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The role of ChatGPT in language education: A study of Omani students' perspectives

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ChatGPT; generative AI; language learning tool; student perceptions

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Abstract

This study explores students' perceptions of ChatGPT as a language learning tool in a higher education institution in Oman. Utilizing a questionnaire designed by the researchers, quantitative and qualitative data were gathered from 235 students to understand their viewpoints on this AI-driven platform. The analysis reveals generally positive perceptions towards ChatGPT. The respondents appreciated its ability to enhance English language learning experiences by assisting them in writing, aiding in vocabulary expansion, and offering immediate feedback. Students also valued ChatGPT's accessibility and its utility in translating languages and facilitating comprehension of complex topics. However, the study also identified limitations, such as ChatGPT's occasional inaccuracies and its tendency to foster overreliance among students. Concerns were also raised about the authenticity of the content generated by ChatGPT and its impact on academic integrity. Despite these challenges, the findings highlight ChatGPT's potential as a supplementary educational tool in language learning. This research contributes to the ongoing discussion about integrating generative AI into educational settings by providing a detailed understanding of students' viewpoints. These insights can help educators make informed decisions about the deployment of ChatGPT, ensuring it is used effectively to enhance learning while addressing potential challenges.

1. Introduction

Launched by OpenAI in late 2022, Chat Generative Pre-Trained Transformer (ChatGPT) marked a pivotal moment in the landscape of education. Recognized globally for its sophisticated natural language processing (NLP) capabilities, ChatGPT has been praised for its ability to generate responses that are not only coherent and informative but also tailored to individual learning needs (Firat, 2023). This AI-driven platform, quickly gaining attention among educators and language experts globally, elicited a wide range of reactions from the educational community. Some educators have embraced ChatGPT, leveraging its unique potential in their teaching strategies. Others, however, have proceeded cautiously due to ethical dilemmas and concerns about the technology's disruptive impacts in academia, particularly regarding its credibility, acceptability, and relevance (Grant & Mets, 2022; Patel & Lam, 2023). Amidst this mixture of reactions, from excitement to apprehension and confusion, one thing became clear: ChatGPT has unlocked new paths for student learning and interaction with information, fundamentally altering traditional paradigms of learning (Firat, 2023).

Acknowledging the transformative impact of ChatGPT on teaching and learning necessitates a closer examination of student perceptions of this novel technology. Scholars, academicians and researchers in the realm of language learning and teaching have extensively expressed their positions on this new possibility (Bonsu and Baffour-Koduah, 2023; Firat, 2023; Thuy, 2023; Tlili et al., 2023). However, given the traction of this new technology, there remains a scarcity of studies examining students' perceptions and their intention to use ChatGPT (Bonsu & Baffour-Koduah, 2023). Hence, it is prudent to focus on eliciting and examining the perspectives of students, the primary stakeholders in learning, on ChatGPT. This study seeks to explore how students in a higher education institution in Oman perceive ChatGPT, aiming to understand the various ways they interpret and interact with this tool. Through this lens, the study endeavors to contribute to the ongoing discourse on integrating generative AI in educational settings with a rather neglected focus, the students' perspectives on this new technology.

2. Literature review

2.1 ChatGPT, a large language model

The forefront of technological advancements in 2023 is marked by the emergence of ChatGPT. This groundbreaking AI technology has quickly gained prominence, surpassing its digital counterparts (Bin Hady et al., 2023). ChatGPT is a cutting-edge language model designed to generate text that closely resembles human-generated content. It also has the capacity to engage in human-like conversations (Rudolph et al., 2023). The capabilities of ChatGPT are expected to broaden as it gathers new data from interactions with its users (van Dis et al., 2023).

Early adopters in academia highlight several key advantages brought forth by ChatGPT, including its ability to facilitate dynamic conversations, offer immediate feedback, and support a learning environment that fosters creativity and productivity (Cai, 2023; Liu, 2023; Rudolph et al., 2023). These insights provide a glimpse into the multifaceted benefits ChatGPT introduces to educational settings, emphasizing the chatbot's role in promoting a more engaged and personalized learning experience.

In *Strengths, Weaknesses, Opportunities, and Threats of Using ChatGPT in Scientific Research*, Giray et al. (2024) illuminate ChatGPT's transformative potential within the educational sphere, particularly noting its vast knowledge base and personalized learning facilitation as key strengths. ChatGPT's ability to tailor educational content and provide interactive assistance offers a significant leap towards more adaptive and individualized learning experiences. However, alongside these strengths, the authors also caution against the model's potential to fabricate information. This dual aspect underscores the importance of integrating ChatGPT with a mindful approach, leveraging its educational benefits while employing critical evaluation to navigate and mitigate the challenges posed by its fabrication tendencies.

In a qualitative case study, Tlili et al. (2023) also explored ChatGPT's ethical, pedagogical, and social implications in education. While the study confirms a broadly optimistic view of ChatGPT's impact on education, it simultaneously underscores a growing consensus on the necessity of cautious and conscientious deployment. This perspective emphasizes the importance of a balanced approach to utilizing ChatGPT, advocating for its potential to innovate while remaining vigilant to its inherent challenges and calling for the need for the responsible integration of ChatGPT in education.

2.2 Students' perspectives on the use of ChatGPT

As the discussion surrounding the use of generative AI in academia gains momentum and to understand the impact of generative AI on education, there seems to be a need for educators to gain insights into students' perceptions and experiences of this tool. Study.com, an online study and test preparation platform, surveyed over 1,000 students over the age of 18 years in January 2023 to explore their opinions about ChatGPT. However, the study has not provided specific information regarding the context in which it was conducted or the course level of students involved. The results revealed that opinions showed a significant variation depending on the respondents. According to the survey, more than 89% of students actively used ChatGPT as a valuable resource to assist them with homework assignments. Additionally, it was reported that around 48% admitted to employing the chatbot during at-home tests and quizzes. The results indicated that 53% of students used the chatbot to generate essays, and 22% reported the use of the chatbot for outline formulation. Interestingly, despite its widespread use, 72% of college students believed that ChatGPT should be banned. Study.com believes that these students may have been influenced by their instructors' perspectives towards this chatbot ("Productive Teaching Tool or Innovative Cheating?," n.d.). Additionally, another study on engineering students' perceptions of ChatGPT suggested that students held a positive view of this tool, admiring its capabilities, user-friendliness, and human-like interface that generates well-structured responses with clear explanation (Shoufan, 2023). The students participating in the study were senior students taking a course on embedded systems in a computer engineering program. These studies emphasize the varied perspectives on ChatGPT among students. While students recognize its capabilities, the instructors' viewpoints and ethical concerns surrounding ChatGPT appear to be influencing factors.

