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University professors and lecturers' awareness and perspectives of employing ChatGPT: A Case of University students' essay assignments

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Abstract

Current literature lacks substantive empirical analysis of perceptions toward students employing ChatGPT as an academic writing assignment. Therefore, the purpose of this study is to investigate university faculty members' awareness and perspectives regarding ChatGPT's use in student essay assignments. The study employed a cross-sectional survey design, particularly an online questionnaire distributed to all participants to gather their responses simultaneously. Drawing on data from 108 professors and lecturers, the study employs a quantitative descriptive design utilizing independent samples t-tests and ANOVA to analyze differences across gender, age, years of experience, and academic rank. Results indicate participants possess moderate-to-high familiarity with ChatGPT's language generation capabilities while maintaining significant concerns about academic integrity and critical thinking development. The analysis reveals statistically significant differences in perceptions based on gender, professional experience, and academic position, though no meaningful variation emerged across age groups. These findings underscore the importance of targeted faculty development programs to address both the potential benefits and challenges of AI writing tools in higher education. This paper suggests opportunities for further qualitative research to deepen understanding of faculty attitudes toward ChatGPT integration in academic writing and highlights the need for balanced institutional approaches to technological adoption.

Keywords: Academic writing, AI in education, ChatGPT, Essay Assignments, Faculty members, Perceptions.

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1. Introduction

Technology has transformed educational institutions by introducing innovative materials for educators and learners, such as Artificial Intelligence (AI). One of the popular tools is ChatGPT, a language model created by OpenAI. According to Tan [1] and Bok and Cho [2], ChatGPT utilizes the Generative Pre-trained Transformer (GPT) framework to produce text that mimics human language conversations. To train ChatGPT, large amounts of data from diverse online sources were employed, allowing it to provide precise and appropriate responses [3]. It offers several outstanding features, such as answering questions and providing real-time feedback in academic settings [4, 5].

Integrating ChatGPT into education offers both benefits and concerns [6]. On one hand, it can help educators to reduce their workload by developing more effective assessments, providing prompt feedback, and generating instructional resources [3]. In addition, it can act as a virtual instructor, delivering customized lessons and generating authentic resources to boost students' motivation and engagement [3, 5]. However, this integration poses challenges such as preserving academic integrity, maintaining privacy, and minimizing the risk of over-reliance on AI tools, which may impede the development of critical thinking and problem-solving skills [3, 4]. Moreover, the reliability and quality of AI-generated content, as well as the need for proper training and support, are issues that educators and students must address in order to effectively utilize these tools [4, 5].

Language learners commonly face difficulties in English writing and seek assistance [2]. Students are increasingly turning to AI tools such as ChatGPT for academic writing, as these tools have shown promise in improving the quality of their writing and their confidence [7]. These instruments are particularly useful for non-native English speakers [8]. While AI writing assistants are unlikely to entirely replace traditional academic writing courses in the foreseeable future [9], students have developed a preference for tools such as ChatGPT due to their capacity to assist with a variety of writing tasks, including college-style essays and emails [10]. ChatGPT has the potential to transform the educational landscape, bridge language gaps, and resolve specific challenges by assisting students in enhancing their writing style and achieving academic success [11].

Nevertheless, the growing usage of ChatGPT in academic settings has sparked discussions among educators. That is to say, some favor the prohibition of AI tools in academic writing, while others view these tools as a means of reassessing current teaching methodologies [12]. Researchers often express concern about the constraints of the voice in academic writing when employing AI-generated content [13]. Although several studies have investigated the perspectives of teachers and students on ChatGPT as a writing tool. [2, 14, 15] there is a lack of research addressing the views of university language professors on using ChatGPT in students' written assignments [16]. This study aims to fill this gap by answering the following research questions:

1. To what extent are faculty members aware of ChatGPT's key functions, including text generation, translation assistance, and search utility?
2. How do university faculty members perceive the use of ChatGPT in students' essay writing?
3. Are there any significant differences in terms of gender, age, years of experience, and academic rank among faculty members' views on the use of ChatGPT in students' essay writing?

The significance of the research lies in its potential to provide a comprehensive understanding of the impact of AI technologies like ChatGPT on teaching and learning, which can inform the development of sound policies and ethical practices in the field of education. This research offers guidance for future advancements and assists educators and learners in the responsible use of AI to enhance educational outcomes. Understanding faculty perspectives is critical to guiding ethical and effective AI integration in writing education.

2. Literature Review

2.1. ChatGPT

Technological developments have transformed and shaped the history of civilization. In recent years, artificial intelligence technologies, particularly ChatGPT, have been widely used in various sectors such as healthcare, education, and customer service [17].

By focusing on the education field, ChatGPT is considered a transformative technology that attracts millions of users worldwide [17].

