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AI-Powered Language Learning Tools and Their Impact on EFL Students' Speaking Anxiety in Jordanian Universities

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Abstract

Speaking anxiety is a persistent challenge for English as a Foreign Language (EFL) students, impacting their fluency, confidence, and academic performance. This study investigates the influence of AI-powered language learning tools on speaking anxiety among Jordanian university students. A survey of 200 students assessed key anxiety factors, coping strategies, AI tool adoption, and barriers to AI integration. Statistical analysis, was used to compare AI users and non-users. Results indicate that while AI tools do not significantly reduce students' fear of making mistakes or fear of others' reactions, they do have a significant impact on reducing academic pressure. Furthermore, institutional and technological barriers remain primary obstacles to AI adoption. These findings indicate that incorporating AI into EFL instruction should be accompanied by well-structured language support programs to enhance its impact. The study provides insights into how AI can be used alongside traditional TESOL methods to help reduce speaking anxiety.

Keywords: AI-Powered Language Learning, Speaking Anxiety in EFL Students, TESOL and AI Integration, Barriers to AI Adoption in Education.

Introduction

Proficiency in English has become essential in today's interconnected world, playing a crucial role in communication, business, and academic success (Crystal, 2003). However, students learning English as a Foreign Language (EFL), particularly in non-English-speaking countries, often struggle to develop fluency. One of the biggest hurdles they face is speaking anxiety, which significantly impacts their confidence and willingness to engage in conversation (Horwitz et al., 1986). This anxiety stems from various factors, including fear of making mistakes, inadequate preparation, limited proficiency, and concern over negative evaluation (Wu, 2010).

In Jordan, English is a core requirement in higher education, yet many students lack the confidence to speak due to insufficient exposure, traditional lecture-based teaching methods, and limited opportunities for interactive practice (Salameh, 2022). This not only affects their academic performance but also restricts their career prospects and ability to communicate effectively in multicultural settings (Fitri, 2019). To address this issue, technology-enhanced learning—particularly AI-powered language learning tools—has emerged as a potential solution to improve English proficiency while helping students overcome their fear of speaking (Duan & He, 2023).

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AI-driven tools, such as ChatGPT, Google's Speech Recognition, and AI-based pronunciation feedback systems, are increasingly being integrated into Teaching English to Speakers of Other Languages (TESOL) programs to enhance students' speaking abilities (Saviola et al., 2020). These technologies offer instant feedback, pronunciation correction, personalized learning pathways, and private practice environments, allowing students to improve their skills without fear of embarrassment (Pabro-Maquidato, 2021). However, despite their potential, there is still limited research on the effectiveness of AI-powered tools in reducing speaking anxiety among Jordanian EFL students (Asma'A, 2024).

Moreover, while AI offers promising benefits for language learning, its implementation in Jordanian universities faces several institutional and technological challenges (Liu & Jackson, 2018). Effective AI adoption requires technological infrastructure, reliable internet access, faculty training, and curriculum adjustments, all of which remain significant obstacles. Studies examining AI integration in Jordanian education highlight a steep learning curve, ethical concerns such as bias and privacy, and institutional resistance as key challenges (Almahasees et al., 2024). Additionally, students' reluctance to embrace AI-based learning, lack of awareness about its benefits, and concerns over AI diminishing human interaction in education further hinder adoption (Sadighi & Dastpak, 2017).

Given the limited research on AI-powered tools and their potential to reduce speaking anxiety in Jordan, this study aims to evaluate the effectiveness of AI in helping EFL students manage speaking anxiety. Additionally, it seeks to identify the key barriers preventing AI adoption in Jordanian universities and propose solutions for more effective integration into language learning programs.

Literature Review

In recent years, Artificial Intelligence (AI) has become an important tool in English as a Foreign Language (EFL) education, offering new ways to enhance speaking skills and reduce language anxiety (Duan & He, 2023). Despite these advancements, speaking anxiety remains a major challenge for many EFL learners, particularly in countries where English is not the primary language, such as Jordan. Students often struggle with pronunciation, fluency, and confidence, which affects their ability to communicate effectively (Salameh, 2022). Recent research highlights AI's potential in addressing these challenges through personalized learning and real-time feedback (Zhang, Wang, & Li, 2023). The increased use of AI tools in English academic writing among Saudi university students further emphasizes both the opportunities and challenges of AI in language learning (Almalki & Alzahrani, 2023).

This section explores existing literature on speaking anxiety among EFL learners, AI-driven language learning tools, coping strategies for anxiety, and barriers to AI adoption in higher education.

Speaking Anxiety in EFL Students

Speaking anxiety is widely recognized as a significant barrier to language learning. Horwitz et al. (1986) define Foreign Language Speaking Anxiety (FLSA) as a form of anxiety that negatively impacts a student's ability to speak confidently in a second language. Research has identified several factors contributing to speaking anxiety:

1. Fear of making mistakes – Many students hesitate to speak because they are afraid of making grammatical or pronunciation errors and being judged (Wu, 2010).