Bonsu and Baffour-Koduah (2023) conducted research on 107 Ghanaian students to investigate their perceptions and intentions regarding the use of ChatGPT in higher education. The study utilized Davis's 1989 Technology Acceptance Model (TAM) as a theoretical framework. The model utilizes users' behavioral intentions to predict their likelihood of accepting and using a specific technology. TAM was utilized to predict the acceptance of information technology systems like ChatGPT, and identify potential challenges associated with their usage. TAM proposes that a person's attitude towards using a technology is influenced by their perceived usefulness (PU) and perceived ease of use (PEOU) of that technology. In this case, the researchers combined PU and PEOU as "perceptions" that shape the students' "intention to use" ChatGPT. The study sought to

understand the students' perspectives on the usefulness and ease of use of ChatGPT, and how these factors influence their intentions to utilize this technology. The analysis, guided by two hypotheses and a mixed-method approach, revealed no statistically significant relationship between the students' perceptions and their intention to use ChatGPT. However, the study reported that the students had generally positive perceptions towards ChatGPT and advocated for the adoption of ChatGPT in educational contexts. This study further underscores the diverse viewpoints on ChatGPT and emphasized students' positive attitudes towards the technology.

ChatGPT is also known to have the potential to transform language learning and assessment (Liu & Ma, 2023). In a quantitative cross-sectional study, ChatGPT's use was explored among 405 English as a Foreign Language (EFL) learners, using Davis's (1989) Technology Acceptance Model (TAM) to assess how ChatGPT is perceived and utilized in informal English learning. The results of the study indicated that positive attitudes towards ChatGPT's usefulness correlates with a stronger intention to use it, which significantly predicts actual use in informal English learning. In another study, Ali et al. (2023) examined the influence of ChatGPT on motivation in EFL learners and teachers in Saudi Arabia. The results indicated that ChatGPT enhanced student motivation for reading and writing skills but had a neutral impact on their listening and speaking skills. These studies were significant in their findings as they reported positive effects of using ChatGPT. It is worth noting that this finding may be impacted by ChatGPT 4o, which offers additional audio and voice capabilities, potentially impacting the outcomes of students' perceptions of ChatGPT on listening and speaking skills.

Thuy's (2023) study on 200 Vietnamese university students' perceptions of ChatGPT in education found a generally positive attitude towards the AI tool. Students valued ChatGPT's ease of use, search engine-like functionality, multilingual support, and its effectiveness as a study aid, highlighting its role in facilitating efficient learning and information retrieval. Despite appreciating these advantages, students also noted ChatGPT's drawbacks, including challenges in verifying information and handling complex content, leading to potential inaccuracies. To address these issues and ensure ChatGPT's ethical application in educational environments, students recommended verifying its outputs against trusted sources, utilizing it as an adjunct tool, and establishing usage guidelines to uphold academic integrity.

In another study on the students' perceptions of ChatGPT as a language learning tool, Rahim et al. (2023) revealed a positive perception among Universiti Teknologi MARA (UiTM) students towards using ChatGPT. According to the findings, the majority of students believed that interacting with ChatGPT could significantly enhance their writing skills and made the process of learning English more engaging. They valued ChatGPT for its ability to provide personalized feedback, suggested new vocabulary, and corrected grammatical errors, which contributed to improving their writing proficiency. Furthermore, students appreciated the interactive and personalized learning experience offered by ChatGPT, finding it to be a fun and engaging way to improve their language skills through real-life scenarios.

3. Rationale and significance of the study

In the context of Oman, where English serves as the primary medium of instruction in colleges and universities, the significance of students' perspectives on ChatGPT as a language learning tool cannot be overstated. For Arabic-speaking students in Oman, English proficiency is often a critical factor in their academic success and future career prospects. Understanding how students in this specific linguistic and educational context perceive and utilize ChatGPT is essential for tailoring effective language learning strategies and resources. This study contributes to the limited body of literature concerning the perceptions of university students towards ChatGPT, a relatively novel phenomenon. These insights can help educators in Oman adapt and leverage ChatGPT to enhance English language learning experiences while addressing the unique challenges and opportunities presented by this innovative technology.

The main aim of the study was to examine the potential benefits, challenges and limitations of ChatGPT for language learning from the perspectives of students. At the time of conducting this study, versions 3.5 and 4 of ChatGPT were available. Based on considerations of accessibility and the availability of a free version, it was presumed that the participants predominantly utilized ChatGPT 3.5 for their interactions and engagements with the platform.

The following are the research questions that guided this study:

1. How do students perceive ChatGPT as a language learning tool in terms of effectiveness and usefulness?

2. What opportunities does ChatGPT as a language learning tool provide for language learning from the students' viewpoints?
3. What are the limitations of ChatGPT as a language learning tool from the students' viewpoints?

4. Methodology

4.1 Context of the study

This research was carried out at the Centre for Preparatory Studies (CPS) in Sultan Qaboos University, the largest university in Oman. The CPS plays a key role in equipping students for their university experience through offering Foundation Program (FP) and credit courses. These FP courses encompass essential subjects such as English language proficiency, mathematics, and information technology, in addition to a study and life skills course. Furthermore, the CPS offers credit courses in English for Specific Purposes (ESP) across a range of sciences- and humanities-related disciplines, thereby assisting students in their pursuit of undergraduate studies.