ChatGPT (Chat Generative Pre-trained Transformer) is a language and communication-based artificial intelligence developed by an American AI company called OpenAI. It emerged in November 2022 [3, 17] and it is trained on a huge corpus of data obtained from different sources such as textbooks, journal articles and websites [3]. ChatGPT is considered the latest trend within the field of artificial intelligence (AI), simulating human interactions to communicate with users and answer their questions [18]. This system can generate different types of data such as texts, images, and videos [15].

Our review of prior literature on using ChatGPT in education revealed a significant knowledge gap [2, 3, 14, 18-20]. Given the recency of this topic and the growing interest in using ChatGPT in education, research in this area is still limited. Although there is a growing number of recently published studies investigating the use of this tool in students' written assignments, further research is required to address this gap. Particularly in the Saudi context, there is a lack of literature investigating instructors' perspectives on students' AI-generated assignments [19]. According to Alqahtani [20] there is a dearth of empirical research that focuses on the attitudes of instructors and students, especially in Saudi Arabia. Therefore, this research study intends to bridge this gap.

The increasing use of ChatGPT by students, instructors, and researchers has sparked debates among educators. Literature on the application of ChatGPT in academia indicates that its use is often controversial, as educators discuss both

the benefits and risks associated with ChatGPT [3, 6]. The next section of this literature review discusses the benefits and challenges of using this AI technology in education.

2.2. Challenges of Using ChatGPT in Education

Despite the potential benefits ChatGPT offers, educators have important concerns about its application that could impact the quality of education [3, 6, 18]. The primary concern relates to academic integrity and plagiarism [18, 19]. Learners might use ChatGPT to generate academic papers, essays, and reports to submit them as their own work without making any changes or providing proper citations [18, 19]. Also, some learners may use ChatGPT tools to cheat during exams. In addition, Sok and Heng [3] discussed that when students use ChatGPT to write their assignments, it can result in unfair assessment because these assignments do not reflect students' true capabilities; it is challenging, if not impossible, for instructors to determine whether the work was done by the student or generated by ChatGPT. Another concern mentioned by Sok and Heng [3] and Al-Jarf [19] is related to data privacy and security. Students and teachers may share personal information when they use ChatGPT, which raises the risk of this sensitive data being used for non-academic purposes. The last issue with using ChatGPT is that the data generated by this tool might be inaccurate or misleading. For example, ChatGPT can generate fake references. Due to these concerns and negative effects, ChatGPT has been prohibited by some educational institutions [3, 18].

2.3. Instructors and Students' Perceptions of ChatGPT

Several studies explored instructors' perceptions of using ChatGPT tools [15, 18]. For example, ElSayary [18] mixed methods study examined instructors' perspectives on integrating ChatGPT as a supporting tool for teaching, including lesson planning, assessment, and teaching and learning activities. The data were collected from middle and high school teachers in Dubai and Abu Dhabi through an online survey and semi-structured interviews. The study revealed that teachers acknowledged the benefits of using ChatGPT in teaching practices, particularly in lesson planning and teaching and learning activities. Additionally, it was noted that ChatGPT increased students' engagement and motivation, which positively impacted learners' performance. However, the study mentioned that teachers faced two challenges: the lack of human interaction and the inaccuracy of information generated by ChatGPT.

Furthermore, Picciano [15] conducted a qualitative research study to explore the use of ChatGPT by K-12 teachers. The two methods of data collection used in this study were document analysis and focus group discussions. The participants reported that ChatGPT assisted them in their writing tasks by providing new ideas, summarizing key points, helping with writer's block, organizing their thoughts, and saving their time.

In addition to examining the perceptions of instructors, some studies focused on students' perceptions of using ChatGPT in their learning experiences. Črček and Patekar [14] examined students' use of ChatGPT for written assignments. The researchers used online surveys to obtain data from 201 students from different universities in Croatia. The findings showed that the majority of the participants utilized ChatGPT to generate ideas, paraphrase, summarize, and proofread. The researchers also noted that some participants used ChatGPT to write parts of their assignments. The researchers argued that some students considered using ChatGPT to generate ideas as an ethical practice, while other uses of ChatGPT were perceived by students as being unethical.

Another study that investigated learners' perspectives on using ChatGPT was conducted by Bok and Cho [2]. The researchers surveyed 71 Korean college students who used ChatGPT to revise paragraphs in an English academic writing course. The study revealed that students were satisfied with using ChatGPT. For these participants, ChatGPT was a convenient tool that provided helpful feedback related to vocabulary, grammar, and writing flow. On the other hand, participants reported some concerns, such as the lack of error descriptions, incomprehensible feedback, misalignment of responses, concerns about diminished authorship, and uncertainty about learning effectiveness (p. 15). The study emphasized that ChatGPT can be used as a supplementary tool for writing revision. Although ChatGPT can be an effective tool for writing, it is important to employ a balanced approach that includes both AI-driven and human feedback.