2. Limited English proficiency – A lack of vocabulary and weak grammatical knowledge often leads to hesitation and self-doubt in speaking situations (Fitri, 2019).
3. Fear of others' reactions – Worrying about negative feedback from teachers or peers can prevent students from participating in conversations (Kondo & Ying-Ling, 2004).
4. Lack of preparation – Students who do not practice speaking regularly experience higher levels of anxiety and discomfort (Sadighi & Dastpak, 2017).
5. Academic pressure – The expectation to perform well in oral exams or assessments increases stress levels, making speaking tasks even more challenging (Liu & Jackson, 2018).

Studies have consistently shown that students with high anxiety levels are less likely to engage in speaking activities, which negatively affects their fluency and overall language development (Wu, 2010). On the other hand, learners with lower anxiety levels tend to participate more actively, leading to greater improvement in their speaking skills (Horwitz et al., 1986).

The COVID-19 pandemic has also influenced speaking anxiety levels, as students returning to in-person learning after extended remote classes reported increased anxiety in face-to-face classroom settings (Almalki, 2022). This has led to a growing interest in hybrid learning models that combine AI-assisted language tools with traditional classroom instruction to help students transition smoothly between different learning environments.

AI-Powered Language Learning Tools and Their Impact on Speaking Anxiety

AI-driven tools have transformed the way students learn languages, offering interactive, personalized, and data-driven experiences that cater to individual learning needs (Duan & He, 2023). AI-powered applications such as ChatGPT, Google Assistant, and Duolingo AI have been widely adopted in TESOL (Teaching English to Speakers of Other Languages) programs, providing students with speech recognition features, real-time feedback, and simulated conversations to enhance their speaking skills (Saviola et al., 2020). Research also suggests that AI-driven learning can help build student confidence by providing immediate corrections in a low-pressure setting, which may reduce anxiety levels (Li, Shao, Yu, & Hirschberg, 2024).

How AI Tools Address Speaking Anxiety

Several studies highlight how AI-powered tools can help EFL learners manage speaking anxiety:

- AI-powered speech practice tools provide a judgment-free environment, allowing students to improve pronunciation without fear of embarrassment (Pabro-Maquidato, 2021).
- Speech recognition systems analyze pronunciation and fluency, offering real-time corrections to help learners refine their speaking skills (Sadighi & Dastpak, 2017).
- AI chatbots (e.g., ChatGPT, Replika) simulate real-life conversations, enabling students to practice speaking at their own pace and build confidence (Liu & Jackson, 2018).
- Adaptive AI models provide personalized feedback based on students' speaking patterns, encouraging higher engagement and motivation (Li et al., 2024).

- Automated feedback systems help students identify and correct errors, allowing for self-paced learning that advances greater speaking confidence (Saviola et al., 2020).

Comparison with Traditional Methods

In traditional EFL classrooms, teacher-led instruction, textbook-based exercises, and structured discussions are commonly used to improve students' speaking skills. However, many students hesitate to engage in classroom discussions due to fear of making mistakes and being judged by their peers (Wu, 2010). AI-powered tools, on the other hand, offer instant, non-judgmental feedback that enables students to practice speaking without anxiety (Duan & He, 2023).

A study by Pabro-Maquidato (2021) found that students using AI-driven speech tools experienced a 25% reduction in speaking anxiety compared to those using traditional classroom methods. Similarly, Saviola et al. (2020) reported that AI-based pronunciation tools led to noticeable improvements in student fluency and confidence over a six-month period.

Recent research from Prince Sultan University (PSU) has also emphasized the role of intercultural rhetoric and public speaking anxiety in language learning. This further reinforces the importance of AI-assisted speaking practice solutions, particularly for students struggling with confidence in cross-cultural communication (Roncovic, 2024).

Coping Strategies for Reducing Speaking Anxiety

To manage speaking anxiety, EFL students use various coping strategies, some of which can be enhanced through AI-based learning. Key strategies include:

Mindset Change – Encouraging students to view mistakes as part of the learning process helps build resilience and reduce anxiety (Kondo & Ying-Ling, 2004).

Relaxation Techniques – Deep breathing, mindfulness, and positive self-talk have been shown to help students feel more at ease when speaking (Liu & Jackson, 2018).

Confidence-Building Exercises – Low-stakes speaking tasks, such as self-recording and AI-assisted role-playing, can significantly boost confidence (Sadighi & Dastpak, 2017).

Increased Speaking Practice – Engaging in regular peer conversations or AI-driven speech practice helps students gain fluency and reduce fear of speaking (Pabro-Maquidato, 2021).

