feedback, personalized learning, and adaptive support, but challenges such as resource constraints, privacy, and equitable access remain (Aldosari, 2020; Sapci, 2020).

Globally, scholars have reported positive contributions of AI in education. Studies indicate that AI-driven tutoring systems and intelligent learning platforms can enhance engagement, motivation, and academic performance by tailoring content to individual learners (Boulay, 2016; Sapci, 2020). Furthermore, AI has shown potential in improving collaboration and communication among students and faculty, particularly in online and blended learning environments (Schuetzler et al., 2020). More recent literature underscores AI's capacity to support inclusive education, providing adaptive learning opportunities for students with diverse needs (Holmes et al., 2022). However, concerns persist regarding data privacy, algorithmic bias, and the potential for over-reliance on AI tools, which may compromise students' independent critical thinking skills (Zawacki-Richter et al., 2019).

While the global literature highlights AI as a transformative force, the local context presents unique challenges. In developing countries such as Pakistan, limited infrastructure, unequal digital access, and varying levels of digital literacy pose barriers to AI adoption in higher education (Aldosari, 2020). Although international studies have established AI's role in improving learning efficiency, the extent to which students in resource-constrained settings perceive AI as supportive of academic excellence remains underexplored (Southgate, 2020). Some studies from South Asia suggest that despite students' positive attitudes towards educational technologies, infrastructural gaps and lack of institutional support often limit their practical use (Abbas, 2023). This contrast between global optimism and local constraints highlights the need for a more nuanced understanding of AI's role in diverse contexts.

Research Gap

In the context of higher education, particularly in Pakistan, there is a growing need to understand how students perceive the role of AI in achieving academic excellence. As students across different disciplines may view the usefulness and application of AI tools differently, examining their perceptions provides critical insights into the opportunities and challenges of AI adoption in higher education. This focus ensures that institutions develop strategies that address diverse student needs while fostering inclusive and future-oriented academic excellence.

In summary, although the global research landscape affirms AI's potential in reshaping education, little is known about how students in Pakistan perceive and utilize AI for academic excellence. Addressing this gap is critical, as student readiness, acceptance, and contextual challenges significantly shape the successful integration of AI tools in higher education. This study therefore contributes to bridging the gap by examining students' perspectives in a developing country context, offering insights that may inform policy, practice, and future research.

Methodology

The present study was grounded in the positivist paradigm, which emphasizes objectivity, empirical measurement, and hypothesis testing through systematic observation and analysis (Creswell & Creswell, 2018). A quantitative descriptive research design was employed, using the survey method to collect data from final-year university students. This approach was considered appropriate for examining students' perceptions of AI tools in achieving academic excellence and for identifying significant differences across academic disciplines.

Population of the Study

The target population for this study comprised final-year undergraduate students enrolled in public and private sector universities of Punjab, Pakistan. Punjab was selected because it has

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the largest number of higher education institutions in the country, ensuring diversity and representation. To capture students' perspectives across disciplines, participants were drawn from five commonly available faculties: Arts and Social Sciences, Management and Administrative Sciences, Engineering and Technology, Education, and Science and Technology.

Sample of the Study

A multistage sampling technique was used to ensure balanced representation across Punjab's higher education institutions. In the first stage, universities were selected from three geographical zones of Punjab (Central, Eastern, and Southern) covering both public and private sectors. In the second stage, only those universities offering all five major faculties (Arts and Social Sciences, Management and Administrative Sciences, Engineering and Technology, Education, and Science and Technology) were included. Within these universities, departments were randomly selected, and from these departments, final-year undergraduate students were chosen using simple random sampling. This approach ensured diversity across zones, faculties, and institutional type.

Table 1

Selected Universities by Zone and Sector

Zone	Public Universities	Private Universities
Southern	The Islamia University of Bahawalpur Bahauddin Zakariya University, Multan	University of Southern Punjab
Eastern	University of Chakwal	University of Wah
Central	Government College University, Lahore Lahore College for Women University University of the Punjab, Lahore Government College University, Faisalabad	Minhaj University Lahore Superior University, Lahore The University of Lahore Green International University, Lahore University of Faisalabad

Sample Size

The estimated population of final-year undergraduate students across the selected universities was approximately 17,000. Using Cochran's (1977) formula for finite populations at a 95% confidence level and 5% margin of error, the required sample size was calculated as 375 students. This sample size is consistent with the guidelines of Krejcie and Morgan (1970) and Yamane (1967), ensuring reliability and representativeness of the population.

