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Reimagining ChatGPT Integration in Higher Education: Student Usage, Ethical Concerns, and Institutional Responsibilities

Zohaib Hassan Sain[1], Chanda Chansa Thelma[2], Shahzadi Hina Sain[3] Shahzadi Hina Sain[3]
[1]Department of Business & Management Sciences, Superior University, Pakistan
[2]Department of Humanities & Social Studies, Chreso University, Zambia
[3]Department of Operations, Beaconhouse Head Office, Pakistan
Corresponding Author: Zohaib Hassan Sain zohaib3746@gmail.com

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A B S T R A C T

This study explores the integration of ChatGPT in higher education, focusing on student usage, perceived benefits, and ethical concerns. Using a mixed-methods approach, data were collected from 180 university students through surveys and interviews. Findings reveal that ChatGPT is widely used for research, assignments, and exam preparation, enhancing learning efficiency and personalized support. However, concerns regarding plagiarism, over-reliance, and data privacy persist. The study emphasizes the need for clear institutional guidelines and ethical frameworks to support responsible AI use. It offers practical insights for educators and policymakers aiming to balance technological advancement with academic integrity in digital learning environments.

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INTRODUCTION

Artificial Intelligence (AI) is transforming the landscape of higher education by reshaping how students access information, complete academic tasks, and engage with learning materials. Among emerging tools, OpenAI's ChatGPT stands out for its ability to simulate human-like dialogue, offering students real-time assistance in drafting essays, conducting research, and preparing for examinations. Its accessibility and versatility make it especially attractive to digital-native learners navigating complex academic workloads (Dwivedi et al., 2023; Acosta-Enriquez et al., 2024).

AI technologies and large language models are now seen not merely as content generators but as educational companions that can support learning across disciplines. Scholars have argued that such tools promote independent learning by offering instant feedback and simplifying complex content (Espartinez, 2024; Klimova & De Campos, 2024). From a pedagogical standpoint, AI may enhance engagement, motivation, and academic performance, especially when integrated with student-centred learning models.

However, the benefits of AI adoption are accompanied by serious ethical and educational concerns. Plagiarism, overreliance on automated tools, and data privacy are among the most pressing issues (Bin-Nashwan et al., 2023; Rajabi et al., 2024). The potential for misuse—such as students submitting AI-generated work without attribution—has triggered discussions on academic integrity, prompting educational institutions to reconsider assessment methods and AI usage policies (Montenegro-Rueda et al., 2023; Adel et al., 2024).

Moreover, the rapid integration of AI tools has created uncertainty among educators and learners. Many institutions lack clearly defined frameworks or codes of conduct to guide the ethical use of AI in academic contexts (Dwivedi et al., 2023). As a result, while students embrace tools like ChatGPT for convenience and productivity, educators remain divided on addressing its implications for learning integrity and cognitive development.

This study investigates how students in higher education engage with ChatGPT, focusing on patterns of usage, perceived benefits, and emerging ethical concerns. It builds upon existing literature by adopting a mixed-methods approach incorporating quantitative insights from a survey of 180 university students and qualitative data from follow-up interviews. The study explores how students use ChatGPT and what they think about its long-term impact on academic habits, critical thinking, and institutional responsibility.

The following research objectives guide this inquiry:

a. To analyze the patterns of ChatGPT usage among students in higher education.
b. To understand students' perceptions of the tool's effectiveness in supporting academic tasks.
c. To identify ethical concerns, including plagiarism, dependency, and data security.
d. To offer recommendations for educators and policymakers on responsible AI integration.

This research is particularly relevant in light of growing calls to reimagine academic integrity in the digital age. It contributes to the discourse on ethical AI adoption in education by offering grounded insights into student behaviour and expectations. By addressing opportunities and limitations, the study seeks to inform evidence-based strategies to balance technological advancement with academic values.

LITERATURE REVIEW

Integrating Artificial Intelligence (AI) in higher education has sparked considerable scholarly interest, with studies highlighting its transformative potential and raising questions about ethical usage, learning dependency, and academic performance. ChatGPT is among the most widely discussed tools, a generative AI model capable of producing natural-language responses to a wide range of prompts. Researchers increasingly explore how ChatGPT affects students' learning processes, motivation, and academic integrity as its popularity rises.

Recent findings show that students generally perceive AI tools as supportive aids for academic tasks. Espartinez (2024), through a Q-methodology study, found that students demonstrated high engagement levels and viewed ChatGPT as beneficial in enhancing their understanding of complex subjects. This aligns with Klimova and De Campos (2024), who reported that university undergraduates used ChatGPT to complete assignments and prepare for exams more effectively. These studies indicate growing student reliance on AI tools for both cognitive and practical learning support.

