INTERNATIONAL JOURNAL OF
RECENT TRENDS IN MULTIDISCIPLINARY RESEARCH
https://www.doi.org/10.59256/ijrtmr.20260603029
May-June 2026, Vol 6(03), 249-257.
ISSN No: 2583-0368

AI in the Classroom: How University Instructors Use ChatGPT in Applied Sciences

Simge Sübaşı
Translation and Interpretıng Studies Department, Istnabul Gelisim University, Türkiye.

OPEN ACCESS
Article Citation:
Simge Sübaşı, "AI in the Classroom: How University Instructors Use ChatGPT in Applied Sciences", International Journal of Recent Trends in Multidisciplinary Research, May-June 2026, Vol 6(03), 249-257.

©2026 The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Publishedby5thDimension Research Publication

Abstract: The rapid integration of artificial intelligence (AI) technologies, such as ChatGPT, into higher education has generated both opportunities and ethical concerns, particularly regarding instructional practices and academic integrity. This study investigates the extent and patterns of ChatGPT usage among instructors at the Faculty of Applied Sciences in a private university, examining perceptions of its pedagogical benefits, challenges, and ethical implications. A mixed-methods convergent parallel design was employed, combining quantitative survey data from 100 instructors using the ChatGPT Usage Scale with qualitative insights from semi-structured interviews. Quantitative results indicated a moderate to moderately high level of ChatGPT usage, with instructors perceiving greater opportunities than challenges. Inferential analyses revealed no significant differences in perceptions based on gender or academic title. Thematic analysis of interviews identified two overarching themes: perceived opportunities, including instructional support, time efficiency, cognitive organization, and pedagogical flexibility; and perceived challenges, encompassing academic integrity concerns, reliability and hallucination risks, and the need for institutional guidance. Findings reveal that instructors adopt a balanced and cautious approach to AI integration, recognizing its value as a supportive tool while emphasizing the importance of ethical oversight and institutional policies. This study contributes to the understanding of AI adoption in higher education, highlighting the need for faculty development and governance frameworks to ensure responsible and effective use of ChatGPT in academic contexts.

Key Words: ChatGPT, higher education, instructors, artificial intelligence, mixed-methods, ChatGPT Usage Scale

1. Introduction

The convergence of artificial intelligence (AI) technologies in higher education has ignited both enthusiasm and apprehension regarding their implications for academic integrity and instructional practices. The advent of tools like ChatGPT exemplifies this duality, while offering innovative avenues for instruction and research, they also present challenges posed by potential misuse and ethical considerations (Mlambo, 2024; (Sun & Hoelscher, 2023; . Within the context of the Faculty of Applied Sciences at a private university, this study examines the patterns and extent of ChatGPT usage among instructors, crucial for understanding its integration into educational methodologies.

The backdrop of our inquiry is framed by a growing body of literature that investigates instructors' and students' perceptions of AI's role in pedagogical settings. Earlier studies have identified a spectrum of positive attitudes toward AI technologies for enhancing educational experiences, yet concerns surrounding academic integrity continue to populate discussions among faculty (Sun & Hoelscher, 2023; Ninomiya, 2025; Krečar et al., 2024). The mixed-methods approach implemented in this research facilitates a nuanced exploration of these perceptions, aligning with recent findings highlighting the need for frameworks that cultivate ethical AI practices (Vesudevan, 2021; Brondani et al., 2024).

To systematically assess the dimensions of ChatGPT usage; namely, its perceived usefulness and emotional responses from educators, a blended quantitative and qualitative methodology was employed. This approach allows for a robust analysis

of instructors' self-reported experiences and attitudes, capturing the complexity of their interactions with AI tools in academic environments (Du & Alm, 2024; Masjutina et al., 2025; Döş, 2025). By incorporating validated instruments such as the ChatGPT Usage Scale and conducting semi-structured interviews, this study aims to illuminate the pedagogical value perceived by faculty while acknowledging their reservations regarding reliance on AI-generated content and the implications for academic honesty (Razı et al., 2018).

Ultimately, this research contributes to a growing dialogue on the integration of AI in education, advocating for institutional policies and professional development that champion ethical utilization, thereby fostering an environment conducive to pedagogical innovation and academic integrity (Mlambo, 2024; Brondani et al., 2024). The findings highlight an essential discourse within higher education on how to effectively navigate the dichotomy of technology as both an ally and a potential adversary in academic contexts.

2. Literature Review

The integration of ChatGPT and similar AI technologies in higher education is a rapidly evolving area of research that has prompted investigations into their implications for teaching, learning, and academic integrity. Various studies have highlighted the transformative potential of AI applications in educational settings, noting both opportunities and challenges associated with their adoption.