Research Instrument

A structured questionnaire was employed as the primary instrument for data collection. The questionnaire was adapted from Almaraz-López, Almaraz-Menéndez, and López-Esteban (2023) and modified to fit the Pakistani higher education context. To ensure content validity, the instrument was reviewed by subject experts and refined through pilot testing with 50 final-year students. The reliability of the instrument was confirmed through Cronbach's alpha, which yielded a coefficient above the acceptable threshold of 0.70, indicating strong internal consistency. The pilot process also ensured face and content validity.

Quantitative Data Collection and Analysis

Data were collected through a structured questionnaire administered to final-year undergraduate students across selected public and private universities in Punjab. The instrument included demographic information, Likert-scale items assessing students' perceptions of AI in achieving academic excellence, and questions on their exposure to AI-related training. A total of

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375 valid responses were obtained. The data were analyzed using SPSS software. Descriptive statistics (mean, standard deviation, and percentages) were computed to summarize the responses, while inferential statistics, including independent sample *t*-tests and one-way ANOVA, were employed to examine group differences across gender and academic disciplines. The reliability of the questionnaire was confirmed through Cronbach's alpha ($\alpha > 0.70$), ensuring internal consistency, while expert review and pilot testing established content validity.

Results and Interpretations

The study examined the perceptions of university students regarding the relevance and integration of AI tools in their discipline. For demographic information, the questionnaire included variables such as gender, institution sector, department (faculty) and university of the respondents. The following table presents a summary of the demographic characteristics of the sample.

Quantitative Analysis

This part focuses on analyzing the structured questionnaire responses (Likert-scale items).

Reliability Testing (Internal Consistency)

Table 2

Reliability Statistics

Cronbach's Alpha	N of Items
0.867	30

The reliability of the student's questionnaire was assessed using Cronbach's Alpha. The obtained value of $\alpha = 0.867$ for 30 items indicates a high level of internal consistency among the items.

This finding provides confidence that the data collected from faculty and students can be meaningfully analyzed in subsequent sections, as the items are sufficiently correlated and measure the intended dimensions of the study.

Descriptive Statistics of Likert-Scale Items

Descriptive statistics are used to calculate the frequencies, percentages, Mean and Standard Deviation to interpret the data.

Table 3

Factors	Minimum	Maximum	Mean	Std. Deviation
Relevance to Discipline	3.00	15.00	7.9573	3.06582
Academic Performance	3.00	15.00	8.1760	2.89494
Skill Development	3.00	15.00	8.0960	3.00736
Support and Resources	3.00	15.00	7.8347	2.95589
Future Impact	3.00	15.00	8.0400	2.96972
Challenges and Limitations	3.00	15.00	8.1200	2.93768
Training and Support	2.00	10.00	5.3120	2.27195
Efficiency and Productivity	4.00	20.00	10.5360	3.67433
Accuracy and Precision	2.00	10.00	5.4000	2.36734
Improvement of Work Quality	2.00	10.00	5.2427	2.21861
Collaboration	2.00	10.00	5.3333	2.30399

Table 2 presents the descriptive statistics of the perceptions of final-year university students regarding the role of AI tools in achieving academic excellence in higher education. The

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results indicate that most factors were rated above the midpoint of their respective scales, reflecting a generally positive perception.

Among the 15-point scale factors, Academic Performance (M = 8.18, SD = 2.89), Skill Development (M = 8.10, SD = 3.01), and Challenges and Limitations (M = 8.12, SD = 2.94) emerged as the highest-rated, highlighting the strong impact of AI tools on learning outcomes and skill acquisition, while also acknowledging existing challenges. Relevance to Discipline (M = 7.96, SD = 3.07) and Support and Resources (M = 7.83, SD = 2.96) received slightly lower means but still reflected positive evaluations.

On the 20-point scale, Efficiency and Productivity showed the highest mean score (M = 10.54, SD = 3.67), indicating that AI tools substantially enhance academic efficiency. Similarly, on the 10-point scale, Accuracy and Precision (M = 5.40, SD = 2.37), Collaboration (M = 5.33, SD = 2.30), and Training and Support (M = 5.31, SD = 2.27) were moderately rated, suggesting room for improvement in these areas. Improvement of Work Quality received the lowest mean score (M = 5.24, SD = 2.22), implying that while AI tools contribute positively, their impact on overall quality of academic work is perceived as moderate.