It is also worth mentioning that some studies discussed the attitudes of both instructors and students toward the use of ChatGPT [4, 20, 21]. For instance, Kamoun et al. [4] examined the Knowledge, Attitude, and Perception (KAP) towards using ChatGPT by university students and faculty. By surveying 145 faculty members and 855 students, the researchers reported that faculty members had a higher level of ChatGPT knowledge than students. In addition, faculty members showed a more negative perception of ChatGPT and had more concerns than students. Also, the findings included that 63.4% of faculty lack the training and resources to utilize ChatGPT in teaching practices.

2.4. Studies on the Adoption of ChatGPT in Saudi Higher Education

The Saudi 2030 vision is a roadmap aimed at transforming the country from an oil-based economy to a knowledge-based economy. One of the goals of this vision is to revolutionize higher education and equip students with 21st-century skills. To achieve this, it is essential to integrate technology and modernize traditional teaching and learning practices Faisal [11]. Faisal [11] stated that "As the digital age reshapes the global educational landscape, Saudi Arabian higher education has the opportunity to harness the power of AI technologies to provide innovative and personalized learning experiences for its students" (p.2). Specifically, Faisal [11] conducted a systematic review to explore the benefits of incorporating ChatGPT in higher education. The study showed the important role of ChatGPT in increasing students' engagement, promoting language learning, and enhancing research and writing skills. The findings also indicated that ChatGPT can be a transformative tool that can reshape students' learning experiences and empower educators in Saudi Arabia.

In addition, Sobaih et al. [22] explored students' acceptance and use of ChatGPT in Saudi higher education. Data were collected from 520 students at a Saudi university. The findings indicated that students who perceived ChatGPT as a useful tool to assist them in their academic tasks experienced increased productivity and improved performance. However, the study also revealed that students lacked the essential resources to use this tool effectively.

Another study that focused on students' perceptions of using ChatGPT in Saudi Arabia was conducted by Ahmed [23]. This study compared the satisfaction of EFL learners with teacher-mediated and ChatGPT-created writing opportunities. The researcher collected data from 64 students at a language institution in Saudi Arabia. The study revealed that students were more satisfied with the teacher's mode of mediation. The study highlighted that ChatGPT cannot replace human instructors in EFL classes. However, ChatGPT can be used as a supplementary tool to enrich students' learning experiences.

In the context of instructors, Al-Jarf [19] qualitative study investigated faculty's attitudes toward AI-generated assignments and research papers that students submit. The participants involved in this study were not only from Saudi Arabia but also from other Arabic countries. The study involved 45 Arab instructors from Saudi Arabia, Qatar, Egypt, Palestine, Tunisia, Oman, and Mauritania. The majority of the participants did not accept these AI-generated assignments and research papers. The researcher emphasized the significance of familiarizing instructors and students with AI plagiarism detection tools and raising students' awareness of university guidelines on AI-generated content.

By focusing on both instructors and students, Abouammoh et al. [21] conducted a qualitative study to discuss the advantages and challenges of integrating ChatGPT among faculty members and students at a leading Saudi university. The researchers argued that the participants had good knowledge of utilizing ChatGPT. The benefits of using ChatGPT include the ease of collecting and summarizing information in a short time. On the other hand, concerns related to using this tool included the lack of critical thinking and the inaccuracy of references generated by ChatGPT. Similarly, Alqahtani [20] examined the attitudes of both instructors and learners toward integrating ChatGPT in writing classes at Saudi universities. The participants reported that ChatGPT was a beneficial tool that enhanced their learning experiences and helped them increase their creativity and productivity. However, the participants had some concerns related to plagiarism risks. The study also indicated that the participants needed more training and guidance to effectively utilize this tool.

2.5. Strategies for Using ChatGPT Effectively

To reap the benefits of utilizing ChatGPT in higher education, several educators suggested specific strategies to effectively use this technology Sok and Heng [3], Kamoun et al. [4], Vargas-Murillo et al. [6] and Al-Jarf [19]. Vargas-Murillo et al. [6] argued that in today's digital world, it is unrealistic to prohibit the use of new technologies such as ChatGPT tools. Higher educational institutions need to reconsider their teaching and learning approaches and take advantage of the opportunities provided by AI tools. It is essential to develop the skills of both instructors and students by training them on how to use ChatGPT tools correctly and ethically [6, 19]. Also, academic institutions need to raise faculty and students' awareness of the capabilities and limitations of ChatGPT. Additionally, universities should establish clear policies and guidelines for using AI tools to ensure academic integrity [3, 6]. As recommended by Sok and Heng [3], faculty members can use AI detection applications to identify AI-generated text.