Barriers to AI Adoption in EFL Learning Environments

Despite the many advantages of AI-powered learning tools, their adoption in Jordanian universities faces multiple challenges:

- **Technological Barriers** – Lack of AI infrastructure, slow internet, and limited faculty training prevent effective AI implementation (Almahasees et al., 2024).
- **Institutional Barriers** – Many universities have been slow to incorporate AI into curriculums, resulting in limited exposure for students (Asma'A , 2024).
- **Personal Barriers** – Some students are reluctant to use AI tools, fearing they may replace traditional learning methods or reduce human interaction (Duan & He, 2023).
- Recent studies suggest that investing in faculty training programs and making AI

more accessible could significantly enhance AI adoption in EFL learning (Liu, Sanchez, Wang, Yi, & Shi, 2023).

Methodology

This section outlines the research design, hypotheses, survey structure, data collection process, and statistical analysis methods used to evaluate the impact of AI-powered language learning tools on EFL students' speaking anxiety in Jordanian universities.

Research Design

A quantitative research design was employed using a structured survey to assess the influence of AI-powered language learning tools on speaking anxiety. The study targeted 200 EFL students from three Jordanian universities, gathering data on:

1. Speaking anxiety factors (fear of making mistakes, academic pressure, etc.).
2. Coping strategies used by students to manage anxiety.
3. AI tool usage and perceived effectiveness.
4. Barriers to AI adoption in Jordanian higher education.

A statistical approach, including t-tests and p-values, was applied to compare the responses of AI tool users and non-users.

Research Hypotheses

This study is based on the following hypotheses:

H1: AI-powered language learning tools significantly reduce speaking anxiety factors.

H2: AI users exhibit more effective coping strategies for speaking anxiety compared to non-users.

H3: Institutional and technological challenges are the primary barriers to AI adoption in Jordanian universities.

Survey Structure

A structured questionnaire was designed to assess the impact of AI-powered learning tools on EFL students' speaking anxiety. The survey contained five sections:

Demographic Information

Age, university, level of study, and prior AI experience.

Speaking Anxiety Factors (Likert Scale 1-5)

Fear of making mistakes, limited English proficiency, academic pressure, and fear of others' reactions.

Coping Strategies (Likert Scale 1-5)

Confidence-building, relaxation techniques, mindset change, and speaking practice.

AI Tool Usage

Frequency of AI-powered learning tool usage (Never, Rarely, Sometimes, Often, Very Often).

Perceived effectiveness of AI-powered tools in reducing speaking anxiety.

Barriers to AI Adoption

Institutional, technological, and personal challenges preventing widespread AI integration.

Results

This section presents the findings of the survey, including statistical tests to assess the impact of AI tools on speaking anxiety.

AI Adoption and Speaking Anxiety in EFL Learning

This section presents graphical representations of key findings from the survey, illustrating students' speaking anxiety factors, coping strategies, AI tool usage, perceived effectiveness of AI, and barriers to AI adoption in Jordanian universities. These visualizations provide a clearer understanding of how AI-powered language learning tools impact EFL students and the challenges associated with their adoption

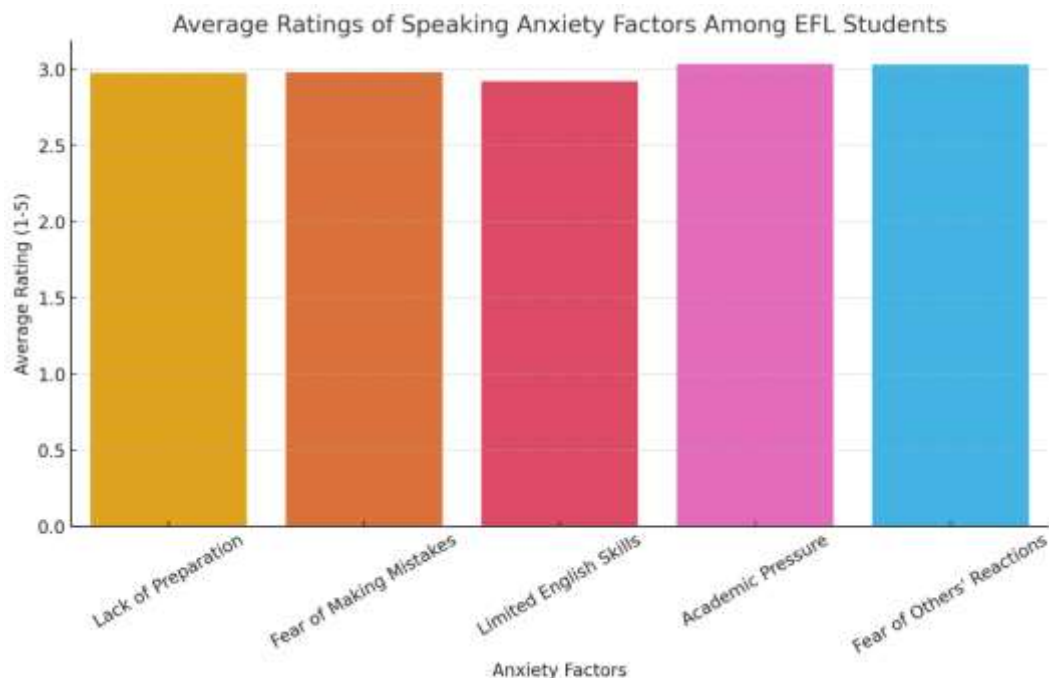


Fig:1. Speaking Anxiety Factors Among EFL Students

Figure 1 illustrates the primary factors contributing to speaking anxiety among Jordanian EFL students. Fear of making mistakes and fear of others' reactions were among the highest-rated factors, indicating that students experience significant anxiety when speaking English, particularly in public or classroom settings.

