

EXPLORING STUDENTS' PERCEPTIONS IN THE USE OF ARTIFICIAL INTELLIGENCE TECHNOLOGY THE INFLUENCE OF CHATGPT ON LANGUAGE LEARNING

¹Amanda Salsabila, ²Hesty Widiastuty Institut Agama Islam Negeri Palangka Raya

Keywords:

ChatGPT, Language Learning, Technology, EFL Students

*Correspondence Address:

Email: amandasalsabila.spt@gmail.com hesty.widiastuty@yiain-palangkaraya.ac.id

Abstract: This study explore students' perceptions of using ChatGPT as a tool for English language learning, focusing on ease of use, its impact on learning, and challenges encountered. Using a qualitative approach, data were collected through semi-structured interviews with 16 EFL students from the State Islamic Institute of Palangka Raya. Thematic analysis revealed that ChatGPT's simple interface and quick response support its adoption. Respondents reported improvements in vocabulary acquisition and grammar understanding, pronunciation features were inadequate. Additionally, ChatGPT enhanced learning motivation through interactive experiences, although free account access limitations posed challenges. This study recommends the development of audio-based features for pronunciation and the integration of ChatGPT into curricula with appropriate guidance. These findings provide valuable insights for educators, technology developers, and policymakers to optimize the use of AI in education.

INTRODUCTION

Artificial intelligence is increasingly being integrated into educational contexts due to the great potential it has for the transformation of teaching and learning processes. Among many others, one of the latest innovations with AI is ChatGPT, which is really very popular among language learners. Previous studies have identified AI-driven technologies as having the potential to offer personalized feedback, increase learner engagement, and promote autonomous learning behaviors (Barrera Castro et al., 2024). Given the human-like responses that it can generate and its potential for interactive learning, ChatGPT represents a paradigm shift in how students approach language acquisition (Nazeer et al., 2024). The more such tools are used, the more urgent it is to understand their impact on learners so that their full potential can be unleashed. ChatGPT, powered by advanced natural language processing algorithms, is designed to address some of the key challenges in language learning.

For example, (El Shazly, 2021) found that conversational AI systems could simulate natural interactions, enabling students to practice communication skills in a supportive, low-



International Proceedings Universitas Tulungagung 2024 Exploring Students' Perceptions in the Use of Artificial Intelligence Technology the Influence of ChatGPT on Language Learning

anxiety environment. Whereas traditional approaches are often inelastic or delayed, ChatGPT facilitates interactions that can be truly dynamic and sensitive to context, This improves the simulation of conversation interactions with native speakers. This is supported by (Van Der Kleij & Adie, 2020), who pointed out the significance of immediate, individualized feedback for language proficiency improvement. Similarly, ChatGPT's ability to provide instant feedback and foster self-directed learning has been demonstrated in its application for EFL learners' writing and speaking tasks (Xiao & Zhi, 2023). Yet, these promising features still have to be explored for a proper interpretation of their practical implications for learners. Despite the promising attributes of ChatGPT, the integration of such technologies into educational settings requires a nuanced understanding of students' perceptions. The studies of (Mogaji et al., 2024) on the Technology Acceptance Model (TAM) underscore the importance of perceived usefulness and ease of use in determining the acceptance and effectiveness of new technologies.

Further, a study by (Chen, 2024) revealed that students' perceptions of the AI tool itself have a great influence on their engagement and motivation within digital learning spaces. (Du and Alm, 2024) found that ChatGPT also supports students' psychological needs for autonomy and competence, enhancing motivation in academic English learning contexts. Such insights bring forward the imperative to investigate students' perception and usage of ChatGPT within language learning for its successful adoption and impact. This study will seek to explore students' perceptions of ChatGPT as a language learning tool in terms of its perceived usefulness, effectiveness, and impact on their language acquisition journey. By identifying these perceptions, the study will highlight both the opportunities and challenges associated with integrating AI technologies into language education. Furthermore, the research aims to provide evidence-based recommendations for optimizing the use of ChatGPT in pedagogical practices and curriculum development. These results are expected to contribute to the greater discussion of AI in education generally and language learning in particular. They shall inform educators, policymakers, and developers of technology about the potential that ChatGPT has for improving learning outcomes and the limitations it presents.

