

## Postgraduate Students' Perspectives on the Use of Artificial Intelligence in English Language Learning at the Libyan Academy, Janzour, Libya

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### تصورات طلبة الدراسات العليا حول استخدام الذكاء الاصطناعي في تعلم اللغة الإنجليزية بالأكاديمية الليبية، جنزور، ليبيا

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#### Abstract:

Artificial Intelligence (AI) has emerged as a transformative technology in higher education, offering innovative opportunities to support language learning through personalized instruction, immediate feedback, and flexible access to learning resources. This study aimed to investigate postgraduate students' perspectives on the use of AI in English language learning at the Libyan Academy, Janzour, Libya. A quantitative descriptive survey design was employed, and data were collected from 50 postgraduate students using a structured questionnaire consisting of five sections: socio-demographic characteristics, AI use, perceived benefits, challenges and concerns, and attitudes toward future AI integration. The collected data were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations. The findings revealed that AI tools are widely used among postgraduate students, with ChatGPT identified as the most frequently utilized application. Participants reported positive perceptions regarding the role of AI in improving writing skills, enhancing learning efficiency, and facilitating the completion of English-related tasks. The results also indicated that students recognized several benefits of AI-assisted learning, including increased accessibility to educational support and opportunities for autonomous learning. However, concerns were expressed regarding the accuracy of AI-generated information, the potential impact of excessive AI use on critical thinking skills, and the possibility of misleading content. Despite these concerns, participants demonstrated positive attitudes toward the future integration of AI in English language education and emphasized the importance of institutional training for the effective and responsible use of AI technologies. The study concludes that AI has considerable potential to enhance English language learning when integrated within appropriate pedagogical and ethical frameworks.

**Keywords:** Artificial Intelligence, English Language Learning, ChatGPT, Postgraduate Students, Higher Education.

### الملخص:

أصبح الذكاء الاصطناعي (AI) من أبرز التقنيات الحديثة التي أحدثت تحولاً ملحوظاً في مؤسسات التعليم العالي، حيث وفر أدوات وتطبيقات قادرة على دعم العملية التعليمية من خلال التعلم الشخصي، والتغذية الراجعة الفورية، وإتاحة الوصول إلى مصادر تعليمية متنوعة. وفي مجال تعلم اللغة الإنجليزية، برزت تطبيقات الذكاء الاصطناعي التوليدي، مثل ChatGPT، بوصفها أدوات مساندة يمكن أن تسهم في تطوير المهارات اللغوية وتحسين تجربة التعلم لدى الطلاب. هدفت هذه الدراسة إلى استقصاء تصورات طلبة الدراسات العليا حول استخدام الذكاء الاصطناعي في تعلم اللغة الإنجليزية بالأكاديمية الليبية بنزور، ليبيا. واعتمدت الدراسة المنهج الوصفي الكمي، حيث جُمعت البيانات من خلال استبانة إلكترونية وزعت على عينة مكونة من (50) طالباً وطالبة من طلبة الدراسات العليا. وتضمنت الاستبانة خمسة محاور رئيسة تمثلت في الخصائص الديموغرافية للمشاركين، وأنماط استخدام الذكاء الاصطناعي في تعلم اللغة الإنجليزية، والفوائد المدركة لاستخدامه، والتحديات والمخاوف المرتبطة به، إضافة إلى الاتجاهات نحو دمج مستقبلًا في تعليم اللغة الإنجليزية. وتم تحليل البيانات باستخدام برنامج الحزمة الإحصائية للعلوم الاجتماعية (SPSS) بالاعتماد على التكرارات والنسب المئوية والمتوسطات الحسابية والانحرافات المعيارية. أظهرت النتائج أن أدوات الذكاء الاصطناعي تُستخدم على نطاق واسع بين طلبة الدراسات العليا، وأن ChatGPT يُعد الأداة الأكثر استخدامًا. كما كشفت النتائج عن وجود اتجاهات إيجابية نحو استخدام الذكاء الاصطناعي، خاصة فيما يتعلق بتحسين مهارات الكتابة باللغة الإنجليزية، وزيادة كفاءة إنجاز المهام الأكاديمية، وتوفير فرص أكبر للتعلم الذاتي. وأشارت النتائج كذلك إلى إدراك المشاركين للفوائد التعليمية التي توفرها هذه التقنيات، إلى جانب وجود بعض المخاوف المتعلقة بدقة المعلومات المنتجة بواسطة الذكاء الاصطناعي، وتأثير الاعتماد المفرط عليه في تنمية مهارات التفكير النقدي، واحتمالية تقديم معلومات غير دقيقة أو مضللة. وعلى الرغم من هذه التحديات، أبدى المشاركون دعمًا واضحًا لدمج الذكاء الاصطناعي في تعليم اللغة الإنجليزية مستقبلًا، مؤكدين أهمية توفير برامج تدريبية وإرشادية لضمان الاستخدام الفعال والمسؤول لهذه التقنيات. وتخلص الدراسة إلى أن الذكاء الاصطناعي يمتلك إمكانات كبيرة لدعم تعلم اللغة الإنجليزية وتعزيز مخرجاته التعليمية إذا ما تم توظيفه ضمن أطر تربوية وأخلاقية مناسبة.

