

**The Role of AI Platforms in Enhancing Motivation,
Language Proficiency, and Intercultural Competence
Among EFL Learners: A Scoping Review**

Hatim Abdulhadi Masoudi

Associate Professor of Applied Linguistics College of Arts and
Humanities, Taibah University,
Saudi Arabia

ORCID ID: 0000-0003-3662-8222

Abstract

The rapid advancement of Artificial Intelligence (AI) technologies is transforming English as a Foreign Language (EFL) education. The study aims to comprehensively analyze peer-reviewed research to understand how AI technologies reshape language learning experiences, exploring their impacts on learner motivation, linguistic skills, and cross-cultural understanding. The review followed Arksey and O'Malley's framework and the Joanna Briggs Institute guidelines. The researcher systematically searched ERIC, Scopus, Web of Science, and Google Scholar databases, focusing on peer-reviewed articles published between 2010 and 2024. Inclusion criteria were applied to select empirical studies addressing AI's impact on motivation, proficiency, or intercultural competence in EFL learning. The data were charted and synthesized narratively. The review revealed that AI platforms provide personalized, interactive learning experiences significantly boosting learner motivation. ChatGPT, Grammarly, and ELSA improved language skills, particularly writing, speaking, and grammatical accuracy. AI platforms also showed potential in developing intercultural competence by exposing learners to diverse cultural contexts. However, challenges such as contextual inaccuracies in feedback, over-reliance on AI tools, and ethical concerns like data privacy and algorithmic bias persist. AI platforms present transformative opportunities for EFL education, fostering personalized, engaging, and culturally enriched learning experiences. To maximize their potential, careful integration, ethical considerations, and ongoing refinement of AI tools are imperative. Future research should address long-term impacts and develop adaptive frameworks for inclusive and effective AI-enhanced education.

Keywords:

Artificial Intelligence, EFL Learners, Motivation, Language Proficiency, Intercultural Competence, Educational Technology

دور منصات الذكاء الاصطناعي في تعزيز دوافع التعلم والكفاءة اللغوية والكفاءة الثقافية بين متعلمي اللغة الإنجليزية كلغة أجنبية: مراجعة شاملة

حاتم عبد الهادي مسعودي

أستاذ اللغويات التطبيقية المشارك، كلية الآداب والإنسانيات، جامعة الطائف، المملكة العربية السعودية
المستخلص

ما تشهده تقنيات الذكاء الاصطناعي (AI) من تطور سريع وغير مسبوق أصبح يُرى أثره بوضوح في تعلم اللغة الإنجليزية كلغة أجنبية (EFL)؛ مما جعل هدف هذه الدراسة إجراء تحليل شامل للأبحاث المحكّمة للوقوف على فهم، بل واستيعاب، سبل استخدام مثل تلك التقنيات وكيفية إعادة صياغة مخزون تعلم اللغة وتشكيله، ومعرفة مدى أثرها الملموس على دوافع المتعلمين، وكذلك المهارات اللغوية، فضلاً عن جوانب البعد الثقافي المتبادل. وفي هذا الصدد، استقصى البحث عن كُتب الإطار العملي لأومالي (O'Malley)، ولا سيما إرشادات معهد جونا بريجز (Joanna Briggs). كما قام الباحث بالاستقصاء البحثي بشكل منهجي وفق قواعد البيانات المعتمدة، ومنها (Google Scholar)، و(Scopus)، و(Web of Science)، و(ERIC)، من خلال الاستعانة برسومات بيانية وملخصات سردية لها، مع التركيز على الأبحاث المحكّمة والصادرة بين عامي 2010 & 2024، ومراعاة تطبيق معايير الإدراج والدمج حيال انتقاء الدراسات التجريبية التي تناولت تأثير الذكاء الاصطناعي على دوافع التعلم أو كفاءة العملية التعليمية أو مدى إتقان المهارات الثقافية عند تعلم اللغة الإنجليزية كلغة أجنبية. وخلص هذا الاستقصاء البحثي إلى الكشف عن الكم الوافر من الخبرات الشخصية والتفاعلية التي تركز بها منصات الذكاء الاصطناعي إزاء تعزيز سبل التعلم بشكل كبير لدى المتعلم، ومنها، على سبيل المثال، منصات ChatGPT، وGrammarly، وELSA، ودورها الملموس في رفع كفاءة المهارات اللغوية، وبالأخص مهارات الكتابة والمحادثة والدقة اللغوية. كما أظهرت تلك المنصات نتائج مبشرة حيال استيعاب البعد أو الحاجز الثقافي بين اللغات من خلال ممارسة المتعلم ومشاركته الفعلية في سياقات ثقافية متنوعة، ومع ذلك، لا تزال هناك تحديات تتعلق بتفاوت السياقات الواردة في التقييم وتباينها، وكذلك الاعتماد المفرط على أدوات الذكاء الاصطناعي، ناهيك عن المسائل الأخلاقية، مثل خصوصية البيانات والتحيز الخوارزمي (algorithmic bias)، إلا أن هذا لا ينكر دور هذه المنصات الذي يتجلى في إتاحة كم هائل من الخدمات التحويلية لتعلم اللغة الإنجليزية كلغة أجنبية، فضلاً عن تعزيز خبرات التعلم الشخصية والمختلطة والثرية ثقافياً. ومع ذلك، فيجب الحرص على أخذ الحذر والدقة، ومراعاة الاعتبارات الأخلاقية، والمتابعة المتواصلة لأدوات الذكاء الاصطناعي لتحقيق أقصى قدر من الاستفادة من مثل هذه المزايا. وختاماً، يوصي هذا البحث الأبحاث المستقبلية بضرورة تناول الآثار طويلة المدى للتعلم المعزز بالذكاء الاصطناعي وتطوير أطر مناسبة تتسم بالشمولية والفعالية.

