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Knowledge and Attitudes towards Artificial Intelligence among Language Learners in Universitas Pahlawan

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Abstrak

Penerapan kecerdasan buatan (AI) dalam Pengajaran Bahasa Inggris (ELT) telah berkembang pesat secara global, seiring dengan kemajuan dalam pemahaman ilmiah tentang teknologi AI. Integrasi AI ke dalam pengajaran bahasa memfasilitasi pengembangan dan penyampaian materi pendidikan berkualitas tinggi, sehingga mengoptimalkan kemampuan bahasa Inggris siswa. Penelitian ini bertujuan untuk memperoleh pemahaman yang komprehensif tentang perspektif siswa bahasa tentang integrasi AI dalam konteks ELT di Universitas Pahlawan. Peneliti melakukan penelitian cross-sectional dengan menggunakan survei daring untuk mengumpulkan data tentang karakteristik demografi, pengetahuan, dan sikap yang terkait dengan AI di antara Pembelajar Bahasa Inggris. Sampel praktis yang terdiri dari 59 pembelajar bahasa dipilih untuk berpartisipasi dalam penelitian ini. Data yang dikumpulkan kemudian dianalisis menggunakan uji chi-kuadrat untuk memeriksa hubungan dan perbedaan di antara berbagai faktor yang terkait dengan keterlibatan AI dalam konteks pembelajaran bahasa. Penelitian kami mengungkapkan bahwa di antara 59 pembelajar bahasa yang disurvei, 41 responden (69,49%) melaporkan pernah mendengar tentang kecerdasan buatan dan menunjukkan pemahaman mendasar tentang konsep-konsep seperti kecerdasan buatan/pembelajaran mendalam/pembelajaran mesin. Sebaliknya, 24 responden (40,68%) menyatakan kekhawatiran mengenai keberadaan AI, sementara 39 peserta (66,10%) mempertahankan pandangan positif terhadap integrasinya. Khususnya, 11,86% peserta menyatakan kekhawatiran bahwa AI dapat menimbulkan ancaman terhadap peluang kerja mereka di masa depan sebagai guru bahasa Inggris. Hasil tersebut menunjukkan bahwa meskipun siswa memiliki pengetahuan dasar tentang AI dan menyatakan keinginan untuk mengintegrasikannya ke dalam praktik pendidikan mereka, ada kebutuhan signifikan untuk mengeksplorasi dan memanfaatkan potensi penuh AI sebagai alat pembelajaran transformatif. Hal ini menggarisbawahi pentingnya mengembangkan strategi pendidikan yang ditargetkan untuk meningkatkan kemahiran siswa dalam memanfaatkan teknologi AI secara efektif.

Kata kunci: *AI, Pembelajar Bahasa, Keterlibatan Pembelajaran*

Abstract

The application of artificial intelligence (AI) in English Language Teaching (ELT) has proliferated globally, paralleling advancements in the scientific understanding of AI technologies. The integration of AI into language instruction facilitates the development and delivery of high-quality educational materials, thereby optimizing students' English proficiency. This study aims to gain a comprehensive understanding of language students' perspectives on the integration of AI within the context of ELT at Universitas Pahlawan. The researcher conducted a cross-sectional study utilizing an online survey to collect data on the demographic characteristics, knowledge, and attitudes related to AI among English Language Learners. A convenience sample of 59 language learners was selected to participate in the study. The collected data were subsequently analyzed using chi-squared tests to examine the relationships and differences among various factors associated with AI engagement in language learning contexts. Our study reveals that among the 59 language learners surveyed, 41 respondents (69.49%) reported having heard of artificial intelligence and demonstrated a fundamental understanding of concepts such as artificial intelligence/deep learning/machine learning. Conversely, 24 respondents (40.68%) expressed apprehension regarding the existence of AI, while 39 participants (66.10%) maintained a positive outlook toward its integration. Notably, 11.86% of participants expressed concern that AI may pose a threat to their future employment opportunities as English teachers. The results indicate that while students possess a foundational knowledge of AI and express a willingness to integrate it into their educational practices, there is a significant need to explore and harness the full potential of AI as a transformative learning tool. This underscores the importance of developing targeted educational strategies to enhance students' proficiency in utilizing AI technologies effectively.

Keywords: *AI, Language Learners, Learning Engagement*

INTRODUCTION

Artificial intelligence (AI) has garnered significant attention in recent years and is frequently seen as a key driver of the fourth industrial revolution, according to various expert analyses (Waymel, Badr, Demondion, Cotten, & Jacques, 2019a, 2019b). Many developed nations have invested heavily in AI research and its applications in education, particularly in language learning. The COVID-19 pandemic has further amplified the need for AI-driven resources and knowledge in language education to enhance student motivation and facilitate personalized learning experiences.