**الكلمات المفتاحية:** الذكاء الاصطناعي، تعلم اللغة الإنجليزية، ChatGPT، طلبة الدراسات العليا، التعليم العالي.

### Introduction:

Artificial Intelligence (AI) has become one of the most influential technological innovations in higher education, significantly transforming teaching and learning practices across disciplines. The emergence of AI-powered applications, particularly generative AI tools such as ChatGPT and other intelligent language-learning platforms, has created new opportunities for students to develop their language proficiency through personalized learning experiences, immediate feedback, and interactive educational support [1]. As AI technologies continue to evolve, their integration into English language learning has attracted increasing attention from researchers, educators, and policymakers worldwide. In the field of English language learning, AI tools have demonstrated considerable potential in enhancing learners' achievement, motivation, and self-regulated learning skills. Recent studies indicate that AI-assisted learning environments can support vocabulary acquisition, grammar development, writing improvement, and language practice through adaptive and individualized instruction [2]. Furthermore, AI technologies provide learners with flexible access to educational resources beyond the traditional classroom setting, enabling autonomous learning and continuous language development [3]. The growing use of AI in language education has also prompted extensive research on learners' perceptions and experiences. Students' attitudes toward AI play a crucial role in determining the effectiveness of these technologies in educational contexts. Positive perceptions may encourage greater adoption and engagement, whereas concerns related to accuracy, ethical use, privacy, and academic integrity may influence students' willingness to utilize AI tools for learning purposes [4]. Therefore, understanding learners' perspectives is essential for the successful implementation of AI-supported educational practices.

Recent research has highlighted the increasing role of AI-mediated digital learning in English as a Foreign Language (EFL) contexts, demonstrating that students generally perceive AI tools as beneficial for enhancing learning efficiency and language performance [5]. Nevertheless, scholars have emphasized the need for further investigations in diverse educational settings to better understand students' experiences and attitudes toward AI integration in language learning [6].

Within the Libyan higher education context, empirical studies examining postgraduate students' perspectives on the use of AI in English language learning remain limited. Consequently, this study seeks to investigate postgraduate students' perspectives on the use of Artificial Intelligence in English

language learning at the Libyan Academy, Janzour, Libya. Specifically, the study explores students' patterns of AI use, perceived benefits, challenges, and attitudes toward the future integration of AI in English language education.

**Material and methods:**

**Research Design:**

This study employed a quantitative descriptive survey design to investigate postgraduate students' perspectives on the use of Artificial Intelligence (AI) in English language learning at the Libyan Academy, Janzour, Libya. The survey approach was considered appropriate because it enabled the researchers to collect data from a relatively large number of participants and examine their perceptions, experiences, and attitudes toward AI-assisted language learning.

**Participants:**

The participants of this study were postgraduate students enrolled at the Libyan Academy in Janzour, Libya. A total of 50 students voluntarily participated in the study. The participants represented different age groups, academic programs, and levels of experience with AI technologies. They were selected using convenience sampling due to their accessibility and willingness to participate in the research.

**Research Instrument:**

Data were collected using a structured questionnaire developed based on previous studies on Artificial Intelligence and language learning. The questionnaire consisted of five sections. The first section collected socio-demographic information, including gender, age, academic program, and prior experience with AI tools. The second section examined the participants' use of AI in English language learning. The third section explored the perceived benefits of AI. The fourth section investigated challenges associated with the use of AI in language learning. The final section examined participants' attitudes toward the future integration of AI in English language education.

