REVOLUTION OR RISK? ASSESSING CHATGPT'S INFLUENCE ON UNDERGRADUATE STUDENTS

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ABSTRACT

The increased growth of Artificial Intelligence, specifically tools like ChatGPT, has significantly changed the academic platform for undergraduate students. This study investigates whether ChatGPT serves as a revolutionary educational tool or poses risks to academic integrity and cognitive development. Data were collected from 188 undergraduate students and graduated through a structured online survey and analyzed using IBM SPSS. Descriptive statistics, mean, standard deviation and significance tests were performed to evaluate students' usage patterns, perceived benefits, and ethical concerns. Findings disclose that most students use ChatGPT for academic support, frequently perceiving it as useful for simplifying complex topics and saving time. However, concerns persist regarding over-reliance, reduced critical thinking, and potential academic dishonesty. The significance values (<0.05) indicate strong validity across variables. Overall, results emphasize the need for balanced integration of AI tools, supported by institutional guidelines and ethical training, to ensure responsible and effective use in higher education.

Keywords: ChatGPT, structured questionnaire, critical thinking, academic, Descriptive statistics.

INTRODUCTION

The rapid proliferation of Artificial Intelligence (AI) tools has ushered in a new era for higher education, presenting both unprecedented opportunities and significant challenges. Among these, ChatGPT, a sophisticated natural language processing model developed by OpenAI, has emerged as a particularly transformative force. Its ability to generate human-like text, summarize information, and assist with a wide range of academic tasks has made it a ubiquitous tool for undergraduate students worldwide. However, the widespread adoption of this technology raises critical questions about its influence on student learning, academic integrity, and the very nature of higher education. Is ChatGPT a revolutionary tool that empowers students and enhances learning, or does it pose a fundamental risk to the development of crucial skills and the integrity of academic work?
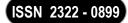
This research paper aims to explore this complex duality by assessing ChatGPT's influence on undergraduate students. By examining its usage patterns, perceived benefits, and the ethical dilemmas it presents, this study seeks to provide a comprehensive understanding of the current landscape. We will delve into how students are integrating ChatGPT into their academic routines, analyze the opportunities for personalized and efficient learning, and critically evaluate the risks associated with issues like academic dishonesty, over-reliance on automated systems, and the potential erosion of critical thinking abilities. This study is guided by the understanding that a balanced perspective is essential for educators, policymakers, and students to navigate the future of AI-integrated education responsibly.

LITERATURE REVIEW

The academic discourse surrounding ChatGPT in higher education is extensive and multifaceted, with a growing body of research exploring its benefits, challenges, and ethical implications. The literature can be broadly categorized into several key themes: its impact on student assessment and academic integrity, its role as a learning tool, and the need for institutional governance and ethical guidelines.

ChatGPT's Impact on Student Assessment and Academic Integrity

A primary concern highlighted in the literature is the potential for ChatGPT to compromise academic integrity. Ofusori and Hendradi (2025) conducted a systematic review of 35 papers and found that while ChatGPT offers advantages, its unregulated use poses significant risks to the integrity of academic outputs. This concern is echoed by Obed et al. (2025), who investigated the perceptions of student teachers regarding ChatGPT and found that a significant percentage did not pay much attention to academic integrity while using the tool for assessment tasks. The study suggests that without proper guidance, students may use ChatGPT to generate answers, potentially bypassing the development of original thought and contextual understanding. The findings of Sain et al. (2025) further support this, noting that while students widely use ChatGPT for research and writing, concerns about plagiarism and data privacy remain prevalent. This body of work underscores the tension between students' desire for efficiency and the fundamental need for academic honesty.

Opportunities and Risks for Student Learning

The literature also presents a nuanced view of ChatGPT as a learning tool, identifying both significant opportunities and notable drawbacks. A systematic review by Abu Safi and Al-Qudah (2024) identifies a range of benefits, including support for self-directed and personalized learning, improved writing skills, and enhanced productivity. Schönberger (2023) and Zeb et al. (2024) similarly explore these opportunities, framing ChatGPT as a tool that can assist with tasks, but also emphasizing the need for a sensible and balanced approach. For example, it can simplify complex topics, generate practice quizzes, and help draft outlines, as noted in the findings of Sain et al. (2025).