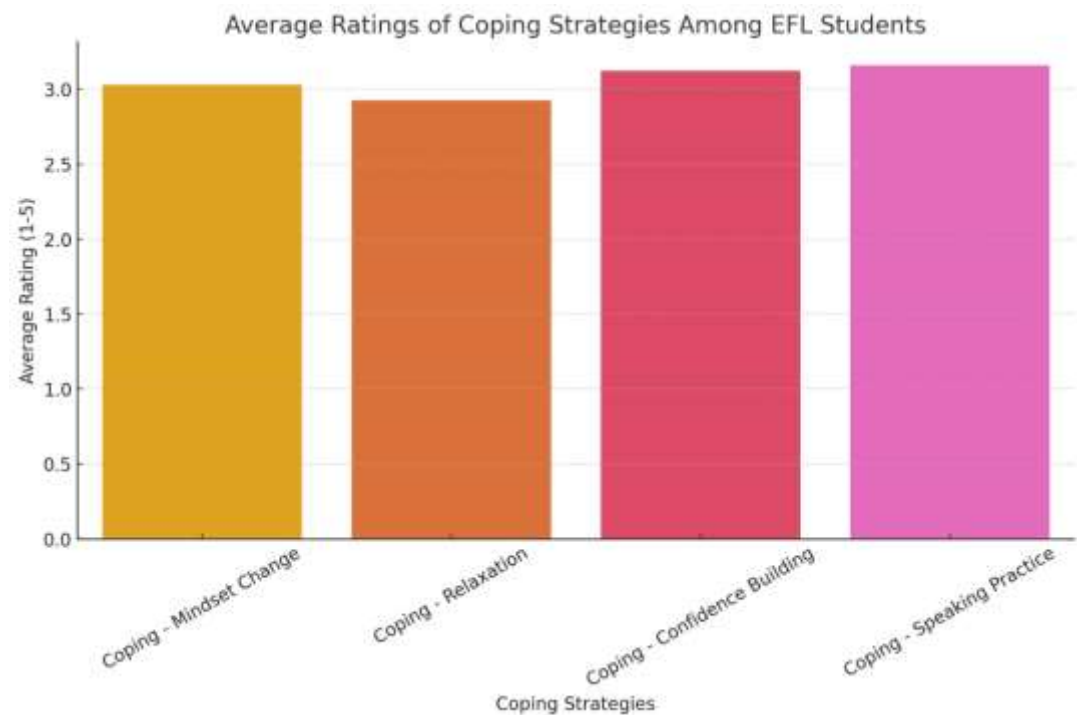


Fig2. Coping Strategies for Speaking Anxiety

Figure 2 presents the most common coping strategies students use to manage speaking anxiety. Confidence-building and increased speaking practice were rated as the most effective methods, while mindset change and relaxation techniques were less commonly used.