The questionnaire items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

**Data Collection Procedure:**

The questionnaire was distributed electronically through online platforms during the academic year 2025–2026. Participants were informed about the purpose of the study and assured that their responses would remain confidential and would be used solely for research purposes. Participation was voluntary, and informed consent was obtained from all participants before completing the questionnaire.

**Data Analysis:**

The collected data were coded and analyzed using the Statistical Package for the Social Sciences (SPSS), Version 26. Descriptive statistical techniques, including frequencies, percentages, means, and standard deviations, were employed to summarize the participants' responses and identify general trends regarding the use of Artificial Intelligence in English language learning. The findings were presented in tables and figures to facilitate interpretation and discussion.

**Results and discussion:**

This section presents the findings of the study on postgraduate students' perspectives toward the use of Artificial Intelligence (AI) in English language learning. The results are presented according to the study objectives and discussed in relation to relevant literature and previous studies.

**A: Socio-Demographic Characteristics of the Participants:**

**Table (1):** Socio-Demographic Characteristics of the Participants (N = 50)

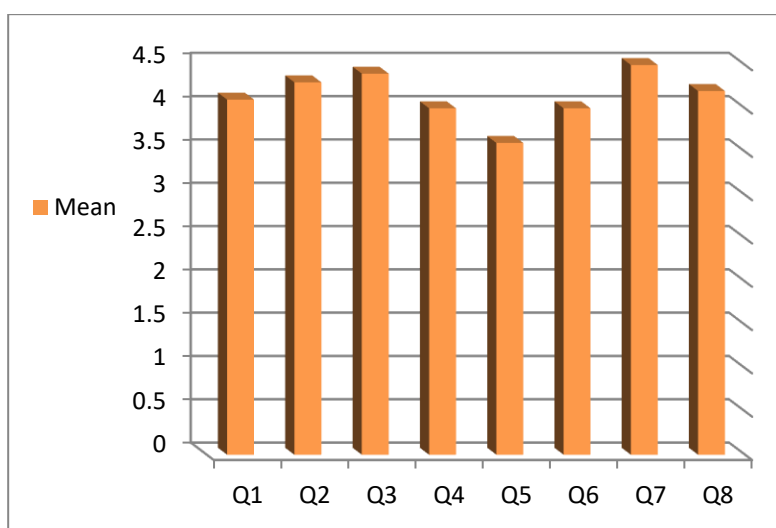
Variable	Category	Frequency (f)	Percentage (%)
Gender	Female	41	82.0
	Male	9	18.0
Age	21–25	3	6.0
	26–30	16	32.0
	31–35	23	46.0
	36–40	6	12.0
	Above 40	2	4.0
Academic Program	Master's	45	90.0
	Higher Diploma	4	8.0
	PhD	1	2.0
Field of Specialization	Applied Linguistics / English-related Fields	44	88.0
	Other Specializations	6	12.0

Academic Semester/Year	Advanced Academic Stages (Thesis/Dissertation/Final Semesters)	31	62.0
	Early or Mid-Academic Stages	19	38.0
Frequency of AI Use for English Learning	Daily	18	36.0
	Weekly	26	52.0
	Monthly	2	4.0
	Rarely	3	6.0
	Never	1	2.0
Most Frequently Used AI Tool	ChatGPT (alone or combined with other tools)	31	62.0
	Other AI Tools	19	38.0

**Table (1):** indicates that females constituted the majority of the sample (82%), while males represented only 18%. Most participants were aged 31–35 years (46%), whereas those above 40 years formed the smallest group (4%). Master’s students accounted for the largest proportion (90%), and most respondents specialized in Applied Linguistics and English-related fields (88%). Regarding AI use, weekly usage was the most common (52%), followed by daily usage (36%), while only 2% reported never using AI tools. ChatGPT emerged as the most frequently used AI application (62%).

### B: Use of Artificial Intelligence in English Language Learning:

For ease of presentation in the figure1, the questionnaire items are abbreviated as Q1–Q8. Q1 refers to the frequency of using AI tools to support English language learning; Q2 refers to the accessibility and ease of use of AI tools; Q3 refers to the use of AI tools for improving writing skills; Q4 refers to improving reading skills; Q5 refers to improving listening skills; Q6 refers to improving speaking skills; Q7 refers to the role of AI tools in completing English-related tasks more efficiently; and Q8 refers to the importance of AI in the English language learning process.