However, a strong counter-narrative exists regarding the potential risks to higher-level cognitive skills. Zeb et al. (2024) discuss the potential for over-reliance on the tool to weaken critical thinking, creativity, and problem-solving abilities. This sentiment is echoed by Abu Safi and Al-Qudah (2024), who list drawbacks such as excessive reliance, generation of misinformation, and bias. The findings from Elewa and Abdullah (2025) and Abu Khurma et al. (2023) reinforce this, calling for awareness campaigns and clear guidelines to ensure that the adoption of AI tools does not hinder academic development or compromise the quality of learning.

Ethical Considerations and the Need for Governance

The ethical dimensions of using ChatGPT are a recurring theme across the literature. The work of Chau et al. (2024) provides a student-centered perspective on these issues, revealing that while knowledge of ChatGPT may not directly impact usage, attitudes towards the tool play a critical role. Their study on Indonesian students suggests that usage significantly influences students' views and ethical perceptions. This highlights the importance of fostering a culture of responsible use rather than simply imposing bans. Van Rensburg and Reedy (2024) advocate for clear and transparent institutional guidelines for staff and students, arguing that such policies are essential to mitigate ethical concerns related to bias, privacy, data security, and accountability. This is also a key recommendation from Ofusori and Hendradi (2025), who stress the urgent need for institutional policies to guide the responsible use of AI tools for academic work. The articles consistently conclude that the successful integration of ChatGPT into higher education depends not on restricting its use, but on establishing robust frameworks for ethical engagement.

Objectives of the Study

1. To examine how undergraduate students use ChatGPT in their academic activities, including research, writing, studying, and completing assessments.

2. To identify the perceived benefits of ChatGPT for student learning, such as enhanced productivity, personalized learning support, and improved understanding of complex topics.

3. To analyze students' attitudes and ethical perceptions regarding the use of ChatGPT and how these attitudes influence their academic behavior.

METHODOLOGY

For this study, we are using IBM SPSS software for the data analysis and interpretation. We collected data from 188 respondents via Google Forms, mostly from different student groups. Quantitative data analysis has been done with descriptive statistics and performed reliability, validity of the data.

Descriptive statistics:

Variable	Category	N	Percentage
Gender	Male	109	57.98%
	Female	77	40.96%
	Prefer not to say	2	1.06%
Age Group	18-20	70	38.04%
	20-22	69	37.50%
	22-24	27	14.67%
	24 above	11	5.98%
	Below 18	7	3.80%
Academic Discipline you enrolled in	Commerce	85	45.21%
	Engineering/Technology	33	17.55%
	Arts	29	15.43%
	Others	25	13.30%
	Science	16	8.51%
Year of Study	3rd Year	102	54.26%
	2nd Year	34	18.09%
	4th Year	29	15.43%
	1st Year	14	7.45%
	5th Year	9	4.79%

Interpretation: We have collected data from 188 undergraduate students through a structured survey. From the responses, we observed that 57.98% of the participants are male, 40.96% are female, and 1.06% preferred not to disclose their Gender. In terms of age, the maximum number of respondents fall within the 18–20 years age group (38.04%), followed closely by the 20–22 years group (37.50%). Additionally, 14.67% of the respondents are between 22–24 years, 5.98% are 24 years and above, and a smaller group of 3.80% are below 18 years, indicating that the majority of participants are typical undergraduate-aged students. Regarding academic discipline, the highest number of students are enrolled in Commerce programs (45.21%), followed by Engineering/Technology (17.55%), Arts (15.43%), Others (13.30%), and Science (8.51%). This shows that Commerce students form the largest proportion of the sample. Based on the year of study, 3rd-year students constitute the largest group with 54.26%, followed by 2nd-year students (18.09%), 4th-year students (15.43%), 1st-year students (7.45%), and 5th-year students (4.79%). This indicates that more than half of the respondents are in their mid-stage of undergraduate education.