4.2 Participants

To collect data, a questionnaire was designed by the researcher and sent out to all students studying at the CPS with the aim of getting as many responses as possible to gain a comprehensive understanding of students' perceptions. The questionnaire was emailed to students via their teachers to ensure wide distribution and participation. The respondents comprised 235 undergraduate students from various majors, enrolled in either FP or credit ESP English courses at Sultan Qaboos University in Muscat, Oman. Their ages ranged from 18 to 22 years. The majority of participants were Omani students whose English proficiency levels spanned from elementary to upper-intermediate. The researchers assumed that the digital skills of the participants ranged from intermediate to upper-intermediate levels, as many of them had to take a course in basic computing skills along with their English course or had already passed the course. This detail was not asked in the questionnaire, as the researchers believed using ChatGPT did not require advanced digital skills.

Prior to their involvement, all the participants were informed that the purpose of the questionnaire was to explore their viewpoints about the use of ChatGPT for language learning and to examine the potential benefits, challenges and limitations of this tool for language learning.

4.3 Data collection

An online survey, which comprised 20 questions of various types—including selected-response and open-ended questions—was utilized to collect both quantitative and qualitative data. This allowed participants to provide detailed explanations of their views. To ensure students would easily understand the questions, Arabic translations were also provided alongside the original text. Additionally, students who had no experience with ChatGPT were not able to access the remaining questions in the questionnaire, ensuring that only users could provide informed responses. This selective access added to the reliability of the study by ensuring that the data collected were based on actual user experience. The major themes of the questionnaire focused on participants' awareness and usage of ChatGPT, the accessibility and frequency of its use, perceived effectiveness in enhancing language skills, specific purposes for employing ChatGPT, satisfaction with the responses provided by ChatGPT, and the overall advantages and disadvantages of using ChatGPT for language learning.

This questionnaire was designed by the researchers to delve into the participants' thoughts regarding ChatGPT and its application in language learning. Feedback on the questionnaire was sought from two colleagues who possessed extensive experience with ChatGPT, aiming to ensure the quality of the questions. Their insights were invaluable in refining the questionnaire, ensuring that it effectively captured the necessary information while adhering to high standards of clarity and relevance. The questionnaire was administered among students enrolled in the FP and credit-bearing English courses. A total of 235 responses were collected.

It is worth noting that the questionnaire and research design were evaluated by the CPS Research Committee to ensure ethical integrity and quality purposes, including the reliability and validity of the data collection process. An information sheet explaining the purpose of the study and participants' rights, including voluntary participation and their right to withdraw from the study at any time without explanation, was shared along with the questionnaire. Additionally, the process was designed to respect the privacy of the participants: student IDs were not collected, and the questionnaire was conducted anonymously.

4.4 Data analysis

The collected data were analyzed using descriptive statistics to provide a comprehensive summary of participants' responses. This approach enabled the identification of

underlying patterns and trends within the dataset. For this purpose, frequency analysis was employed to understand the distribution and occurrence of specific responses, providing valuable insights into prevailing trends and viewpoints. Additionally, thematic analysis was utilized to systematically identify, organize, and offer insights into recurring themes within the qualitative data derived from open-ended questions. This method helped in capturing the depth and complexity of participants' perspectives.

5. Results

In the conducted study, 235 individuals participated by completing the questionnaire. Initial screening questions were posed to ascertain eligibility for inclusion in the study's results. Participants were queried on their awareness and prior usage of ChatGPT, with the questions being: "Have you ever heard about ChatGPT?" and "Have you ever used ChatGPT?" Of the respondents, 45 indicated a lack of familiarity with ChatGPT, resulting in their exclusion from the subsequent sections of the questionnaire. Consequently, 190 respondents, having acknowledged prior knowledge or use of ChatGPT, proceeded to complete the remaining survey questions. In other words, 95.3% of respondents reported that they had used ChatGPT, and the following data analysis reflects the viewpoints of these users, as non-users were not able to access the remaining questions in the questionnaire.

5.1 Accessibility

Questionnaire respondents provided diverse feedback on their ease of access to ChatGPT. A significant 44.7% found it very easy as they emphasized a high level of user-friendly interaction. Another substantial 34.2% characterized the access as easy and highlighted the generally straightforward process. A moderate level of ease was reported by 17.9% who described it as somewhat easy. However, a smaller 2.1% found it not very easy, indicating some difficulty. A minimal 1.1% reported the access to be very difficult. These findings showcased the diverse perspectives on the ease of accessing ChatGPT among respondents. Further analysis of the data indicated that 21.05% of the participating students selected "very difficult", "not very easy", or "somewhat difficult". Of those reporting difficulty, 90% were enrolled in intermediate English levels. This suggests that the reported difficulties may not be attributed to their proficiency levels.

5.2 Preferred input language

The preferred input language was predominantly English, with 83.7% of respondents favoring it, while 16.3% preferred Arabic. Upon examining individual participants' English language proficiency levels, it became evident that the preference for input language choice was not solely determined by English proficiency levels, as many of the individuals who opted for Arabic were not low-level in English language proficiency. This suggests that there are likely other factors influencing their language preference, requiring further investigation to better understand the underlying causes.

5.3 Purposes of use

A variety of purposes were reported for using ChatGPT. The most prevalent uses included enhancing comprehension of challenging topics (57.4%) and generating ideas for writing (54.2%). Language-related functions were prominent, with a notable 23.7% employing the tool for English-to-Arabic translation and 13.7% for the reverse. ChatGPT also proved valuable for academic pursuits, as indicated by 41.6% utilizing it for research projects and 35.8% for expediting assignments. Additionally, students reported using ChatGPT to improve grammar rules (21.1%) and vocabulary (33.2%). Beyond these, respondents utilized ChatGPT

for diverse purposes such as getting feedback on writing (28.4%), editing written content (33.2%), and obtaining ideas for speaking tasks (45.3%). A smaller yet noteworthy proportion (10.5%) engaged in role-play practice. The results highlight ChatGPT's multifaceted utility in assisting users across a spectrum of tasks and learning objectives. The reported uses can be categorized into themes, as shown in Table 1.

