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## Revolutionizing Language Learning: How ChatGPT and AI are changing the Way We Learn Languages

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# Revolutionizing Language Learning: How ChatGPT and AI are changing the Way We Learn Languages

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## Abstract

Artificial Intelligence (AI) has relatively become a part of our lives in many fields including education. As a recent AI tool generated by OpenAI, ChatGPT offers numerous opportunities and challenges for language learners and teachers. Therefore, the purpose of this study was to investigate the experiences of language learners and teachers in the use of ChatGPT during the language learning and teaching process. Phenomenological design, which is a type of qualitative research, was used in this study. Participants in the study were 8 English language learners with a background in English language learning and 3 English Language teachers with teaching experience at different levels. The participants were voluntarily selected through a purposive sampling and the interview technique was used as the data collection instrument. The findings of the study revealed that ChatGPT and AI were considered to be useful tools for language learning and teaching, although they presented some challenges that can be overcome with the advancement of technology. It is believed that students and teachers will be more involved in ChatGPT and AI in the future with its introduction into the language teaching curriculum, pre-service and in-service teachers' curriculum and the improvement of teachers' technological and pedagogical content knowledge.

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## Introduction

Artificial Intelligence (AI) has rapidly become a part of our lives and its pervasive use in many fields is attracting people's attention including education. AI designs intelligent machines, such as computer systems and computerized machines (robots) that function and respond similarly to the human brain (Karsenti, 2019). According to Mehrotra, (2019), AI is a field of computer science that investigates the analysis and creation of intelligent devices and software. Kaur and Gill (2019) state that AI is a digital innovation that replicates human intelligence through various machine computations.

AI has also had created an impact on language learning and teaching methods. Technologies based on artificial intelligence can make global classrooms accessible to all students, including those who speak different languages. AI serves as an additional support system for English language students and teachers (Gawate, 2019; Li, 2020). The English learning environment has been transformed by artificial intelligence. An excellent learning environment for immersive English teaching is provided by AI. English learning becomes more comprehensive

through the logical integration of data such as images, voice, and text in an intelligent device. The effectiveness of English teaching is maximized through the use of artificial intelligence. AI provides a realistic simulated conversation platform for English language teaching and learning (Wang, 2019).

Chatbots are one of artificial intelligent conversational systems designed to automatically communicate with both humans and computers (Ngh, Phuc, & Thang, 2019). A chatbot is an artificial intelligence program that conducts conversations via text or audio and engages users in a particular domain or topic by providing insightful responses in natural language (Sameera & Woods, 2015). It analyses errors, suggests substitutions, and provides explanations to minimize sentence structure errors (Haristiani, 2019). ChatGPT is a sophisticated chatbot technology developed by OpenAI. It provides users with the ability to shape and guide a conversation towards a preferred duration, format, style, language level and detail. ChatGPT can even write dissertations on a wide variety of topics based on its large data warehouses. Chinonso, Theresa, and Aduke (2023) list the most common benefits of ChatGPT as quick and rapid response, improved research, text generation, data augmentation, self-paced/active learning. On the other hand, they mention the challenges as the possibility of plagiarism, inaccurate answers, limited results and no reference or citation for the data. In this context, ChatGPT is a new technology in its early stages, offering many benefits and some challenges. Therefore, the purpose of this study is to explore teachers' and learners' experiences of using ChatGPT in language learning and teaching and to shed light on issues related to the use of AI technology in language learning.

## **Review of the Literature**

Early research on AI focused mainly on grammar, but more recent research has shown that the capabilities of AI have increased much more due to the advances in computer technology. Research on AI and language teaching and learning has mainly concentrated on the design of tools, experimentation and evaluation of the tools, attitudes, perceptions and review of studies. Liu (2009) designed a sensor and handheld AI-related mobile AR learning system to support the listening and speaking activities of English language learners. The results showed that the English listening and speaking skills of students improved.

Hwang et al. (2019) investigated recognition technologies, instructional strategies, and engaging activity layouts aimed at improving the motivation and speaking accuracy of English as a foreign language (EFL) students. They found that the way the activities were designed had a significant impact on the learners' speaking accuracy and motivation to learn. Yang (2020) pointed out that the use of AI in language teaching was still in its early stages, but showed great promise. It changed the process by which students learned English, improved the learning experience, changed the role of teachers, raised the standard of English teaching and promoted the reform of English teaching.

