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The Potentials of ChatGPT for Language Learning: Unpacking its Benefits and Limitations

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Abstract

The present study aims to unpack the potentials of ChatGPT for language learning based on students' perspectives. Specifically, this study scrutinizes language learning needs that can be fulfilled by ChatGPT, potential benefits of ChatGPT, and limitations of ChatGPT for language education. Drawing on exploratory case study, this study involves 18 language students majoring in English education and linguistic studies from two public universities in Indonesia. The findings of semi-structured interviews and FGD reveal that ChatGPT shows great promise as a digital platform that can support personalize learning, stimulate authentic interactions, and boost student productivity. This study suggests that students can gain several advantages from ChatGPT to support their language learning, such as enhancing their writing skills (e.g., translation, paraphrasing, outlining, and receiving assistance with grammar and syntax), improving vocabulary acquisition, providing learning materials, and serving as conversation partner. However, students might encounter certain challenges when using ChatGPT for language learning, such as the risk of cheating and plagiarism, inaccurate responses, and ambiguous information which can lead to confusion and misunderstanding. This study offers fruitful insights for language education stakeholders (especially teachers and students) to enhance their digital competencies specifically related to the use of AI tools in language education.

Keywords: artificial intelligence, ChatGPT, benefits of ChatGPT, limitations of ChatGPT, english teaching and learning

INTRODUCTION

Education and artificial intelligence (henceforth AI) are enormously growing as crucial topics of conversation among scholars and practitioners. The impact of advanced technology development, including AI tools, on higher education is undeniable to ignore (Cotton et al., 2023). The most recently developed AI program, Chat Generative Pre-trained Transformer (henceforth ChatGPT), has been successful attract educational stakeholders due to its admiration and controversy. ChatGPT is a natural language processing (NLP) chatbot powered by AI technology that uses a large language model (LLM), drawing knowledge from various online sources like books, articles, and conversations, and it produces responses based on a vast human language database (Deng & Lin, 2022). Its capabilities include, but are not limited to, providing human-like conversation, answering questions, assisting text translation, enhancing writing quality, summarizing reports, and coding (Farrokhnia et al., 2023). While educators worldwide have been discussing ChatGPT extensively, the impact of its usage on the field of education still remains uncertain (Elbanna & Armstrong, 2023). On the one hand, it possesses possibility to significantly alter the landscape of education, causing teachers and policymakers to re-design appropriate teaching methods, strategies, assessment and evaluation. An AI-driven tool like ChatGPT has capacity to save cost and time, automate routine tasks, and even to carry out complex and creative works (Strzelecki, 2023). On the other hand, ChatGPT has certain limitations, such as factual errors, ambiguous responses, potential misuse, and causing technological dependence (Kasneci et al., 2023). Consequently, educational scholars and practitioners should be attentive to the potential opportunities and risks associated with ChatGPT, as its implications could significantly affect the education sector.

Recently, artificial intelligence (AI) has been an ongoing topic of discussion in the field of technology-enhanced language learning (TELL). Several prior studies have examined the role of AI for language education. According to Hou (2020), the application of AI had a profound effect on language teachers, students' learning styles, teaching modes and methods, and evaluation models. Educational institutions must provide financial and technical support, improve teachers' digital competencies, and adapt to the current pace of education in the era of AI (Pikhart, 2020). Liang et al. (2021) explored the roles and research focus of AI in language

education by reviewing relevant studies published from 1990 to 2020. The results demonstrated that the primary implementation domains of AI programs were to enhance reading, writing, and vocabulary acquisition. In addition, Chen et al. (2021) studied trends and prominent research issues on personalized language learning (PLL), a sub-field of AI application in education. The findings revealed that PLL was closely associated with game-based learning, mobile-based learning, and online/web-based learning that could improve students' motivation and engagement. Additionally, there was an increasing interest in adopting AI in PLL research. More recently, Huang et al. (2023) analyzed the current trends, issues, and implementation of artificial intelligence in language learning. Using bibliometric analysis reviewing 516 papers, the study showed that AI programs (e.g., natural language processing, machine translation, chatbots, and automated speech recognition) were regularly employed to assist students in developing language skills.

Studies have acknowledged the positive impact of AI application in language learning. Prior to the emergence of ChatGPT, intelligent chatbots have caught language educators' attention since they can help learners enhance their target language skills in an instant and realistic manner (Fryer et al., 2020). AI-driven chatbots, such as QuillBot, Google Translate, and Grammarly have been widely used to assist language learning due to their capabilities to provide rich linguistic input, human-like conversation practice, promote learners' interest, and contribute to their overall language performance (Ebadi et al., 2023; Nurmayanti & Suryadi, 2023; Organ, 2023). The chatbots' affordances enable learners to learn and practice language skills anywhere and anytime because they are freely accessible 24/7 (Huang et al., 2022). The real-time assistance offers learners ample opportunities to interact and provides them with a virtual assistant (Chiu et al., 2023). Nowadays, one of the most advanced AI-driven chatbots has been released since November 2022, which is called ChatGPT (Generative Pre-trained Transformer). ChatGPT's ability to realistically imitate human conversation offers an exciting and contemporary avenue for language education.