الكلمات المفتاحية:

الذكاء الاصطناعي، متعلمو اللغة الإنجليزية كلغة أجنبية، الدافع، الكفاءة اللغوية، الكفاءة بين الثقافات، التكنولوجيا التعليمية.

**The Role of AI Platforms in Enhancing Motivation,
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Hatim Abdulhadi Masoudi

Associate Professor of Applied Linguistics College of Arts and
Humanities, Taibah University,
Saudi Arabia

ORCID ID: 0000-0003-3662-8222

Background:

Artificial Intelligence (AI) integration in education, particularly in English as a Foreign Language (EFL) learning, has gained significant traction in recent years. This growing interest is driven by the potential of AI platforms to enhance motivation, language proficiency, and intercultural competence among learners. As globalization continues to shape educational landscapes, the need for effective language acquisition strategies that foster cultural understanding becomes increasingly critical. Recent studies have demonstrated the transformative impact of AI on EFL learners' motivation. Moybeka et al. (2023) suggest that AI technologies have shown the ability to transform language education by crafting dynamic, adaptive learning environments that align with individual learner needs. These tools sustain student interest and cultivate perseverance in mastering language skills. Personalized approaches, such as tailored feedback and gamified experiences, appear instrumental in maintaining engagement. When integrated effectively, these strategies could encourage intrinsic and extrinsic motivation, making learning more rewarding and immersive (Fountoulakis, 2024; Hanna, 2022). Wei (2023) emphasize the role of AI in fostering autonomous learning by encouraging learners to take ownership of their educational journeys. Through features like real-time feedback and progress tracking, AI systems guide learners from dependence on external instruction to self-directed study. This transition improves proficiency and instils critical skills like goal-setting and self-monitoring, which are vital for lifelong learning. When combined with the motivational benefits, AI platforms offer a comprehensive approach to cultivating independence and engagement in EFL learners (Moybeka et al., 2023).

AI tools are increasingly being recognized for their capacity to simulate authentic cultural exchanges. Rusmiyanto et al. (2023) in a literature review highlighted how immersive AI-driven platforms enable learners to practice language in culturally relevant contexts, enhancing both linguistic and cultural understanding. They explained that AI

systems could bridge the gap between theoretical knowledge and real-world application by exposing learners to diverse traditions, idiomatic expressions, and communicative norms. Combined with Holmes and Porayska-Pomsta (2023)'s advocacy for ethical, inclusive frameworks, AI technologies can promote cross-cultural awareness in a way that is both enriching and socially responsible. The role of AI in language learning is further enhanced by its capacity to support self-regulated learning. Wei's findings suggest that AI tools facilitate the transition from other-regulation to self-regulation in language learning, enabling learners to take greater ownership of their educational journeys (Wei, 2023). This self-directed approach is particularly beneficial in EFL contexts, where learners often face challenges maintaining motivation and engagement. By empowering learners to set goals and monitor their progress, AI platforms can contribute to more effective and personalized language learning experiences. Thus, integrating AI platforms in EFL education presents a novel contribution to language learning.