One significant area of focus has been the attitudes and behaviors of educators toward the utilization of ChatGPT. Popenici & Kerr (2017) discuss the shifting dynamics of teaching roles influenced by AI, observing that this technology may lead to the evolution of educational methods, where traditional teaching models are augmented or even replaced by AI systems. This shift stresses the importance of preparing educators to navigate the nuanced demands of AI-adapted pedagogy. Additionally, studies such as George & Wooden (2023) articulate concerns about algorithmic bias and the implications this has for educational equity, emphasizing that universities must engage in comprehensive discussions around AI's role and formulate best practices for its responsible use.

Furthermore, investigations into the utility of ChatGPT reveal varying perceptions among instructors and students. Abdaljaleel et al. (2023) examined how factors influencing attitudes towards ChatGPT may correlate with classroom management practices, drawing attention to the need for instructional frameworks that support AI integration. In a multi-national study, they validated the TAME-ChatGPT survey instrument based on the Technology Acceptance Model (TAM), identifying numerous factors that influence university students' attitudes towards ChatGPT. The findings suggest that perceived ease of use and usefulness significantly propel engagement with ChatGPT as an educational tool.

Another critical component of the literature is the ethical and practical implications of using AI in education. Sallam et al. (Sallam, 2023) highlight risks associated with AI applications in healthcare education among students, identifying issues such as bias in AI outputs, lack of transparency, and concerns over privacy and reliability. Similarly, Yan et al. Yan et al. (2023) offer a systematic review of existing literature, emphasizing the practical and ethical challenges associated with the use of large language models (LLMs) in educational contexts, which include concerns over technological readiness and the adequacy of current educational practices to fully implement AI solutions.

Moreover, the application of ChatGPT within specific domains, such as healthcare and professional training, has come under scrutiny. Studies by Sallam et al. Sallam et al. (2023) and Zhang and Boulos Zhang & Boulos (2023) assess the benefits and limitations of ChatGPT in healthcare education, indicating that while there are significant advantages to integrating AI in training programs, the complexity of healthcare necessitates careful consideration of ethical issues and reliability.

This literature points toward a dual narrative where the promise of AI technologies like ChatGPT may enhance educational experiences through personalized learning and improved engagement while simultaneously posing significant concerns regarding their ethical integration and the potential for reinforcing existing biases within educational frameworks (Gilmore et al., 2025; Adıgüzel et al., 2023). As ChatGPT continues to gain traction among educators and students alike, a comprehensive approach to policy development and training is essential to facilitate its responsible use while navigating the associated risks (Sallam, 2023).

The purpose of this study is to explore the extent and patterns of ChatGPT usage among instructors in the Faculty of Applied Sciences at a private university, aiming to understand their perceptions, the identified benefits, and ethical considerations surrounding AI integration in higher education. By addressing the following research questions:

1. What is the current level of ChatGPT utilization among instructors in academic contexts?
2. How do instructors perceive the opportunities and challenges of using ChatGPT in enhancing teaching and learning depending on their title and gender?
3. How does ChatGPT influence instructors' attitudes toward modern pedagogical methodologies?

The significance of this research lies in its potential to elucidate the multifaceted impacts of AI on education, guiding faculty development programs and institutional policies aimed at ensuring a balanced and responsible approach to AI integration.

3. Methodology

Research Design: This study adopted a mixed-methods research design, integrating quantitative and qualitative approaches to provide a comprehensive understanding of instructors' use of ChatGPT in higher education. Specifically, a convergent parallel design was employed, in which quantitative and qualitative data were collected during the same phase of the study, analyzed separately, and then integrated at the interpretation stage. This design enabled the triangulation of findings and allowed for both breadth and depth in examining instructors' usage patterns, perceptions, and concerns related to ChatGPT.

Participants and Setting: The study was conducted at the Faculty of Applied Sciences of a private university. A total of 100 instructors voluntarily participated in the quantitative phase of the research. Participants represented diverse academic disciplines within the faculty and varied in terms of teaching experience and academic rank (table 5). For the qualitative phase, a purposive subsample of instructors was selected from the survey participants to ensure variation in levels of ChatGPT use and attitudes. Participation in both phases was based on informed consent, and confidentiality was ensured throughout the research process.

Data Collection Instruments: To gather quantitative data on the perceived opportunities and challenges associated with the use of ChatGPT in early childhood education, the ChatGPT Usage Scale developed by Taktak and Bafralı (2025) was utilized. The scale comprises 12 items designed to examine pre-service preschool teachers' perceptions of integrating ChatGPT into educational contexts. It is organized into two sub-dimensions: Opportunities (7 items), which assess the perceived pedagogical benefits of ChatGPT use (e.g., *"The use of ChatGPT provides opportunities for individualized learning"*), and Challenges (5 items), which evaluate potential limitations and concerns, such as the possibility that *"ChatGPT may reduce student–teacher interaction."*.