5.4 Usefulness for language learning

According to Figure 1, the responses regarding the perceived helpfulness of ChatGPT in improving language skills varied among participants. Twenty percent of the respondents found it to be very helpful, while a slightly higher percentage (25.8%) considered it helpful. A significant proportion (38.9%) regarded it as somewhat helpful, indicating a moderate level of effectiveness. However, a notable minority (12.6%) reported that ChatGPT was not very helpful, and a small fraction (2.6%) deemed it not helpful at all. These results suggest a range of experiences and perceptions regarding the utility of ChatGPT for language skill enhancement, with the majority of users finding it beneficial, while others conveyed less satisfaction regarding its utility. Please note: Arabic translation of the question was provided in the questionnaire.

Table 1. Students' Reported Uses of ChatGPT for Language Learning. Total Number of Respondents: 19

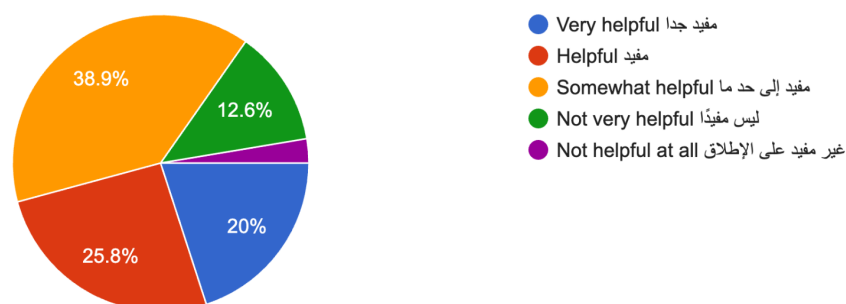
Theme	Purpose	Percentage
Comprehension and Idea Generation	Enhancing comprehension of challenging topics	57.4%
	Generating ideas for writing	54.2%
Language Translation	English-to-Arabic translation	23.7%
	Arabic-to-English translation	13.7%
Academic Support	Utilizing ChatGPT for research projects	41.6%
	Expediting assignments	35.8%
Language Knowledge Enhancement	Improving grammar	21.1%
	Enhancing vocabulary	33.2%
Writing and Editing	Getting feedback on writing	28.4%
	Editing written content	33.2%
Speaking and Role-play	Obtaining ideas for speaking tasks	45.3%
	Engaging in role-play practice	10.5%

Figure 1. Students' Perceptions on How Helpful ChatGPT was**Please note: Arabic translation of the question was provided in the questionnaire.**

8. How helpful do you find ChatGPT in improving your language skills? في تحسين مهاراتك اللغوية؟

ما مدى فائدة ChatGPT

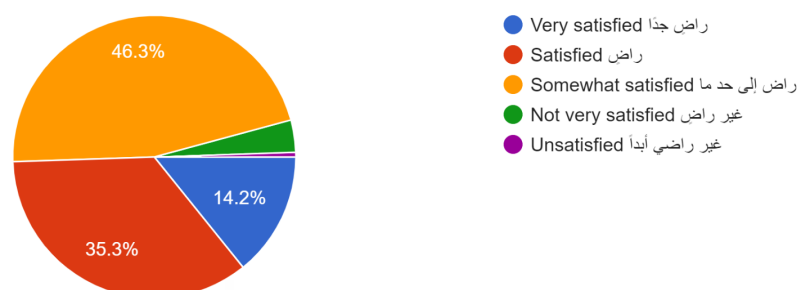
190 responses

**Figure 2. Student Satisfaction with ChatGPT Responses****Please note: Arabic translation of the question was provided in the questionnaire.**

11. How satisfied are you with the quality of responses provided by ChatGPT? ما مدى رضاك عن جودة الردود المقدمة من

عن جودة الردود المقدمة من

190 responses



The data present a comprehensive insight into the areas where learners find ChatGPT particularly useful for language learning. Writing emerged as the most frequently mentioned skill (71.1%), underscoring ChatGPT's perceived effectiveness in aiding users to improve their writing abilities. This was closely followed by its utility in enhancing reading comprehension (33.7%), grammar understanding (51.6%), and vocabulary expansion (55.8%). Additionally, many users appreciated ChatGPT for its help in paraphrasing (34.7%) and summarizing texts (64.2%). Translating languages (40%) and assisting with research projects (43.7%) were also highlighted, indicating ChatGPT's versatility in academic support. Interestingly, 35.8% of participants valued ChatGPT for its assistance in completing homework assignments faster, reflecting its practical application in everyday

academic tasks. Across these diverse areas, ChatGPT was recognized for its broad utility in supporting and enriching the language learning experience.

5.5 User satisfaction with ChatGPT responses

User satisfaction was predominantly positive, with 46.3% expressing a moderate level of satisfaction, 35.3% reporting outright satisfaction, and 14.2% indicating a very high level of satisfaction. Conversely, only a minimal percentage reported being not very satisfied (3.7%) or unsatisfied (0.5%) (see Figure 2). These findings underscore a consistent trend of favorable perceptions towards ChatGPT's response qualities across both phases, with the majority of students indicating satisfaction with the tool's performance.