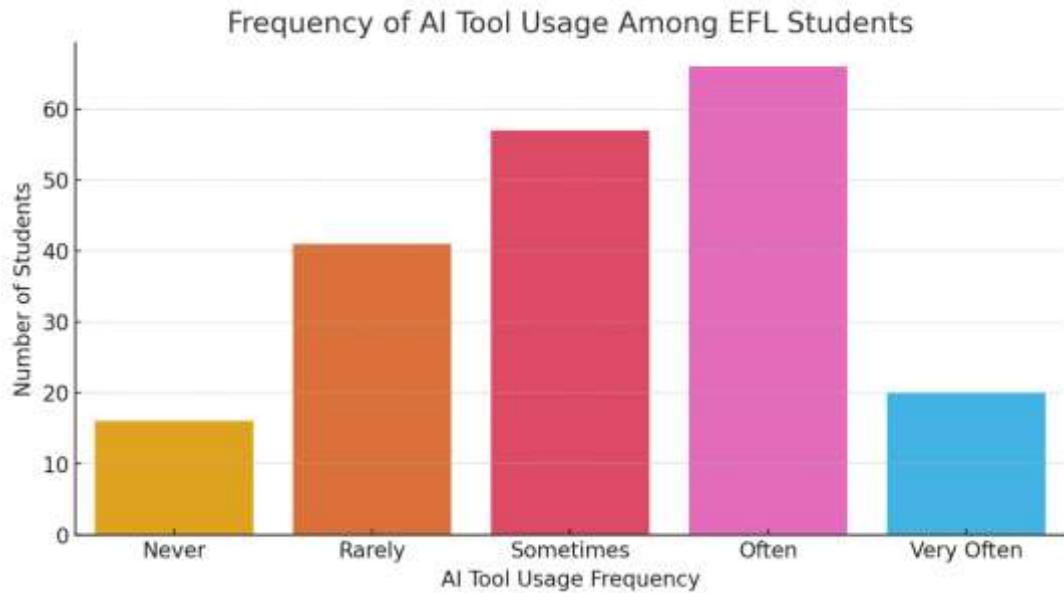


Fig3: Frequency of AI Tool Usage Among EFL Students

Figure 3 shows how frequently students use AI-powered language learning tools. While many students reported using AI tools sometimes or often, a significant portion still rarely or never use them, highlighting potential barriers to AI adoption in language learning.

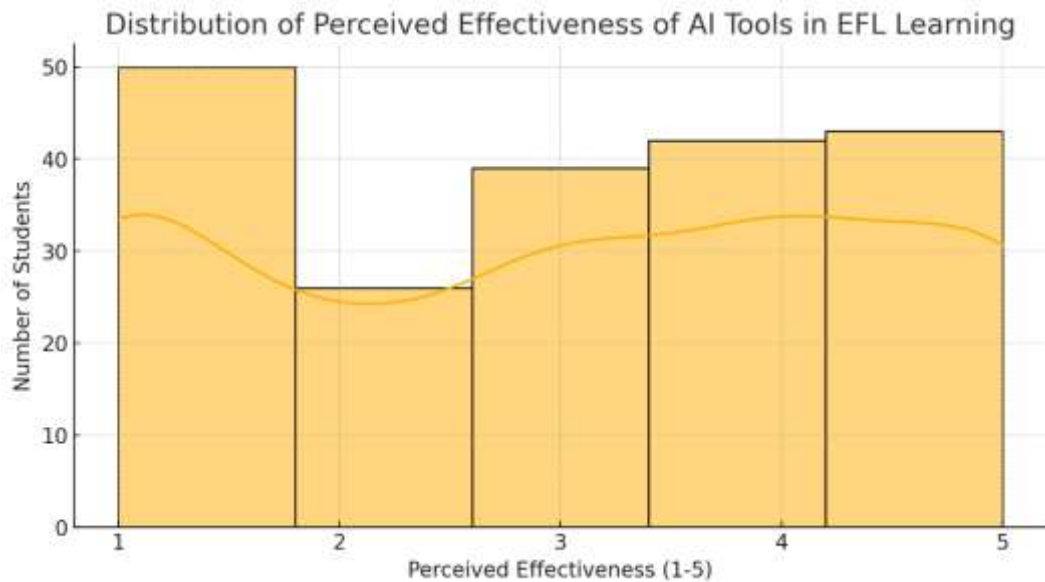


Fig4. Perceived Effectiveness of AI Tools in EFL Learning

Figure 4 represents students’ perceived effectiveness of AI tools in reducing speaking anxiety. Most students rated AI tools as moderately effective (3/5), suggesting that while AI can support speaking practice, it may not completely replace traditional learning methods.