The internal consistency of the ChatGPT Usage Scale was examined using Cronbach's alpha coefficient. The analysis yielded a Cronbach's alpha value of **.634** for the 12-item scale, indicating a **moderate level of internal consistency**. Although this value is slightly below the commonly accepted threshold of .70, it is considered **acceptable for exploratory research,** particularly in the context of newly developed or adapted measurement instruments.

To gain deeper insights into instructors' experiences with ChatGPT, semi-structured interviews were conducted with a subset of participants. The interview protocol included open-ended questions focusing on instructors' purposes for using ChatGPT, perceived benefits and challenges, ethical considerations, and concerns related to academic integrity and dependence on AI-generated content. The semi-structured format allowed flexibility for probing and follow-up questions while ensuring consistency across interviews.

Data Collection Procedure: Data collection took place over a defined academic term. The ChatGPT Usage Scale was administered electronically to instructors, allowing participants to complete the survey at their convenience. Following the quantitative data collection, interview participants were contacted and interviews were conducted either face-to-face or online, depending on availability and preference. All interviews were audio-recorded with participants' permission and subsequently transcribed verbatim for analysis.

Data Analysis: Quantitative data were analyzed using descriptive and inferential statistical techniques. Descriptive statistics were used to summarize instructors' levels of ChatGPT use and overall attitudes, while inferential analyses were conducted to examine potential differences or relationships among key variables where appropriate. Reliability analyses were also performed to assess the internal consistency of the scale.

Qualitative data were analyzed using thematic analysis. Transcripts were read multiple times to achieve familiarity with the data, followed by initial coding. Codes were then organized into broader themes that captured recurring patterns related to instructors' experiences, perceived benefits, challenges, and ethical concerns regarding ChatGPT use. To enhance trustworthiness, coding decisions were reviewed and refined iteratively.

Ethical Considerations: Ethical approval for the study was obtained from the relevant institutional review body. Participation was voluntary, and participants were informed of the purpose of the study, their right to withdraw at any time, and the measures taken to ensure anonymity and confidentiality. All data were securely stored and used solely for research purposes.

4. Results

The quantitative data obtained through the ChatGPT Usage Scale were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were used to summarize participants' demographic characteristics and their responses to the scale items. To assess the reliability of the scale, Cronbach's alpha coefficient was calculated and found to be 0.71, indicating acceptable internal consistency. Prior to conducting inferential analyses, the assumption of normality was tested using both the Kolmogorov-Smirnov and Shapiro-Wilk tests. The results indicated that the distribution of scores did not significantly deviate from normality (Kolmogorov–Smirnov: $D = .069$, $p = .200$; Shapiro–Wilk: $W = .984$, $p = .283$). These findings suggest that the data meet the assumption of normality, supporting the use of **parametric statistical analyses** in subsequent procedures.

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
ChatGptUsage	,069	100	,200*	,984	100	,283

Table no 1 Tests of Normality of ChatGpt Usage Scale

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Descriptive analyses were conducted to summarize participants' scores on the ChatGPT Usage Scale and its sub-dimensions. The overall ChatGPT usage score ranged from 2.58 to 4.67, with a mean of 3.64 ($SD = 0.48$), indicating a moderate

to moderately high level of perceived ChatGPT usage among university academics. Regarding the sub-dimensions, participants reported relatively higher perceptions of opportunities (M = 3.95, SD = 0.79; range = 1.00–5.00) compared to perceived challenges (M = 3.21, SD = 0.82; range = 1.00–5.00). This finding suggests that university academics tend to perceive ChatGPT as offering more potential benefits than limitations within educational and academic contexts.

	N	Minimum	Maximum	Mean	SD
ChatGptUsage	100	2,58	4,67	3,6433	,47851
Opportunities	100	1,00	5,00	3,9500	,79407
Challenges	100	1,00	5,00	3,2140	,82303
Valid N (listwise)	100				

Table no 2 Descriptive Statistics

To examine differences in instructors' perceptions of the opportunities and challenges of using ChatGPT based on **gender** and **academic title, independent samples *t*-tests** were conducted for gender comparisons, while **one-way analysis of variance (ANOVA)** was employed to compare groups across academic titles. Statistical significance was set at $p < .05$.