Table 2. Students' Reports of Advantages of Using ChatGPT for Language Learning

Theme	Description
Academic Efficiency	Streamlining academic tasks, quick completion of assignments, obtaining good grades
Language Skill Enhancement	Enhancing vocabulary knowledge, improving writing skills, facilitating real-time practice in conversation, aiding in self-learning
Convenience and Accessibility	Easy and fast access to information, saving time, providing information quickly
Creative and Ideation Support	Offering a platform for creative ideation, obtaining ideas
Error Detection and Improvement	Detecting and improving errors
Diverse Learning Activities	Offering a diverse range of activities for language enhancement

5.6 Accuracy of ChatGPT responses

The evaluation of perceived accuracy in ChatGPT's responses unveiled a predominant sentiment of confidence among participants. A substantial 78.9% expressed a moderate level of confidence, characterizing their perception as "somewhat accurate". Additionally, 6.8% of respondents reported a higher level of confidence and deemed ChatGPT's responses "very accurate". On the other hand, 12.1% stated that they found the responses provided by ChatGPT to be inaccurate. Interestingly, a small fraction, 2.1%, remained uncertain about the accuracy. The data suggest that while ChatGPT is largely seen as a reliable tool, there are areas where its performance may not meet some users' expectations. Additionally, the evaluation suggests that, despite the sophisticated language used in ChatGPT's responses, students do not perceive it as a highly reliable tool for accuracy. This "somewhat accurate" sentiment, weighing more heavily in the overall perception, underscores a cautious approach to relying on ChatGPT, suggesting that while its sophisticated language is recognized, the ultimate trust in its accuracy is tempered by experiences of inaccurate responses.

5.7 Advantages and disadvantages of ChatGPT for language learning

Respondents highlighted a myriad of advantages associated with using ChatGPT for language learning. A prevalent theme was the tool's ability to streamline academic tasks, making student life more manageable and aiding in the quick completion of take-home assignments. Participants appreciated ChatGPT for its potential to enhance their vocabulary knowledge. The tool was seen as conducive to obtaining good grades, facilitating real-time practice in conversation, and offering a platform for creative ideation.

Users lauded ChatGPT for its role in providing information quickly, improving writing skills, and aiding in self-learning. The convenience of easy and fast access, coupled with the potential to save time, emerged as consistent benefits. The tool was also perceived as a valuable resource for obtaining ideas, detecting and improving errors, and offering a diverse range of activities for language enhancement. Despite the overall positive sentiment, a few participants expressed neutral views, citing a lack of advantages or indicating they had not utilized ChatGPT for language learning.

After carefully reviewing students' descriptions of ChatGPT's advantages in the open-ended question, students' recurring opinions were categorized, and common themes were developed. This involved an iterative process and a systematic review of the responses. The resulting themes and their descriptions, which illustrate students' examples provided in the open-ended question, are presented in Table 2.

Respondents identified several drawbacks associated with the use of ChatGPT for language learning. The most common concern was the potential overreliance on the tool, which might lead to student laziness and a decreased willingness to put in individual effort. Users noted instances of inaccuracy, highlighting that ChatGPT occasionally provided incorrect or irrelevant information, potentially impacting the quality of learning. Some participants expressed worries about the tool facilitating cheating, making students less self-reliant, and creating a dependency on ChatGPT. Issues related to understanding complex questions, difficulty in providing accurate details, and limitations in offering structured lessons were also mentioned. Despite these concerns, a few respondents acknowledged not having encountered significant drawbacks, while others highlighted the

Table 3. Students' Reports of Disadvantages of Using ChatGPT for Language Learning

Theme	Description
Overreliance and Laziness	Potential overreliance on the tool, leading to student laziness and decreased willingness for individual effort
Inaccuracy and Irrelevant Information	Instances of inaccuracy, incorrect or irrelevant information impacting the quality of learning
Facilitation of Cheating and Dependency	Facilitating cheating, making students less self-reliant, creating a dependency on ChatGPT
Understanding and Complexity Issues	Difficulty in understanding complex questions, issues in providing accurate details
Limitations in Structured Learning	Limitations in offering structured lessons

importance of clarifying prompts to obtain accurate responses. Overall, users recognized the need for caution in relying on ChatGPT for language learning, emphasizing the importance of maintaining a balance between using the tool and individual effort.

Similarly to the approach employed for the advantages section, students' opinions regarding ChatGPT's drawbacks in the responses to the open-ended question were carefully analyzed. Recurring opinions were identified and then categorized into common themes. This process involved a systematic analysis and multiple iterations. Table 3 showcases these themes and their corresponding descriptions, which illustrate examples derived from students' responses.

5.8 Students' recommending ChatGPT

The questionnaire results indicated a generally positive sentiment towards recommending ChatGPT among language learners, with 54.7% expressing a positive recommendation. A significant proportion, 40.5%, remained unsure. Nevertheless, the percentage of respondents outright opposed to recommending ChatGPT was relatively low at 4.7% (see Figure 3).

5.9 ChatGPT and cheating

The results suggest a divided opinion on whether ChatGPT contributes to an increase in cheating cases. A significant proportion, 51.1%, believed that it does, indicating concerns about potential misuse. About 35.8% expressed uncertainty, suggesting a need for further evaluation or clarification on the tool's impact. On the contrary, 13.2% were confident that ChatGPT does not lead to an escalation in cheating cases. The varied responses reflected differing

perspectives on the role of ChatGPT in academic integrity, with a substantial proportion expressing apprehension about its potential implications in terms of academic integrity.

5.10 Students' viewpoints on banning ChatGPT

The results revealed a notable majority, with 93.7% opposing the idea of banning the use of ChatGPT in colleges and universities. In contrast, a minority, 6.3%, supported the notion of such a ban (see Figure 4). This indicates a strong opposition among questionnaire respondents to the idea of banning ChatGPT in academic settings. With 93.7% of participants opposing a ban, it suggests that the majority value the potential benefits and contributions of ChatGPT to education within colleges and universities. They may have perceived it as a valuable tool for learning, research, or enhancing academic work. On the other hand, the small minority of 6.3% who supported a ban might have had concerns about academic integrity, the potential for misuse, or the impact on traditional learning methods.

To provide a clear understanding of their rationale, the respondents were asked to provide explanations for their stance. Many emphasized its utility in aiding students with tasks, saving time, and providing valuable ideas. Some acknowledged the importance of using it ethically and not for cheating. Others highlighted its role as a helpful tool for understanding complex topics, improving language skills, and organizing thoughts. The viewpoint that ChatGPT is a beneficial resource and should not be banned was commonly expressed. However, a few respondents recognized the potential misuse and suggested establishing guidelines for responsible use rather than an outright ban. Overall, the overwhelming opposition to a ban reflected a significant interest in integrating AI and chatbot technologies like ChatGPT into the educational landscape.