Integrating AI into education demands a careful balance between technological innovation and ethical responsibility. While Holmes and Porayska-Pomsta (2023) calls for frameworks to mitigate biases and inequities, these challenges also present opportunities to enhance the inclusivity of language learning tools. Rusmiyanto et al. (2023) suggests that AI's adaptive capabilities can be leveraged to cater to learners from diverse backgrounds, fostering a more equitable learning environment. By embedding ethical principles into AI algorithms, these platforms can ensure that the benefits of technological advancements are accessible to all.

The primary aim of this scoping review is to systematically explore and synthesize existing literature on the role of Artificial Intelligence (AI) platforms in enhancing motivation, language proficiency, and intercultural competence among EFL learners. Specifically, this review seeks to achieve the following objectives:

1. To identify and categorize the various AI platforms and technologies currently employed in EFL education.
2. To investigate how AI platforms influence learners' motivation in EFL contexts.
3. To evaluate the effectiveness of AI-assisted learning tools in improving language proficiency among EFL learners.
4. To explore the role of AI platforms in promoting intercultural competence among EFL learners.
5. To provide recommendations for educators and policymakers on integrating AI technologies in EFL instruction.

Methodology

This scoping review was conducted using the methodological framework established by Arksey and O'Malley and the updated guidance from the Joanna Briggs Institute (JBI). This approach is particularly suited for exploring the breadth of literature surrounding the role of Artificial Intelligence (AI) platforms in enhancing motivation, language proficiency, and intercultural competence among English as a Foreign Language (EFL) learners (Khalil et al., 2024). The methodology consisted of the following key stages: identifying the research question, identifying relevant literature, selecting literature, charting the data, and collating, summarizing, and reporting results.

1. **Identifying the Research Question:** The primary research question guiding this scoping review is: "What is the role of AI platforms in enhancing motivation, language proficiency, and intercultural competence among EFL learners?" This question delineated the scope of the review and ensured that the literature search was focused and relevant.
2. **Identifying Relevant Literature:** A comprehensive literature search was conducted across multiple databases, including ERIC, Scopus, Web of Science, and Google Scholar. The search strategy employed a combination of keywords and phrases such as "AI in language learning," "EFL motivation," "language proficiency," and "intercultural competence." The search was limited to peer-reviewed articles published in English from 2010 to the present to ensure the inclusion of recent advancements in the field.
3. **Selecting Literature:** Inclusion criteria were established to guide the selection of relevant studies. Articles were included if they focused on the use of AI platforms in EFL contexts, addressed at least one of the following aspects: motivation, language proficiency, or intercultural competence, and were empirical studies. Articles were excluded if they were reviews, theoretical papers, or not available in full text. Articles that are focused on non-EFL contexts or do not involve AI technologies were also excluded. The selection process was conducted in two phases: an initial screening of titles and abstracts, followed by a full-text review of potentially relevant articles as described by Khalil et al. (2024). Figure 1 illustrates the flowchart of the screening process.
4. **Charting the Data:** A data extraction form was created to capture key information from each included study systematically. The data included details of the author(s), year of publication, study design, sample size, AI technologies used, outcomes related to motivation,