Although ChatGPT has recently been established in November 2022, several studies have examined its potential roles in language education. Hong (2023) discussed the impact of ChatGPT on foreign language teaching and learning. It was argued that ChatGPT provided some opportunities for educators and universities

to enhance L2 teaching and assessments (e.g., authentic language use, personal language tutor) and offered language learners a more personalized learning experience. Baskara and Mukarto (2023) explored the potential implications of ChatGPT for foreign language education at the university level. It provided comprehensive discussion based on literature review on the use of ChatGPT for language learning. According to the discussion, ChatGPT can generate coherent and fluent texts about particular topics but may have difficulties understanding more complex ideas. In a similar direction, Kohnke (2023) and Kohnke et al. (2023) described the affordances of ChatGPT for language teaching and learning. So far, prior discussion on ChatGPT for language learning has highlighted its potential benefits and challenges to enhance L2 education. In short, ChatGPT enhances language learning by providing authentic interactions, such as contextual meaning of words, fixing language mistakes, creating texts in various genres, paraphrasing and translating, and developing assessment and quizzes (Kohnke, 2023). However, using ChatGPT might also raise concerns about technological dependance, inaccuracy of the machine's responses, and ethical issue of using technology to generate texts (Kohnke et al., 2023).

Although ChatGPT is relatively new, prior studies have discussed its opportunities and challenges for educational purposes (Cooper, 2023; Elbanna & Armstrong, 2023; Farrokhnia et al., 2023; Firat, 2023) including in language learning (Baskara & Mukarto, 2023; Hong, 2023; Kohnke, 2023; Kohnke et al., 2023; Singer et al., 2023). However, the majority of the research conducted so far consists of discussion papers, leaving the exploration of empirical evidence on ChatGPT's application in language learning through field research largely unexplored. Therefore, there is an urgent need for future studies to examine the effectiveness of ChatGPT in supporting language instruction and to delve into its potentials for language learning. In the realm of ChatGPT for language education, there is a high demand for empirical evidence derived from field research. Addressing this gap in the literature, this study aims to explore the potentials of ChatGPT for language learning. Specifically, this study examines the needs of language learning that can be fulfilled by ChatGPT and its potential implications (including benefits and limitations) for language education. To achieve the objective, exploratory case study is employed by involving eighteen English as foreign language (EFL) learners as participants. This study contributes to the

ongoing discussion about the role of ChatGPT in language learning, especially regarding the possibility of integrating this AI chatbot in higher education. In addition, this study also stimulates future research by providing in-depth exploration of how EFL students use ChatGPT to help them enhance language skills. To ensure the objective, this study is guided by the following research questions (RQs):

RQ 1: What language learning needs can be fulfilled by ChatGPT?

RQ 2: What are the potential benefits of ChatGPT for language learning?

RQ 3: What are the limitations of ChatGPT for language learning?

Studying the role of AI in language learning is inseparable from technologyenhanced language learning (TELL). TELL refers to the integration of technological resources to promote language teaching and learning (Webb & Doman, 2020). In the modern era, education is undergoing a revolutionary transformation and the field of language learning is no different. The present-day English language teaching and learning has been the witness of advanced development of information, communication, and technology (ICT). The emergence of various digital resources and technological tools offers ample opportunities for language learners to enhance their language skills and alters their learning styles to be more independent and self-regulated (Zhang et al., 2023). Using the emerging learning technologies, learners are able to learn and practice language anytime and anywhere as long as they are connected to the internet (Weng & Chiu, 2023). According to Bonk and Wiley (2020), emerging learning technologies include resources, innovations, concepts, tools, platforms, and advancements. These technologies have the potential to enhance the effectiveness of teaching and learning and are widely adopted in language education (Chang & Hung, 2019). For instance, Lee (2023), through systematic review and meta analysis, examined the effectiveness of machine translation (MT) in foreign language education. The results reported that most studies on MT from 2000 to 2019 investigated the significant effects of using MT in foreign language learning, especially for enhancing writing skill. Liao et al. (2023) and Taguchi (2023) explored the effects of an augmented-reality game-based learning application to improve learners' motivation and engagement in language learning. Overall, it was found that employing game-based applications resulted in a positive improvement of learners' English performance and motivation. Game-based activities could help learners obtain rich linguistic input, opportunities for L2 interaction, and experience-based learning (Taguchi, 2023). In short, integration of technology into language learning has been proven effective to enhance learners' performance and the efficacy of teaching practice.

Today, the AI chatbot called ChatGPT has been widely discussed in terms of technology-enhanced language learning. ChatGPT is an AI-driven natural language processing (NLP) chatbot that allows users to engage in human-like conversations. The term "Generative Pre-trained Transformer (GPT)" refers to a language processing model that has been extensively trained on vast amounts of data to generate text that closely resembles human writing (Lund & Wang, 2023). It produces information in a conversational manner, learns from previous patterns of interactions, and consequently delivers increasingly personalized responses (Floridi, 2023). ChatGPT imitates human-like behaviour when providing instructions and sharing information with users. This AI chatbot can engage in a wide range of activities, such as writing emails and essays, translating texts, composing teaching materials, and coding (Tlili et al., 2023). Unlike other previous chatbots, ChatGPT stands out thanks to its ability to provide immediate responses, leading to more diverse and dynamic discussions on almost all topics (Firat, 2023). It is designed to facilitate engaging and authentic conversations with people. By leveraging AI and ML techniques, it can understand text-based input and provide responses akin to human-like discussions (Strzelecki, 2023). Serving as a virtual assistant, ChatGPT interacts with users, addressing inquiries like an actual person would (Farrokhnia et al., 2023).

To summarize, technology-enhanced language learning has become an interesting topic of research. In the recent years, the use of AI-driven tools has been a new trend and being a center of research in computer-assisted language learning (Baskara & Mukarto, 2023; Ebadi et al., 2023; Fitria, 2023; Hong, 2023; Kohnke et al., 2023; Nurmayanti & Suryadi, 2023; Organ, 2023). As the use of ChatGPT in language learning is relatively novel, research on the possibility of its integration into language education requires more empirical evidence. Addressing this issue, the present study scrutinizes EFL learners' perspective toward the use of ChatGPT in language education, as well as examines their views on its potential benefits and challenges by qualitatively exploring the learners' views, this study offers in-depth

construction of their understanding on the acceptance of ChatGPT for language learning.