Figure 3. Students' recommending ChatGPT

Please note: Arabic translation of the question was provided in the questionnaire.

15. Do you recommend ChatGPT to other language learners? هل تنصح متعلمي اللغة الآخرين بـ ChatGPT؟
 190 responses

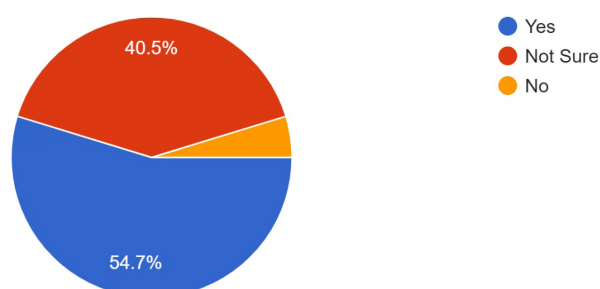


Figure 4. Students' viewpoints on banning ChatGPT

Please note: Arabic translation of the question was provided in the questionnaire.

17. Do you think the use of ChatGPT should be banned in colleges and universities? هل تعتقد أنه يجب حظر استخدام ChatGPT في الكليات والجامعات؟
 190 responses

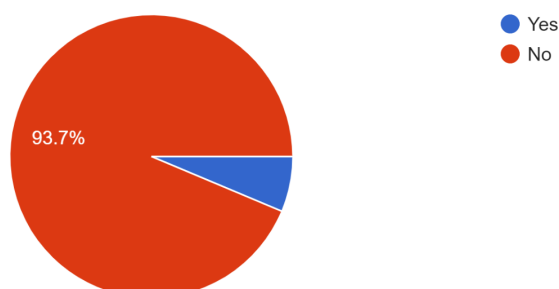


Figure 5. Other Generative AI Tools

Please note: Arabic translation of the question was provided in the questionnaire.

19. In addition to ChatGPT, what other AI tools do you use for language learning? Select all that apply. ما هي أدوات الذكاء الاصطناعي الأخرى التي تستخدمها لتعلم اللغة؟ اختر كل ما ينطبق (Chat GPT جات جي بي تي) بالإضافة إلى ال.
 190 responses

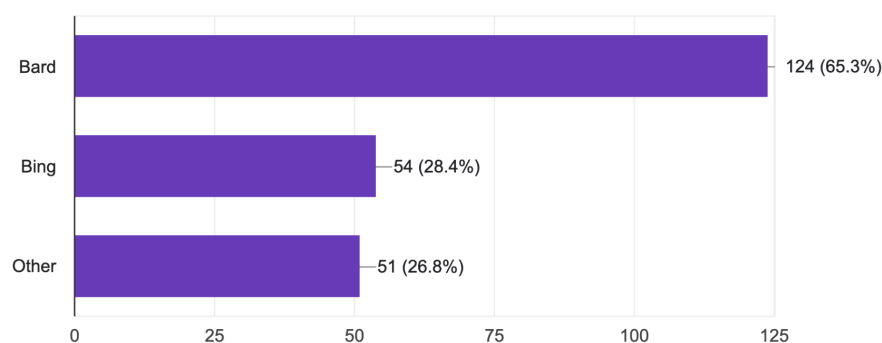


Table 4. Adjectives used to describe ChatGPT

Frequency	Positive Adjectives	Negative Adjectives
48	Useful	
45	Fast	
35	Easy to use	
41	Intelligent, Smart, Clever	
18	Accurate, Good	
10	Beneficial	
7	Perfect	
6	Great, Interesting	
5	Amazing	
4	Clear	Not accurate
3	Awesome, Important, Resourceful, Wonderful	
2	Creative, Enriching, Hero, Speed, Fantastic	
1	Developed, Enriching, Available 24/7, Variable, Legendary, Inspiring, Powerful, Informative, Versatile, Consistently, Unlimited, Brief, Careful, Support, Saver, Like, Super excellent, Nice, Beneficial, Easy to access, Teacher, Man, Perfect, Comprehensive, Excellent	Harmful, Lies sometimes, Dumb

5.11 Words used to describe ChatGPT

The question asking participants to describe ChatGPT with three adjectives garnered a wide range of responses, showcasing a predominantly positive view. The most frequently cited adjectives were “Useful” (48 mentions), “Fast” (45 mentions), and “Easy to use” (35 mentions), highlighting ChatGPT’s efficiency, speed, and user-friendliness. Other notable positive adjectives included “Intelligent”, “Accurate”, “Good” and “Smart” reflecting appreciation for ChatGPT’s capabilities. While the majority of feedback was positive, there were a few mentions of negative adjectives such as “Not accurate”, “Harmful”, “Lies sometimes” and “Dumb”, though these were significantly less common. The variety of adjectives used indicates a broad recognition of ChatGPT’s potential and a few areas for improvement (see Table 4).

5.12 Other generative AI tools

The questionnaire respondents indicated a variety of AI tools used in addition to ChatGPT for language learning. The highest percentage, 65.3%, reported utilizing Bard, suggesting a notable reliance on this particular tool. Additionally,

28.4% of participants mentioned incorporating Bing into their language learning endeavors. A considerable proportion, 26.8%, chose the “Other” category, implying a diverse range of alternative AI tools beyond the specified options. These findings demonstrate that language learners are leveraging a mix of AI resources, highlighting the multifaceted approaches individuals take to enhance their language acquisition experiences (see Figure 5).

A variety of responses were provided when participants were asked to elaborate on their selection of “Other” AI tools for language learning. While some respondents mentioned not recalling their choices or specified that they did not use any additional tools, others indicated alternatives such as Google Translate, Bard, Snap Boot, AI websites, Duolingo, and Nerd AI. Some participants favored utilizing Google and Google Translate for language-related tasks. Additionally, the mention of specific tools like Poe, My AI, and PDF AI underscores the diverse set of AI resources individuals may integrate into their language learning practices. The reasons for selecting these tools ranged from their perceived fame to their multifunctionality. This showcased the various

preferences and strategies adopted by language learners in conjunction with or beyond ChatGPT. The data overwhelmingly indicates that ChatGPT is the favorite AI tool for language learning among the participants. Despite mentions of other tools like Bard, Bing, Google, Duolingo, and YouTube, ChatGPT's prominence in the responses suggests its significant impact and value in the eyes of learners seeking to enhance their language skills through AI technology.