The current research, therefore, attempts to bridge the gap between theoretical developments in AI on the one hand and educational applications on the other, so that AI may be put to more effective, equitable, and sustainable use in language learning contexts. While the study highlights the potential of ChatGPT in enhancing language learning, it is not without limitations. First, the research focuses primarily on students' perceptions, which may not fully capture the practical challenges or outcomes of integrating ChatGPT into language learning



International Proceedings Universitas Tulungagung 2024
Exploring Students' Perceptions in the Use of Artificial Intelligence
Technology the Influence of ChatGPT on Language Learning

contexts. Additionally, external factors such as varying levels of access to technology and digital literacy among students could influence their perceptions and experiences, yet these factors are not deeply explored in the study. (C. Meniado, 2023) highlights the ongoing challenge of ensuring equitable access to AI tools like ChatGPT, especially in regions with limited technological infrastructure. Another limitation is the reliance on theoretical frameworks like the Technology Acceptance Model, which may not comprehensively address all dimensions of AI usage in education. Finally, ethical considerations surrounding the use of AI, including data privacy and dependency on technology, are under explored in this research.

This article investigates students' perceptions of ChatGPT as a tool for language learning, focusing on its perceived usefulness, effectiveness, and impact on the learning process. By synthesizing previous studies and theoretical frameworks, the research highlights ChatGPT potential to provide personalized feedback, promote engagement, and support autonomous learning. However, it also identifies challenges such as students' acceptance of AI tools and their practical integration into educational settings. The study aims to provide actionable recommendations for educators, policymakers, and developers, emphasizing the need for equitable and sustainable applications of AI in education.

RESEARCH METHODS

This study will use a qualitative approach, where in-depth interviews will be conducted to explore English language learners' perceptions of technology use (Okyar, 2023), with a focus on the impact of AI tools such as ChatGPT in language learning. Participants were selected from English language teaching study program students at the State Islamic Institute of Palangka Raya, totaling 16 students and selected based on criteria that include active engagement with technology in their language studies and previous experience using ChatGPT (Hossan et al., 2023). Data were collected through semi-structured interviews conducted online, due to time constraints. Each interview participant will last approximately 10-15 minutes and will be recorded after seeking the participant's consent. In addition, during the interview, observations and non-verbal reactions will also be recorded to add depth to the data.

Interviews were guided by open-ended questions aimed at gaining insight into participants' experiences with the technology, perspectives on ChatGPT AI, and perceived impact on their new language learning process. Data analysis were follow a thematic analysis approach, starting with transcription of the recorded interviews (Dawadi, 2020). This were followed by coding to identify emerging themes, which will then be organized into larger



International Proceedings Universitas Tulungagung 2024 Exploring Students' Perceptions in the Use of Artificial Intelligence Technology the Influence of ChatGPT on Language Learning

categories for interpretation. To increase the validity of the findings, triangulation will be used, involving multiple researchers or comparison with existing literature (Dehalwar & Sharma, 2024). The following are some of the main procedures that will be implemented in this study: written consent before the interview, guarantee of confidentiality of identity and information, and the right to withdraw from the study at any time without any consequences (KANG & HWANG, 2021). Therefore, this methodology will be able to provide extensive insights into students' perceptions of technology and the place of AI in language learning, with a special focus on the influence of ChatGPT.