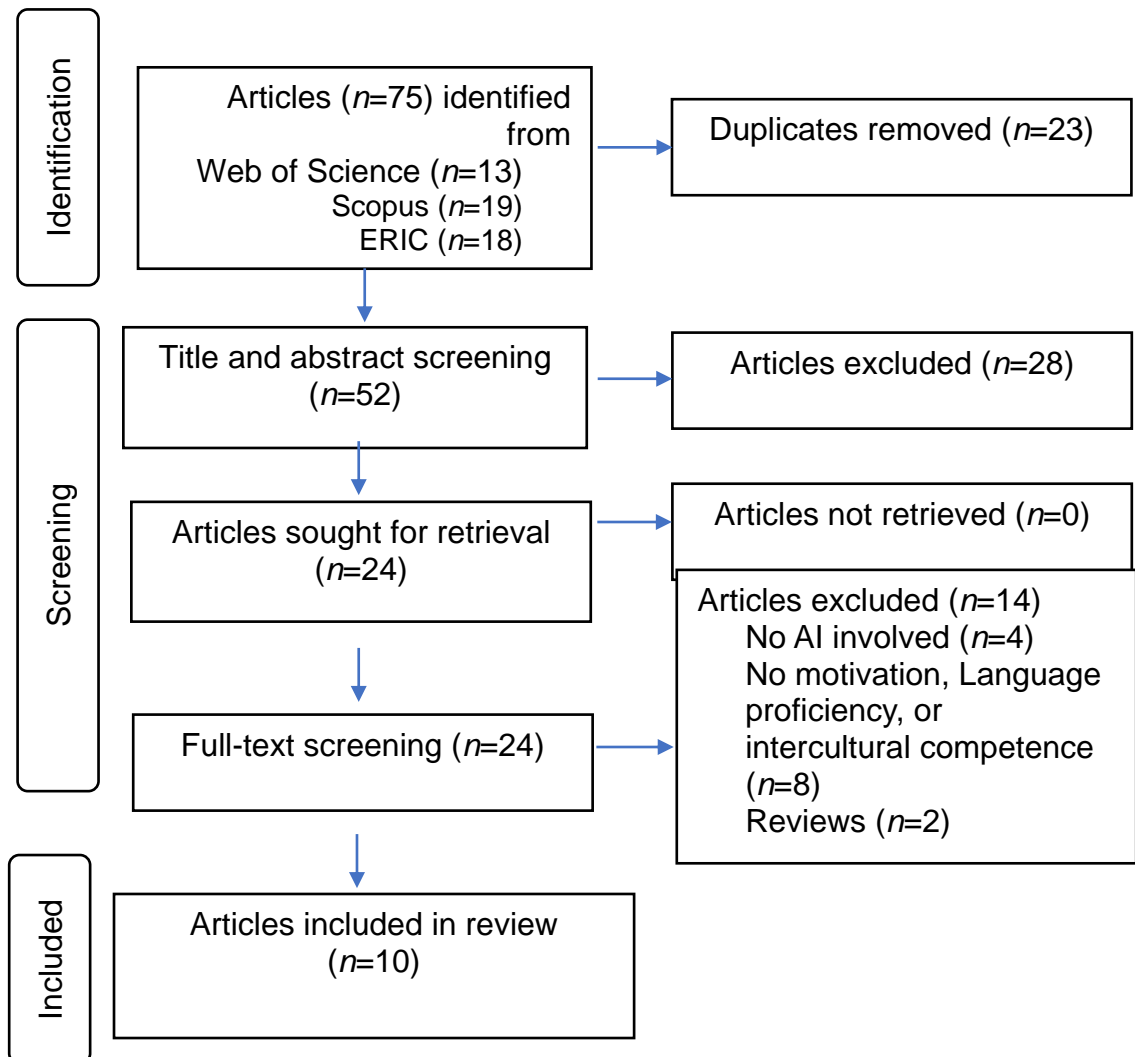
language proficiency, and intercultural competence, and key findings.

5. Collating, Summarizing, and Reporting Results: The final stage involved collating and summarizing the findings from the charted data. The results were organized thematically based on the three key areas of focus: motivation, language proficiency, and intercultural competence. A narrative synthesis was employed to present the findings, highlighting the contributions of AI platforms to each area and discussing implications for EFL education. The review also identified existing literature gaps and suggested future research directions.
6. Ethical Considerations: The scoping review did not involve direct interaction with human participants or sensitive data. Thus, ethical approval was not required.

Literature Search Strategy

The literature search for this scoping review was conducted systematically to ensure a comprehensive and unbiased collection of relevant studies on the role of AI platforms in enhancing motivation, language proficiency, and intercultural competence among EFL learners. The search strategy involved several key steps, including defining search terms, selecting databases, and applying inclusion and exclusion criteria. The search utilized a combination of keywords and phrases related to the research focus. Key terms included "Artificial Intelligence," "AI platforms," "EFL learners," "language proficiency," "motivation," and "intercultural competence." Boolean operators (AND, OR) were employed to refine the search. The following combinations were used ("Artificial Intelligence") OR "AI platforms" AND ("EFL learners" OR "English as a Foreign Language") AND ("motivation" OR "language proficiency" OR "intercultural competence"). Various academic databases (ERIC (Education Resources Information Center), Scopus, Web of Science, and Google Scholar) were utilized to capture a broad and diverse literature range.

