Navigating the Artificial Intelligence Frontier:
Perceptions of Instructors, Students, and Administrative Staff on the Role of Artificial Intelligence in Education in the Sultanate of Oman

Syerina Syahrin
Department of English Language and Literature, College of Arts and Applied Sciences
Dhofar University, Sultanate of Oman
Corresponding Author: sysyahrin@du.edu.om

Nurul Akmal
Department of Computer Science, College of Arts and Applied Sciences
Dhofar University, Sultanate of Oman

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Abstract
This study examines the perceptions of instructors, students, and administrative staff on the role of ChatGPT in Oman's educational setting. This study is significant as it provides insights into the extent to which Artificial Intelligence is used in education and provides guidance for future plans. Examining the perceptions of the various stakeholders in an education setting in Oman provides valuable information for higher learning institutions that are keen on embracing new technology while keeping to the traditional education values. The study utilized focus group discussions to gather the data from the instructors, students, and administrative staff. The findings revealed that ChatGPT's instrumental role is in refining content, especially among students, administrative staff, and instructors who are non-native English speakers. Administrative staff and instructors highlighted its efficacy in drafting emails, indicating Artificial Intelligence's potential to improve routine cognitive tasks. Students appreciated ChatGPT for explaining complex academic tasks. However, concerns surface from the instructors regarding over-reliance on Artificial Intelligence and potential loss of academic integrity, resonating with previous literature. These findings are contextualized within Oman's unique socio-cultural and educational settings. Given the emergent nature of Artificial Intelligence in Oman's education, the study offers insights that provide a foundation for future research and guide policymaking.

Keywords: artificial intelligence, Omani education, teaching, learning

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Introduction

In the current landscape of academia and industry, there is an emphasis on productivity-driven outcomes, goal attainment, and result-oriented endeavors. A recent MIT study examined the impact of generative Artificial Intelligence (AI), specifically ChatGPT, on work tasks and productivity. The study focused on tasks such as writing cover letters, emails, and cost-benefit analyses, which, while not exact replicas of actual work, were relevant to participants' professional roles. The key findings of the study suggest two critical implications. First, the participants with access to ChatGPT for their tasks completed 40% faster than the control group. Second, the output quality, as evaluated by independent professionals, increased by 18% when ChatGPT was utilized (Winn, 2023).

AI refers to the stimulation of human intelligence in machines that can perform tasks typically requiring human intelligence, such as problem-solving, learning, and decision-making (Wang et al., 2023). According to Sanchez (2023), using AI parallels teachers' sentiments toward calculators in the past. During that era, teachers were concerned that calculators would alter how students understood mathematical concepts. At present, people across various sectors share similar apprehension towards AI. AI has evolved significantly over the years, impacting numerous sectors uniquely. One prominent example of AI innovation is ChatGPT. ChatGPT is a language model developed by OpenAI. It is a state-of-the-art model in natural language understanding and generation. ChatGPT has garnered significant attention for its ability to generate coherent and contextually relevant responses in text-based conversations. It is a valuable tool for various applications, including customer support, content generation, and virtual assistants (Hill-Yardin et al., 2023).

In education, AI has transformed the learning experience through personalized learning platforms and intelligent tutoring systems. AI can analyze student performance data to provide tailored recommendations and to help students grasp concepts more effectively. Additionally, AI-powered chatbots provide instant support and guidance to learners (Wang et al., 2023). While integrating AI promises efficiency and tailored learning experiences, it has also sparked concerns over its potential implications on fundamental academic skills such as research, material selection, content judgment, and writing skills (Alhalangy & AbdAlgane, 2023).

Historically, the Omani educational landscape was characterized by examination-oriented systems, standardized assessments, and traditional pedagogical practices. However, these approaches were increasingly seen as restrictive and inadequate for meeting the demands of a changing labor market (Al-Ani, 2017). In response, there was a national shift towards incorporating twenty-first-century skills and knowledge that students need to be successful in a rapidly changing world. This includes a focus on digital skills. The Education Council (2018) explained that twenty-first-century skills are the "global currency" (p.17) for local and international workplaces. By equipping students with these skills, students in Oman could enhance their readiness for employment across diverse sectors such as technology, business, and communication (Syahrin et al., 2023). The Education Council (2018) described, Oman's movement towards a knowledge-based economy requires reform of the current education system. [It] should consider improving the information technology infrastructure in educational institutions [and] supporting the use of cutting-edge technology, e-learning, capacity building, and infrastructure improvement in schools and higher education. (p.33)

The national policy outlines the role of digitization and technological innovation in revolutionizing the country's economy. In the education sector, the ministry has rolled up digital transformation...
plans, including training teachers with skills and technology (Microsoft News Center, 2020), developing IT infrastructure, and equipping students with digital skills for their future careers (Al-Mashaani, 2022).