RESULTS AND DISCUSSION

RESULTS

1. Ease of Use

The majority of interview participants stated that ChatGPT is very easy to use. Factors contributing to this ease include its simple interface, quick responses, and flexible access at any time. For example, Participant 9 mentioned that "ChatGPT is very easy to use because it has a simple interface and quick responses." A similar sentiment was expressed by Participant 5, who said that ChatGPT is "very easy to use, fast, and responsive." This demonstrates that ChatGPT features a user-friendly design that facilitates students' access to its features.

2. Impact on English Proficiency

Participants' opinions on ChatGPT's impact on their English proficiency varied. Some participants, such as Participant 3 and Participant 5, felt that ChatGPT helped them expand their vocabulary and understand grammar. Participant 3 stated, "By interacting with ChatGPT in English, I can learn new vocabulary, better sentence structures, and see examples of appropriate English usage in various contexts." However, other respondents, like Participant 2, believed that ChatGPT had less influence on improving their English proficiency.

3. Main Benefits of ChatGPT

The main benefits of ChatGPT experienced by the respondents include:

a) Ease of Access to Information: ChatGPT provides quick and flexible access to answer questions and explain difficult-to-understand material. For instance, Participant 16 remarked, "ChatGPT can develop ideas and creativity in the four English skills."



International Proceedings Universitas Tulungagung 2024 Exploring Students' Perceptions in the Use of Artificial Intelligence Technology the Influence of ChatGPT on Language Learning

b) **Increased Learning Motivation:** Some respondents felt more motivated because ChatGPT made the learning process more engaging and interactive. Participant 3 noted, "ChatGPT boosts my motivation because it makes the learning process more interactive and enjoyable."

4. Challenges and Difficulties

Despite its many advantages, respondents also faced several challenges, including:

- a) Free Account Limitations: Some participants, such as Participant 1 and Participant 2, complained about the limitations of free accounts, which restrict full access to ChatGPT's features.
- b) **Less Specific Answers:** Respondents like Participant 5 and Participant 10 mentioned that ChatGPT's answers were sometimes too general or less relevant to their needs.
- c) **Limitations in Pronunciation Practice:** Participant 7 expressed a desire for pronunciation features to help users practice their speaking skills more effectively.

5. Suggestions for ChatGPT Development

Respondents provided several suggestions for the development of ChatGPT, including:

- a) Adding audio-based features for pronunciation practice.
- b) Improving the validity of references provided.
- c) Developing interactive practice features to support English language learning.

DISCUSSION

These findings are in consonance with the perceived ease of use element in the Technology Acceptance Model (Marangunić & Granić, 2015), which emphasizes the importance of how users perceive the ease of interacting with technology. The simplicity of the interface and the intuitiveness of the design of ChatGPT go a long way toward ensuring acceptance by users (Almogren et al., 2024). Such user-friendly features make ChatGPT a highly accessible tool, appealing to both novice and experienced learners alike. The preceding discussion thus underscores the crucial role of well-designed, user-centered technology in driving adoption, particularly when the goal is to foster meaningful engagement and facilitate learning.

Furthermore, participants who felt that ChatGPT had positively influenced their English language skills highlight the potential of this tool as an effective language learning aid (Yu et al., 2022). This potential stems from several of ChatGPT's capabilities, such as offering grammar explanations and enhancing vocabulary usage (Cintrón-Valentín & García-Amaya,



International Proceedings Universitas Tulungagung 2024 Exploring Students' Perceptions in the Use of Artificial Intelligence Technology the Influence of ChatGPT on Language Learning

2021). These features directly contribute to the advancement of learners' language proficiency. However, despite these advantages, a limitation exists in its support for pronunciation. This shortcoming slightly reduces its effectiveness in helping users with oral language skills (Siemons et al., 2021), indicating that improvements in this area are necessary for a more holistic language learning experience.

In addition to the improvements in language knowledge, ChatGPT fosters an enjoyable learning environment, thereby increasing motivation (Qu & Wu, 2024). The variability of its responses and interactions, tailored to the learner's needs, encourages sustained engagement, which aligns with the principles of self-determination theory (Du & Alm, 2024). The theory suggests that autonomy in learning enhances intrinsic motivation, and this is exemplified by the flexible and responsive nature of ChatGPT. As learners gain more control over their learning process, they are likely to experience greater satisfaction and a deeper commitment to their educational goals.