6. Discussion, conclusion and implications

The data underscore the effectiveness and usefulness of ChatGPT in language learning, with a significant proportion of users finding it beneficial across a variety of tasks. Writing, grammar, and vocabulary were identified as key areas where ChatGPT aided significantly, with over half of the participants reporting improvements in writing skills and a notable percentage acknowledging its help in grammar and vocabulary enhancement. The tool's role in academic pursuits like research projects further attests to its practical application in enhancing educational outcomes. Despite varying levels of satisfaction, the majority of users expressed a positive experience, highlighting ChatGPT's utility in supporting and enriching language learning endeavors. This is in line with Kohnke et al.'s research (2023) stating that "ChatGPT is a versatile and valuable tool with significant potential to promote engaging and adaptive language learning" (p. 547). Other studies have also reported ChatGPT's effectiveness in language learning (Ali et al., 2023; Hong 2023; Thuy, 2023; Xiao & Zhi, 2023).

Opportunities presented by ChatGPT in language learning extend beyond immediate academic assistance to include the tool's potential in fostering a deeper understanding of language nuances and facilitating real-time practice. Reflecting this, the literature highlights that since these chatbots are accessible around the clock, students have the flexibility to improve their language skills anywhere and anytime (Haristiani, 2019; Kohnke et al, 2023; Winkler and Soellner, 2018). The broad spectrum of uses, from translating between languages to generating ideas for speaking tasks, opens new paths for learners to explore language in a multifaceted manner. Kohnke et al. (2023) also reflect on ChatGPT's capability of identifying a word's meaning within a specific context, rectifying and explaining linguistic errors as well as illustrating sentences, and language translations to further assist learners in enhancing their language learning experiences. Additionally, ChatGPT's convenience and accessibility seem to enable users to engage with the language learning process more dynamically and flexibly, allowing for a more personalized learning experience. That being said,

Kim et al. (2023) believe that ChatGPT lacks the ability to give in-depth feedback. Their study suggests that ChatGPT can only provide simple feedback, and that it fails to deliver thorough assessments necessary for enhancing learners' communicative abilities. This suggests that although there is positive reception towards ChatGPT's potential for enhancing learning experiences, ChatGPT may not be a complete substitute when it comes to providing detailed feedback. That being said, this drawback should not be considered as fixed, as ChatGPT's capabilities have been improved since the study was conducted.

The limitations of relying on ChatGPT for language learning are also evident, with concerns about accuracy, potential for misuse, and the risk of fostering dependency among learners. The data reveal skepticism regarding the tool's accuracy, with a considerable number expressing only moderate confidence in the responses provided. Bowman's study (2022) also expresses concerns on the reliability of chatbot replies, saying that the authoritative nature of the responses may prompt users to accept them unquestioningly. It is interesting that the data indicate that the assertive nature of the responses generated by ChatGPT do not seem to significantly influence the students, who appear to approach these interactions with caution. Concerns about ChatGPT facilitating cheating and leading to student laziness underline the need for careful integration of AI tools in educational contexts. Cassidy (2023) also expresses apprehensions regarding AI's potential to facilitate cheating and the implications it may have on assessment integrity. Additionally, Kim et al. (2023) emphasize that ChatGPT may impede learning by supplying answers or completing tasks on behalf of learners instead. Despite these challenges, the overwhelmingly positive stance against banning ChatGPT in academic institutions suggests a recognition of its potential benefits as an educational tool. This suggests that, while awareness of its limitations is necessary, the focus should be on establishing guidelines for responsible use rather than restricting access to such innovative tools. This aligns with Tlili et al. (2023), who advocate for the responsible integration of ChatGPT into educational settings.

Conducting this study on students' perceptions of ChatGPT as a language learning tool offers several benefits. First, it provides educators with insights to inform pedagogical practices, enabling the design of more effective and engaging language learning experiences tailored to students' preferences. Additionally, it facilitates the optimization of ChatGPT's integration into educational settings by identifying both its strengths and limitations. Understanding students' positive perceptions can enhance student engagement and motivation. Furthermore, these findings contribute

to curriculum development efforts aimed at incorporating innovative technologies into language learning curricula. Moreover, the study contributes to the broader discourse on educational technology, providing empirical evidence to inform future research and development in the field.

7. Limitations of the study

Given the novelty of this research on student perceptions regarding ChatGPT, there are several limitations to acknowledge. First, the capabilities of ChatGPT have been improved since the study was conducted; therefore, the benefits, challenges and limitations stated in this study should be considered as fluid. It is recommended that more research be conducted to examine the latest versions of ChatGPT.

Second, despite the study encompassing over 200 participants, the authors recognize the necessity for further large-scale research to more confidently ascertain student views on using ChatGPT in educational settings. An expansion of the sample size or the inclusion of multiple universities could offer a more expansive understanding of this emerging phenomenon. Third, incorporating a mixed methods research design, including focus group interviews, could have facilitated a deeper exploration into students' perceptions and viewpoints and would allow for a nuanced understanding of the complexities in students' interactions with this new tool. Some students' viewpoints presented in this study would have greatly benefited from a more in-depth exploration through a focus-group interview.