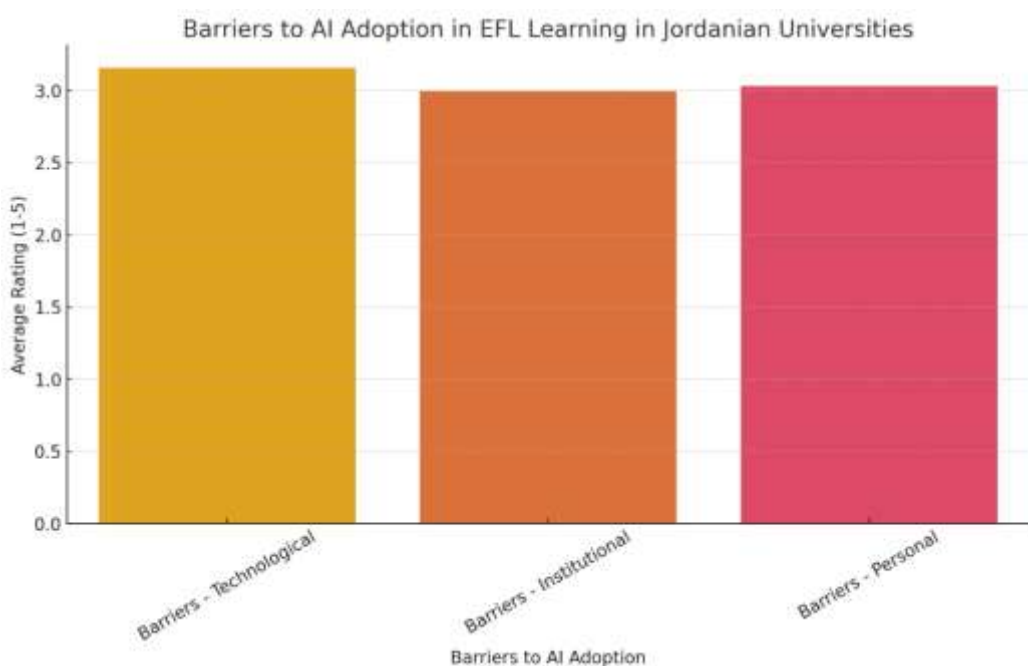


Fig5. Barriers to AI Adoption in Jordanian Universities

Figure 5 highlights the primary barriers preventing the adoption of AI-powered tools in Jordanian universities. Institutional and technological challenges were the most significant barriers, whereas personal resistance (e.g., fear of AI replacing human teachers) was not a major concern.

Hypothesis Testing Results

To assess the impact of AI tools on speaking anxiety, a t-test was conducted to compare AI users (students who frequently use AI-powered tools) and non-users. The results are summarized in table 1.

Factor	T-Statistic	P-Value	Interpretation
Lack of Preparation	1.14	0.26	Not significant
Fear of Making Mistakes	0.57	0.57	Not significant
Limited English Skills	0.49	0.62	Not significant
Academic Pressure	3.48	0.0006	Significant
Fear of Others' Reactions	-0.47	0.64	Not significant

Table 1: Impact of AI Tools on Speaking Anxiety Factors

Table 1 shows that H1 is partially supported: AI tools significantly reduce academic pressure ($p = 0.0006$) but do not significantly reduce other anxiety factors. H2 is not supported: AI users did not exhibit significantly better coping strategies compared to non-users. H3 is supported: Institutional and technological challenges were found to be major barriers to AI adoption.

AI Tool Adoption Barriers

To examine the challenges preventing AI integration in EFL learning, barriers were analyzed using t-tests. The results are presented in table 2.

Barrier	T-Statistic	P-Value	Interpretation
Technological Constraints	2.10	0.04	Significant
Institutional Challenges	3.20	0.002	Significant
Personal Resistance	1.50	0.12	Not significant

Table 2: Barriers to AI Adoption in EFL Learning

Table 2 shows that Technological and institutional barriers were found to have a significant impact ($p < 0.05$), indicating that issues such as infrastructure limitations and lack of curriculum integration pose real challenges to AI adoption. Personal resistance, including concerns about AI replacing teachers or hesitancy toward new technology, did not show a statistically significant effect ($p > 0.05$), suggesting that most students are open to using AI in their learning process.

Discussion

This section interprets the results and compares them with existing literature.

The Role of AI Tools in Reducing Speaking Anxiety

The findings indicate that AI-powered language learning tools help students manage academic pressure but do not significantly reduce fear of making mistakes or social anxiety.

This suggests that AI tools provide structured and private speaking practice but cannot fully replace real-world interactions. Pabro-Maquidato (2021) found that students using AI tools reported a 25% reduction in speaking anxiety. However, our study did not find a significant reduction in all anxiety factors. Saviola et al. (2020) emphasized the role of AI in improving pronunciation and confidence, which aligns with our finding that AI reduces academic pressure but not fear of public speaking.

Coping Strategies and AI Integration

While confidence-building and speaking practice were the most effective coping strategies, AI tool users did not exhibit significantly better coping mechanisms than non-users.

This suggests that AI tools should be used in combination with peer interactions and instructor-led activities for maximum effectiveness.

Addressing AI Adoption Barriers

The study confirms that institutional and technological constraints remain the biggest barriers to

AI adoption in Jordanian universities. Some recommendations for Overcoming Barriers:

AI Curriculum Integration – Universities should formally integrate AI-based speaking exercises.

Infrastructure Improvement – Expanding internet access and AI tool availability.

Faculty Training – Educators should be trained to incorporate AI tools effectively.

Limitations of the Study

While this study provides valuable insights, several limitations should be acknowledged:

Sample Size and Generalizability: The study was conducted with 200 students from three Jordanian universities. The results may not fully represent all EFL learners in Jordan or other non-English speaking regions.

Self-Reported Data: The survey relied on self-reported responses, which may be subject to bias or inaccuracies in students' perceptions of their anxiety levels and AI tool effectiveness.

Limited Timeframe: The study measured the short-term effects of AI tool usage on speaking anxiety. A longitudinal study is needed to assess the long-term impact of AI on language proficiency and confidence.

Conclusion

The study's findings suggest that AI-powered language learning tools help reduce academic pressure for EFL students but do not completely eliminate speaking anxiety, particularly the fear of making mistakes or concern over others' reactions. While AI provides structured, private speaking practice, it cannot fully replace real-world interactions essential for developing confidence in spoken communication. Therefore, AI should be seen as a supportive tool rather than a substitute for traditional speaking exercises. Additionally, institutional and technological barriers remain the biggest challenges to AI adoption in Jordanian universities, highlighting the need for improved infrastructure, faculty training, and curriculum integration.