As for the theoretical aspect of this study, it is important to note that a key theoretical model is the Technological Pedagogical Content Knowledge (TPACK) framework, as explored by Khlaif et al. [24]. This model (TPACK) combines technological, pedagogical, and content knowledge, offering a holistic view for educators to effectively incorporate technology into their teaching. Thus, this framework highlights the necessity of blending these three knowledge areas to ensure meaningful and effective technology use in education.

3. Methodology

3.1. Research Design and Sample of the Study

This study adopted a quantitative descriptive design, utilizing statistical analysis of numerical data [25]. Data were collected through an online cross-sectional survey assessing faculty members' awareness and perceptions of ChatGPT's use in student essay writing. The participants included 108 English language and translation instructors from Saudi Electronic University, comprising 58 female (53.7%) and 50 male (46.3%) faculty members, all actively engaged in teaching. The sample represented diverse demographic profiles in terms of age, academic rank, and teaching experience. Notably, the largest proportion of respondents fell within the 40–50 age group (44.4%), held the rank of Assistant Professor (67.6%), and had 6–10 years of teaching experience (46.3%). Detailed demographic characteristics are presented in Table 1.

Table 1.

Demographic characteristics of the Participants.

Demographic Factors	N	Mean	SD	Percentage
Gender				
Male	50	49.16	6.49	46.30%
Female	58	52.33	6.67	53.70%
Age				
24-29	3	52	5.29	2.80%
30-39	44	52.16	6.4	40.70%
40-50	48	49.56	7.47	44.40%
Over 50	13	51	4.76	12%
Academic Rank				
Lecturer	14	54.29	3.68	13%
Assistant Professor	73	51.49	5.8	67.60%
Associate Professor	15	45.33	8.22	13.90%
Full Professor	6	49	11.48	5.60%
Experience				
5-Jan	24	52.54	4.92	22.20%
10-Jun	50	51.9	6.06	46.30%
20-Nov	21	49.76	8.01	19.40%
More than 20	13	45.54	7.76	12%
Total	108			100%

3.2. Instrumentation and Research Procedure

This study employed an online cross-sectional survey comprising 14 Likert-scale items adopted from Nguyen [26] to assess faculty perceptions of ChatGPT's role in student essay writing, participants completed a questionnaire divided into three sections: the first collected demographic data (gender, age, academic rank, and years of experience) in a multiple-choice format; the second investigated their awareness of ChatGPT; and the third measured their agreement levels regarding ChatGPT's use in students' essay assignments via a 5-point Likert scale. The survey took approximately 10 minutes to complete. To ensure validity, the instrument was reviewed by a panel of expert professors, whose feedback was incorporated to refine the items. Reliability was confirmed through Cronbach's alpha ($\alpha = 0.765$), indicating acceptable internal consistency [27]. Data analysis was conducted using SPSS (Version 26), with independent samples t-tests and ANOVA applied to examine group differences. Ethical approval was obtained from Saudi Electronic University's Ethics Committee (Approval No.: SEUREC-4640), and informed consent was secured from all participants. Additionally, permissions were acquired for the use of the adopted research instrument.

4. Findings

The first research question, entitled "To what extent are faculty members aware of ChatGPT's key functions, including text generation, translation assistance, and search utility?", addressed faculty members' awareness of ChatGPT's capabilities, as represented by the first section (items: 1-5). Additionally, the second research question, entitled "How do university faculty members perceive the use of ChatGPT in students' essay writing?", examined faculty members' perspectives on ChatGPT, as represented by the second section (items: 6-14), particularly regarding their students' use of this tool for completing essay assignments. Table 2 highlights these sections and displays the mean (M) as well as standard deviation (SD) of the faculty members' awareness and perspectives of ChatGPT.

Table 2.

Faculty Members' Awareness and Perspectives of ChatGPT.

Items (1-5): Faculty Members' Awareness of ChatGPT		Mean	SD
1	I think ChatGPT is a Google-like search engine.	3.41	1.13
2	I think ChatGPT is a language model that can produce text by using simple terms.	3.71	0.96
3	I believe ChatGPT is able to accurately comprehend and carry out human requests.	3.69	0.99
4	I think ChatGPT is an online resource for foreign languages learning.	3.55	0.99
5	I think ChatGPT is a tool for translation assistance.	3.80	0.92
Items (6-14): Faculty Members' Perspectives of Employing ChatGPT in Students' Essay Assignments			
6	I think students can easily cheat on their essay assignments.	4.02	0.87
7	I believe students find ChatGPT to be helpful in doing their essay assignments.	4.09	0.70
8	I think students probably become less critical thinkers when using ChatGPT frequently in doing their assignments.	3.96	1.00
9	I think I am skeptical about the reliability of the data offered by ChatGPT when students do their essay assignments.	3.84	0.76
10	I think ChatGPT is an excellent teaching tool that inspires students to learn and do their essay assignments.	3.44	1.06
11	I believe ChatGPT helps students save their time by doing their essay assignments.	3.48	1.02
12	I think students feel more confident in doing their essay assignments when they have assistance from ChatGPT.	3.60	0.85
13	I think ChatGPT is an ineffective tool for students to use for doing their essay assignments.	2.94	1.10
14	I think ChatGPT provides students with feedback on doing their essay assignments.	3.33	1.07