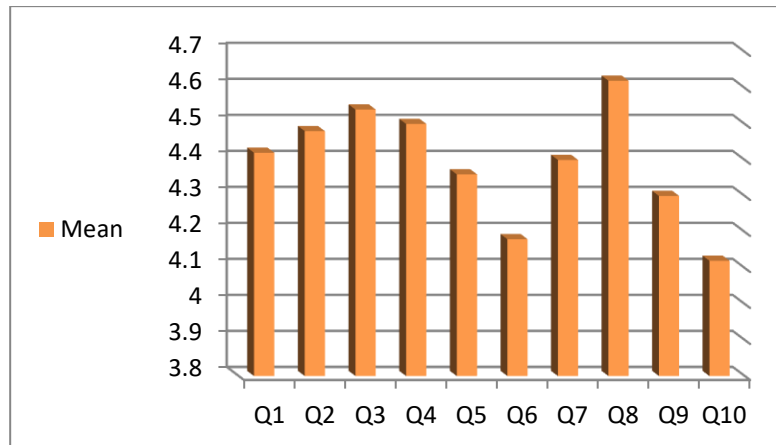


**Figure (1):** Figure Participants’ Responses on the Use of Artificial Intelligence in English Language Learning

Figure 1 illustrates participants’ responses regarding the use of artificial intelligence in English language learning. The findings show that the highest mean score was recorded for the statement “AI tools help me complete English-related tasks more efficiently” (M = 4.60), followed by “I use AI tools to improve my English writing skills” (M = 4.56). This indicates that participants strongly viewed AI as an effective tool for enhancing academic performance and supporting English learning tasks. On the other hand, the lowest mean score was related to the statement “I use AI tools to improve my English speaking skills” (M = 3.74). Despite being the lowest, the result still reflects a high level of agreement, suggesting that participants perceived AI tools as less effective for speaking skills compared to writing and task completion activities.

**C: Perceived Benefits of Artificial Intelligence.**

For ease of presentation in the figure2, the questionnaire items are abbreviated as Q1–Q10. Q1 refers to the effectiveness of AI in facilitating English language learning; Q2 refers to the provision of immediate feedback on language performance; Q3 refers to the improvement of grammar accuracy; Q4 refers to the expansion of English vocabulary; Q5 refers to enhancing understanding of English learning materials; Q6 refers to increasing confidence in using English; Q7 refers to encouraging self-directed learning; Q8 refers to saving time and effort during English study; Q9 refers to providing personalized learning opportunities; and Q10 refers to increasing motivation to learn English.

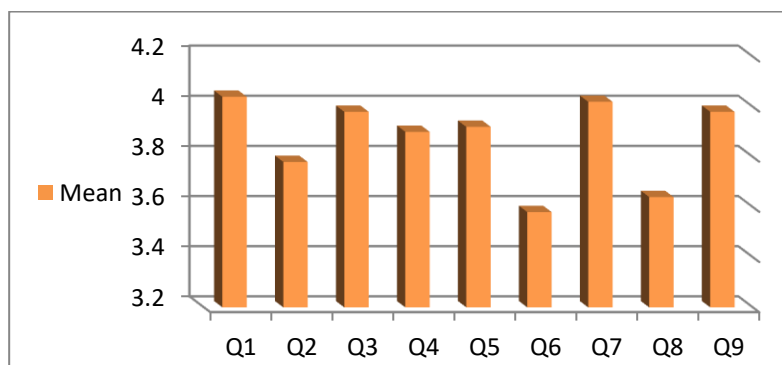


**Figure (2):** Participants' Perceptions of the Benefits of Artificial Intelligence in English Language Learning

Figure X shows that the highest mean score was recorded for Q1 (AI-generated information is not always accurate) (M = 4.04), followed closely by Q7 (Some AI tools require costly subscriptions) (M = 4.02). Similarly, Q3 (Excessive use of AI may reduce critical thinking skills) and Q9 (AI may occasionally provide misleading information) obtained identical mean scores (M = 3.98). In contrast, the lowest mean score was reported for Q6 (Technical problems sometimes limit my use of AI applications) (M = 3.58), followed by Q8 (I have concerns regarding privacy and data security when using AI tools) (M = 3.64). Overall, the findings indicate that concerns related to the accuracy, reliability, and educational impact of AI were more prominent than technical and privacy-related concerns.