According to Ayed (2022), AI has been widely adopted in Oman's corporate sector. However, the integration of AI into higher education is still in its early stages and described that the role of AI in the teaching and learning process is limited. This has led higher education systems in Oman under scrutiny as local newspapers reported that the widening skills gap between tertiary education and employment expectations made it difficult for young Omani job seekers to find suitable roles. In light of Ayed's (2022) findings, which highlighted the limited integration of AI in Oman's higher education, this study aims to address the gap by investigating the perceptions of instructors, students, and administrative staff within a university setting.

As AI, particularly platforms like ChatGPT, becomes increasingly popular in educational settings in Oman, understanding its impact becomes paramount. Students, administrative staff, and instructors serve as the primary stakeholders in this environment. Their perception provides insight into the current state of AI adoption in education and guides future implementation strategies and policies. By studying the extent to which ChatGPT is used and identifying the various stakeholders' concerns, the study aims to contribute to the ongoing dialogue between leveraging technology and preserving the traditional values of education in Oman. The study explores instructors, students, and administrative staff's perceptions of using ChatGPT within a university setting. This study aims to document the complementing and contrasting views on using ChatGPT among instructors, students, and administrative staff. This objective is further broken down into the following:

1. To assess the extent to which ChatGPT is used in educational settings by the participants in their respective roles.
2. To identify the study participants' reservations regarding using ChatGPT in an educational setting.

The research questions for the study are as follows:

1. How do the instructors, students, and administrative staff perceive the extent to which ChatGPT is utilized in their respective roles?
2. What reservations do the instructors, students, and administrative staff have concerning using ChatGPT in an educational setting?
3. How do the perspectives of the instructors, students, and administrative staff on the use of ChatGPT and their reservations complement and contrast with each other?

Literature Review

Artificial Intelligence in Education

Previous studies emphasized the growing impact of AI in transforming educational practices. According to Siemens (2013), AI technologies, which include machine learning and natural language processing, were shown to enhance personalized learning experiences for students. The term AI encompasses attempts to comprehend human intelligence by replicating a cognitive mind within a computer (Ayed, 2022). AI includes efforts to devise technologies capable of performing tasks associated with human intelligence (Broussard, 2018). The development in natural language processing and natural language generation has significantly influenced AI and communication technologies. This paper adopts this as the definition of AI, emphasizing technology designed for specific activities in communication processes previously carried out by humans.
AI's ability to generate content has garnered attention for its potential to increase resources and educational materials. In a study by Thimmanna, Naik, Radhakrishnan, and Sharma (2024), AI-generated content was explored to provide adaptive and personalized learning resources. The research highlighted the potential of AI algorithms in analyzing student performance data and generating content aligned with specific learning objectives. Yu's (2023) research revealed that AI-powered pedagogical tools enhanced the content creation process for educators by facilitating brainstorming, which, in turn, provided a more organized and enriched teaching experience. A similar observation was made by Brown et al. (2020) as the study affirmed the advantages of AI in enhancing content creation for non-native English speakers. Additionally, AI-powered chatbots provide instant support and guidance to learners (Wang et al., 2023). One of the standout capabilities of AI is its proficiency in data analysis. In today's data-driven economy, organizations, such as higher education institutions, produce and gather vast amounts of data. AI-powered tools can sift through these datasets, no matter how large, to extract actionable insights within a fraction of the time it would take humans (Brynjolfsson & McElheran, 2016). This speeds up decision-making, ensures that decisions are rooted in comprehensive analysis, and reduces the risk of errors.