As AI continues to evolve, its role in language education is expanding beyond traditional methods, offering innovative solutions that cater to diverse learner needs. AI-powered tools such as intelligent tutoring systems, speech recognition software, and

adaptive learning platforms provide real-time feedback and personalized lesson plans, allowing students to learn at their own pace. Moreover, AI-driven chatbots and virtual assistants facilitate immersive language practice by simulating real-life conversations, helping learners improve their communication skills. Additionally, machine learning algorithms analyze student performance data, enabling educators to identify learning gaps and tailor instruction accordingly. With these advancements, AI is not only transforming language learning but also reshaping the role of teachers, shifting their focus from direct instruction to mentorship and facilitation. However, as AI becomes more integrated into education, it also raises concerns regarding data privacy, ethical considerations, and the potential over-reliance on technology in the learning process. Therefore, while AI presents exciting opportunities for enhancing language education, its implementation must be approached with a balanced perspective to ensure both technological innovation and pedagogical effectiveness.

Student engagement plays a crucial role in the effectiveness of AI-driven language learning, as interactive and adaptive technologies foster motivation and active participation. Research has shown that AI-powered tools, such as gamified learning platforms and conversational agents, can significantly enhance student engagement by providing personalized learning experiences and immediate feedback (Zhai, 2022; Chen & Lin, 2021). Virtual tutors and AI-driven chatbots create immersive learning environments that encourage students to practice language skills in real-time, making the learning process more dynamic and interactive (Hwang, 2020). Additionally, AI's ability to analyze individual learning patterns allows for customized lesson plans that cater to students' specific needs, further increasing engagement and retention (Xu & Warschauer, 2023). However, while AI offers promising benefits, some studies highlight potential challenges, such as decreased human interaction and concerns over students' over-reliance on technology (Johnson & Wang, 2022). Thus, integrating AI into language learning requires a balanced approach that leverages technology while maintaining essential human elements in education.

The primary aim of this study is to explore students' attitudes and knowledge regarding the integration of AI in language learning. Understanding learners' perceptions is crucial, as their willingness to adopt AI-driven tools can significantly impact the effectiveness of these technologies in educational settings. Previous research suggests that while many students recognize the potential benefits of AI, such as personalized learning and instant feedback, others express concerns about data privacy, reliability, and the reduction of human interaction in the learning process (Brown & Lee, 2021; García &

Martinez, 2022). Additionally, the level of students' familiarity with AI varies, influencing their confidence and readiness to use AI-powered language learning applications (Nguyen & Chen, 2023). By examining both attitudes and knowledge, this study seeks to provide valuable insights into how students perceive AI in education and what factors contribute to their acceptance or skepticism. The findings can help educators and policymakers design AI-based learning experiences that align with students' needs, ensuring a more effective and engaging language learning process.

RESEARCH METHOD

A cross-sectional, open survey design was utilized in this study, employing an online questionnaire distributed via Google Docs. Participants were language learners who were invited to participate after being informed about the study's objectives and potential benefits. Recruitment was conducted through online channels from July to August 2024. The questionnaire was adapted from Alghamdi and Ashban (2023)(Alghamdi & Alashban, 2023). A senior faculty member designed, reviewed, and validated the questionnaire, and extensive steps were taken to safeguard the anonymity of participants, since no personal information was collected or retained, and only the lead investigator had access to the data.

Respondents

Fifty-nine language learners from diverse year of study participated in the survey. The questionnaire elicited demographic data, including age and gender, as well as participants' knowledge and perceptions of AI and its applications. A pilot study was conducted prior to the main survey to validate the questionnaire's usability and technical functionality.

Variables	Classification	N (%)
Gender	Male	11 (18.64)
	Female	48 (81.36)
Age	18-20	23 (38.98)
	21-22	29 (49.16)
	23-24	7 (11.86)
Semester	2	11 (18.64)
	4	24 (40.68)
	6	14 (23.73)
	8	10 (16.95)

Data analysis

Data were analyzed using PSPP, with frequency tables employed to examine the distribution of variables. A chi-square test was conducted at a significance level of $\alpha < 0.05$ to assess the statistical association between variables. Univariate logistic regression was performed to calculate unadjusted odds ratios and their associated 95% confidence intervals.