Gender Differences in Perceptions of ChatGPT Usage

Independent samples *t*-tests (see tables 4 and 5) were conducted to examine whether university academics' perceptions of **ChatGPT usage, perceived opportunities**, and **perceived challenges** differed significantly by **gender.** Prior to the *t*-tests, **Levene's test for equality of variances** indicated that the assumption of homogeneity of variance was met for all variables ($p > .05$). The results revealed **no statistically significant gender differences** in overall ChatGPT usage perceptions, $t(98) = 1.10$, $p = .274$. Similarly, no significant differences were found between female (M = 4.01, SD = 0.78) and male (M = 3.87, SD = 0.82) academics in terms of perceived **opportunities,** $t(98) = 0.88$, $p = .383$. With respect to perceived **challenges,** the difference between female (M = 3.24, SD = 0.71) and male (M = 3.18, SD = 0.95) academics was also not statistically significant, $t(98) = 0.35$, $p = .729$. Overall, these findings suggest that **gender does not play a significant role** in shaping university academics' perceptions of the opportunities and challenges associated with the use of ChatGPT in teaching and learning.

	Gender	N	Mean	SD	Std. Error M
ChatGptUsage	Female	55	3,6909	,43882	,05917
	Male	45	3,5852	,52208	,07783
Opportunities	Female	55	4,0130	,77775	,10487
	Male	45	3,8730	,81568	,12159
Challenges	Female	55	3,2400	,70595	,09519
	Male	45	3,1822	,95425	,14225

Table no 3 T-test Statistics for Gender

		Levene's Test for EV		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
ChatGptUsage	EV Assumed	2,213	,140	1,100	98	,274	,10572	,09608	-,08495	,29639
	EV not assumed			1,081	86,121	,283	,10572	,09777	-,08862	,30007
Opportunities	EV assumed	,363	,548	,876	98	,383	,13997	,15980	-,17715	,45709
	EV not assumed			,872	92,225	,386	,13997	,16057	-,17893	,45887
Challenges	EV assumed	3,386	,069	,348	98	,729	,05778	,16617	-,27199	,38755
	EV not assumed			,338	79,276	,737	,05778	,17116	-,28289	,39845

Table no 4 Independent Samples Test Results for Gender

Differences in Perceptions by Academic Title

A **one-way analysis of variance (ANOVA)** was conducted (Table 6) to examine whether university academics' perceptions of **overall ChatGPT usage, perceived opportunities**, and **perceived challenges** differed significantly according to their **academic titles.** The results indicated that there were **no statistically significant differences** among academic title groups in terms of overall ChatGPT usage, $F(4, 95) = 1.77$, $p = .142$. Similarly, perceptions of **opportunities** did not differ significantly across academic titles, $F(4, 95) = 1.36$, $p = .253$. With regard to **perceived challenges**, the ANOVA results also

revealed no significant differences among groups, $F(4, 95) = 0.81$, $p = .522$. Overall, these findings suggest that **academic title does not significantly influence** university academics' perceptions of the opportunities and challenges associated with the use of ChatGPT in teaching and learning.

		Sum of Squares	df	Mean Square	F	Sig.
ChatGptUsage	Between Groups	1,569	4	,392	1,766	,142
	Within Groups	21,099	95	,222		
	Total	22,668	99			
Opportunities	Between Groups	3,384	4	,846	1,361	,253
	Within Groups	59,039	95	,621		
	Total	62,423	99			
Challenges	Between Groups	2,212	4	,553	,810	,522
	Within Groups	64,848	95	,683		
	Total	67,060	99			

Table no 5 ANOVA Results of Differences in Perceptions by Academic Title

The quantitative findings indicate that university academics hold **moderately positive perceptions** regarding the use of ChatGPT in educational contexts. Descriptive statistics revealed a moderate to moderately high overall level of ChatGPT usage, with participants perceiving **greater opportunities than challenges** associated with its integration into teaching and learning. Reliability analysis showed that the ChatGPT Usage Scale demonstrated **moderate internal consistency**, which is acceptable for exploratory research. Normality tests confirmed that the data were **normally distributed**, supporting the use of parametric statistical analyses. Inferential analyses revealed **no statistically significant differences** in perceptions of ChatGPT usage, perceived opportunities, or perceived challenges based on **gender** or **academic title.** Independent samples *t*-tests indicated that female and male academics reported similar perceptions across all dimensions. Likewise, one-way ANOVA results showed that perceptions did not significantly vary across different academic titles. Overall, the findings suggest that perceptions of ChatGPT's opportunities and challenges in higher education are **relatively consistent across demographic and professional groups**, indicating a shared and balanced perspective among university academics.