Historically, research was an immersive process that required students to dive deep into libraries, sift through books, and engage critically with multiple sources. With AI-powered search engines and tools, students can access information instantaneously, sometimes bypassing the rigorous processes of traditional research (Warschauer & Matuchniak, 2010). In their seminal work on the Google Effect, Sparrow, Liu, and Wegner (2011) argued that the easy accessibility of information online leads to cognitive offloading, resulting in a reduced inclination to remember information. In the age of information overflow, recognizing sources' credibility and relevance is crucial. However, with AI-driven content recommendation systems, students might find themselves in echo chambers, receiving information that aligns with their existing beliefs and not being exposed to diverse sources (Pariser, 2011). The dependence on algorithmic recommendations can thus hinder the development of a critical eye, thus hindering students' ability to judge the quality and bias of material. AI-powered writing assistants, while invaluable for grammar checks and style suggestions, might inadvertently hinder the organic development of writing skills. When students over-rely on these tools, they risk not internalizing the nuances of language, tone, and style, relying on the machine's judgment rather than refining their innate abilities (Ulla et al., 2023). This could lead to a generation of writers who, while technically correct, lack a unique voice and critical writing skills. However, Alhalangy and AbdAlgane (2023) observed that using AI tools enhanced productivity in writing tasks and provided linguistic clarity, particularly in situations where English is not the primary mode of communication. AlAfnan, Dishari, Jovic, and Lomidze's (2023) research revealed similar findings in which AI-driven tools have the potential to alleviate the cognitive load associated with routine tasks, such as composing emails. Both studies by Alhalangy and AbdAlgane (2023) and AlAfnan, Dishari, Jovic, and Lomidze (2023) echoed the findings presented by a team of researchers at MIT, where the key findings of the study indicated participants with access to ChatGPT completed their routine tasks, such as composing emails, 40% faster than those who did not (Winn, 2023). Nonetheless, concerns were raised about the potential replacement of workplace roles where AI is used to automate routine tasks (Budhwar et al., 2023).
ChatGPT in Educational Settings

The advent of natural language processing models, such as ChatGPT, has opened new ways for interactive and conversational learning. Studies exploring the use of ChatGPT in education settings garnered substantial interest among the research communities globally (Qadir, 2023; Sardana et al., 2023; Arif et al., 2023; Adiguzel et al., 2023). Open AI's ChatGPT demonstrated the potential of language models in producing human-like text (Gao et al., 2023). While initial models focused on shorter text outputs, the advanced models produced longer, more coherent, and contextually relevant content. ChatGPT and its later models brought a new dimension to media technology. The ability of these models to engage in real-time and contextually aware conversations marked a significant shift. The models were no longer passive content generators but could interact, engage, and persuade, bridging the gap between static content and interactive media (Firat, 2023). A study by Ray (2023) investigated the use of ChatGPT in an educational context. The research found that ChatGPT could engage students in meaningful conversations, answering questions and providing explanations. These features contributed to a more interactive and personalized educational experience. ChatGPT appeared to be a transformative factor for students by empowering them to decipher complex academic tasks independently (Mahendra et al., 2023). In other studies, research has found that ChatGPT offers a variety of support for various stakeholders in educational settings, such as answering questions, generating assignments, creating question papers, and designing classroom activities (Khan et al., 2023). ChatGPT also functions as a virtual assistant facilitating information access (Sun & Hoelscher, 2023).

Studies investigating teachers' attitudes toward ChatGPT found mixed results, as Haque et al.'s (2022) research revealed positive sentiments, while Dwivedi et al.'s (2023) revealed negative sentiments. Despite the promising potential, concerns and challenges associated with AI, particularly ChatGPT in education, were highlighted in previous studies. This included issues related to privacy (Wu et al., 2023), information bias, and the need for ethical considerations when implementing AI in educational settings (Nguyen et al., 2023). Studies also found that integrating ChatGPT into education may reduce human interaction and personal connections and impact meaningful discussions and mentorship opportunities (Qadir, 2023). Concerns also arose about the potential diminishment of collaboration and teamwork (Arif et al., 2023), a decline in academic abilities (Shidiq, 2023), and issues of plagiarism and originality (Anders, 2023). Research suggested that overdependence on ChatGPT for instruction may result in an overall decline in the quality of education (Ausat et al., 2023; Chan & Lee, 2023) and a threat to the cultivation of critical and analytical thinking skills (Selwyn, 2019). These concerns must be investigated further as institutions integrate AI technologies like ChatGPT into the learning environment. Identifying these factors may enable policymakers and ChatGPT service providers to collaboratively optimize the benefits of ChatGPT while maintaining the quality of education.