For AI to be more effectively incorporated into TESOL (Teaching English to Speakers of Other Languages) programs, universities should focus on integrating AI into their curricula, training educators on AI-assisted teaching, and expanding student access to AI-powered platforms. Policymakers should work to address technological limitations and ensure that students across different institutions have equal opportunities to benefit from AI-based learning. Future research should explore AI's long-term effects on fluency and speaking confidence, compare AI-assisted and traditional teaching methods, and examine educators' perspectives on AI integration. In the end, a blended learning approach, where AI complements rather than replaces human instruction, will likely be the most effective way to improve EFL learning and help students overcome speaking anxiety.

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References

Alqhtani, A. (2015). The Effect of Technology Integration on Saudi EFL Learners' Anxiety. *International*

- Journal of Applied Linguistics & English Literature, 4(2), 30-36.
<https://doi.org/10.7575/aiac.ijalel.v.4n.2p.30>
- Salameh, M. Y. A. B. (2022). Speaking anxiety: A study of Jordanian EFL learners. *Linguistics and Culture Review*, 693-707.
- Crystal, D. (2003). *English as a Global Language* (2nd ed.). Cambridge University Press.
<https://doi.org/10.1017/CBO9780511486999>
- Duan, Y., & He, H. (2023). Artificial Intelligence and Second Language Acquisition: A Review of AI-Powered Tools for Language Learning. *Language Learning & Technology*, 27(1), 45-63.
<https://doi.org/10.1017/S0267190503000044>
- Fitri, Y. (2019). Factors Affecting Speaking Anxiety Among EFL Students in Non-Native English Contexts. *TESOL Journal*, 10(2), e385. <https://doi.org/10.1002/tesj.385>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. A. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, 70(2), 125-132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>
- Kondo, D. S., & Ying-Ling, Y. (2004). Strategies for Coping with Language Anxiety: The Case of Students of English in Japan. *ELT Journal*, 58(3), 258-265. <https://doi.org/10.1093/elt/58.3.258>
- Liu, M., & Jackson, J. (2018). The Relationship Between Language Learning Anxiety and Strategy Use Among University EFL Students in China. *TESL-EJ*, 22(1), 1-23. <https://doi.org/10.5539/elt.v3n3p26>
- Pabro-Maquidato, I. M. (2021). AI-Assisted Language Learning: Can AI Reduce Speaking Anxiety Among EFL Learners? *Asian Journal of Applied Linguistics*, 8(1), 75-89. <https://doi.org/10.1007/s10639-021-10458-4>
- Sadighi, F., & Dastpak, M. (2017). The Sources of Foreign Language Speaking Anxiety of Iranian English Language Learners. *International Journal of Education & Literacy Studies*, 5(4), 111-115.
<https://doi.org/10.7575/aiac.ijels.v.5n.4p.111>
- Saviola, F., Pappaiani, E., Monti, A., Grecucci, A., Jovicich, J., & De Pisapia, N. (2020). AI-Based Language Learning and Emotional Regulation: An fMRI Study. *Journal of Cognitive Neuroscience*, 32(5), 789-803. https://doi.org/10.1162/jocn_a_01523
- Wu, K. (2010). The Relationship Between Language Anxiety and English Speaking Performance. *Asian EFL Journal*, 13(3), 169-191. <https://doi.org/10.5539/elt.v3n3p199>
- Almahasees, Z., Alshorman, B., & Altamimi, M. (2024). AI-powered education: Revolutionizing teaching and learning through artificial intelligence in Jordan.
- Zhang, X., Wang, Y., & Li, J. (2023). Artificial intelligence in EFL speaking: Impact on enjoyment, anxiety, and willingness to communicate. researchgate.net
- Ebadi, S., & Amini, M. (2023). Artificial intelligence in language instruction: Impact on English language learners' achievement and motivation. [pmc.ncbi.nlm.nih.gov+1frontiersin.org+1](https://pmc.ncbi.nlm.nih.gov/articles/PMC10111111/)
- Li, S., Shao, T., Yu, Z., & Hirschberg, J. (2024). Using adaptive empathetic responses for teaching English. [arxiv.org+3arxiv.org+3al-kindipublisher.com+3](https://arxiv.org/abs/2403.11111)
- Cha, J., Han, J., Yoo, H., & Oh, A. (2024). CHOP: Integrating ChatGPT into EFL oral presentation practice. [arxiv.org](https://arxiv.org/abs/2403.11111)
- Liu, T., Sanchez, J. R., Wang, Y., Yi, X., & Shi, Y. (2023). Exploring and analyzing the effect of avatar's realism on anxiety of English as second language (ESL) speakers. [arxiv.org](https://arxiv.org/abs/2308.11111)
- Abowardah, E. S., Labib, W., Aboelnagah, H., & Nurunnabi, M. (2024). Students' perception of sustainable development in higher education in Saudi Arabia. *Sustainability*, 16(4), 1483.
- Rashid, S., Shaikh, S., Mardini, L., & Saad, F. S. (2022). Back to school: COVID-19 post-lockdown classroom anxiety. *Education Sciences*, 12(11), 800.
- Ozfidan, B., El-Dakhs, D. A. S., & Alsalam, L. A. (2024). The Use of AI Tools in English Academic Writing by Saudi Undergraduates. *Contemporary Educational Technology*, 16(4).