4.1. Findings of the First Research Question

To answer the first research question addressing the initial section (items 1-5), statistical analysis was employed to determine the mean and standard deviation. The findings indicate varying levels of awareness among faculty members regarding ChatGPT. The highest mean score ($M = 3.80$, $SD = 0.92$) was observed for the statement that ChatGPT is a tool for translation assistance, reflecting a relatively strong agreement with this perception. Similarly, participants moderately agreed that ChatGPT is a language model capable of generating text using simple terms ($M = 3.71$, $SD = 0.96$) and that it can accurately understand and execute human requests ($M = 3.69$, $SD = 0.99$). Faculty members also demonstrated moderate awareness of ChatGPT as an online resource for foreign language learning ($M = 3.55$, $SD = 0.99$). However, the lowest mean score ($M = 3.41$, $SD = 1.13$) was associated with the perception of ChatGPT as a Google-like search engine, indicating some uncertainty or disagreement regarding this comparison. Overall, while faculty members recognize ChatGPT's capabilities in text generation, translation, and language learning, there appears to be less clarity about its distinction from traditional search engines.

In short, these results indicate that faculty members generally recognize ChatGPT's capabilities as a language model, translation tool, and resource for language learning, with moderate to high agreement across these aspects. The highest awareness was for its role in translation assistance, followed by its ability to generate text and comprehend human requests. However, there was slightly lower agreement on ChatGPT being an online language learning resource and the least agreement on it functioning like a Google-like search engine. This suggests that while faculty are aware of ChatGPT's generative and language-related functions, some misconceptions or uncertainties remain regarding their distinction from conventional search engines.

4.2. Findings of the Second Research Question

Based on Table 2, the 2nd research question tackles the second section (items: 6-14). The results showed that faculty members expressed strong agreement that students could easily cheat on essay assignments when using ChatGPT ($M = 4.02$, $SD = 0.87$). They also strongly believed students found ChatGPT helpful for completing essay assignments ($M = 4.09$, $SD = 0.70$). There was considerable concern about the potential negative impact on critical thinking skills, with faculty agreeing that frequent ChatGPT use might make students less critical thinkers ($M = 3.96$, $SD = 1.00$). Regarding reliability, faculty reported skepticism about the accuracy of information provided by ChatGPT for essay assignments ($M = 3.84$, $SD = 0.76$). While they recognized some benefits, faculty were more neutral about ChatGPT's value as an inspirational teaching tool ($M = 3.44$, $SD = 1.06$) and its ability to save students time ($M = 3.48$, $SD = 1.02$). Faculty members noted moderate agreement that ChatGPT use might increase student confidence in completing assignments ($M = 3.60$, $SD = 0.85$). However, they generally disagreed with the statement that ChatGPT was completely ineffective for essay assignments ($M = 2.94$, $SD = 1.10$). Opinions were divided about ChatGPT's feedback capabilities, with neutral-leaning responses ($M = 3.33$, $SD = 1.07$).

In sum, the findings reveal faculty members recognize both the potential benefits and significant concerns regarding ChatGPT use in academic writing, with particular apprehension about academic integrity and critical thinking development. Hence, they expressed strong agreement that ChatGPT could facilitate cheating and was helpful to students, while also raising concerns about reduced critical thinking. They were skeptical about ChatGPT's reliability and neutral-to-positive about its role as a teaching tool, time-saving benefits, and boosting student confidence. Most disagreed that

ChatGPT was entirely ineffective but were divided on its feedback quality. Overall, faculty members acknowledged ChatGPT's utility but emphasized risks for academic integrity and learning outcomes.

4.3. Findings of the Third Research Question

This research question examines whether there are substantial differences in faculty members' awareness and views regarding the use of ChatGPT in students' essay writing based on gender, age, years of experience, and academic rank. To examine potential differences across key demographic variables, statistical analyses were conducted using independent samples t-tests for gender comparisons and one-way ANOVA tests for age groups, academic ranks, and years of teaching experience. These analyses determined whether significant variations existed in faculty perceptions based on these categorical factors.