Gill et al. (2024) expanded this perspective by analyzing the broader impact of chatbots on learning access and democratization. Their work suggests that AI tools serve as equalizers, assisting students across diverse socio-economic backgrounds. This theme is echoed by Shabbir et al. (2024), who emphasized ChatGPT's potential in underdeveloped regions to bridge educational gaps through real-time feedback and language assistance. However, both studies caution against overlooking the limitations of infrastructure and digital literacy, which may prevent equitable access to AI tools.

Ethical concerns remain a central issue in the academic discourse surrounding ChatGPT. Bin-Nashwan et al. (2023) and Montenegro-Rueda et al. (2023) raised alarms about the potential misuse of AI, particularly the increased risk of plagiarism and academic dishonesty. These risks are further compounded by the lack of regulatory clarity in many institutions, which leads to inconsistent application of rules regarding AI-assisted submissions. Adel et al. (2024) argue that while ChatGPT provides cognitive scaffolding, it blurs the boundaries between independent thought and machine-generated assistance.

Acosta-Enriquez et al. (2024) explored students' ethical perceptions. They found that although many students acknowledged the academic benefits of ChatGPT, they were also aware of privacy risks and the possibility of over-dependence. Data protection concerns are especially relevant in an age where student inputs may be logged or processed without transparent data

governance structures. Similarly, Kamalov et al. (2023) highlighted the psychological dimension of ChatGPT use, noting that while it reduces stress by offering immediate answers, it may inadvertently diminish problem-solving skills and student autonomy over time.

Another emerging debate involves AI's impact on students' creativity and original thinking. Rajabi et al. (2024) and Marzuki et al. (2023) questioned whether frequent use of AI writing tools may limit students' ability to express ideas independently. While such tools enhance fluency and grammar, they may also reduce opportunities for critical thinking and linguistic innovation. These concerns reflect a broader academic tension between adopting helpful technology and preserving pedagogical integrity.

Despite these risks, several scholars recognize the dual nature of AI's role in education. Dwivedi et al. (2023) emphasized the need for interdisciplinary strategies to manage AI integration, advocating for a collaborative framework involving educators, technologists, and ethicists. Their study promotes the idea that AI, including ChatGPT, should not be seen solely as a threat but as a powerful tool—provided ethical standards and institutional support guide it.

In terms of empirical gaps, few studies provide detailed demographic analyses of ChatGPT usage across academic disciplines and levels of study. Most investigations focus on general usage trends without differentiating between contexts or learning environments. Furthermore, while ethical concerns are widely discussed, fewer studies address students' recommendations for ethical AI use in academia. This research fills those gaps by examining usage patterns among 180 students and presenting their perceptions of ChatGPT's academic utility and moral implications.

METHODOLOGY

This study employed a mixed-methods research design to comprehensively explore university students' experiences, usage patterns, and ethical perceptions of ChatGPT in higher education. A mixed-methods approach was selected to combine the statistical breadth of quantitative data with the depth of qualitative insights, ensuring a multidimensional understanding of a complex and evolving phenomenon (Creswell, 2014).

Research Design and Rationale

The research was conducted in two sequential phases. In the first phase, a quantitative survey was distributed to collect structured data from a broad student population. In the second phase, semi-structured interviews were conducted with a subset of survey participants to explore deeper narratives, motivations, and ethical reflections regarding ChatGPT usage.

This explanatory sequential design allowed the researchers to identify usage trends and then elaborate on those trends through in-depth discussions. Such a design is well-suited for studies exploring technology adoption and behavioural response, particularly in academic environments where user perception and ethical considerations are critical (Creswell & Plano Clark, 2018).

Sample and Participants

One hundred eighty university students from various academic disciplines participated in the study. Participants were selected using convenience sampling, targeting students across multiple faculties and levels of study to ensure demographic and disciplinary diversity. The inclusion criteria required that participants have at least some experience using ChatGPT for academic purposes.

Of the sample, 52% identified as female and 48% as male. Students ranged in age from 18 to 29 and were drawn from business, humanities, computer science, education, and social sciences programs.

Data Collection Instruments

1. *Quantitative Data Collection*

An online survey was designed and disseminated via university mailing lists, student portals, and social media groups. The survey consisted of 25 items, including multiple-choice and Likert-scale questions focused on:

a. Frequency and purposes of ChatGPT use
b. Perceived benefits (e.g., learning support, time efficiency)
c. Ethical concerns (e.g., plagiarism, data privacy)
d. Academic performance and AI reliance

2. *Qualitative Data Collection*

Following the survey, 20 students were purposively selected for semi-structured interviews. Selection was based on their survey responses and willingness to participate further. Each interview lasted approximately 30–40 minutes and was conducted virtually via Zoom. Questions focused on how students use ChatGPT, their experiences of academic support, ethical boundaries, and their views on institutional regulation of AI.