Method

Research Procedures

The study was undertaken at Dhofar University, situated in Dhofar, in the southern region of the Sultanate of Oman. All aspects of the research, including the survey respondents, were intrinsically linked to the institution, establishing Dhofar University as the primary context of the study. The data collection for this study was conducted through focus group discussion. The study adhered to ethical principles, as participation in the focus group discussion was voluntary. All instructors, administrative staff, and students enrolled in preservice teacher education were invited
to respond. The decision to have the participants from Dhofar University was driven by the practical need for accessibility and convenience in conducting the research. By ensuring that the study participants were all from the same university setting, arranging meetings and interactions within the vicinity of the university became more straightforward. This method not only streamlined logistical arrangements but also likely increased the participants’ comfort as they were engaged in a study with someone familiar to them. Ethical safeguards were included in the invitation to participate in the study regarding the purpose of the study and a commitment to disseminate the results in a manner that respects the participants’ confidentiality. The semi-structured questions used during the focus-group discussion were formed and referenced with established studies in AI and ChatGPT in education. Prompts and follow-up questions were used during the meeting to obtain more precise responses and depth of understanding of the participant’s responses.

Participants
The study comprised a total of fifteen participants. The data was gathered from the Spring 2022/23 academic year participants. Within each category, instructors, students, and administrative staff from Dhofar University were represented by five individuals. The sampling method was convenient, as described in the Research Procedures section. Invitations to participate in the research were sent to all potential participants, namely instructors, administrative staff, and students enrolled in preservice teacher education. The participants who provided explicit consent were recruited in the focus group discussion. The participants were grouped according to their respective roles to ensure participants would be at ease discussing within a familiar group.

Research Instrument
The chosen research instrument was the focus group discussion. Three distinct groups were formed: one composed of students, another of instructors, and the third of the administrative staff. Each focus group was designed to ensure open dialogue and free expression of ideas among its members. We meticulously documented each response in writing to safeguard the integrity of participants’ responses and ensure their confidentiality. Voice recordings were also utilized to capture any nuances that might have been overlooked during written documentation. This choice was deliberate, allowing participants to express themselves without apprehension about the potential compromise of their anonymity. The discussions were guided by open-ended questions, with facilitators probing for detailed insights when necessary. The separation of the groups was intentional to foster an environment where participants felt comfortable sharing candid perspectives, free from potential biases or influence from other groups. One of the fundamental advantages of the focus group methodology is the dynamic interplay of ideas among participants, enabling a richer understanding of shared and divergent viewpoints (Kuhn, 2000). Each discussion was allocated a one-hour time frame.

Data Analysis
The data underwent an inductive-interpretive analysis, allowing the researchers to navigate the intricate and complex information provided by the participants. Through this approach, emergent themes, categories, and codes were systematically identified. The information gathered from the focus-group discussion yielded qualitative data, with overarching domains being reasoned from the initial research questions. Several of the participants communicated using a mix
of Arabic and English. For clarity and consistency, these expressions were translated into English. Grammar mistakes in the responses were adjusted. Minor disfluencies like, “um” and “ah” and repetitions were eliminated. To enhance readability, certain non-essential segments of the conversations were omitted. This is especially important in a focus-group methodology where the discussion deviated off-topic, and the participants spoke simultaneously. Only utterances pertinent to the focus of the study were retained in the final presentation.

Findings

The results of this investigation will be methodically presented subsequently:
1. Document the findings related to the participants' uses of ChatGPT based on their specific roles within the institution.
2. Analyzing the complementing and contrasting views expressed by the participants concerning how ChatGPT is used.
3. Document the findings related to the concerns and reservations expressed by the participants.
4. Analyzing the complementing and contrasting views expressed by the participants on those concerns.

The findings revealed that the instructors predominantly use ChatGPT for brainstorming purposes, mainly when curating topics for students' assignments or formulating subjects for debates. Notably, instructors who identify as ESL (English as a Second Language) or EFL (English as a Foreign Language) users have an additional application for ChatGPT. They often resort to this tool to assist them in crafting research papers in English, ensuring linguistic accuracy and enhancing the overall quality of their written work. Below are excerpts taken from the focus-group discussion:

I: English is not my first language, and while I am proficient, writing research papers can be daunting. I consulted ChatGPT for help refining my language, and it not only corrected my grammar but also offered suggestions to enhance my argument's clarity.
I2: I often struggle with thinking of fresh topics for assignments, so I turn to ChatGPT
I3: I once used it to suggest a current and controversial topic that can engage my students
I4: ChatGPT offered fresh topics for assignments.

* Instructor (I).