References

- Ali, J.K.M., Shamsan, M.A.A., Hezam, T.A. and Mohammed, A.A.Q. (2023). Impact of ChatGPT on learning motivation: teachers and students' voices, *Journal of English Studies in Arabia Felix*, 2(1), 41-49. doi: 10.56540/jesaf.v2i1.51.
- Bonsu, E. & Baffour-Koduah, D. (2023, March 16). *From the Consumers' Side: Determining Students' Perception and Intention to Use ChatGPT in Ghanaian Higher Education*. SSRN. <https://dx.doi.org/10.2139/ssrn.4387107>.
- Bin-Hady, W.R.A., Al-Kadi, A., Hazaea, A. and Ali, J.K.M. (2023). Exploring the dimensions of ChatGPT in English language learning: a global perspective. *Library Hi Tech*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/LHT-05-2023-0200>
- Bowman, E. (2022, December 19). *A new AI chatbot might do your homework for you. But it's still not an A+ student*. NPR. <https://www.npr.org/2022/12/19/1143912956/chatgpt-ai-chatbot-homework-academia>
- Cai, W. (2023, February 24). *ChatGPT can be powerful tool for language learning*. <https://www.universityaffairs.ca/career-advice/career-advice-article/chatgpt-can-be-powerful-tool-for-language-learning/>.
- Cassidy, C. (2023, January 10). *Australian universities to return to 'pen and paper' exams after students caught using AI to write essays*. The Guardian. <https://www.theguardian.com/australia-news/2023/jan/10/universities-to-return-to-pen-and-paper-exams-after-students-caught-using-ai-to-write-essays>
- Eva A. M. van Dis, E. A. M., Bollen, J., Willem Zuidema, Robert van Rooij & Claudi L. Bockting (2023). *Nature*, 614, 224-226. <https://doi.org/10.1038/d41586-023-00288-7>.
- Essel, H. B., Vlachopoulos, D., Tachie-Menson, A., Johnson, E. E., & Baah, P. K. (2022). The impact of a virtual teaching assistant (chatbot) on students' learning in Ghanaian higher education. *International Journal of Educational Technology in Higher Education*, 19(1), 1-19. <https://doi.org/10.1186/s41239-022-00362-6>
- Firat, M. (2023). What ChatGPT means for universities: Perceptions of scholars and students. *Journal of Applied Learning and Teaching*, 6(1). <https://doi.org/10.37074/jalt.2023.6.1.22>
- Giray, L., Jacob, J., & Gumalin, D.L. (2024). Strengths, weaknesses, opportunities, and threats of using ChatGPT in scientific research. *International Journal of Technology in Education (IJTE)*, 7(1), 40-58. <https://doi.org/10.46328/ijte.618>
- Grant, N., & Mets, C. (2022, December 21). *A New Chatbot is a Code Red for Google's Search Business*. NYTimes. <https://www.nytimes.com/2022/12/21/technology/ai-chatgpt-google-search.html>
- Haristiani, N. (2019). Artificial intelligence (AI). chatbot as language learning medium: an inquiry. *Journal of Physics: Conference Series* 1387(1), 202.
- Hong, W. C. H. (2023). The impact of ChatGPT on foreign language teaching and learning: opportunities in education and research. *Journal of Educational Technology*

- and Innovation, 3(1). <https://jeti.thewsu.org/index.php/cieti/article/view/103>
- Hu, G. (2023, February 25). *Challenges for Enforcing Editorial Policies on AI-generated Papers*. Accountability in Research. <https://doi.org/10.1080/08989621.2023.2184262>
- Kim, S., Shim, J., & Shim, J. (2023). A Study on the Utilization of OpenAI ChatGPT as a Second Language Learning Tool. *Journal of Multimedia Information System*, 10(1), 79–88. <https://doi.org/10.33851/jmis.2023.10.1.79>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for Language Teaching and Learning. *RELC Journal*, 54(2), 003368822311628. <https://doi.org/10.1177/00336882231162868>
- Liu, G., & Ma, C. (2023). Measuring EFL learners' use of ChatGPT in informal digital learning of English based on the technology acceptance model. *Innovation in Language Learning and Teaching*, 1-14. <https://doi.org/10.1080/17501229.2023.2240316>
- Patel, S. B., & Lam, K. (2023, February 06). *ChatGPT: the future of discharge summaries?* The Lancet Digital Health. [https://doi.org/10.1016/S2589-7500\(23\)00021-3](https://doi.org/10.1016/S2589-7500(23)00021-3)
- Productive Teaching Tool or Innovative Cheating?* (n.d.). Study. Retrieved April 13, 2024, from <https://study.com/resources/perceptions-of-chatgpt-in-schools>
- Rahim, M. E. A., Rahim, E. M. A., Razawi, N. A., & Mohamed, N. (2023). Students' Perception on the Use of ChatGPT as a Language Learning Tool. *Ideology Journal*, 8(2). <https://doi.org/10.24191/idealogy.v8i2.456>
- Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning and Teaching*, 6(1). <https://doi.org/10.37074/jalt.2023.6.1.9>
- Shoufan, A. (2023). Exploring students' perceptions of ChatGPT: Thematic analysis and follow-up survey. *IEEE Access*, 11, 38805-38818. <https://doi.org/10.1109/access.2023.3268224>
- Thuy, T. (2023). The Perception by University Students of the Use of ChatGPT in Education. *International Journal of Emerging Technologies in Learning*, 18(17), 4–19. <https://doi.org/10.3991/ijet.v18i17.39019>
- Tlili, A., Shehata, B., Adarkwah, M.A., Bozkurt, A., Hickey, D.T., Huang, R. & Agyemang, B. (2023), What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, 10(1), 15. doi: 10.1186/s40561-023-00237-x.
- van Dis, E. A. M., Bollen, J., Zuidema, W., van Rooij, R., & Bockting, C. L. (2023). ChatGPT: Five Priorities for Research. *Nature*, 614(7947), 224–226. <https://doi.org/10.1038/d41586-023-00288-7>.
- Winkler, R. & Söllner, M. (2018). Unleashing the Potential of Chatbots in Education: A State-Of-The-Art Analysis. *Academy of Management Annual Meeting Proceedings*. 2018(1). doi: 10.5465/AMBPP.2018.15903abstract
- Xiao, Y., & Zhi, Y. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions. *Languages*, 8(3), 212. <https://doi.org/10.3390/languages8030212>.

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