Interestingly, an independent samples t-test was conducted to compare male and female faculty members' awareness and perspectives, as shown in Table 3. The results revealed a statistically significant difference between genders ($t = -2.48$, $p = 0.01$), with female faculty members ($M = 52.33$, $SD = 6.67$) holding more favorable views toward ChatGPT's use compared to their male counterparts ($M = 49.16$, $SD = 6.49$). This suggests that gender may influence faculty attitudes toward ChatGPT-assisted essay writing.

Table 3.

Independent sample t-test for faculty members' awareness and views of ChatGPT in terms of gender

Items (1-14)	Gender	N	Mean	SD	T	P
Faculty members' awareness and views of the use of ChatGPT in students' essay writing	Male	50	49.16	6.49	-2.48	0.01
	Female	58	52.33	6.67		

The ANOVA results in Table 4 indicate no statistically significant differences in faculty members' views of ChatGPT's use in student essay writing across age groups ($F = 1.16$, $p = 0.32$). However, descriptive statistics show slight variations, with the 30-39 age group expressing the most favorable views ($M = 52.16$, $SD = 6.40$), followed by the 24-29 group ($M = 52.00$, $SD = 5.29$). Faculty aged 40-50 held the least favorable perceptions ($M = 49.56$, $SD = 7.47$), while those over 50 were moderately positive ($M = 51.00$, $SD = 4.76$).

Table 4.

ANOVA for faculty members' awareness and views of ChatGPT and their age group.

Items (1-14)	Age	N	Mean	SD	F	P
Faculty members' awareness and views of the use of ChatGPT in students' essay writing	24-29	3	52.00	5.29	1.16	0.32
	30-39	44	52.16	6.40		
	40-50	48	49.56	7.47		
	over 50	13	51.00	4.76		
	Total	108	50.86	6.75		

As for Table 5, the ANOVA results reveal statistically significant differences in faculty members' views of ChatGPT's use based on years of experience ($F = 4.09$, $p = 0.009$). Faculty with 1-5 years of experience held the most favorable views ($M = 52.54$, $SD = 4.92$), followed closely by those with 6-10 years ($M = 51.90$, $SD = 6.06$). Perceptions became less positive with increasing experience, as faculty with 11-20 years ($M = 49.76$, $SD = 8.01$) and over 20 years ($M = 45.54$, $SD = 7.76$) showed declining acceptance. The findings suggest that less experienced faculty are more receptive to ChatGPT in student writing, while veteran educators express greater skepticism.

Table 5.

ANOVA for faculty members' awareness and views of ChatGPT and years of experience.

Items (1-14)	Years of Experience	N	Mean	SD	F	P
Faculty members' awareness and views of the use of ChatGPT in students' essay writing	1-5	24	52.54	4.92	4.09	0.009
	6-10	50	51.90	6.06		
	11-20	21	49.76	8.01		
	over 20 years	13	45.54	7.76		
	Total	108	50.86	6.75		

Finally, the ANOVA results in Table 6 show statistically significant differences in faculty views of ChatGPT's use based on academic rank ($F = 5.53$, $p = 0.001$). Lecturers expressed the most favorable perceptions ($M = 54.29$, $SD = 3.69$), followed by assistant professors ($M = 51.49$, $SD = 5.80$). In contrast, associate professors held the least positive views ($M = 45.33$, $SD = 8.23$), while professors showed moderate acceptance ($M = 49.00$, $SD = 11.49$). The findings suggest a clear trend: lower-ranking faculty (lecturers and assistant professors) are more receptive to ChatGPT in student writing, while higher-ranking faculty (associate and full professors) demonstrate greater skepticism. This pattern may reflect generational differences in technology adoption or varying pedagogical priorities across career stages.

Table 6.

ANOVA for faculty members' awareness and views of ChatGPT and academic rank.

Items (1-14)	Academic Rank	N	Mean	SD	F	P
Faculty members' views of the use of ChatGPT in students' essay writing	Lecturer	14	54.29	3.688	5.53	0.001
	Asst. Prof	73	51.49	5.803		
	Assoc. Prof	15	45.33	8.226		
	Professor	6	49.00	11.489		
	Total	108	50.86	6.754		