Figure 1: Flowchart of the Screening Process



Results

This scoping review examined the impact of AI platforms on motivation, language proficiency, and intercultural competence among English as a Foreign Language (EFL) learners. The findings from diverse studies reveal a broad spectrum of advantages, challenges, and recommendations highlighting AI tools' transformative potential in language education. See a summary of the result as demonstrated in Table 1.

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S/N O.	Authors	Country	AI Platforms & Learner's Motivation	Types of AI Platforms	AI & Language Proficiency	AI Platforms & Intercultural Competence	Challenges with the Use of AI	Recommendation	Study Design	Sample Size
	(Arini et al., 2022)	Indonesia	Not mentioned	NovoLearn- an AI-based mobile learning application.	AI-based mobile learning significantly improves EFL students' English competence.	No information provided	Minor malfunctions in the application affect user experience. Audio recordings sometimes fail to save properly. Background noise disrupts pronunciation practice effectiveness. Loading times can be frustrating for users.	Utilize NovoLearn for EFL courses in large classrooms. Encourage mobile learning for flexible, anytime learning opportunities. Foster students' confidence through enjoyable AI-based learning experiences. Integrate technology to enhance communication skills in EFL learners.	Quasi-experimental design	Not provided
	(Kang, 2022)	United States	Interactions with AI avatars did not increase motivation level.	AI-based conversational bot called Replika	AI avatars significantly improve speaking accuracy and fluency	No info. Provided	AI may struggle with understanding learners' speech accurately. Non-verbal cues in interactions were not addressed in the study. High-level learners may feel dissatisfied with AI interactions.	Utilize AI avatars for enhanced speaking practice. Encourage low-level learners to interact with AI.	Quasi-experimental design	61

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S/N O.	Authors	Coun try	AI Platfor ms & Learne r's Motiva tion	Types of AI Platform s	AI & Langua ge Proficie ncy	AI Platform s & Intercult ural Compete nce	Challen ges with the Use of AI	Recommen dation	Study Design	Sam ple Size
	(Meyer et al., 2024)	Germ any	AI-generated feedback enhances task motivation in EFL contexts.	GPT-3.5-turbo	AI-generated feedback enhances revision performance in writing tasks.	No info. Provided	<p>Quality of AI-generated feedback may vary across students.</p> <p>Students need AI literacy to handle feedback effectively.</p> <p>Feedback may contain errors despite increased motivation.</p> <p>Cumulative effects of feedback require further investigation.</p> <p>Different students may react variably to feedback types.</p>	<p>Implement LLM-generated feedback in writing instruction.</p> <p>Conduct longitudinal studies on feedback effectiveness.</p> <p>Explore socioemotional support from LLMs in education.</p> <p>Assess feedback usefulness from students' perspectives.</p> <p>Adapt LLMs for diverse writing tasks & criteria.</p>	Mixed method	459
	(Song & Song, 2023)	China	AI-assisted instruction significantly boosts EFL learners' writing motivation.	ChatGPT & Grammarly	AI tools significantly improve EFL learners' writing skills.	No info. Provided	<p>Contextual accuracy of AI suggestions can be problematic.</p> <p>Over-reliance on AI hinder creativity & critical thinking.</p> <p>Need for careful judgment when</p>	<p>Continue developing AI tools for language learning.</p> <p>Emphasize ethical use of AI in academic writing.</p> <p>Provide ongoing training for effective AI integration.</p> <p>Monitor long-term impacts of AI on</p>	Mixed study	50

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S/N O.	Authors	Country	AI Platforms & Learner's Motivation	Types of AI Platforms	AI & Language Proficiency	AI Platforms & Intercultural Competence	Challenges with the Use of AI	Recommendation	Study Design	Sample Size
							using AI feedback. Long-term impact on writing skills remains a concern. Continuous improvement of AI tools is essential for effectiveness.	writing skill.		
	(Chu et al., 2024)	Taiwan & Japan	No inf.	Not provided	No info. Provided	No info. Provided	The research paper does not address challenges with AI.	Address time-zone challenges in COIL project planning.	Mixed study	32
	(Xia et al., 2024)	China	Real-time feedback boosts learner confidence & motivation.	Machine Learning, Natural Language Processing (NLP), and Deep Learning	AI tools improve engagement & language proficiency	AI enhances users' communicative efficiency & cultural understanding	Ethical consideration regarding data privacy & bias must be addressed. Ensuring accessibility for all learners is crucial. Continuous exploration of AI's impact on learner motivation is needed. Effective pedagogi	Assess scalability of AI-enhanced language learning platforms. Address ethical considerations in AI educational context. Strengthen collaborations among technologists, educated, & cultural experts.	Mixed study	600