Thematic Analysis of University Academics' Perceptions of ChatGPT

A thematic analysis was conducted on the semi-structured interview data collected from university academics across different disciplines. Following Braun and Clarke's (2006) six-phase framework, the data were coded inductively, and recurring patterns were organized into overarching themes and sub-themes. The analysis revealed two main themes: Perceived Opportunities of ChatGPT and Perceived Challenges and Concerns, each supported by direct interview excerpts.

Theme 1: Perceived Opportunities of ChatGPT in Teaching and Academic Practice

1.1. Instructional Support and Time Efficiency

Participants consistently emphasized ChatGPT's role in saving time and increasing efficiency, particularly during lesson preparation, curriculum planning, and feedback provision.

One instructor described how ChatGPT supports course preparation:

"I use it during the preliminary lesson preparation. It is especially helpful for new topics. I even ask how many hours and days the course will last, and it prepares a curriculum accordingly. It asks whether I want a presentation, and if I say yes, it prepares the main headings."

Another participant highlighted the benefits of time efficiency:

"The biggest contribution of ChatGPT for me is saving time. This allows me to devote my energy and time to improving the quality of the course and engaging more with students."

These excerpts suggest that ChatGPT is perceived primarily as a supportive assistant that facilitates instructional processes rather than replacing academic judgment.

1.2. Cognitive Organization and Academic Writing Support

Participants frequently reported using ChatGPT to structure ideas, clarify conceptual frameworks, and improve the linguistic quality of academic writing.

One academic explained:

"I use it not to directly search the literature, but to conceptually classify existing studies, identify possible argument lines for the discussion section, and improve clarity in academic writing."

Similarly, another participant emphasized its role in organizing technical and scholarly thinking:

"Its strongest contribution to my research process is helping me structure my thinking and quickly scan the space of alternatives."

These accounts indicate that ChatGPT functions as a cognitive scaffold, supporting academic productivity while requiring expert oversight.

1.3. Pedagogical Flexibility and Differentiated Learning Support

Several participants highlighted ChatGPT's potential to support diverse learning needs, particularly through the generation of examples and level-appropriate explanations.

An instructor in language education stated:

"When guided appropriately, ChatGPT has the potential to support student learning. Especially in language teaching, it can be functional in generating examples, rephrasing, and creating awareness through comparisons."

Another participant similarly noted:

"I benefit from ChatGPT in diversifying in-class activities and creating examples suitable for different proficiency levels."

These statements reflect a shared view that ChatGPT can enhance instructional adaptability when used in a controlled and pedagogically informed manner.

Theme 2: Perceived Challenges, Risks, and Ethical Concerns

2.1. Academic Integrity and Student Overreliance

A dominant concern across interviews was the risk of student dependency, surface-level learning, and misuse of AI-generated outputs.

One participant expressed this concern strongly:

"Unfortunately, it makes most students lazy. Many of them are focused on getting high grades quickly."

Another academic emphasized the ethical dimension:

"My most fundamental ethical concern is that ChatGPT outputs are presented as original academic work."

These excerpts indicate widespread apprehension that uncontrolled AI use may undermine academic integrity and genuine learning.

2.2. Reliability, Accuracy, and Hallucination Risks

Participants also raised concerns about the accuracy and trustworthiness of ChatGPT outputs, particularly in research-intensive and technical fields.

One instructor noted:

"In literature searches, it provides incorrect sources. I remove those and only use the correct ones. That is why I always have to verify the information."

Another participant highlighted hallucination risks:

"There is a hallucination risk. In very technical systems, a small incorrect assumption can render the entire solution wrong."

These statements demonstrate that academics approach ChatGPT with critical caution rather than unconditional trust.

2.3. Need for Institutional Policy and Guidance

Participants consistently emphasized the absence of clear institutional policies and the need for structured guidance and training regarding AI use in higher education.

One academic stated:

"I think universities should develop clear and binding policies for the use of artificial intelligence."

Another participant proposed a governance-oriented approach:

"A committee should be established for the use of artificial intelligence, and it should be updated every year."

These views underscore a strong expectation that universities take an active institutional role in regulating and supporting responsible AI integration.

Integration with Quantitative Findings

The qualitative findings align closely with the quantitative results, revealing a balanced and cautious perception of ChatGPT among university academics. While participants acknowledged substantial opportunities related to efficiency, instructional support, and academic productivity, they simultaneously emphasized challenges related to academic integrity, reliability, and ethical governance. This convergence helps explain the moderate mean scores observed in the quantitative data and the absence of significant differences across gender and academic title.

5. Discussion and Conclusion

This study examined the perceptions and usage patterns of ChatGPT among instructors at the Faculty of Applied Sciences in a private university, integrating quantitative and qualitative findings to provide a nuanced understanding of AI integration in higher education. The results indicate that instructors hold moderately positive perceptions of ChatGPT, viewing it as a tool that offers significant pedagogical and research-related opportunities while simultaneously raising concerns regarding academic integrity, reliability, and the need for institutional governance.