5. Discussion

5.1. Discussion of the First Research Question (ITEMS 1-5)

The findings revealed that faculty members exhibit varying levels of awareness regarding ChatGPT's functionalities. The highest mean score (3.80) was observed for the perception of ChatGPT as a tool for translation assistance, suggesting that faculty members are most familiar with its language-related capabilities. This aligns with previous research highlighting the growing use of AI-powered tools in language education and translation tasks [26, 28, 29]. Studies have shown that educators increasingly rely on AI for real-time translation and language support [30]. The relatively high mean score (3.71) for the perception of ChatGPT as a text-generating language model further supports the idea that educators recognize its core function in producing human-like text, consistent with findings by Kasneci et al. [31] who noted that many users understand ChatGPT's generative nature but may overestimate its accuracy. As for the statement equating ChatGPT to a "Google-like search engine," it indicates some misconceptions about its operational mechanisms. Despite ChatGPT's clear disclaimer that it does not function as a search engine or language learning platform, a view corroborated by Nguyen [26] and Shoufan [30] most respondents (over 50%) held incorrect assumptions about its capabilities. Thus, this misconception may influence how faculty members integrate the tool into teaching and research, potentially leading to unrealistic expectations about its accuracy and reliability. Additionally, there is a moderate agreement (3.69) with ChatGPT's ability to accurately comprehend and grasp human requests [26] suggests cautious optimism, possibly reflecting awareness of its limitations in contextual understanding, as noted by Ji et al. [32] who found that AI language models often struggle with nuanced or complex queries.

The perception of ChatGPT as an online resource for foreign language learning (mean = 3.55) further underscores its perceived utility in educational settings. Research by Zhang and Huang [33] supports this finding, demonstrating that AI chatbots are increasingly used as supplementary tools for vocabulary acquisition. Most respondents believed that ChatGPT is a tool for translation assistance. This provides support for the idea that ChatGPT has attracted significant academic interest due to its advanced language capabilities [34]. Researchers have assessed its machine translation performance through both human and automated evaluations [35, 36].

5.2. Discussion of the Second Research Question (ITEMS 6-14)

The results revealed that faculty members have significant concerns regarding the use of ChatGPT in students' essay assignments. A primary concern is the potential for academic dishonesty, as evidenced by the strong agreement (M = 4.02) with the statement that students could easily cheat using ChatGPT. This aligns with broader academic discourse on AI-assisted plagiarism, where studies have shown that generative AI tools can facilitate unauthorized assistance if not properly regulated [37]. Additionally, faculty members expressed concern (M = 3.96) that frequent reliance on ChatGPT might diminish students' critical thinking abilities. This result echoes previous research suggesting that overuse of AI-generated content can lead to surface-level engagement with learning materials, thereby reducing opportunities for deep cognitive processing [38]. Skepticism regarding the reliability of ChatGPT's outputs (M = 3.84) further reinforces these reservations, as a faculty member appears wary of students submitting essays containing inaccuracies or unverified information; this aligns with concerns supported by studies highlighting AI's tendency to produce plausible but sometimes incorrect or biased content [39]. Despite these concerns, faculty members also recognized the potential benefits of ChatGPT in supporting student learning. The highest level of agreement (M = 4.09) was with the statement that students find ChatGPT helpful, suggesting that faculty acknowledge its practical utility. This aligns with research conducted by Castro [40] that affirmed that ChatGPT serves as a valuable resource for fostering student engagement and developing essential soft skills in a way that enables learners to freely explore various linguistic patterns, sentence constructions, and communication styles in a non-judgmental environment. Additionally, faculty members moderately agreed that ChatGPT helps students save time (M = 3.48) and increases their confidence (M = 3.60). This indicates that learners can save time when accessing information and achieve better learning outcomes [41]. This access can be done individually and leads to boosting both student participation and academic achievement [42]. However, most respondents agreed that ChatGPT is effective as a teaching tool (M = 3.44) and capable of providing meaningful feedback (M = 3.33), indicating that they observe some advantages of this tool. This aligns with Park [43] study showing that ChatGPT's feedback has been fruitful. Notably, most faculty members disagreed (M = 2.94) with the claim that ChatGPT is entirely ineffective, suggesting that outright dismissal of AI's role in education is uncommon. Literature confirms the effectiveness of ChatGPT, as evidenced in most studies [26, 44].

5.3. Discussion of the Third Research Question

The findings of this specific research question revealed significant differences in faculty members' views regarding the use of ChatGPT in students' essay writing based on gender, years of experience, and academic rank, while no significant differences were found based on age.

First, the results indicate a statistically significant difference between male and female faculty members in their awareness and views of ChatGPT ($t = -2.48$, $p = 0.01$). Female faculty members had a higher mean score ($M = 52.33$) compared to their male counterparts ($M = 49.16$), suggesting that female faculty may hold more favorable or cautious views regarding the use of ChatGPT in student writing. This finding is consistent with a study conducted by Nyaaba et al. [45] that observed a significant difference in Generative AI tool usage between genders. However, the findings of Russo et al. [46] study showed notable gender-based variations in AI adoption, with women exhibiting greater AI-related anxiety, less favorable views of AI, reduced usage, and lower self-assessed AI knowledge compared to men. Regarding age, no significant differences were observed among faculty members ($p = 0.32$), indicating that age does not play a major role in shaping perceptions of ChatGPT in academic writing. This result supports recent research conducted by Ibrahim et al. [47], confirming that variables such as age showed little or no impact on educators' decisions when using generative AI. However, years of experience yielded significant differences ($p = 0.009$). This contrasts with studies conducted by Omar et al. [48] and Ibrahim et al. [47], in which the latter highlighted that the factor 'years of experience' showed no significant relationship with generative AI adoption intentions. Furthermore, academic rank significantly influenced faculty perceptions ($p = 0.001$). This aligns with Omar et al. [48] findings indicate that there were no statistically significant differences across all measured opportunities and challenges based on educational qualifications, with one exception: associate professors perceived significantly greater benefits of AI applications in teaching and education compared to other ranks.