The study's findings further revealed that several instructors leverage ChatGPT to draft emails. This utilization is primarily motivated by its efficiency, significantly reducing the time traditionally used on email composition. Such a practice not only streamlines their communication process but also enhances the effectiveness of their interactions, allowing them to allocate more time to their core teaching responsibilities. The university's administrative staff reiterated parallel sentiments. They disclosed their reliance on ChatGPT for the drafting of emails. Given that email correspondence constitutes a repeated component of their daily responsibilities, the integration of ChatGPT has proven invaluable. It facilitates a more efficient email drafting process and allows them to allocate attention to other crucial tasks, consequently amplifying their overall productivity. A particularly relevant advantage highlighted was ChatGPT's capacity to mitigate potential conflicts or misunderstandings in communication. For many of these administrative individuals, English does not serve as their primary language and is rarely employed in their routine dialogues. Their written communication often holds a somewhat rigid or textbook quality. In contrast, ChatGPT provides a more fluid and natural linguistic output, closely resembling colloquial
English, thereby enhancing the clarity and reliability of their interactions. Below are excerpts taken from the focus-group discussion:

A1: Writing and replying to emails are part of our daily operations. Using ChatGPT is not just about saving time, but it is also about ensuring the content is well-structured and clear.

A2: For many of us, communicating in English is a problem. We struggle with sounding natural in our written communication.

A3: There’s a noticeable reduction in misunderstandings or the need for clarification in our email exchanges.

A4: It allows us to focus on other important tasks

*Administrative Staff (A)*.

Within the administrative setting of the university, ChatGPT has been seamlessly integrated as a vital tool for documentation processes. The study revealed that administrative staff leverages its capabilities to draft, edit, and refine many documents, from official correspondence and memos to more intricate reports and policy documents. This adoption stems from the efficiency and time-saving potential ChatGPT offers and its ability to produce precise, coherent, and professionally articulated content. Especially for staff members for whom English might not be the primary language, ChatGPT serves as an indispensable linguistic aid, ensuring that documentation aligns with the high linguistic and professional standards expected within an academic institution. The study shed light on how students have incorporated ChatGPT into their academic activities. A prominent finding was the tool’s utility to assist homework and assignments. Students frequently sought guidance from ChatGPT as a resource to navigate complex problems or to refine and elevate the quality of their written outputs. This was especially beneficial for those who struggled with the intricacies of academic writing or needed assistance in synthesizing information coherently. Furthermore, the study explained an interesting dynamic concerning the student-supervisor relationship in the research context. When tasked with initiating research projects, the students felt lost, often receiving broad directives from supervisors to “read more” without specific guidance on direction or topic selection. In these instances, ChatGPT emerged as a valuable ally. Students leveraged the tool to brainstorm potential research directions, refine their topics, and gain preliminary insights into areas they could explore further. This reinforced their research foundations and instilled a greater sense of confidence and autonomy in their academic attempts. Below are excerpts taken from the focus-group discussion:

S1: I’ve been using ChatGPT quite frequently for my assignments to be honest with you. It’s not like I’m trying to skip work, but it helps me understand and process the information better. Especially when I’m working on my essays, it’s been a fantastic writing aid.

S2: In terms of research, it’s been a lifesaver. My research supervisor often suggests that I read more when I ask for help. I don’t know where to start. With ChatGPT, I can brainstorm potential topics and get a clearer perspective

S3: Academic writing is not easy. Sometimes when I’m not sure about how to phrase an argument or present a thought, I ask ChatGPT.

*Student (S)*.

The university's administrative staff and students find common ground in their use of ChatGPT, which they rely on to summarize complex information and improve their English language skills. Across the board, instructors, administrative staff, and students, a shared use of ChatGPT emerged from the responses. All emphasized how ChatGPT aids writing with greater
clarity. Whether it is a research paper, an email, an assignment, or regular homework, ChatGPT consistently helps produce more precise and concise written content. These findings are illustrated in the chart below.

![Diagram showing complementing and contrasting views on the use of ChatGPT](image)

**Figure 1.** Complementing and contrasting views on the use of ChatGPT

The rapid integration of artificial intelligence tools like ChatGPT into academic environments has yielded a range of reactions from educators. A noticeable finding from the study reveals instructors’ apprehension about the potential pitfalls associated with such technology. Primary among these concerns is the fear of over-reliance on the tool. Instructors worry that the convenience offered by ChatGPT might lead students to bypass traditional learning pathways, relying excessively on the software for answers and insights. This could result in a significant knowledge gap, with students failing to engage deeply with the subject material and instead seeking quick, AI-generated responses. Such a trend, the instructors argue, might detrimentally affect the holistic development of critical thinking and analytical skills, which are fundamental to academic learning. Furthermore, the instructors expressed deep concern about losing essential academic skills. If students increasingly turn to ChatGPT for research, brainstorming, or even drafting tasks, they may neglect the cultivation of these foundational abilities, making them less adept over time. Beyond these skills-related apprehensions, there is an ethical dimension that alarms educators, which is academic integrity. The ease with which ChatGPT can generate content raises the possibility of plagiarism. Even if the content is not directly copied, the reliance on AI tools could be apparent along the lines of originality, potentially undermining the very ethos of academic scholarship. Instructors are faced with the challenging task of navigating AI tools while safeguarding the principles of rigorous, authentic education.