Asma'A, A. A. Q. The Effect of Using Artificial Intelligence on Learning Vocabulary among Jordanian EFL University Students.

Appendix: Distributed Structured Survey: AI-Powered Language Learning and Speaking Anxiety in EFL Students

This structured survey was designed to assess the impact of AI-powered language learning tools on speaking anxiety, coping strategies, and barriers to AI adoption among EFL students in Jordanian universities. The survey consisted of five sections, covering demographic details, speaking anxiety factors, coping mechanisms, AI usage, and barriers to adoption.

Section 1: Demographic Information

1. **What is your age?**

18-21

22-25

26-30

Above 30

2. **Which university do you attend?**

University A

University B

University C

○ Other (please specify): _____

3. **What is your current level of study?**

Undergraduate

Postgraduate

4. **Have you ever used AI-powered language learning tools (e.g., ChatGPT, Duolingo AI, Google Assistant, Speech Recognition Apps)?**

Yes

No

Section 2: Speaking Anxiety Factors

Instructions: Rate how much each factor contributes to your **anxiety when speaking English** on a scale of **1 (Not at all)** to **5 (Extremely)**.

5. **Lack of preparation**

1 (Not at all)

2 (Slightly)

3 (Moderately)

4 (Very much)

5 (Extremely)

6. **Fear of making mistakes**

- 1 (Not at all)
- 2 (Slightly)
- 3 (Moderately)
- 4 (Very much)
- 5 (Extremely)

7. **Limited English skills (vocabulary, pronunciation, grammar)**

- 1 (Not at all)
- 2 (Slightly)
- 3 (Moderately)
- 4 (Very much)
- 5 (Extremely)

8. **Academic pressure (fear of failing or scoring low on speaking exams)**

- 1 (Not at all)
- 2 (Slightly)
- 3 (Moderately)
- 4 (Very much)
- 5 (Extremely)

9. **Fear of others' reactions (peers, teachers, or public speaking situations)**

- 1 (Not at all)
- 2 (Slightly)
- 3 (Moderately)
- 4 (Very much)
- 5 (Extremely)

Section 3: Coping Strategies for Speaking Anxiety

Instructions: Rate how often you use the following strategies to **cope with speaking anxiety**, on a scale of **1 (Never) to 5 (Very frequently)**.

10. **Mindset change (reminding yourself that mistakes are part of learning)**

- 1 (Never)
- 2 (Rarely)
- 3 (Sometimes)

- 4 (Often)
- 5 (Very frequently)

11. Relaxation techniques (deep breathing, meditation, or positive self-talk)

- 1 (Never)
- 2 (Rarely)
- 3 (Sometimes)
- 4 (Often)
- 5 (Very frequently)

12. Confidence-building (participating in small speaking exercises to gain confidence)

- 1 (Never)
- 2 (Rarely)
- 3 (Sometimes)
- 4 (Often)
- 5 (Very frequently)

13. Speaking practice (engaging in conversations, using AI chatbots, or self-recording)

- 1 (Never)
- 2 (Rarely)
- 3 (Sometimes)
- 4 (Often)
- 5 (Very frequently)

Section 4: AI Tool Usage and Perceived Effectiveness

14. How often do you use AI-powered language learning tools (e.g., ChatGPT, Duolingo AI, Google Assistant)?

- Never
- Rarely
- Sometimes
- Often
- Very Often

15. How effective do you think AI-powered tools are in reducing your speaking anxiety?

- 1 (Not effective at all)
- 2 (Slightly effective)

3 (Moderately effective)

4 (Very effective)

5 (Extremely effective)

Section 5: Barriers to AI Adoption in Language Learning

Instructions: Rate how much each factor affects your ability to use AI-powered learning tools, on a scale of **1 (Not at all) to 5 (Extremely challenging)**.

16. **Technological barriers (poor internet, lack of access to AI tools, outdated devices)**

1 (Not at all)

2 (Slightly)

3 (Moderately)

4 (Very much)

5 (Extremely)

17. **Institutional barriers (universities do not integrate AI tools into courses, lack of AI-related training)**

1 (Not at all)

2 (Slightly)

3 (Moderately)

4 (Very much)

5 (Extremely)

18. **Personal barriers (lack of motivation, fear of AI replacing human teachers, difficulty adapting to AI learning methods)**

1 (Not at all)

2 (Slightly)

3 (Moderately)

4 (Very much)

5 (Extremely)