6. Conclusion, Recommendation and Limitations

The current study examined university professors' and lecturers' perceptions of ChatGPT for student essay writing, with specific interest in how different demographic factors such as gender, age, academic rank, and experience affect their knowledge and views about the tool. The findings show that faculty members have a moderate to high level of understanding of what ChatGPT can do in terms of language generation and translation. Nonetheless, some misunderstandings still exist, particularly with regard to their distinction from other search engines, which aligns with findings of other researchers [26, 30].

The perception of faculty members regarding the use of ChatGPT in student writing is complex and multifaceted. On the one hand, they appreciate that the tool can assist students in doing their homework and improving their writing skills. On the other hand, they are worried about the risks of the tool in promoting cheating and undermining critical thinking. This is in line with what other authors have stated regarding the academic potential of the tools as well as the ethical problems that they present [37, 38, 41].

The results of the analysis showed that there were differences in the perceptions of faculty members based on their gender, academic rank, and years of teaching experience. The female instructors and those who were less experienced in teaching were more positive, while the senior faculty members, particularly those who were associate professors, were more negative. The research indicates that training on AI and policy development for institutions should be sensitive to the generational and rank differences which have been observed in Nyaaba et al. [45] and Russo et al. [46]. These findings emphasize that the integration of ChatGPT in education cannot follow a one-size-fits-all approach. Demographic differences must be acknowledged in developing inclusive and responsive strategies that reflect the diversity of faculty attitudes.

The current study has some implications for both universities and practice. Educational institutions should conduct workshops that will help in explaining the functions and limitations of ChatGPT and other similar tools. In addition, myths such as the notion that ChatGPT is a search engine need to be debunked to enable both students and faculty members to use it correctly [26, 32]. By including AI literacy and ethics in academic writing courses, concerns of faculty members about the loss of critical thinking and academic dishonesty will be minimized. Educators should help students learn how to critically assess AI-generated content, as pointed out by Castro [40].

More specific steps are needed. Educators should design assignments that combine human input with AI-assisted drafts. Institutions should invest in faculty development programs that provide hands-on AI tools training. Policy makers should work with universities to create clear, enforceable rules for ethical AI usage in coursework, including submission policies and AI-use declarations.

It is important to provide support to senior educators who are not receptive to AI because they are older and higher in rank. This includes mentorship models and collaborative AI policymaking involving all ranks [47, 48]. The guidelines should be clear in order to specify the use of ChatGPT in the coursework and to ensure that the application and evaluation of the work are consistent. The neutrality of faculty responses toward ChatGPT's feedback features ($M = 3.33$) indicates a need for standard frameworks to harness its strengths [42, 43]. Faculty and students should be involved in ongoing discussions and evaluations of the impact of generative AI in the classroom as it evolves. This will help develop a culture of adaptation and reflection rather than acceptance or rejection of AI [44].

Despite the significance of this study in providing insights into faculty perceptions, there are some limitations that should be acknowledged: First, the study was conducted at Saudi Electronic University, which may limit the generalizability to other educational settings, especially those that are not digital or traditional. Second, the use of self-report surveys may result in biased outcomes due to social desirability bias or misinterpretation of Likert scale items.

Although reliability was established ($\alpha = 0.765$), incorporating qualitative interviews could have enriched the interpretation [27]. These limitations affect how broadly the findings can be interpreted. Faculty views at a digitally advanced institution may not represent those in settings with limited access to technology. Social desirability bias might have caused participants to underreport skepticism or overstate acceptance. The lack of qualitative input may have reduced the richness and nuance in interpreting how and why views vary across demographic groups.

The study is cross-sectional and provides only a snapshot of perceptions at a specific point in time. It does not account for how perceptions may change as tools evolve or policies are modified. The research focused on faculty members' perceptions and did not examine how they actually integrate or reject ChatGPT in their teaching practices. Future research should consider classroom observation or action research to explore this behavioral aspect. The small sample size of full professors ($N = 6$) limits the statistical power for that subgroup in comparative analyses. Future studies should employ longitudinal and mixed-method approaches to monitor evolving perceptions and practices, validate findings, and generate deeper educational insights.

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