Despite these positive outcomes, certain limitations persist, which are commonly associated with AI tools. These include restrictions on free account access and the tendency of AI to generate generic, non-specific responses (Tinelli & Juran, 2019). Such limitations underscore the ongoing need for advancements in personalization and accessibility. Enhancements such as incorporating audio features for pronunciation and offering more dynamic, interactive exercises could substantially improve the tool's effectiveness and user experience (Kshetri et al., 2024). To address these limitations, there is a strong case for integrating ChatGPT as a complementary tool in teaching, ensuring that it is paired with well-structured instructional guidance. Such an approach can optimize learning outcomes by balancing the tool's strengths with targeted support and engagement strategies, creating a comprehensive and enriching learning experience.

CONCLUSIONS AND RECOMMENDATION

ChatGPT is generally perceived as an effective tool for supporting English language learning, particularly in vocabulary and grammar. However, its lack of pronunciation features and free access limitations present significant challenges. To address these issues, technology developers should introduce audio-based features and improve reference validity to enhance learning experiences. Educators should provide training to students on effective ChatGPT usage, ensuring it complements traditional learning methods. Future research is recommended

Exploring Students' Perceptions in the Use of Artificial Intelligence Technology the Influence of ChatGPT on Language Learning

to explore ChatGPT's impact on broader aspects of language learning, including listening and speaking skills, to establish a more holistic understanding of its educational potential.

REFERENCES

- Almogren, A. S., Al-Rahmi, W. M., & Dahri, N. A. (2024). Exploring factors influencing the acceptance of ChatGPT in higher education: A smart education perspective. *Heliyon*, 10(11), e31887. https://doi.org/10.1016/j.heliyon.2024.e31887
- Barrera Castro, G. P., Chiappe, A., Becerra Rodriguez, D. F., & Sepulveda, F. G. (2024). Harnessing AI for Education 4.0: Drivers of Personalized Learning. *Electronic Journal of E-Learning*, 22(5), 01–14. https://doi.org/10.34190/ejel.22.5.3467
- C. Meniado, J. (2023). The Impact of ChatGPT on English Language Teaching, Learning, and Assessment: A Rapid Review of Literature. *Arab World English Journal*, *14*(4), 3–18. https://doi.org/10.24093/awej/vol14no4.1
- Chen, L. (2024). Unlocking the Beat: How AI Tools Drive Music Students' Motivation, Engagement, Creativity and Learning Success. *European Journal of Education*, e12823. https://doi.org/10.1111/ejed.12823
- Cintrón-Valentín, M. C., & García-Amaya, L. (2021). INVESTIGATING TEXTUAL ENHANCEMENT AND CAPTIONS IN L2 GRAMMAR AND VOCABULARY: AN EXPERIMENTAL STUDY. *Studies in Second Language Acquisition*, 43(5), 1068–1093. https://doi.org/10.1017/S0272263120000492
- Dawadi, S. (2020). Thematic Analysis Approach: A Step by Step Guide for ELT Research Practitioners. *Journal of NELTA*, 25(1–2), 62–71. https://doi.org/10.3126/nelta.v25i1-2.49731
- Dehalwar, K., & Sharma, S. N. (2024). Exploring the Distinctions between Quantitative and Qualitative Research Methods. https://doi.org/10.5281/ZENODO.10553000
- Du, J., & Alm, A. (2024). The Impact of ChatGPT on English for Academic Purposes (EAP) Students' Language Learning Experience: A Self-Determination Theory Perspective. *Education Sciences*, 14(7), 726. https://doi.org/10.3390/educsci14070726
- El Shazly, R. (2021). Effects of artificial intelligence on English speaking anxiety and speaking performance: A case study. *Expert Systems*, 38(3), e12667. https://doi.org/10.1111/exsy.12667
- Hossan, D., Dato' Mansor, Z., & Jaharuddin, N. S. (2023). Research Population and Sampling in Quantitative Study. *International Journal of Business and Technopreneurship (IJBT)*, 13(3), 209–222. https://doi.org/10.58915/ijbt.v13i3.263