Overall, the findings suggest that students perceive AI tools as beneficial for academic performance, skill development, and efficiency, though challenges, support mechanisms, and improvements in quality and collaboration remain areas requiring further attention.

Inferential Statistics

Table 4

Group Statistics of Students' Perceptions by Gender

Gender	N	Mean	Std. Deviation
Female	196	80.05	19.47
Male	179	80.04	20.65

Table 1 shows the descriptive statistics for students' perceptions based on gender. Female students (M = 80.05, SD = 19.47) and male students (M = 80.04, SD = 20.65) reported almost identical mean scores, indicating no notable difference in the central tendency of perceptions between the two groups.

Table 5

Independent Samples t-test Comparing Students' Perceptions by Gender

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances assumed	1.365	.243	.003	373	.998	.00633
Equal variances not assumed			.003	364.864	.998	.00633

Table 2 presents the results of the independent samples t-test. Levene's test for equality of variances was not significant (F = 1.37, p = .243), indicating that the assumption of homogeneity of variances was met. The t-test revealed no statistically significant difference in students' perceptions between female and male students, t (373) = .003, p = .998, with a negligible mean

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difference (0.006). This suggests that gender does not influence students' perceptions in the present study.

Table 6

Group Statistics of Students' Perceptions by Institution Type

Sector	N	Mean	Std. Deviation
Public	226	79.4071	19.26823
Private	149	81.0201	21.13262

Table 3 presents the group statistics for students' perceptions across university sectors. The mean perception score for students from private university (M = 81.02, SD = 21.13) was slightly higher than that of public university students (M = 79.41, SD = 19.27). However, descriptive differences alone do not indicate whether the difference is statistically significant.

Table 7

Independent Samples t-test Comparing Students' Perceptions by Institution type

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances assumed	5.475	020	.763	373	.446	1.61305
Equal variances not assumed			.749	296.172	.455	1.61305.

Levene's Test for Equality of Variances was significant (F = 5.475, p = .020), indicating unequal variances between groups. However, both results (assuming equal and not assuming equal variances) revealed that the difference in mean perception scores between private and public sector students was not statistically significant (t = 0.76, p > .05). This indicates that students' perceptions do not differ meaningfully across the two sectors.

Table 8

Group Statistics of Students' Perceptions by type of faculty/department

Faculty	N	Mean	Std. Deviation
Faculty of Arts and Social sciences	82	80.6220	19.98619
Faculty of Education	87	78.1724	20.32710
Faculty of Engineering and Technology	72	80.0694	17.72428
Faculty of Management and Administrative	66	78.9091	20.39814
Faculty of Science and Technology	68	82.8382	21.74315
Total	375	80.0480	20.01758

Descriptive analysis showed that students' perception scores were fairly consistent across faculties. The mean scores ranged from 78.17 in the Faculty of Education to 82.84 in the Faculty of Science and Technology. Other faculties reported similar averages: Arts and Social Sciences (80.62), Engineering and Technology (80.07), and Management and Administrative Sciences (78.91). The overall mean perception score across all faculties was 80.05 (SD = 20.02). These results suggest that students' perception did not differ greatly by faculty, with only minor variations in mean scores.

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Table 9

One way ANOVA comparing Students' Perceptions across different faculties/departments

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	948.114	4	237.028	.589	.671
Within Groups	148915.022	370	402.473		
Total	149863.136	374			

A one-way ANOVA was conducted to test whether students' perception differed across the five faculties. The analysis showed no statistically significant differences, F (4, 370) = 0.59, p = .671. The effect size was very small (η^2 = .006), indicating that students' perception was consistent across faculties, with only negligible variation between them.

Table 10

Group Statistics of Students' Perceptions by different universities

	N	Mean	Std. Deviation
Bahauddin Zakariya University	28	78.0357	20.83530
Government College University, Faisalabad	31	81.0968	20.28194
Government College University, Lahore	21	80.3810	16.65376
Green International University, Lahore	32	80.0000	21.28152
Lahore College for Women University	29	78.9655	20.23166
Minhaj University Lahore	32	77.4375	20.61934
Superior University, Lahore	27	79.1111	20.83882
The Islamia University of Bahawalpur	28	78.1071	16.51114
The University of Faisalabad	18	84.5000	22.73440
The University of Lahore	21	87.9048	18.44425
University of Chakwal	30	80.3667	22.57628
University of Southern Punjab	19	80.5789	23.84514
University of the Punjab	26	79.5385	15.62365
University of Wah	33	78.8788	20.89372
Total	375	80.0480	20.01758