RESEARCH METHOD

Research context and participants

This study aims to explore the potentials of ChatGPT for language learning. To reach the objective, the exploratory case study, under qualitative research approach, was used to reveal a group of Indonesian EFL (English as a foreign language) learners' perspectives about the use of ChatGPT to assist them with foreign language learning. An exploratory case study is employed to depict an initial understanding of a phenomenon and to discover an empirically based introduction of the structure, dynamics and context of the subject interest (Yin, 2015). Since the purpose of this study is to explore EFL learners' perspectives about ChatGPT for language learning, exploratory case study was deemed appropriate since it enabled participants to reveal their feelings, ideas, and experiences in an in-depth understanding. In this research, the exploratory case study was used to investigate the learners' perspectives about the potentials of ChatGPT for language education. This study was based in two public universities at Surakarta, a city in central Java province, Indonesia. The participants of this study were students of English language education and linguistic departments at the two public universities. A total of 18 students (male=11, female=7; called as Participant 1 - Participant 18) voluntarily participated in this study upon invitation. They were purposely chosen based on two primary criteria: (1) using ChatGPT regularly in the one recent month for language learning and (2) consistently using technology to assist them with learning foreign languages. The selection criteria were applied to guarantee that the data collected from the participants about the use of ChatGPT for language learning were accurate and reliable. While the majority of the participants were undergraduate students (N= 12), there were 6 participants studying at a master program in English language education. Ethical consent was obtained from all participants before the data collection was begun, and they were well-informed that their data and responses were only used for the sake of this research.

Instrument and data collection

Two research instruments were used to elicit the required data: (1) semistructured interview and (2) focus group discussion (FGD). First, semi-structured interviews were administered with the 18 participants in both face-to-face and online modes (using zoom and google meeting applications). In a semi-structured interview, the interviewer has a structure in hand but does not strictly follow the formalized list of questions (Brown & Danaher, 2019). The interview protocol was developed by the researchers and was validated by experts in qualitative research to ensure the accuracy. The interview protocol was focused on questions concerning three primary themes as stated in the research questions of this study. To avoid bias and multiple variation during the interview process, the first author took responsibility for all interviews with the participants. Follow-up and probing questions were consistently applied in responding to the participants' answers to reach deeper understanding about the use of ChatGPT for language learning. The semi-structured interviews were administered from May to July 2023, each lasting for 30-40 minutes in Indonesian or English, depending on the participant's preference.

Second, FGD was conducted to triangulate the results of semi-structured interviews. An FGD involves gathering people having similar backgrounds and interests to discuss a specific topic. It is a technique of qualitative data collection which encourages discussions about the participants' perceptions, attitudes, beliefs, and ideas on a particular topic (Yin, 2015). In this study, FGD was carried out to facilitate critical discussion among the participants as well as to explore more in-depth information related to the themes of this research. Out of the 18 participants, 6 were invited based on their willingness and availability to participate in the FGD. The FGD was moderated by the first researcher and lasted for about an hour. The discussion focussed on confirming the results of semi-structured interviews in terms of the primary themes of this study. Further perceptions and ideas of the participants were scrutinized in the FGD. Through the FGD, rich and comprehensive data in the form of the participants' responses were gathered.

Data analysis

Both data obtained from semi-structured interviews and FGD were analyzed using thematic analysis (Lochmiller, 2021). The findings of the interview were used as

discussion materials in the FGD; hence, the interview data were firstly analyzed before conducting the FGD. The analysis involved an iterative approach where the researchers continually revisited and thoroughly examined the data to gain a comprehensive understanding of the research topic (Morgan & Nica, 2020). The analysis process began by data familiarization with the interview and FGD transcripts. Then, the researchers conducted initial coding based on the three research themes related to the potentials of ChatGPT for language learning. The coding episodes were further categorized with potentially similar themes and were consistently compared and contrasted. Throughout this process, the emerging themes from the results of the interview and FGD with all participants were carefully analyzed and reviewed. Subsequently, a cross-case comparison was performed to refine the overall themes regarding to three primary topics of this research: (1) the needs of language learning that can be fulfilled with ChatGPT, (2) potential benefits of ChatGPT for language learning, and (3) possible limitations of ChatGPT to help students with language learning. During this stage, discussions among researchers were conducted to reach a consensus on the final results and conclusions. The findings of this study were presented in the following section.

RESULTS & DISCUSSION

Results

The findings of this study focus on three primary themes: (1) the needs of language learning being fulfilled by ChatGPT, (2) practical benefits of ChatGPT for language learning, and (3) limitations and challenges of using ChatGPT for language learning. Table 1 presents the summary of the findings.

Table 1. Summary of the findings

Theme	Sub-theme	Explanation
The needs of language learning can be fulfilled by ChatGPT	 Facilitating personalized learning Stimulating authentic interactions Boosting student productivity 	According to the participants, the findings show some needs of language learning that can be fulfilled by ChatGPT, such as facilitating personalized learning, stimulating authentic learning, boosting student productivity and developing overall language skills.