I1: While I see the merits of tools like ChatGPT, I can’t help but be weary. I fear that students will no longer experience the traditional learning methods, which I think is important and useful to them, which is to go through the course material instead of turning to the software for quick answers.
I2: Too much reliance on the tool. I worry about the potential gaps in the students’ understanding. We want to foster critical thinking and deep engagement with the course content and course materials, but with these tools, they will just skim the surface.
I3: My concern isn’t just the knowledge retention. I think the pervasive use of ChatGPT might erode some essential academic skills. We used to spend hours discussing, drafting, and researching … it is the foundation of academic growth.
I4: Beyond the skills, there’s another glaring issue… academic integrity. With ChatGPT I’ve seen papers that feel… too polished if you know what I mean.
I5: Even if they don’t directly plagiarize, constantly generating content via AI blurs the boundaries of originality. We’re in academia; original thoughts and integrity are our cornerstones. I fear we might be diluting that with such ready-made solutions.

Administrative staff from the university who participated in the study voiced notable concerns regarding the potential for ChatGPT to compromise personal data. Central to their apprehension was the integrity of privacy measures, fearing that sensitive information could accidentally become accessible or be misused. They emphasized the nature of some of their communications, which occasionally involve personal details of students or staff, and the possible risks associated with entrusting such data to an AI tool. Similarly, instructors echoed these sentiments, bringing the spotlight to data security. Their reservations stemmed from the potential vulnerability of academic content, research data, and intellectual property. Several staff members vocalized the anxiety that AI continues to evolve and regime its capabilities; these technologies might reduce or entirely replace the essence of their jobs. They noted that while AI can optimize specific tasks and bring out efficiency, it also inadvertently casts a shadow on the relevance of their roles in the evolving educational landscape.

A1: When I first started here, my work required a very human touch, understanding nuances, liaising with departments, writing and drafting communications, but now with tools like ChatGPT, I wonder if my role as we know it will even exist in 10 years
A3: As much as I appreciate how tools like ChatGPT simplify our tasks, I’m genuinely worried about the future. I mean, if it can draft emails, schedule tasks, and even handle documentations, what’s stopping it from replacing roles like mine in a few years.

The students who participated in the study expressed their dissatisfaction with being labeled as lazy when they use ChatGPT to assist with their assignments, despite instructors themselves relying on tools like Google search engines, proofreading tools like Grammarly, predictive text in Microsoft Word, or even hiring proofreaders in the past, all of which are deemed acceptable in academia. The contrast with the perception towards AI highlights a potential double standard. Students participating in the study also conveyed specific reservations about utilizing ChatGPT for their academic needs. A prominent concern centered on the potential for miscommunication. They pointed out instances where their intended message or query was not accurately captured by ChatGPT, leading to responses that could deviate from their original intent. This inconsistency raised apprehensions about relying on the tool for critical academic tasks, as any disparity between their intended communication and the output generated by ChatGPT could lead to significant misunderstanding.
S1: In a group project, a team member used ChatGPT for some of our presentations. During the actual presentation, we realized that some of the content wasn’t in line with what we had intended to convey. It was quite embarrassing.

S2: I rely on ChatGPT for quick clarifications, but there’ve been a few times where it misunderstood my question entirely. It’s concerning especially if I don’t double-check.

S3: I once used ChatGPT for a class assignment, and even though I was clear with what I wanted to say, the output from ChatGPT was a bit off from my intended message. I used it to proofread my paragraphs. I didn’t notice until after I’d submitted.