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S/N O.	Authors	Country	AI Platforms & Learner's Motivation	Types of AI Platforms	AI & Language Proficiency	AI Platforms & Intercultural Competence	Challenges with the Use of AI	Recommendation	Study Design	Sample Size
							cal approaches in digital environments require investigation.			
	(Zheng et al.,)	China	AI platforms enhance learner autonomy in language learning	ChatGPT, Youchat and Spark	AI tools provide interactive conversational practice for fluency.	No inf. Provided	<p>Challenges exist in implementing GAI in education.</p> <p>Assessment methods need prompt updates for GAI integration.</p> <p>Institutional policies require revision for effective GAI use.</p>	<p>Educators should enhance individual motivation in technology use.</p> <p>Implement goal-setting and feedback mechanisms for better engagement.</p> <p>Foster a supportive learning environment for all proficiency levels.</p> <p>Encourage collaboration and interaction among learners using AI tools.</p>	Survey	620
	(Fountoulakis, 2024)	Canadian	Immediate feedback from AI boosts learner confidence and motivation.	Duolingo, Rosetta Stone, and ChatGPT	AI tools significantly improve language proficiency in EFL learners	AI tools help learners grasp cultural nuances in language use	<p>AI tools may oversimplify language learning complexities.</p> <p>Over-reliance on AI can diminish the role of human interaction.</p> <p>AI often lacks</p>	<p>Integrate AI tools into language curricula effectively</p> <p>Address ethical considerations like data privacy and access.</p>	Mixed method	200

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S/N O.	Authors	Country	AI Platforms & Learner's Motivation	Types of AI Platforms	AI & Language Proficiency	AI Platforms & Intercultural Competence	Challenges with the Use of AI	Recommendation	Study Design	Sample Size
							depth in conveying cultural nuances. Potential for reinforcing stereotypes and superficial cultural understanding. Ethical concerns include data privacy and algorithmic bias.			
	(Zhang et al., 2024)	China	AI platforms enhance foreign language enjoyment and control over the learning process among learners.	Lora and Alexa	AI tools enhance foreign language enjoyment and boosts learners' confidence.	No info. Provided	Reliance on self-reported responses may affect accuracy. Need for objective tests in future assessments. Qualitative methods like interviews are necessary for deeper insights.	Integrate AI-driven technologies in language education	Survey	131
	(Sayit et al., 2023)	Indonesia	AI platforms enhance learner motivation in EFL contexts.	English Language Speech Application (ELSA)	ELSA improve EFL learners' speaking performance	No info. Provided	Lack of interest in learning English among students. Limited vocabulary affecting speaking	EFL teachers and students should use ELSA speak. ELSA speak enhances speaking skills and pronunciation	Mixed method	21

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S/N O.	Authors	Country	AI Platforms & Learner's Motivation	Types of AI Platforms	AI & Language Proficiency	AI Platforms & Intercultural Competence	Challenges with the Use of AI	Recommendation	Study Design	Sample Size
							performance. Low self-confidence when speaking in public. Insufficient support from the surrounding environment.	on.		
	(Wei, 2023)	China	AI platforms enhance learner engagement and interaction.	ChatGPT and Duolingo	AI-assisted tools significantly improve English learning outcomes.	No info. Provided	No info. Provided	Incorporate AI tools in language instruction	Mixed method	60

Table 1: Summary of Studies on the Role of AI Platforms in Enhancing Motivation, Language Proficiency, and Intercultural Competence Among EFL Learners

Motivation in EFL Learning

Most AI platforms enhance learner motivation by providing engaging, personalized, and interactive experiences. Tools like NovoLearning and Replika offer real-time feedback, which fosters intrinsic motivation by giving learners a sense of competence and accomplishment. Meyer et al. (2024) emphasize that AI-generated feedback positively influences task motivation by creating a supportive learning environment where learners feel acknowledged and competent. Similarly, Shikun et al. (2024) report that AI chatbots enhance motivation by offering immediate and engaging responses during speaking practice. However, only the study of Hanna (2022) did not show an improvement in learners' motivation. The chatbot (Replica) was said to struggle to understand learners' speech accurately.