**D: Challenges and Concerns Related to AI Use:**

To facilitate the interpretation of the figures, the questionnaire items in this section are abbreviated as Q1–Q9. Q1 refers to concerns about the accuracy of AI-generated information; Q2 refers to difficulties in evaluating the reliability of AI-generated content; Q3 refers to the potential reduction of critical thinking skills due to excessive AI use; Q4 refers to the possible negative impact of AI on creativity; Q5 refers to concerns about plagiarism when using AI tools; Q6 refers to technical issues that may limit the use of AI applications; Q7 refers to the financial costs associated with some AI tools; Q8 refers to concerns regarding privacy and data security; and Q9 refers to the possibility of receiving misleading information from AI systems.



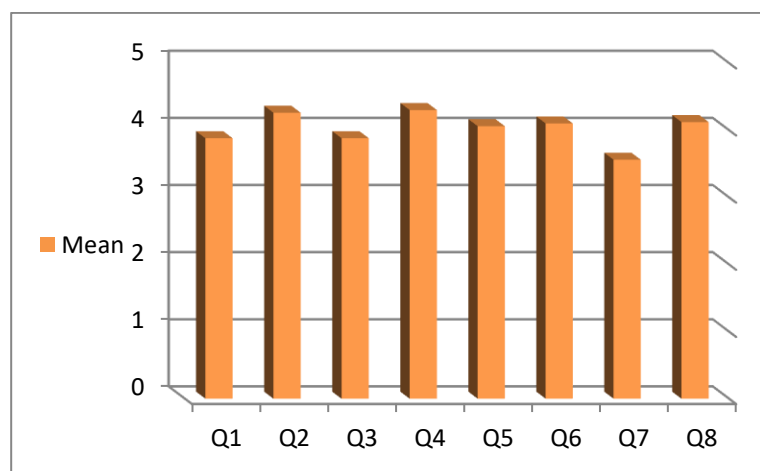
**Figure (3):** Participants' Responses on the Challenges and Concerns Related to AI Use

Figure 3 shows that the highest mean score was recorded for Q1 (M = 4.04), indicating that participants were most concerned about the accuracy of AI-generated information. A closely related

concern was the cost of AI tools (Q7), which obtained a mean of 4.02. Similarly, Q3 and Q9 received identical mean scores ( $M = 3.98$ ), reflecting concerns about the impact of AI on critical thinking and the possibility of misleading information. In contrast, the lowest mean score was reported for Q6 ( $M = 3.58$ ), followed by Q8 ( $M = 3.64$ ), suggesting that technical and privacy-related issues were perceived as less significant challenges. Overall, concerns about information reliability and educational consequences were more prominent than technical or privacy-related concerns.

**E: Attitudes Toward Future Integration of AI in English Language Learning:**

For clarity and consistency in the graphical presentation, the questionnaire items in this section are represented as Q1–Q8. Q1 refers to the integration of AI into English language courses; Q2 refers to the provision of university training on the effective use of AI tools; Q3 refers to the role of AI in complementing traditional teaching methods; Q4 refers to the growing importance of AI in English language education; Q5 refers to encouraging the responsible use of AI by English language instructors; Q6 refers to participants' intention to continue using AI tools for English language learning in the future; Q7 refers to perceptions that the advantages of AI outweigh its disadvantages in English language learning; and Q8 refers to the contribution of AI to improving the quality of higher education.



**Figure (4):** Participants' Attitudes Toward the Future Integration of AI in English Language Learning

Figure 4: shows that the highest mean score was recorded for Q4 (AI will play an increasingly important role in English language education) ( $M = 4.30$ ), followed by Q2 (Universities should provide training on the effective use of AI tools) ( $M = 4.26$ ). Similarly, Q8 (AI can contribute to improving the quality of higher education) achieved a high mean score ( $M = 4.12$ ), while Q6 (I intend to continue using AI tools for English language learning in the future) and Q5 (English language instructors should encourage responsible use of AI) obtained mean scores of 4.10 and 4.06, respectively. In contrast, the lowest mean score was reported for Q7 (The advantages of AI outweigh its disadvantages in English language learning) ( $M = 3.56$ ). Furthermore, Q1 (AI should be integrated into English language courses) and Q3 (AI can complement traditional teaching methods) recorded identical mean scores ( $M = 3.88$ ). Overall, the findings indicate positive attitudes toward the future integration of AI in English language learning.