Theme	Sub-theme	Explanation
Practical benefits of ChatGPT for language learning	 Translation and paraphrasing Generating ideas/outlines for writing Fixing grammatical and syntactical mistakes Enhancing vocabulary acquisition Virtual learning assistant and providing materials Being a conversation partner to practice target language 	The findings reveal some benefits of using ChatGPT for language learning, including translation and paraphrasing, enhancing writing quality, assisting grammar and syntax, enhancing vocabulary, providing learning materials, and being a conversational partner.
Limitations and challenges of ChatGPT for language learning	 Ethical use of ChatGPT in education Inaccuracy of ChatGPT's responses Cultural bias and ambiguity Misinformation 	The use of ChatGPT in language education also has several limitations and challenges, such as ethical issue, accuracy of ChatGPT responses, bias and ambiguity, misinformation and technological dependence.

The needs of language learning can be fulfilled by ChatGPT

Language learning needs to pertain to the linguistic requirements that can be fulfilled through learning activities to effectively engage in communication using language skills. The research findings demonstrate several student needs that can be addressed by incorporating ChatGPT. Since language learners come from diverse social backgrounds, they possess distinct characteristics. ChatGPT, in this context, has the capability to support personalized learning tailored to each student's specific needs. With its conversational design, ChatGPT can swiftly interact and provide accurate responses to all queries. This adaptability allows students to use it as a virtual assistant for enhancing their language skills. The use of ChatGPT to facilitate personalized learning aligns with the views of participant 7, who expressed the following utterances:

I've used ChatGPT to help me improve my language skills, especially writing, and to assist me with tasks and assignments. The reason I enjoy using it is due to its flexibility. I can ask ChatGPT any questions anywhere and anytime, depending on my will. By doing so, I can manage and personalize my own learning. Using

ChatGPT also increases the frequency of my independent learning outside the classroom. (Interview/Participant 7)

ChatGPT assists language learning by triggering authentic interactions (Kohnke et al., 2023). It can engage with students in the target language promptly and realistically. The research findings reveal that ChatGPT is proficient in contextual word understanding, correcting and explaining language errors, and generating authentic materials such as emails, genres, and short functional texts. Furthermore, ChatGPT enables conversations to take place in private and secure settings, providing learners with abundant opportunities for authentic interactions. Participant 10 exemplifies this by stating:

Yes, I totally agree that ChatGPT gives us private and secure place to learn and practice language skills because we can interact with it in our own way, style and environment. It facilitates me to learn grammar mistakes and identify vocabulary meaning. It also gives examples of several authentic materials such as emails, short functional texts, and other various genres. (FGD/Participant 10)

Moreover, ChatGPT can promote learners' productivity by supplying resources, fostering learning effectiveness, improving language skills, enhancing collaboration, and stimulating engagement and motivation (Kasneci et al., 2023). Nonetheless, the utilization of ChatGPT should be accompanied by adherence to guidelines and policies to ensure academic integrity and ethical clearance. Based on the research findings, the majority of participants reported that incorporating ChatGPT into their learning process saved them more than an hour's worth of time to complete tasks and assignments. Participant 1 also highlighted that using ChatGPT led to increased engagement in learning and practicing the target language. As he stated,

I can invest more time to learn English skills (especially writing and vocabulary) when I use ChatGPT to accompany my learning activity. (Interview/Participant 1)

In addition, Participant 16 also pointed out that ChatGPT could enhance his writing productivity. Participant 16 uttered:

Among all language skills, I'm most interested in writing, especially writing literary works such as poems, short stories, and essays. Using ChatGPT, I can enhance my writing productivity since it helps me with generating creative

ideas, creating outlines, and correcting my language grammatical and syntactical mistakes. (FGD/Participant 16)

Practical benefits of ChatGPT for language learning

It has widely been argued that ChatGPT is beneficial as a supportive tool to enhance language learning (Fitria, 2023; Kohnke, 2023). ChatGPT has the capacity to improve students' educational experiences by offering personalized, adaptable, and engaging learning opportunities. With regards to the benefits of ChatGPT, the findings of this study show that this AI chatbot could be used by the students to enhance their writing, specifically translating and paraphrasing, generating outline and ideas, and correcting grammatical and syntactical mistakes. The majority of participants, as evident from their responses gathered through interviews and focus group discussions, recognized ChatGPT as the most advanced and potent AI chatbot available currently. For example, participant 18 stated,

ChatGPT helps me translate and paraphrase phrases, words, and even paragraphs. It really enhances my writing ability. (Interview/Participant 18). Similarly, another student (participant 12) revealed that ChatGPT could assist him with grammatical and syntactical issues while writing. As he said:

For me, language grammar and syntax are the most difficult aspects of writing. I often use ChatGPT to fix any grammatical mistake and to suggest me correct phrase or sentence patterns. I was feeling convenient when I used ChatGPT to assist with my grammatical and syntactical issues to improve the quality of my writing. (FGD/Participant 12)

Some students use ChatGPT to generate innovative ideas or writing outlines. By employing this technology, they receive search results in more elaborate and comprehensive phrases, which diverge from the conventional output of the Google search engine (Javaid et al., 2023). For example, participant 3 argued that ChatGPT could be an alternative option when she was out of ideas while writing. As she mentioned:

I often encounter situation where I do not have ideas, especially when starting my writing. I see ChatGPT and start asking questions or deliver command about the topic I am going to write. From the information generated by ChatGPT, I make outline for my writing. (FGD/Participant 3)

Another benefit of ChatGPT as resulted in the findings of this study is that this technology is capable of helping students enhance their vocabulary acquisition. Students could take benefits from ChatGPT to learn vocabulary relevant to a particular topic (Yan, 2023). For instance, participant 6 confessed that ChatGPT could be used to create Indonesian-English vocabulary lists on the theme of economics and business, then he invited the chatbot to practice through conversation. As he stated:

Sure, it [ChatGPT] can be used to enhance our vocabulary mastery. Simply ask ChatGPT to provide list of vocabulary on a topic, for example, economics and business. Then, I often use the prompt as follows "Let's practice. Please ask me a word about economics and business at a time. You give me the Indonesian translation, and I must reply in English. Correct me if I am wrong". (Interview/Participant 6)