The instructors confirmed some of the apprehension expressed by the students, particularly around the potential for ChatGPT to inadvertently foster miscommunication; a relevant concern was the accuracy and reliability of the summaries generated by ChatGPT. One instructor recounted an instance where the tool failed to provide an accurate summary of a paper they had written, leading them to question the broader implications. “How many papers have been misinterpreted, inaccurately summarized, or even manipulated by such tools?” The complementing and contrasting views the participants have towards their reservations about using ChatGPT are presented in the figure below:

**Figure 2.** Complementing and contrasting views on the reservations towards ChatGPT

In sum, the instructors reported using ChatGPT predominantly for brainstorming and creating topics for assignments and debates, improving the quality of their written work, such as their research papers, and leveraging ChatGPT to draft emails. The administrative staff relied on ChatGPT for email drafting, which improved their overall productivity. They also reported using ChatGPT for other documentation processes, such as official correspondence, reports, and policy documents. The tool’s capacity to provide clear and professionally articulated content is particularly beneficial for instructors and administrative staff for whom English may not be their primary language. The students extensively used ChatGPT as an aid for homework and assignments and sought guidance for navigating complex problems and refining the quality of their
written work. Like the instructors, the students reported using ChatGPT to brainstorm potential research directions and refine topics. Across all groups, a frequent use of ChatGPT is to summarize complex information and aid in writing for greater clarity. The instructors expressed concerns about over-reliance on ChatGPT, which may lead to bypassing traditional pathways and result in a knowledge gap and a lack of critical thinking skills. The administrative staff expressed concerns about the potential compromise of data and feared a reduction or replacement of their roles in the educational landscape. The students’ reservations were about the accuracy and reliability of summaries generated by ChatGPT. The students expressed dissatisfaction with being labeled lazy when using ChatGPT and highlighted a potential double standard compared to instructors using other tools. All three groups had no complementing views regarding their reservations towards ChatGPT.

Discussion

The recent surge in the integration of AI within educational settings has prompted a discourse centered around its utility, implications, and user perceptions. ChatGPT, a sophisticated AI tool, and its role within universities are at the heart of this discourse. This research embarked on the journey to determine the complementing and contrasting views of different stakeholders, namely instructors, students, and administrative staff, on using ChatGPT within a university setting. In the context of instructors, it is evident that ChatGPT plays a vital role, especially in brainstorming and curating academic content. This resonates with the findings of Yu (2023), who suggested that modern pedagogical tools, especially AI-driven, facilitate a more structured and enriched content-creation process for educators. The specific utility of ChatGPT by ESL and EFL instructors in refining their research papers further aligns with Alhalangy and AbdAlgane (2023), who highlighted the significant advantages of AI in aiding non-native speakers in achieving linguistic accuracy and enhancing academic writing.

Another significant observation pertains to using ChatGPT in email drafting, a practice predominantly favored by instructors and the administrative staff. The emphasis on its efficiency in email composition echoes the findings of AlAfnan, Dishari, Jovic, and Lomidze (2023), who noted that AI-driven tools tend to reduce the cognitive load of routine tasks, allowing professionals to channel their efforts towards core responsibilities. The administrative staff’s reliance on ChatGPT for drafting emails and documents signifies the paradigm shift in administrative operations. As posited by Alhalangy and AbdAlgane (2023), using AI tools not only boosts productivity but also ensures linguistic clarity, especially when English is not the primary mode of communication. Students’ perceptions of ChatGPT offer a multidimensional view. The tool’s utility in assignments and research parallels Mahendra, Nurkamilah, and Sari (2023), who posited that ICT tools enable students to interpret complex academic tasks with more autonomy. This sense of autonomy, coupled with the linguistic clarification offered by ChatGPT, seems to be a game-changer for many students, particularly when navigating the nuances of academic writing, a challenge often highlighted in tertiary education literature.

The rapid adoption of AI tools, particularly ChatGPT, in academic environments, has evoked diverse reactions from educators. An evident finding from our study aligns with the concerns raised by Chan and Lee (2023), who highlighted the risk of over-reliance on AI tools. The instructors in this study voiced similar apprehension, fearing that ChatGPT convenience could encourage students to sidestep traditional learning methods. This echoes the prediction of Selwyn (2019), who claimed that excessive reliance on AI could lead to superficial engagement with
academic material, jeopardizing the development of critical thinking and analytical skills. Moreover, instructors are concerned about a potential decline in core academic abilities. Shidiq (2023) fears that AI tools diminish students’ research and writing skills. Thus, this study corroborates such sentiments. Further complicating matters is the issue of academic integrity. The ease of content generation through ChatGPT has raised alarms about plagiarism and originality, a concern similarly highlighted by Anders (2023). Administrative staff and instructors both vocalized concerns about data security and privacy, aligning with the findings of Wu, Duan, and Ni (2023). The potential vulnerability of academic content and personal data remains a pressing issue in AI. Meanwhile, the staff’s anxieties about AI tools replacing their roles were reflected in Budhwar et al. (2023) study that discussed the potential of AI in automating tasks and its broader societal implications.