ChatGPT as a Pedagogical and Cognitive Support Tool

Consistent with previous studies highlighting AI's potential to enhance educational practice (Popenici & Kerr, 2017; Abdaljaleel et al., 2023), the findings reveal that instructors perceive ChatGPT primarily as a supportive assistant rather than a replacement for human judgment. Instructors emphasized its role in improving time efficiency, facilitating lesson preparation, and structuring ideas for academic writing, echoing the observations of Du & Alm (2024) and Masjutina et al. (2025) regarding AI's cognitive scaffolding functions. These results suggest that ChatGPT can function as an adjunct to educators' professional expertise, providing immediate support for instructional planning and scholarly tasks without undermining academic agency.

Moreover, the ability of ChatGPT to support differentiated learning and pedagogical flexibility aligns with findings from Gilmore et al. (2025) and Adıgüzel et al. (2023), highlighting the potential for AI to cater to diverse student needs through example generation, rephrasing, and adaptive explanations. This confirms that, when used intentionally and guided by pedagogical principles, ChatGPT can enhance instructional adaptability and responsiveness to individual learners' levels.

Ethical and Practical Challenges

Despite the recognized benefits, the study identifies persistent concerns regarding academic integrity, reliability, and ethical oversight. Instructors expressed apprehension about student overreliance on AI-generated content, superficial learning, and the misrepresentation of AI outputs as original work. These findings corroborate previous research by Sun & Hoelscher (2023) and Ninomiya (2025), who reported faculty concerns about the potential erosion of authentic learning processes in AI-enhanced classrooms.

The issue of reliability and hallucination risks, particularly in technical and research-intensive domains, emerged as a critical theme, reflecting similar concerns raised by Sallam (2023) and Zhang & Boulos (2023) regarding the accuracy of AI-generated information. Instructors consistently emphasized the need for careful verification of AI outputs, underscoring that ChatGPT's utility is contingent upon critical oversight and expertise.

Furthermore, the absence of formal institutional policies and structured guidance emerged as a significant challenge. Participants called for clear governance frameworks and professional development opportunities to ensure ethical and responsible AI integration, echoing recommendations from Brondani et al. (2024) and Vesudevan (2021). These findings suggest that effective AI adoption in higher education requires not only technological tools but also supportive institutional structures and ethical guidelines to mitigate risks and promote responsible usage.

Perceptions Across Demographic and Professional Groups

Quantitative analyses revealed no statistically significant differences in ChatGPT usage perceptions based on gender or academic title. This suggests a broadly shared perspective among instructors regarding the opportunities and challenges of AI integration, indicating that experiences with ChatGPT are relatively consistent across demographic and professional subgroups. These results align with recent literature suggesting that attitudes toward AI in educational contexts are shaped more by professional engagement with technology and pedagogical orientation than by demographic characteristics (Du & Alm, 2024; Masjutina et al., 2025).

Implications for Policy and Practice

The findings highlight the duality of AI as both an ally and a potential adversary in higher education. While ChatGPT offers efficiency, cognitive scaffolding, and pedagogical flexibility, it also presents risks to academic integrity and reliability. Institutions should develop comprehensive policies that guide ethical AI use, integrate AI literacy into professional development programs, and establish mechanisms for ongoing evaluation of AI tools in educational contexts. Such measures can ensure that ChatGPT is leveraged responsibly, enhancing learning experiences while safeguarding academic standards.

This study contributes to the growing body of research on AI integration in higher education by providing empirical evidence of instructors' perceptions and usage patterns of ChatGPT. Overall, the findings indicate that instructors recognize the pedagogical and research-related benefits of ChatGPT, particularly in terms of instructional support, time efficiency, cognitive organization, and differentiated learning. At the same time, concerns regarding academic integrity, reliability, and ethical governance underscore the need for careful oversight and institutional support.

The convergence of quantitative and qualitative findings demonstrates a balanced and cautious stance among university academics, with opportunities valued but risks acknowledged. The lack of significant differences across gender and academic title further indicates that these perceptions are broadly shared across professional groups.

Ultimately, this study emphasizes that successful AI integration in higher education requires more than mere access to technological tools. It necessitates the establishment of ethical guidelines, institutional policies, and faculty development initiatives that empower instructors to use AI tools like ChatGPT responsibly. By fostering such a framework, universities can harness the benefits of AI while mitigating its risks, creating an educational environment that promotes innovation, academic integrity, and student-centered learning.