Exploring Students' Perceptions in the Use of Artificial Intelligence Technology the Influence of ChatGPT on Language Learning

- KANG, E., & HWANG, H.-J. (2021). Ethical Conducts in Qualitative Research Methodology:Participant Observation and Interview Process. *Journal of Research and Publication Ethics*, 2(2), 5–10. https://doi.org/10.15722/JRPE.2.2.202109.5
- Kshetri, N., Dwivedi, Y. K., Davenport, T. H., & Panteli, N. (2024). Generative artificial intelligence in marketing: Applications, opportunities, challenges, and research agenda. *International Journal of Information Management*, 75, 102716. https://doi.org/10.1016/j.ijinfomgt.2023.102716
- Marangunić, N., & Granić, A. (2015). Technology acceptance model: A literature review from 1986 to 2013. *Universal Access in the Information Society*, 14(1), 81–95. https://doi.org/10.1007/s10209-014-0348-1
- Mogaji, E., Viglia, G., Srivastava, P., & Dwivedi, Y. K. (2024). Is it the end of the technology acceptance model in the era of generative artificial intelligence? *International Journal of Contemporary Hospitality Management*, 36(10), 3324–3339. https://doi.org/10.1108/IJCHM-08-2023-1271
- Nazeer. (2024). ENGLISH LANGUAGE ACQUISITION THROUGH CHATGPT: A STUDY ON PERSONALIZED CONVERSATIONAL PRACTICE AND FEEDBACK. JOURNAL OF APPLIED LINGUISTICS AND TESOL (JALT).
- Okyar, H. (2023). University-level EFL students' views on learning English online: A qualitative study. *Education and Information Technologies*, 28(1), 81–107. https://doi.org/10.1007/s10639-022-11155-9
- Qu, K., & Wu, X. (2024). ChatGPT as a CALL tool in language education: A study of hedonic motivation adoption models in English learning environments. *Education and Information Technologies*, 29(15), 19471–19503. https://doi.org/10.1007/s10639-024-12598-y
- Siemons-Lühring, D. I., Euler, H. A., Mathmann, P., Suchan, B., & Neumann, K. (2021). The Effectiveness of an Integrated Treatment for Functional Speech Sound Disorders—A Randomized Controlled Trial. *Children*, 8(12), 1190. https://doi.org/10.3390/children8121190
- Tinelli, S., & Juran, I. (2019). Artificial intelligence-based monitoring system of water quality parameters for early detection of non-specific bio-contamination in water distribution systems. *Water Supply*, 19(6), 1785–1792. https://doi.org/10.2166/ws.2019.057
- Van Der Kleij, F., & Adie, L. (2020). Towards effective feedback: An investigation of teachers' and students' perceptions of oral feedback in classroom practice. *Assessment in Education: Principles, Policy & Practice, 27*(3), 252–270. https://doi.org/10.1080/0969594X.2020.1748871



International Proceedings Universitas Tulungagung 2024

Exploring Students' Perceptions in the Use of Artificial Intelligence Technology the Influence of ChatGPT on Language Learning

- Xiao, Y., & Zhi, Y. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions. *Languages*, 8(3), 212. https://doi.org/10.3390/languages8030212
- Yu, Z., Yu, L., Xu, Q., Xu, W., & Wu, P. (2022). Effects of mobile learning technologies and social media tools on student engagement and learning outcomes of English learning. *Technology, Pedagogy and Education*, 31(3), 381–398. https://doi.org/10.1080/1475939X.2022.2045215