The findings presented in this paper are relevant as they contribute to the ongoing discussion on AI in education by presenting a nuanced understanding of its uses and reservations from various stakeholder perspectives. The study considered the perspectives of instructors, students, and administrative staff within a university setting. ChatGPT was instrumental for instructors in content creation, which aligned with existing literature that emphasized the benefits of AI-driven tools in structuring enriching educational materials. Administrative staff relied on ChatGPT for routine tasks such as email drafting, which signaled a significant shift in administrative operations. This finding corroborated previous studies on increased productivity, efficiency, and linguistic clarity. Students perceived ChatGPT as an invaluable tool in assignments and research, and it empowered them with more autonomy in interpreting complex tasks. However, the study also reveals concerns among instructors about potential over-reliance on AI, its impact on critical and analytical thinking skills, the decline in academic abilities, and concerns about plagiarism and academic integrity. Both the administrative staff and instructors expressed the theme of data security and privacy concerns. This theme is aligned with the broader societal issue of safeguarding academic content and personal data in the AI era.

Conclusion

The paper is focused on investigating the perspectives of instructors, students, and administrative staff within a university setting regarding using ChatGPT within their respective roles. The primary objective is to document both the complementing and contrasting views on the extent to which ChatGPT is used and the reservations the participants have concerning the integration of ChatGPT in an educational setting.

A clear tendency among instructors is the instrumental role ChatGPT plays in brainstorming and curating academic content. The research findings, particularly with ESL and EFL instructors, reinforce the assertions presented in previous studies. Similarly, the trends of faculty and administrative staff utilizing ChatGPT for drafting emails speak to its efficiency, corroborating previous literature that provided insights on AI’s potential to reduce routine cognitive loads. Notably, students find ChatGPT invaluable in interpreting complex academic tasks, reinforcing previous studies’ stances on AI’s role in fostering student autonomy. However, with the positive comes apprehension. As indicated by previous investigations, concerns about the potential for an over-reliance on AI resonate with the views of our study’s instructors. Earlier studies on AI-driven tools predicted the drawbacks of an over-dependence on AI for academic engagement; a sentiment echoed in this research. Further concerns regarding academic integrity, the potential degradation of research skills, and data security issues were articulated. In all
participant groups, ChatGPT is used to summarize complex information and improve clarity in writing. However, there were no shared perspectives among the three groups regarding their reservations about ChatGPT.

With its rich cultural heritage and distinctive educational setting, Oman presents a unique situation for exploring AI’s integration into academia. The ways AI tools are perceived and implied in educational institutions could differ from global trends, informed by its unique socio-cultural and pedagogical dynamics. Thus, understanding the perspectives of key stakeholders, namely students, instructors, and administrative staff within a university setting, as presented in this paper, becomes essential for guiding AI’s integration in Oman’s academic realm. Furthermore, the study can encourage policymakers, academic institutions, and technology developers in the region, ensuring that as Oman ventures into the AI-augmented educational future, it does so with informed forethought, maximizing benefits while mitigating potential drawbacks.

An avenue for future research is to investigate the long-term impact of ChatGPT integration in Oman academic institutions. A longitudinal study could assess how the utilization of ChatGPT evolves among instructors, students, and administrative staff. Understanding the evolving practices would ensure a well-informed approach to the ongoing integration of AI in education while tailoring the strategies to Oman’s unique socio-cultural and pedagogical dynamics.

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About the Authors
Dr. Syerina Syahrin received her doctorate degree from Victoria University of Wellington, New Zealand. She was the recipient of Victoria Award of Research Excellence and Erasmus+. Syerina has taught students in Malaysia, New Zealand, Thailand, Nepal, the US and is currently a faculty member at the Department of English Language and Literature, Dhofar University, Sultanate of Oman. Syerina’s primary research interests are in inclusive pedagogy, especially for culturally diverse students, and exploring best practices for the integration of technology in the classroom. https://orcid.org/0000-0002-9214-759X

Dr. Nurul Akhmal Mohd Zulkefli is an assistant professor at the Department of Computer Science, College of Arts & Applied Sciences, Dhofar University, Oman. She received her PhD in Information Technology (Expert Decision System) from Universiti Teknologi PETRONAS, Malaysia; a Master in Computer and Information Engineering from INHA University, South Korea; and a Bachelor of Computer Science in Software Engineering from Universiti Putra
Malaysia. Her research interests are in expert decision systems, knowledge management systems, IT education, and software engineering. Email: nzulkefli@du.edu.om
https://orcid.org/0000-0002-1444-0600

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