**Discussion:**

The present study investigated postgraduate students' perspectives on the use of Artificial Intelligence (AI) in English language learning at the Libyan Academy. Overall, the findings revealed a high level of engagement with AI technologies and generally positive perceptions regarding their educational value, benefits, and future integration into English language education. The socio-demographic results indicated that most participants regularly utilized AI tools for English language learning, with ChatGPT emerging as the most frequently used application. This finding reflects the rapid expansion of generative AI technologies in higher education and supports previous research demonstrating the increasing adoption of AI-powered tools among university students for academic and language-learning purposes [1,3]. The widespread use of AI among the participants suggests that these technologies have become an important component of contemporary learning environments. Regarding the use of AI in English language learning, participants reported particularly positive perceptions toward the role of AI in improving writing skills and facilitating the completion of English-related tasks. The highest mean scores were associated with AI-assisted task completion and writing improvement, indicating that students perceive AI as a practical and efficient learning resource. These findings are consistent with earlier studies which found that AI tools can provide immediate feedback, language

support, and individualized learning opportunities that enhance language performance and learner autonomy [2,5]. Similarly, recent research on generative AI has shown that large language models can effectively support academic writing, idea generation, and language development among higher education students [7].

The findings further demonstrated that participants recognized numerous benefits associated with AI-assisted language learning. Students generally agreed that AI contributes positively to learning effectiveness, accessibility, and educational support. Such findings reinforce the growing body of literature suggesting that AI technologies can create flexible learning environments that extend learning opportunities beyond traditional classroom settings [3]. Furthermore, AI-based systems can personalize learning experiences according to students' individual needs, thereby enhancing engagement and motivation [8]. These results indicate that learners view AI not merely as a technological innovation but as a valuable educational partner that supports their language-learning goals. Despite these positive perceptions, participants also expressed several concerns regarding AI use. The most prominent concerns were related to the accuracy and reliability of AI-generated information, followed by concerns about the potential negative effects of excessive AI dependence on critical thinking skills. These findings align with previous studies that have highlighted the limitations of generative AI systems and the necessity of evaluating AI-generated content critically [4]. Recent investigations have similarly emphasized that although AI offers substantial educational benefits, it may occasionally produce inaccurate, biased, or misleading information, requiring users to verify outputs carefully before relying on them for academic purposes [9]. Another important finding concerns students' attitudes toward the future integration of AI in English language education. Participants strongly agreed that AI will play an increasingly important role in language learning and that universities should provide training programs to support the effective and responsible use of AI tools. These findings suggest that students recognize the long-term educational potential of AI while simultaneously acknowledging the need for institutional guidance and digital literacy development. Similar conclusions were reported by recent studies emphasizing that successful AI implementation in higher education requires appropriate pedagogical frameworks, ethical guidelines, and user training to maximize benefits and minimize potential risks [10]. Overall, the findings of this study demonstrate that postgraduate students hold favorable attitudes toward AI-assisted English language learning. Although concerns regarding information accuracy and overreliance remain evident, the perceived benefits appear to outweigh the challenges. The results therefore support the growing consensus that AI technologies can serve as valuable complementary tools in language education when used responsibly and within appropriate educational frameworks. Consequently, higher education institutions should consider integrating AI literacy and responsible AI-use training into academic programs to ensure that students can effectively utilize these emerging technologies while maintaining critical thinking and academic integrity.

#### **Conclusion:**

This study investigated postgraduate students' perspectives on the use of Artificial Intelligence in English language learning at the Libyan Academy, Janzour, Libya. The findings revealed that AI tools are widely used among postgraduate students, with ChatGPT emerging as the most frequently utilized application. Participants reported positive experiences with AI, particularly in improving writing skills, facilitating task completion, and supporting independent language learning. The study also showed that students recognized numerous benefits associated with AI-assisted learning, including increased learning efficiency and enhanced access to educational support. However, concerns were identified regarding the accuracy of AI-generated information, the potential reduction of critical thinking skills, and the possibility of misleading content. Despite these challenges, participants expressed strong support for the future integration of AI into English language education and emphasized the importance of institutional training and guidance for effective AI use. Based on these findings, the study concludes that AI has significant potential to support English language learning in higher education. Nevertheless, successful implementation requires responsible use, appropriate training, and continuous evaluation to ensure that AI technologies complement rather than replace traditional learning practices. Future research may explore the long-term impact of AI on language proficiency development and investigate the perspectives of students and instructors across different educational contexts in Libya.

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