In a virtual learning environment, ChatGPT possesses the ability to answer students' inquiries and be their virtual assistant. It can be valuable in pinpointing areas where students have weaknesses in their knowledge and understanding (Firat, 2023). Additionally, ChatGPT can provide support by suggesting solutions, answering questions, and aiding with tasks and assignments (Kohnke et al., 2023). The findings of this study discovered that ChatGPT helped the participants with providing learning materials. According to them, it was able to create customized materials for each student by considering their preferred learning style and current skill level. It may provide resources like dictionaries and grammatical rules for learning other languages. In line with this, participant 4 argued that ChatGPT has the potential to guide students towards relevant online resources, like e-books, course modules, and materials, to aid them in enhancing understanding of a specific subject. As she mentioned,

ChatGPT can provide me with learning materials, e-books, articles, and other sources on a particular topic that I want. (Interview/Participant 4)

With regards to this, participant 17 further added:

I often use ChatGPT as a search engine of learning materials, especially dealing with grammar and language structure. For example, when I was going to learn about active and passive sentence, ChatGPT provides me materials along with examples and exercises. (Interview/Participant 17)

In addition, ChatGPT can serve as a personal conversation partner, providing a space to engage in written interactions or even integrate voice control plugins for more interactive experience (Firat, 2023). It allows students to interact more naturally and seamlessly like human conversation. According to the experience of Participant 6, ChatGPT can be a conversation partner for vocabulary acquisition because it can generate a vocabulary list on a specific topic. Once he had the vocabulary list, ChatGPT can assist him in testing his knowledge by creating various types of tests, such as fill-in-the-blank or cloze test. During the FGD, he said:

Also, I take benefit from ChatGPT to help me practice conversation, especially about vocabulary. I ask ChatGPT to provide me with a set of vocabulary list, then I begin the conversation by asking it to give me a test or a quiz. (FGD/Participant 6)

Limitations and challenges of ChatGPT for language learning

Apart from its compelling benefits, ChatGPT also suffers from some limitations. One of its key limitations concerns __the ethical issue. One of the primary concerns prevalent in education is that students might exploit ChatGPT to complete their tasks and assignments, allowing them to copy and paste the responses without any control from the teacher (Kasneci et al., 2023). Based on the findings of this study, the integration of ChatGPT for language learning was considered controversial due to the participants' worries about ethical violation which might lead to cheating behavior and academic dishonesty. One participant (Participant 2) asserted that since ChatGPT is an exceptionally powerful tool that can perform admirably across various tasks and academic fields including language education, it raises ethical issues and there are anxieties about its potential misuse and plagiarism. She said:

The ability of ChatGPT to generate various responses is powerful. So, I am worry that some students may use it without ethical awareness which can result in cheating behavior. (Interview/Participant 2)

Moreover, ChatGPT has the potential to generate inaccurate information and come up with damaging instructions which might lead to misinformation (Benuyenah, 2023). In language learning context, students take benefits from ChatGPT mainly as a source of information about learning materials, such as particular topics on grammar. As a chatbot, it appends words automatically based on patterns of previous words; nevertheless, it is without fact-checking the accuracy of the data.

The inaccurate information might cause bias and ambiguity for students (Kohnke et al., 2023). Participant 14 addressed this issue by saying:

I tried to use ChatGPT to obtain some learning materials on particular topics, but I was not fully satisfied with the information. (Interview/Participant 14) Through FGD, Participant 11 added:

I often search for grammar materials on various topics, such as tenses, active and passive sentence, and gerund and infinitive, to support my learning. I also look for several tasks and quizzes mostly in multiple choice. I answer the questions while asking ChatGPT to give explanation if my answer is wrong. However, the materials are not comprehensive and sometimes inaccurate. We have to recheck its responses and combine the learning materials with information from other sources (e.g., Google, E-books, etc.). (FGD/Participant 11)

In addition, some participants are questioning the originality of ChatGPT's responses. ChatGPT does not offer appropriate sources and citations, leading to the possibility that its responses may not be entirely original but instead paraphrases of sources that have not been correctly addressed (Kohnke, 2023). In accordance with this matter, Participant 5 pointed out that the information provided by ChatGPT is mostly not accompanied by clear and credible sources, even when being asked to include references. He said:

Several times I try to ask ChatGPT to enclose the sources and references from which it generates the information. For example, I was asking it to provide me with explanation about pragmatics, a branch of linguistics. However, it did not attach the sources and references. When I asked for the references, it provided several sources, but most of them were not credible. (Interview/Participant 5)

The findings of this study further reveal that the responses provided by ChatGPT are sometimes repetitive and wordy. According to Participant 13, ChatGPT repeats itself a lot, so that even answers to different questions look the same. He mentioned,

The less precise our questions to ChatGPT are, the more similar the answers will be. (Interview/Participant 13).