References

[1]. Abdaljaleel, M., Barakat, M., Alsanafi, M., Salim, N., Abazid, H., Malaeb, D., & Sallam, M. (2023). Factors influencing attitudes of university students towards chatgpt and its usage: a multi-national study validating the tame-chatgpt survey instrument.. https://doi.org/10.20944/preprints202309.1541.v1

[2]. Adıgüzel, T., Kaya, M., & Cansu, F. (2023). Revolutionizing education with ai: exploring the transformative potential of chatgpt. Contemporary Educational Technology, 15(3), ep429. https://doi.org/10.30935/cedtech/13152

[3]. Alenezi, F. (2023). Artificial intelligence versus arab universities: an enquiry into the saudi context. Humanities and Management Sciences - Scientific Journal of King Faisal University, 1-7. https://doi.org/10.37575/h/edu/220038
[4]. Aparicio-Izurieta, V. (2024). Preferences towards artificial intelligence in ecuadorian university professors. Sapienza International Journal of Interdisciplinary Studies, 5(1), e24009. https://doi.org/10.51798/sijis.v5i1.730
[5]. Brondani, M., Alves, C., Ribeiro, C., Braga, M., Garcia, R., Ardenghi, T., … & Pattanaporn, K. (2024). Artificial intelligence, chatgpt, and dental education: implications for reflective assignments and qualitative research. Journal of Dental Education, 88(12), 1671-1680. https://doi.org/10.1002/jdd.13663
[6]. Buragohain, D. and Chaudhary, S. (2025). Navigating chatgpt in asean higher education: ethical and pedagogical perspectives. Computer Applications in Engineering Education, 33(4). https://doi.org/10.1002/cae.70062
[7]. Du, J. and Alm, A. (2024). The impact of chatgpt on english for academic purposes (eap) students' language learning experience: a self-determination theory perspective. Education Sciences, 14(7), 726. https://doi.org/10.3390/educsci14070726
[8]. Döş, İ. (2025). A systematic review of research on chatgpt in higher education. The European Educational Researcher, 59-76. https://doi.org/10.31757/euer.824
[9]. George, B. and Wooden, O. (2023). Managing the strategic transformation of higher education through artificial intelligence. Administrative Sciences, 13(9), 196. https://doi.org/10.3390/admsci13090196
[10]. Gilmore, J., Whims, T., Blair, B., Katarzynski, B., & Steffen, L. (2025). Technology acceptance, moral panic, and perceived ease of use: negotiating chatgpt at research one universities. Convergence the International Journal of Research Into New Media Technologies, 31(4), 1251-1266. https://doi.org/10.1177/13548565251337576
[11]. Gilmore, J., Whims, T., Blair, B., Katarzynski, B., & Steffen, L. (2025). Technology acceptance, moral panic, and perceived ease of use: negotiating chatgpt at research one universities. Convergence the International Journal of Research Into New Media Technologies, 31(4), 1251-1266. https://doi.org/10.1177/13548565251337576
[12]. Grassini, S. (2023). Shaping the future of education: exploring the potential and consequences of ai and chatgpt in educational settings. Education Sciences, 13(7), 692. https://doi.org/10.3390/educsci13070692
[13]. Krečar, I., Kolega, M., & Jurčec, L. (2024). Perception of chatgpt usage for homework assignments: students' and professors' perspectives. Iafor Journal of Education, 12(2), 33-60. https://doi.org/10.22492/ije.12.2.02
[14]. Masjutina, S., Stearns, E., & Bottía, M. (2025). An analysis of students who represent missed opportunity for diversifying stem fields. Science Education, 109(5), 1287-1312. https://doi.org/10.1002/sce.21956
[15]. Mlambo, P. (2024). Investigating chatgpt: a threat or benefit to higher education?. Futurity Education, 274-289. https://doi.org/10.57125/fed.2024.03.25.14
[16]. Ninomiya, S. (2025). Current status of artificial intelligence utilization in medical education: a cross-sectional survey of medical students and faculty.. https://doi.org/10.21203/rs.3.rs-7504189/v1
[17]. Paris, B., Reynolds, R., & McGowan, C. (2021). Sins of omission: critical informatics perspectives on privacy in e-learning systems in higher education. Journal of the Association for Information Science and Technology, 73(5), 708-725. https://doi.org/10.1002/asi.24575
[18]. Popenici, Ş. and Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. Research and Practice in Technology Enhanced Learning, 12(1). https://doi.org/10.1186/s41039-017-0062-8
[19]. Popenici, Ş. and Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. Research and Practice in Technology Enhanced Learning, 12(1). https://doi.org/10.1186/s41039-017-0062-8
[20]. Razı, S., Glendinning, I., & Foltýnek, T. (2018). Towards consistency and transparency in academic integrity.. https://doi.org/10.3726/b15273
[21]. Sallam, M. (2023). Chatgpt utility in healthcare education, research, and practice: systematic review on the promising perspectives and valid concerns. Healthcare, 11(6), 887. https://doi.org/10.3390/healthcare11060887
[22]. Sallam, M., Salim, N., Barakat, M., & Al-Tammemi, A. (2023). Chatgpt applications in medical, dental, pharmacy, and public health education: a descriptive study highlighting the advantages and limitations. Narra J, 3(1), e103. https://doi.org/10.52225/narra.v3i1.103
[23]. Sallam, M., Salim, N., Barakat, M., & Al-Tammemi, A. (2023). Chatgpt applications in medical, dental, pharmacy, and public health education: a descriptive study highlighting the advantages and limitations. Narra J, 3(1), e103. https://doi.org/10.52225/narra.v3i1.103
[24]. Saylam, S., Duman, N., Yildirim, Y., & Satsevich, K. (2023). Empowering education with ai: addressing ethical concerns. London Journal of Social Sciences, (6), 39-48. https://doi.org/10.31039/ljss.2023.6.103
[25]. Spivakovsky, O., Omelchuk, S., Kobets, V., Valko, N., & Malchykova, D. (2023). Institutional policies on artificial intelligence in university learning, teaching and research. Information Technologies and Learning Tools, 97(5), 181-202. https://doi.org/10.33407/itlt.v97i5.5395
[26]. Sun, G. and Hoelscher, S. (2023). The chatgpt storm and what faculty can do. Nurse Educator, 48(3), 119-124. https://doi.org/10.1097/nne.0000000000001390
[27]. Vesudevan, M. (2021). Teachers' perception about factors influencing ict integration in teaching and learning and students' interest in lesson. Muallim Journal of Social Science and Humanities, 28-40. https://doi.org/10.33306/mjssh/119
[28]. Wait, I. Academic integrity at an american style university abroad: student attitudes, awareness, and cheating frequency.. https://doi.org/10.18260/1-2--4827
[29]. Widayanti, R. and Mariyanti, T. (2023). Ai dialog: utilization, challenges, and ethics in the age of artificial intelligence. International Transactions on Artificial Intelligence (Italic), 2(1), 40-48. https://doi.org/10.33050/italic.v2i1.401
[30]. Yan, L., Sha, L., Zhao, L., Li, Y., Martínez-Maldonado, R., Chen, G., … & Gašević, D. (2023). Practical and ethical challenges of large language models in education: a systematic scoping review. British Journal of Educational Technology, 55(1), 90-112. https://doi.org/10.1111/bjet.13370
[31]. Zadorina, O., Hurskaya, V., Sobolyeva, S., Грекова, Л., & Vasylyuk-Zaitseva, S. (2024). The role of artificial intelligence in creation of future education: possibilities and challenges. Futurity Education. https://doi.org/10.57125/fed.2024.06.25.09
[32]. Zhang, P. and Boulos, M. (2023). Generative ai in medicine and healthcare: promises, opportunities and challenges. Future Internet, 15(9), 286. https://doi.org/10.3390/fi15090286