Data Analysis

1. *Quantitative Analysis*

Survey data were analyzed using descriptive and inferential statistics via SPSS (Statistical Package for the Social Sciences) version 26. Descriptive measures, such as frequency distributions and mean scores, were used to summarize student behaviour. Inferential analyses, including chi-square tests, examined relationships between ChatGPT usage and academic discipline, performance, and ethical awareness.

2. *Qualitative Analysis*

Interview data were transcribed and analyzed using thematic analysis following Braun and Clarke's (2006) six-step framework: familiarization, coding, theme development, theme review, naming, and report writing. This method enabled the researchers to identify recurring patterns, categorize emergent themes related to student motivations and ethical concerns, and propose solutions for responsible AI integration.

Ethical Considerations

Before data collection, informed consent was obtained from all participants. Anonymity and confidentiality were strictly maintained.

Participants were informed that their responses would be used solely for academic research and that they could withdraw at any time. The relevant university ethics committee reviewed and approved the study, ensuring adherence to established research ethics protocols

RESEARCH RESULT

This section presents the findings from the quantitative survey conducted with 180 university students and key patterns that emerged from the data. The analysis was structured around usage frequency, purposes of use, satisfaction levels, and ethical concerns associated with ChatGPT usage in academic settings.

ChatGPT Usage Frequency

Participants were asked how often they used ChatGPT for academic purposes. As shown in Table 1, the most frequent users reported using ChatGPT daily (40%), followed by weekly users (37.8%). A smaller segment used it monthly (15.6%) or not at all (6.7%).

Table 1. ChatGPT Usage Frequency

Usage Frequency	Number of Students	Percentage
Daily	72	40%
Weekly	68	37.8%
Monthly	28	15.6%
Never	12	6.7%

These findings indicate a high adoption rate of ChatGPT among university students, with nearly 78% engaging with it at least weekly.

Purposes for Using ChatGPT

Students were also asked about their primary purposes for using ChatGPT (allowing multiple responses). As shown in Table 2, the most common purpose was research assistance (62.2%), followed by assignment writing (52.2%), concept clarification (47.8%), and exam preparation (43.3%).

Table 2. ChatGPT Usage Purposes

Purpose of Use	Number of Students	Percentage
Research Assistance	112	62.2%
Assignment Writing	94	52.2%
Concept Clarification	86	47.8%
Exam Preparation	78	43.3%
Idea Generation	64	35.6%
Proofreading/Editing	49	27.2%

These results suggest that students perceive ChatGPT as a multifaceted academic support tool for content development and comprehension enhancement.

Satisfaction Levels with ChatGPT

Students were asked to rate their satisfaction with ChatGPT's academic support. Table 3 displays that 75% of respondents were either "Very Satisfied" or "Satisfied", with only a slight fraction expressing dissatisfaction.

Table 3. Student Satisfaction with ChatGPT

Satisfaction Level	Number of Students	Percentage
Very Satisfied	64	35.6%
Satisfied	71	39.4%
Neutral	28	15.6%
Dissatisfied	12	6.7%
Very Dissatisfied	5	2.8%

This reflects a positive student perception of ChatGPT's utility, with minimal negative feedback.

Ethical Concerns

A critical part of the survey addressed students' ethical concerns related to ChatGPT. Table 4 shows that plagiarism was the top concern, followed by unclear institutional policies, over-reliance, and data privacy.

Table 4. Reported Ethical Concerns

Ethical Concern	Number of Students Reporting	Percentage
Plagiarism	135	75%
Unclear Policies	121	67.2%
Over-reliance	109	60.6%
Data Privacy	98	54.4%

These insights indicate that while students benefit from ChatGPT, they are also aware of its potential risks—particularly regarding academic integrity and institutional ambiguity.

DISCUSSION

The findings of this study offer critical insights into how university students integrate ChatGPT into their academic routines and the ethical dilemmas accompanying its use. With 180 participants contributing both quantitative and qualitative data, several key themes emerged that align with and expand upon existing research.

ChatGPT as a Mainstream Academic Support Tool

The high frequency of usage—nearly 78% of students using ChatGPT daily or weekly—confirms that AI-assisted learning is no longer peripheral—it is becoming central to how students approach academic tasks. These results mirror those of Espartinez (2024), who reported that students commonly regard ChatGPT as a practical academic companion rather than a novelty.

The predominant use of ChatGPT for research assistance (62.2%) and assignment writing (52.2%) supports the claim that generative AI is perceived as a productivity enhancer. Klimova and De Campos (2024) noted similar findings, identifying a growing dependence on AI for breaking down complex concepts and scaffolding writing tasks. These patterns suggest a shift toward

task outsourcing, raising concerns about the long-term effects on learning autonomy.