Descriptive results indicated that students' perception scores were broadly consistent across the 14 universities, with mean values ranging between 77.44 (Minhaj University, Lahore) and 87.90 (The University of Lahore). Several universities reported mean scores close to the overall average (M = 80.05, SD = 20.02), including Government College University, Lahore (M = 80.38, SD = 16.65), Green International University, Lahore (M = 80.00, SD = 21.28), and University of Chakwal (M = 80.37, SD = 22.58). Although The University of Lahore (M = 87.90) and The University of Faisalabad (M = 84.50) recorded slightly higher perception scores, the differences among universities were relatively small. Standard deviations (15.62–23.85) also suggest comparable variability in responses across institutions. Overall, the descriptive statistics suggest that while minor fluctuations exist, students' perception levels remain largely similar across the universities.

Table 11

One way ANOVA comparing Students' Perceptions across different universities

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2244.439	13	172.649	.422	.962
Within Groups	147618.697	361	408.916		
Total	149863.136	374			

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A one-way ANOVA was conducted to examine whether students' perception differed significantly across the 14 universities. The analysis showed that the differences among universities were not statistically significant, $F(13, 361) = 0.42$, $p = .962$. The effect size was very small ($\eta^2 = .015$), indicating that students' perception remained broadly consistent regardless of university.

Conclusion

Based on the objectives of the study, two key conclusions can be drawn:

1. **Perceptions of students regarding AI in achieving academic excellence are generally positive.** Final-year students recognize AI tools as valuable supports in learning, writing, and research, thereby confirming the first objective. However, the mixed variance in responses highlights the need for careful and guided use of AI in academic settings.
2. **No significant differences were found across academic disciplines.** This directly addresses the second objective and suggests that AI tools are perceived as equally relevant across diverse fields of study. This challenges earlier assumptions of disciplinary bias in AI adoption and positions AI as a cross-cutting innovation.

Overall, the study contributes to the growing literature by showing that student perceptions in a developing country context mirror global interest for AI, while also reflecting local educational challenges.

Discussion

The findings reveal that final-year university students generally hold positive perceptions regarding the role of AI tools in achieving academic excellence. This aligns with earlier research (e.g., Zawacki-Richter et al., 2019), which emphasizes the growing acceptance of AI technologies in educational contexts. However, while the mean scores reflect optimism, the variation in responses suggests that some students remain cautious, perhaps due to concerns about academic integrity, over-reliance, or unequal access to AI technologies. This echoes critiques in the literature that call for a balanced integration of AI, ensuring it enhances rather than replaces critical thinking and creativity.

When examining perceptions across academic disciplines, the results show no statistically significant differences. This finding suggests that the appeal of AI tools transcends disciplinary boundaries, reinforcing the argument that AI's potential is more universal than context-specific. While prior studies (e.g., Holmes et al., 2022) indicated that STEM students might be more inclined toward AI adoption compared to humanities, the current study challenges this assumption by demonstrating comparable levels of acceptance. This could be attributed to the increasingly interdisciplinary nature of AI applications, with tools such as ChatGPT, Grammarly, and data-analysis software being widely used across both technical and non-technical fields.

From a global-local perspective, the findings resonate with international trends in higher education, where AI is being mainstreamed into learning and assessment practices. Yet, in the local (Pakistani) context, students' reliance on AI may also reflect systemic gaps ,such as large class sizes, limited access to faculty, or lack of updated teaching methodologies, where AI provides a compensatory mechanism. Thus, while globally AI is viewed as an enhancer of innovation, locally it is often adopted as a survival strategy to overcome structural challenges in higher education.

Implications

The findings carry several theoretical, practical, and policy-level implications:

- **Theoretical Implications:** This study enriches the discourse on AI in education by demonstrating that disciplinary differences may not be as prominent as previously thought. It highlights the universality of AI adoption and invites scholars to rethink theoretical models that assume technology adoption varies strongly by discipline.
- **Practical Implications:** Universities should integrate AI literacy programs into curricula to guide students on effective and ethical AI use. Faculty training is also essential to bridge the gap between student enthusiasm and institutional readiness.
- **Policy Implications:** Policymakers in higher education should consider creating clear regulations for AI usage, addressing concerns related to plagiarism, data privacy, and quality assurance, while also ensuring equitable access to AI resources across institutions.
- **Future Research Implications:** Further research should explore longitudinal trends, gender differences, and faculty perceptions, along with experimental designs to measure the actual impact of AI tools on student performance rather than perceptions alone.

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