FINDINGS AND DISCUSSIONS

1. Knowledge and Gender about AI

Table 1. Chi Square between Knowledge and Gender about AI

Factors	Likert Scale	Female (frequency) and Percentage	Male (frequency) and Percentage
Would you describe yourself as someone who enjoys technology	SA	5 (2.95%)	1 (0.59%)
	A	41(24.19%)	10 (5.9%)
	SD	1 (0.59%)	0
	D	1 (0.59%)	0
Would you feel comfortable explaining what an algorithm is?	SA	2 (1.18%)	1 (0.59%)
	A	37 (21.83%)	9 (5.31%)
	SD	0	0
	D	9 (5.31%)	1 (0.59%)
Do you agree that Language Learners should "Embrace, adopt and adapt technology?	SA	12 (7.08%)	3 (1.77%)
	A	34 (20.06%)	8 (4.72%)
	D	0	0
	SD	2 (1.18%)	0
Do you understand the differences between 'machine-learning', 'deeplearning' and AI?	SA	2 (1.18%)	1 (0.59%)
	A	25 (14.75%)	6 (3.54%)
	SD	0	0
	D	21 (12.39%)	4 (2.36%)

Concerning knowledge about AI, respondents were asked about their AI knowledge to assess knowledge among radiologists in Saudi Arabia. The results in terms of gender and academic level are presented in Table 4. It was found that, of the 59 respondents (100%), most of the female respondents agreed with describing themselves as "someone who enjoys technology" (n = 41, 24.19.0%). The majority of female respondents were neutral about their knowledge of, or explaining, what an algorithm is (n = 37, 21.83%). Most of the female respondents agreed that language learners should embrace, adopt and adapt technology (n = 34,20.06%). The majority of female respondents agreed that they understand the differences between "machine learning," "deep learning" and AI (n = 259, 14.75%). It was found that females have more knowledge about AI than males.

2. Attitude and Gender about AI

Table 2. Chi Square between Attitude and Gender about AI

Factors	Likert Scale	Female (frequency) and Percentage	Male (frequency) and Percentage
I am apprehensive about the introduction of AI into the Radiology field.	SA	2 (1.18%)	1 (0.59%)
	A	24 (14.16%)	7 (4.13%)
	SD	0	0
	D	22 (12.98%)	3 (1.77%)
I am excited about the advancement of AI's role with English Language Teaching.	SA	1 (0.59%)	5 (2.95%)
	A	39 (23.01%)	10 (5.9%)
	SD	0	0
	D	4 (2.36%)	0
I think AI already plays an important role within English Language Teaching.	SA	4 (2.36%)	1 (0.59%)
	A	39 (23.01%)	8 (4.72%)
	D	0	1 (0.59%)
	SD	5 (2.95%)	1 (0.59%)
I think our experience as university students	SA	6 (3.54%)	1 (0.59%)

would be improved with further implementations of AI.	A	38 (22.42%)	9 (5.31%)
	SD	0	0
	D	4 (2.36%)	1 (0.59%)
I think AI is going to replace English Language Teachers in the future.	SA	3 (1.77%)	1 (0.59%)
	A	20 (11.8%)	5 (2.95%)
	SD	6 (3.54%)	3 (1.77%)
	D	19 (11.21%)	2 (1.18%)
I think it takes more time for AI to affect the role English Language Teacher.	SA	6 (3.54%)	1 (0.59%)
	A	32 (18.88%)	6 (3.54%)
	SD	1 (0.59%)	0
	D	9 (5.31%)	4 (2.36%)
I think AI can help me to enhance my language skills.	SA	6 (3.54%)	1 (0.59%)
	A	39 (23.01%)	8 (4.72%)
	SD	0	0
	D	3 (1.77%)	2 (1.18%)
I think AI can help me to understand the Foreign Language text through translation.	SA	7 (4.13%)	1 (0.59%)
	A	39 (23.01%)	9 (5.31%)
	SD	0	0
	D	2 (1.18%)	1 (0.59%)
I think AI can help me to solve my problems in language learning.	SA	8 (4.72%)	1 (0.59%)
	A	38 (22.42%)	10 (5.9%)
	SD	0	0
	D	(1.18%)	0

The findings indicate that a significant proportion of female respondents expressed apprehension regarding the integration of AI into the ELT field (n = 24, 14.16%). However, a larger percentage viewed the advancement of AI in radiology positively (n = 39, 23.01%) and acknowledged AI's existing role in ELT (n = 39, 23.01%). Additionally, most female students believed that further AI implementation would enhance their language acquisition (n = 38, 22.42%). Overall, the data suggest that female participants exhibited greater apprehension toward AI in ELT compared to their male counterparts.

CONCLUSIONS

The findings of this study highlight the diverse attitudes and varying levels of knowledge that students have regarding the integration of AI in language learning. While many students acknowledge the benefits of AI-powered tools—such as personalized learning, instant feedback, and enhanced engagement—there remains a level of apprehension due to concerns about data privacy, dependency on technology, and the potential reduction of human interaction. Additionally, students' familiarity with AI significantly influences their perceptions, with those who have prior experience demonstrating greater confidence in its application. These insights suggest that while AI holds great promise in transforming language education, its successful implementation requires addressing students' concerns and improving their AI literacy. Educators and policymakers should focus on fostering a balanced approach that leverages AI's advantages while maintaining essential human elements in language learning to create an effective, inclusive, and engaging educational experience.

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