Positive Perceptions vs. Cognitive Dependency

The data reveals that 75% of students were either "Very Satisfied" or "Satisfied" with their ChatGPT experience. This high level of satisfaction reflects AI's effectiveness in enhancing student confidence and reducing cognitive load—consistent with the REPLACE model proposed by Rosenbaum et al. (2017), which framed place (or tool) as a source of psychological restoration.

However, satisfaction does not necessarily equate to quality learning. As Kamalov et al. (2023) argue, frequent reliance on AI may reduce the development of original thinking, problem-solving, and creativity. The findings in this study lend weight to this concern, especially with 60.6% of students acknowledging over-reliance as an ethical risk. This highlights a cognitive trade-off between short-term gains and long-term learning outcomes.

Growing Ethical Awareness Among Students

An essential outcome of this study is the clear student awareness of ethical risks, particularly around plagiarism (75%) and unclear institutional policies (67.2%). This mirrors the results by Bin-Nashwan et al. (2023), who emphasized the confusion students face when institutional guidance fails to keep pace with technological change.

Interestingly, 54.4% of students also expressed concern over data privacy, showing that students are worried about their academic conduct and the security of their inputs. This aligns with Acosta-Enriquez et al. (2024), who identified growing apprehension around how generative AI tools handle sensitive user data. These findings highlight a critical gap between student awareness and institutional preparedness.

The Role of Policy and Pedagogy

The lack of clearly defined university policies surrounding AI use emerged as a recurring theme. Although students essentially embrace ChatGPT, many remain uncertain about where acceptable use ends and misconduct begins. Adel et al. (2024) emphasize that institutions must evolve from reactive to proactive frameworks, establishing transparent, enforceable, and student-informed AI usage policies.

Educational strategies must also adapt. As Montenegro-Rueda et al. (2023) argue, educators must embed AI literacy and ethics into curricula, equipping students not just to use ChatGPT but to use it responsibly. This calls for a dual emphasis on technological access and ethical awareness—ensuring that students understand both the benefits and boundaries of AI-assisted learning.

Addressing the Research Objectives

The results and discussion directly address the study's objectives:

1. The survey illustrated clear patterns of usage frequency and purpose.

2. Students found ChatGPT helpful for academic efficiency, though not without reservations.
3. Ethical concerns were acknowledged and well-articulated by participants.
4. Finally, the data underscores the need for institution-led guidelines and pedagogical reform to ensure responsible and beneficial integration of AI in academia.

Limitations and Future Research

While the study covers a diverse student population, it remains limited by its convenience sampling and geographic scope. Future research could expand to compare different institutional responses or assess the long-term academic performance of AI-reliant students. A longitudinal approach may also help evaluate behavioural shifts and learning outcomes.

CONCLUSIONS

This study examined the role of ChatGPT in higher education through the lens of 180 university students, focusing on usage patterns, perceived benefits, and ethical concerns. The findings indicate that ChatGPT is increasingly integrated into students' academic routines, with widespread use for research, assignment writing, and concept clarification. Most participants reported satisfaction with the tool's utility in supporting academic tasks, particularly enhancing productivity and simplifying complex content.

However, alongside these advantages, significant ethical concerns were raised. Students expressed anxiety about plagiarism, over-reliance, data privacy, and the lack of clear institutional guidelines. These insights confirm that while ChatGPT offers real-time educational support, its adoption raises new challenges for academic integrity and learning autonomy.

Notably, the study revealed that students are not passive users; they are critically aware of the risks and actively seek institutional guidance. This calls for proactive policy development, ethical awareness training, and revised pedagogical models integrating AI literacy into academic curricula. Rather than resisting AI integration, universities must prepare students to use these tools responsibly and strategically.

RECOMMENDATIONS

Based on the research findings, the following recommendations are proposed:

1. Develop Clear Institutional Guidelines

   Universities should establish transparent policies outlining acceptable AI use in coursework, assignments, and exams.

2. Embed AI Ethics in Curriculum

   Courses should include discussions around ethical AI use, covering academic honesty, data privacy, and digital responsibility.

3. Train Faculty on AI Integration

   Faculty development programs should equip educators with strategies to detect misuse and incorporate AI tools constructively.

4. Foster Critical Thinking Alongside AI Tools

   Assignments should be designed to require human input, interpretation, and originality, reducing dependency on AI for idea generation.

5. Ensure Equitable Access

   Institutions should address digital divides to ensure all students benefit from AI tools, regardless of their socio-economic status.

6. Monitor and Evaluate AI Impact Continuously

   Ongoing research should assess how generative AI affects learning outcomes, integrity, and cognitive development over time.

ADVANCED RESEARCH

This study has limitations in scope and context of ChatGPT use in higher education. Therefore, further research is recommended with a broader and deeper approach to better understand its impact, ethical concerns, and institutional roles.

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