Related to this, Participant 8 argued that although ChatGPT might display repetition in its answers, it is crucial to take into account the underlying factors such as training data bias and user input ambiguity. As he stated:

The repetitive and wordy responses generated from ChatGPT are caused by several factors. In my opinion, there are two main factors, training data bias and user input ambiguity. Sometimes, the repetition is a result of unclear or less detailed prompts provided by its users. (Interview/Participant 8)

To deal with such repetition, Participant 9 suggested that users must provide clear and detailed prompts. For example, he often used ChatGPT to assist him with writing, and he found that clear and detailed description of the prompts were essential to obtain more accurate and appropriate responses. He said,

By offering explicit instructions, users can customize ChatGPT's behavior, helping to reduce repetition and tailor the responses to meet specific needs and requirements. (Interview/Participant 9)

Last but not least, the limitation of ChatGPT relies on cultural bias. Most of ChatGPT's responses in the database come from an English corpus and are subsequently translated into different target languages, such as Chinese and Japanese (Kohnke et al., 2023). This concern is especially relevant in language education, given that students come from diverse cultural backgrounds and may not realize that ChatGPT and other AI-driven tools are not culturally neutral (Firat, 2023). Participant 15 mentioned that ChatGPT cannot provide detailed information related to specific cultural issues. He stated:

ChatGPT can't reach detailed information about specific cultural issue. I was doing assignment of writing explanatory essay about cultural uniqueness in our region. I asked ChatGPT about the cultural uniqueness, but it said that it was not well-informed about the topic. (Interview/Participant 15)

DISCUSSION

The first research question explores students' opinion on the language needs that can be fulfilled by ChatGPT. The findings show that the students utilize ChatGPT to facilitate personalized learning, stimulate authentic interactions, and boost productivity. Based on the findings, it is implied that ChatGPT has pedagogical opportunities as a promising medium for enhancing language skills through authentic interactions. In line with these findings, previous literature studies (Javaid et al., 2023; Kohnke et al., 2023) highlight that ChatGPT has caught the attention of language students due to its ability to interact with users in the target language authentically and realistically. AI-powered Chatbot like ChatGPT

has capability to generate linguistic inputs and facilitate daily conversation practice. When it is appropriately used, ChatGPT offers rich and comprehensive language input which is essential for successful L2 acquisition (Kasneci et al., 2023; Strzelecki, 2023). Its affordance and practicality further stimulate language learners' interests which might encourage self-regulated language learning in informal settings outside the classroom (Firat, 2023). Since ChatGPT is available 24/7, students can practice language skills anytime and anywhere according to their preferences and interests (Elbanna & Armstrong, 2023). As a result, it enhances the students' productivity in learning the target language.

The second research question sought to identify the potential benefits of ChatGPT for language learning based on the students' perspectives. According to the findings, students derive various advantages from ChatGPT, including enhanced vocabulary acquisition, support in learning materials, acting as a virtual language assistant for practice, and improving writing quality through tasks like translation, paraphrasing, outlining, and grammar and syntax corrections. These previous studies (Elbanna & Armstrong, 2023; Kohnke et al., findings support 2023; Yan, 2023), stating that ChatGPT facilitates language learning by offering a number of capabilities such as identifying words meaning in context, providing corrections and explanations for grammatical mistakes, generating texts in various genres, designing guizzes and other types of assessment, annotating texts, and offering dictionary definitions, example sentences, and translations. ChatGPT is ideal for facilitating language learning due to its flexibility, versatility, and real-time and fast responses (Hong, 2023; Javaid et al., 2023). Due to these features, ChatGPT has become a valuable tool for anyone interested in learning language and practicing target language skills, especially writing (Hong, 2023). ChatGPT offers substantial support to proactive students during the writing process by providing valuable assistance such as suggesting writing topics, improving flow, offering diverse sentence structures, and presenting enriched vocabulary options (Firat, 2023).

The third research question concerns limitations and challenges of using ChatGPT for language learning. The findings reveal that the use of ChatGPT in language education also possesses several drawbacks. Its massive use can lead to overreliance on technology and academic dishonesty (Kasneci et al., 2023). This study contributes to empirical evidence by examining language students'

perspectives on the negative consequences of using ChatGPT, such as confusion due to the AI tool's production of insufficient information, potential misuse, and instances of cheating (Firat, 2023). Similar to previous studies (Kohnke et al., 2023; Tlili et al., 2023), ethical concerns emerge as a central issue associated with the widespread use of ChatGPT. Another concern raised by the students is regarding the accuracy of ChatGPT's responses. One participant goes on to report that ChatGPT sometimes lacks appropriate sources and citations. Additionally, ChatGPT's output is sometimes verbose, repetitive, monotonous, and inaccurate (Kohnke et al., 2023). It is important to acknowledge that the quality of the answers relies on the quality of the questions asked to ChatGPT (Kasneci et al., 2023). Although ChatGPT can be beneficial for improving language skills, students need to be aware of the potential ethical challenges and drawbacks (Benuyenah, 2023). Teachers have the responsibility to guide and support students in using the AI chatbot effectively.

CONCLUSION

The present study is a preliminary exploration of language students' perspectives on the potentials of using ChatGPT for language learning. The findings depict that ChatGPT is a promising digital platform to facilitate personalized learning, stimulate authentic interactions, and foster student productivity in language learning. According to the findings, language students might take some benefits from ChatGPT to enhance their writing ability, improve vocabulary acquisition, provide learning materials, and be a conversation partner to practice language skills. In terms of its limitations and challenges, this study finds that using ChatGPT for language learning might lead students to the possibility of cheating, inaccurate responses, ambiguous information, and misunderstanding. Therefore, language students need to improve their digital competence and technological awareness to effectively use ChatGPT and other AI tools for language learning.

This study acknowledges a number of limitations. First, given the novelty of integrating ChatGPT into language education, this research serves as an initial exploration, focusing on language students' perspectives regarding the role of ChatGPT in fulfilling language learning needs, its potential benefits, and limitations. However, this study cornerns bias and validity issues because the point of views about ChatGPT are only from the learners. Therefore, future studies are suggested

to explore the potentials of ChatGPT for language learning from the perspectives of teachers and other relevant stakeholders. Second, this study requires enrichment on the empirical evidence about the positive role of ChatGPT on enhancing students' language skills especially writing. Hence, next research is recommended to conduct experimental research examining the impact of using ChatGPT on enhancing language learning. Further studies are recommended to gather empirical evidence on how ChatGPT impacts the improvement of language skills. Third, this study indicates that the ethical aspects of incorporating ChatGPT into formal education remain subjects of debate. Future research should prioritize investigating the acceptance of ChatGPT by educational stakeholders, especially students and teachers. Additionally, researchers should assess whether ChatGPT meets the expectations of teachers and students who use it.