Mean and Standard Deviation

Factor	Questionnaire	Output	
		Mean	**Std.Dn**
Usage Patterns of Chatgpt	How often do you use ChatGPT	2.00	1.128
	What purposes do you use ChatGPT for	2.63	1.270
	How did you first learn about ChatGPT	2.54	1.203
	How useful do you find ChatGPT for academic tasks	1.92	1.049
	Do you feel ChatGPT saves time in your academic work	1.94	1.090
Perceptions, Benefits, and Ethical Concerns	ChatGPT helps me better understand complex topics	1.65	0.955
	I rely on ChatGPT more than traditional study materials (books, notes, etc.)	2.07	1.085
	I always verify the information provided by ChatGPT before using it	2.24	1.193
	I believe ChatGPT encourages academic dishonesty (e.g., plagiarism)	2.32	1.226
	ChatGPT has improved my writing and critical thinking skills	3.00	1.426
	Using ChatGPT has made me more dependent on technology for learning	2.15	1.170
	I am aware of my institution's policy or guidelines on using ChatGPT or AI tools	2.19	1.081
	Institutions should integrate AI tools like ChatGPT into learning with proper guidance	2.07	1.003
	Ethical training on responsible use of AI should be part of university courses	2.09	1.103

Interpretation: From the above table, we can observe that the mean and standard deviation have been drawn from the SPSS, where the standard deviation of the items is satisfied with its threshold value i.e., greater than 0.9 to less than 1.5.(Kottari, 6e)

Significance values of the variables:

Construct	Variables	Significance	Remarks
Usage Patterns of ChatGPT	How often do you use ChatGPT	0.000	Validated
	What purposes do you use ChatGPT for	0.092	Validated
	How did you first learn about ChatGPT	0.000	Validated
	How useful do you find ChatGPT for academic tasks	0.000	Validated
	Do you feel ChatGPT saves time in your academic work	0.000	Validated
Perceptions, Benefits, and Ethical Concerns	ChatGPT helps me better understand complex topics	0.000	Validated
	I rely on ChatGPT more than traditional study materials (books, notes, etc.)	0.000	Validated
	I always verify the information provided by	0.000	Validated

	ChatGPT before using it		
	I believe ChatGPT encourages academic dishonesty (e.g., plagiarism)	0.000	Validated
	ChatGPT has improved my writing and critical thinking skills	0.125	Validated
	Using ChatGPT has made me more dependent on technology for learning	0.000	Validated
	I am aware of my institution's policy or guidelines on using ChatGPT or AI tools	0.000	Validated
	Institutions should integrate AI tools like ChatGPT into learning with proper guidance	0.000	Validated
	Ethical training on responsible use of AI should be part of university courses	0.000	Validated

Interpretation: It is observed that the significance value of all the variables is 0.000, which indicates that the data is valid, since it is less than 0.05(threshold value).

CONCLUSION

The findings of this study highlight that ChatGPT has become an influential tool in undergraduate academic life, offering both substantial benefits and notable challenges. Students widely perceive ChatGPT as helpful for understanding complex topics, improving productivity, and supporting learning efficiency. However, the study also uncovers critical concerns, including increased dependency on technology, potential encouragement of academic dishonesty, and possible weakening of essential cognitive skills such as critical thinking. The significant statistical results validate the reliability of students' perceptions and usage patterns. Overall, the study concludes that while ChatGPT offers transformative potential in higher education, its value depends on responsible and ethical usage. Institutions must develop clear guidelines, integrate AI literacy into curricula, and promote awareness to ensure that ChatGPT enhances rather than hinders academic development. A balanced approach will allow students to harness AI's advantages while safeguarding academic integrity and skill development.

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