The emotional aspects of motivation were also highlighted. For example, students reported greater enjoyment and reduced anxiety when using AI tools for language learning compared to traditional methods. The integration of humor and empathy, as demonstrated by MACHE-Bot,

further boosts engagement and willingness to interact with the platform (Zhai et al., 2024). However, some challenges persist, such as occasional frustration with AI misinterpretations and concerns about over-reliance on technology. These findings suggest that while AI tools effectively enhance motivation, there is a need for balanced integration to mitigate potential drawbacks.

Enhancing Language Proficiency

AI platforms are pivotal in improving language proficiency across various domains, including speaking, writing, and fluency. Tools like ChatGPT, Grammarly, and ELSA have significantly enhanced learners' grammatical accuracy, vocabulary usage, and pronunciation. For instance, Song and Song (2023) demonstrated that AI-assisted instruction boosts EFL learners' writing skills by offering targeted feedback on grammar, vocabulary, and organizational structure. Similarly, Sayit et al. (2023) found that ELSA improves speaking performance and pronunciation among learners, fostering confidence in real-world communication.

AI platforms also facilitate fluency and coherence in oral communication. Hanna (2022) observed that interactions with AI avatars enhanced speaking accuracy and fluency, especially for low-level learners. High-level learners, however, appeared to benefit more from interactions with native speakers, indicating that the effectiveness of AI tools may vary based on learner proficiency. Additionally, real-time feedback provided by AI platforms, such as voice bots and chatbots, boosts learner confidence and engagement, as reported by Xia et al. (2024). These findings underscore the importance of integrating AI technologies into language curricula to provide learners with consistent and personalized practice opportunities.

Intercultural Competence

Beyond language proficiency, AI platforms contribute to developing intercultural competence by exposing learners to diverse cultural contexts and enhancing their understanding of cultural nuances. For instance, tools like HelloTalk allow learners to engage with peers from different cultural backgrounds, promoting cross-cultural communication skills. Xia et al. (2024) highlighted that AI tools enhance communicative efficiency and cultural understanding, which is crucial for effective language use in multicultural settings.

Despite these benefits, challenges in fostering intercultural competence were noted. Limited culturally diverse content and the oversimplification of cultural nuances by AI systems may hinder learners from gaining deeper insights into different cultures. Moreover, the integration of humor and empathy, which are culturally sensitive

elements, remains complex. Xia et al. (2024) emphasized the need for AI dialogue systems to incorporate more diverse cultural perspectives to improve user engagement and learning outcomes. These findings point to the potential of AI platforms to act as cultural bridges while also underscoring the need for continuous improvement in their design.

Challenges and Limitations

While AI platforms offer significant advantages, several challenges impact their effectiveness. One common issue is the quality and accuracy of feedback provided by AI tools. Meyer et al. (2024) and Song and Song (2023) indicate that contextual inaccuracies in AI-generated feedback can confuse learners, highlighting the need for careful judgment and complementary human oversight. Additionally, technical issues such as background noise disrupting pronunciation practice (Arini et al., 2022) and limited conversational topics in chatbots (Shikun et al., 2024) were reported as barriers to optimal learning experiences.

Ethical concerns, including data privacy and algorithmic bias, were also identified as critical challenges. Xia et al. (2024) and Fountoulakis (2024) stressed the importance of addressing these issues to ensure accessibility and equity in AI-enhanced education. Furthermore, over-reliance on AI tools may undermine creativity and critical thinking, as noted by (Song & Song, 2023). These findings suggest that while AI platforms are valuable educational tools, their integration must be carefully managed to address these limitations.

Recommendations for Effective Implementation

The review highlights several recommendations for leveraging AI platforms to maximize their benefits in language education. Educators are encouraged to integrate AI tools into curricula effectively, ensuring they complement rather than replace traditional teaching methods. Training on the ethical use of AI and fostering AI literacy among students can help address issues related to over-reliance and misinterpretation of feedback. Additionally, developers are urged to improve the cultural sensitivity and contextual accuracy of AI systems and expand the range of conversational topics and linguistic data.