This research holds significant implications for English teaching in higher education. It contributes to the existing literature on the pedagogical effects of utilizing ChatGPT for language learning, which is a relatively new field of study. Consequently, it underscores the need for further research on integrating ChatGPT and other AI tools in language education to enhance learning effectiveness. However, it also highlights the importance for students to be mindful of potential drawbacks and to develop their digital competencies related to AI-driven language learning. Moreover, this study sheds light on the transformative impact of technology on student learning, encouraging the development of novel teaching methods and assessment approaches. It serves as a call to action for language educators to adopt innovative learning strategies and evaluation techniques in the AI era. Importantly, this research emphasizes the ethical use of AI tools for educational purposes, prioritizing academic integrity. It is believed that AI tools like ChatGPT can complement language learning and teaching as long as they are employed ethically and responsibly.

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REFERENCES

- Baskara, F. R., & Mukarto, F. X. (2023). Exploring the Implications of ChatGPT for Language Learning in Higher Education. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 7(2), 343–358. https://ijeltal.org/index.php/ijeltal/article/view/1387
- Benuyenah, V. (2023). Commentary: ChatGPT use in higher education assessment: Prospects and epistemic threats. *Journal of Research in Innovative Teaching & Learning*, *16*(1), 134–135. https://doi.org/10.1108/JRIT-03-2023-097
- Brown, A., & Danaher, P. A. (2019). CHE principles: Facilitating authentic and dialogical semi-structured interviews in educational research. *International Journal of Research & Method in Education*, 42(1), 76–90. https://doi.org/10.1080/1743727X.2017.1379987
- Bonk, C. J., & Wiley, D. A. (2020). Preface: Reflections on the waves of emerging learning technologies. *Educational Technology Research and Development,* 68(4), 1595–1612. https://doi.org/10.1007/s11423-020-09809-x
- Chang, M.-M., & Hung, H.-T. (2019). Effects of technology-enhanced language learning on second language acquisition. *Journal of Educational Technology & Society*, 22(4), 1–17. https://www.j-ets.net/collection/publishedissues/22_4
- Chen, X., Zou, D., Xie, H., & Cheng, G. (2021). Twenty years of personalized language learning: Topic modelling and knowledge mapping. *Educational Technology & Society*, 24(1), 205–222. https://www.j-ets.net/collection/publishedissues/24 1
- Chiu, T. K. F., Moorhouse, B. L., Chai, C. S., & Ismailov, M. (2023). Teacher support and student motivation to learn with Artificial Intelligence (AI) based chatbot. *Interactive Learning Environments*, 1–17. https://doi.org/10.1080/10494820.2023.2172044
- Cooper, G. (2023). Examining science education in chatgpt: An exploratory study of generative artificial intelligence. *Journal of Science Education and Technology*, 32(3), 444–452. https://doi.org/10.1007/s10956-023-10039-y
- Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education*

- *and Teaching International,* 1–12. https://doi.org/10.1080/14703297.2023.2190148
- Deng, J., & Lin, Y. (2022). The benefits and challenges of ChatGPT: An overview. *Frontiers in Computing and Intelligent Systems*, *2*(2), 81–83. https://doi.org/10.54097/fcis.v2i2.4465
- Ebadi, S., Gholami, M., & Vakili, S. (2023). Investigating the Effects of Using Grammarly in EFL Writing: The Case of Articles. *Computers in the Schools*, 40(1), 85–105. https://doi.org/10.1080/07380569.2022.2150067
- Elbanna, S., & Armstrong, L. (2023). Exploring the integration of ChatGPT in education: adapting for the future. *Management & Sustainability: An Arab Review*. https://doi.org/10.1108/MSAR-03-2023-0016
- Farrokhnia, M., Banihashem, S. K., Noroozi, O., & Wals, A. (2023). A SWOT analysis of ChatGPT: Implications for educational practice and research. *Innovations in Education and Teaching International*, 1–15. https://doi.org/10.1080/14703297.2023.2195846
- Firat, M. (2023). What ChatGPT means for universities: Perceptions of scholars and students. *Journal of Applied Learning and Teaching*, 6(1), 57-63. https://doi.org/10.37074/jalt.2023.6.1.22
- Fitria, T. N. (2023). Artificial intelligence (AI) technology in OpenAI ChatGPT application: A review of ChatGPT in writing English essay. *ELT Forum:*Journal of English Language Teaching, 12(1), 44–58. https://journal.unnes.ac.id/sju/index.php/elt/article/view/64069
- Floridi, L. (2023). AI as agency without intelligence: on ChatGPT, large language models, and other generative models. *Philosophy & Technology*, *36*(1), 15. https://doi.org/10.1007/s13347-023-00621-y
- Fryer, L., Coniam, D., Carpenter, R., & Lăpușneanu, D. (2020). Bots for language learning now: Current and future directions. *Language Learning & Technology*, 24(2), 8-22. http://hdl.handle.net/10125/44719
- Hong, W. C. H. (2023). The impact of ChatGPT on foreign language teaching and learning: opportunities in education and research. *Journal of Educational Technology and Innovation*, *5*(1), 37-45. https://jeti.thewsu.org/index.php/cieti/article/view/103
- Hou, Y. (2020). Foreign language education in the era of artificial intelligence. In