Appendix: Semi-Structured Interview Questions on ChatGPT Usage

1. **Usage Patterns** Can you describe how frequently and for what purposes you use ChatGPT in your academic work (e.g., teaching, research, assessment, administrative tasks)?

2. **Instructional Use** In what ways do you integrate ChatGPT into your teaching practices, such as lesson planning, material development, or student support?
3. **Research and Academic Productivity** How has ChatGPT influenced your research-related activities, including literature review, academic writing, or data analysis?
4. **Perceived Usefulness** To what extent do you find ChatGPT useful in enhancing the efficiency and quality of your academic tasks? Can you provide specific examples?
5. **Pedagogical Value** How do you perceive the pedagogical value of ChatGPT for improving student learning outcomes or engagement?
6. **Attitudes Toward AI Integration** What is your overall attitude toward the integration of ChatGPT and similar AI tools in higher education? How has this attitude evolved over time?
7. **Confidence and Competence** How confident do you feel in using ChatGPT effectively and responsibly in your professional role?
8. **Ethical and Academic Integrity Concerns** What ethical concerns, if any, do you associate with the use of ChatGPT in teaching and research, particularly regarding academic integrity and originality?
9. **Limitations and Risk** What do you see as the main limitations or potential risks of relying on ChatGPT in academic contexts?
10. **Institutional Support and Policy Needs** What types of institutional policies, guidelines, or professional development opportunities do you think are necessary to support responsible and effective ChatGPT use among faculty members?