Longitudinal studies and collaborative efforts among technologists, educators, and cultural experts are recommended to explore the long-term impacts of AI tools on motivation, proficiency, and intercultural competence. Addressing these areas will help refine AI platforms and ensure their sustainable use in educational contexts.

Discussion

This review comprehensively examines the transformative potential of AI platforms in English as a Foreign Language (EFL) learning, revealing a

nuanced landscape of opportunities and challenges. By integrating insights from multiple studies across diverse geographical contexts, our findings illuminate the multifaceted role of artificial intelligence technologies in enhancing learner motivation, language proficiency, and intercultural competence.

Theoretical Implications

The results underscore a significant paradigm shift in language learning pedagogies, where AI platforms are emerging as more than just supplementary tools. They represent a dynamic ecosystem that can fundamentally reshape learner engagement and skill development. The consistent findings across studies suggest that AI technologies are complex educational mediators that interact with learners' psychological and linguistic processes. The motivational dynamics revealed in our review challenge traditional behaviorist and cognitivist learning theories. AI platforms demonstrate a unique capacity to foster intrinsic motivation by providing personalized, immediate, and supportive feedback. This aligns with self-determination theory, which emphasizes the importance of autonomy, competence, and relatedness in learning motivation (Deci & Ryan, 2013). Multiple studies' empirical evidence supports this theoretical perspective. For example, Meyer et al. (2024) found that AI-generated feedback significantly enhances task motivation by creating a supportive learning environment. Likewise, Zhai et al. (2024) highlighted how AI platforms like MACHE-Bot foster intrinsic motivation through engaging content and interactive experiences.

The review reveals AI platforms' potential to address critical challenges in language learning. Tools like ChatGPT, Grammarly, and ELSA significantly improve learners' linguistic capabilities. Song and Song (2023) noted that AI-assisted instruction boosts EFL learners' writing skills by offering targeted feedback on grammar, vocabulary, and organizational structure. However, this technological intervention has limitations. Hanna (2022) observed variations in effectiveness across different learner proficiency levels, suggesting that AI tools must be carefully tailored to individual learning needs. This finding underscores the importance of adaptive learning technologies that can respond to diverse learner characteristics. Beyond linguistic skills, AI platforms contribute to developing intercultural competence by exposing learners to diverse cultural contexts. Xia et al. (2024) highlighted that AI tools enhance communicative efficiency and cultural understanding, crucial for effective communication in multicultural settings. Nevertheless, challenges persist in fostering deep intercultural understanding. Zhai et al. (2024) emphasized the complexity of integrating humor and empathy in

AI dialogue systems, pointing to the need for more sophisticated cultural sensitivity in technological design.

Practical Implications and Recommendations

The findings provide educators, educational technologists, and curriculum developers critical guidance. Key recommendations include:

1. Implementing AI literacy programs to help students critically engage with AI-generated feedback
2. Developing adaptive pedagogical strategies that complement AI tools
3. Continuously evaluating and updating AI platforms to enhance cultural sensitivity
4. Addressing ethical considerations such as data privacy and potential algorithmic biases

Ethical Considerations and Limitations

The review identified several critical challenges that must be addressed for responsible AI implementation in language education. Xia et al. (2024) and Fountoulakis (2024) stressed the importance of addressing ethical concerns, including data privacy and algorithmic bias, to ensure accessibility and equity in AI-enhanced education.

Limitations and Future Research Directions

While the review presents promising insights, several limitations must be acknowledged. The studies examined predominantly originated from East Asian contexts, particularly China, which may limit the global generalizability of findings. Additionally, many studies' relatively small sample sizes suggest the need for more extensive, longitudinal research.

Future research should focus on:

1. Developing comprehensive frameworks for AI tool evaluation in language learning
2. Exploring long-term impacts of AI platforms on linguistic and intercultural competence
3. Investigating differential effects of AI tools across various proficiency levels
4. Designing robust methodologies to assess psychological and linguistic outcomes

Conclusion

The review demonstrates that AI platforms are sophisticated educational ecosystems with the potential to revolutionize language learning. By providing personalized, interactive, and supportive learning experiences, these platforms can significantly enhance learner motivation, language proficiency, and intercultural understanding. However, their practical implementation requires a thoughtful, critically reflective approach

prioritizing pedagogical effectiveness, ethical considerations, and learner well-being. As technology continues to evolve, the integration of AI in language education demands ongoing research, careful evaluation, and adaptive strategies.

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