- Atiquzzaman, M., Yen, N., Xu, Z. Big Data Analytics for Cyber-Physical System in Smart City: BDCPS 2019. *Advances in Intelligent Systems and Computing, vol 1117*, page 937-944. Springer, Singapore. https://doi.org/10.1007/978-981-15-2568-1 128
- Huang, W., Hew, K. F., & Fryer, L. K. (2022). Chatbots for language learning—Are they really useful? A systematic review of chatbot-supported language learning. *Journal of Computer Assisted Learning*, *38*(1), 237–257. https://doi.org/10.1111/jcal.12610
- Huang, X., Zou, D., Cheng, G., Chen, X., & Xie, H. (2023). Trends, research issues and applications of artificial intelligence in language education. *Educational Technology & Society*, *26*(1), 112–131. https://www.jets.net/collection/published-issues/26_1
- Javaid, M., Haleem, A., Singh, R. P., Khan, S., & Khan, I. H. (2023). Unlocking the opportunities through ChatGPT Tool towards ameliorating the education system. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, *3*(2), 100115. https://doi.org/10.1016/j.tbench.2023.100115
- Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günnemann, S., & Hüllermeier, E. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. https://doi.org/10.1016/j.lindif.2023.102274
- Kohnke, L. (2023). L2 learners' perceptions of a chatbot as a potential independent language learning tool. *International Journal of Mobile Learning and Organisation*, 17(1–2), 214–226. https://doi.org/10.1504/IJMLO.2023.128339
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal*, 00336882231162868. https://doi.org/10.1177/00336882231162868
- Lee, S.-M. (2023). The effectiveness of machine translation in foreign language education: a systematic review and meta-analysis. *Computer Assisted Language Learning*, 36(1–2), 103–125. https://doi.org/10.1080/09588221.2021.1901745
- Liang, J.-C., Hwang, G.-J., Chen, M.-R. A., & Darmawansah, D. (2021). Roles and

- research foci of artificial intelligence in language education: an integrated bibliographic analysis and systematic review approach. *Interactive Learning Environments*, 1–27. https://doi.org/10.1080/10494820.2021.1958348
- Liao, C.-H. D., Wu, W.-C. V., Gunawan, V., & Chang, T.-C. (2023). Using an Augmented-Reality Game-Based Application to Enhance Language Learning and Motivation of Elementary School EFL Students: A Comparative Study in Rural and Urban Areas. *The Asia-Pacific Education Researcher*, 1–13. https://doi.org/10.1007/s40299-023-00729-x
- Lochmiller, C. R. (2021). Conducting thematic analysis with qualitative data. *The Qualitative Report*, *26*(6), 2029–2044. https://doi.org/10.46743/2160-3715/2021.5008
- Lund, B. D., & Wang, T. (2023). Chatting about ChatGPT: how may AI and GPT impact academia and libraries? *Library Hi Tech News*, 40(3), 26–29. https://doi.org/10.1108/LHTN-01-2023-0009
- Nurmayanti, N., & Suryadi, S. (2023). The Effectiveness Of Using Quillbot In Improving Writing For Students Of English Education Study Program. *Jurnal Teknologi Pendidikan: Jurnal Penelitian Dan Pengembangan Pembelajaran,* 8(1), 32–40. https://doi.org/10.33394/jtp.v8i1.6392
- Organ, A. (2023). Attitudes to the use of Google Translate for L2 production: Analysis of chatroom discussions among UK secondary school students. *The Language Learning Journal*, 51(3), 328–343. https://doi.org/10.1080/09571736.2021.2023896
- Pikhart, M. (2020). Intelligent information processing for language education: The use of artificial intelligence in language learning apps. *Procedia Computer Science*, *176*, 1412–1419. https://doi.org/10.1016/j.procs.2020.09.151
- Singer, J. B., Báez, J. C., & Rios, J. A. (2023). AI creates the message: Integrating AI language learning models into social work education and practice. *Journal of Social Work Education*, 59(2), 294–302. https://doi.org/10.1080/10437797.2023.2189878
- Strzelecki, A. (2023). To use or not to use ChatGPT in higher education? A study of students' acceptance and use of technology. *Interactive Learning Environments*, 1–14. https://doi.org/10.1080/10494820.2023.2209881
- Taguchi, N. (2023). Technology-enhanced language learning and pragmatics:

- Insights from digital game-based pragmatics instruction. *Language Teaching*, 1–11. https://doi.org/10.1017/S0261444823000101
- Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, *10*(1), 15. https://doi.org/10.1186/s40561-023-00237-x
- Webb, M., & Doman, E. (2020). Impacts of flipped classrooms on learner attitudes towards technology-enhanced language learning. *Computer Assisted Language Learning*, *33*(3), 240–274. https://doi.org/10.1080/09588221.2018.1557692
- Weng, X., & Chiu, T. K. F. (2023). Instructional design and learning outcomes of intelligent computer assisted language learning: Systematic review in the field. *Computers and Education: Artificial Intelligence*, 100117. https://doi.org/10.1016/j.caeai.2022.100117
- Yan, D. (2023). Impact of ChatGPT on learners in a L2 writing practicum: An exploratory investigation. *Education and Information Technologies*, 1–25. https://doi.org/10.1007/s10639-023-11742-4
- Yin, R. K. (2015). *Qualitative research from start to finish*. Guilford publications.
- Zhang, R., Zou, D., & Cheng, G. (2023). Technology-enhanced language learning with null and negative results since 2000: A systematic review based on the activity theory. *Education and Information Technologies*, 1–61. https://doi.org/10.1007/s10639-023-11993-1