Cao et al. (2020) developed and constructed an intelligence-based system to enhance the use of contemporary information technology in college English culture teaching in four aspects such as personalization, virtualization, intelligentization and quality orientation of culture learning and teaching. Through the application of relevant systems, they highlighted the importance of educational resources and the integration of knowledge learning and

skill cultivation.

Fitria (2021) claimed that AI provides a positive learning environment for learning English. Depending on a learner's current English proficiency, career needs, or interests, it created a customized environment in which they could simultaneously practice their English skills while using their senses. AI enhanced practical skills and provided a true simulated dialogue platform for spoken English. It maximized the teaching impact of English in ELT while increasing students' practice ability. The use of AI technology provided an opportunity to improve English language proficiency. Woo & Choi (2021) reviewed the studies on AI-based language learning tools between 2017 and 2020. They found that most of these tools were used for machine learning and natural language processing. They helped to assess language skills, find mistakes, and provide feedback. Learners' language skills and knowledge of the learners improved after using these tools.

Aljohani (2021) investigated the perceptions of EFL teachers and students regarding the use of AI to improve English language learning. The study found that both teachers and students in Saudi Arabia had a positive attitude towards the use of artificial intelligence in learning the English language. Sumakul et al. (2022) found that all teachers had a favorable opinion about using AI in the classroom stating that it could aid in both teaching and student learning. The interview data indicates that when integrating AI into EFL courses, it is important to consider teachers' technological and pedagogical abilities. Belda-Medina and Calvo-Ferrer (2022) suggested that the EFL curriculum should be revised to bridge the gap between language teacher candidates' readiness level and current developments in the application of AI. It is important for educators to have a good understanding of the different types of chatbots, their advantages and disadvantages for language learning.

Jiang (2022) provided an overview of AI in the context of English as a Foreign Language (EFL) by summarizing six major applications of AI: automatic evaluation systems, neural machine translation tools, intelligent tutoring systems (ITSs), AI chatbots, intelligent virtual environments, and active computing. The review uncovered the current pedagogical and moral implications of AI in the EFL context. Jia et al. (2022) developed an AI-based English language learning system to aid lower-grade English language learners in enhancing their vocabulary and grammar skills and abilities in a mobile learning environment. Following the testing and evaluation period, they discovered that AIELL was a practical and usable learning system for English language teaching and learning. Zitouni (2022) investigated the use of Artificial Intelligence (AI) in online EFL learning in higher education and found that AI applications significantly improved the EFL learning and teaching process, raising the standard and effectiveness of online education.

Farrokhnia et al. (2023) used the SWOT analysis framework to discuss ChatGPT's advantages, disadvantages, potential, and threats to education. The benefits of ChatGPT include its self-improvement capability, the ability to provide personalized and real-time responses, and the use of a sophisticated natural language model to produce logical answers. Additionally, ChatGPT improves information availability, supports individualized and complex learning, and reduces the workload of teachers. On the other hand, ChatGPT currently has several drawbacks, including a lack of in-depth comprehension, poor response quality, the risk of bias and discrimination, a lack of higher-order thinking skills, a lack of contextual awareness and plagiarism.

Alharbi (2023) found that students frequently used a variety of AI-powered writing aid tools to enhance their writing. The tools were grouped into four categories: (1) GPT-3 automatic, (2) tools for automated writing evaluation, (3) tools for automated writing corrective feedback, and (4) AI-powered machine translators. Chinonso et al. (2023) revealed that ChatGPT instantly produced automatic text responses to search inquiries. The study identified a challenge with the lack of citations and references. While technology has offered many advantages for language learners, the roles of teachers in the classroom remain unclear. Cope et al. (2021) found that artificial intelligence cannot replace human teachers due to its different mode of operation. Steenbergen-Hu and Cooper (2014) suggested that AI has a minimal impact on students' learning. Furthermore, AI-generated language is often unnatural, inappropriate, and lacks context (Wilson et al., 2021). The inadequate pedagogical design of AI applications or the teachers' insufficient understanding of pedagogy may hinder the successful implementation of AI in the classroom (Zawacki-Richter et al., 2019).

### **The Theoretical Framework of the Study**

The theories of this study are based on Constructivist Language Learning theory, Technology Acceptance Model (TAM) and Social Learning Theory. Constructivist Language Learning theory emphasizes that learners actively construct their knowledge rather than passively receiving it (Suhendi & Purwarno, 2018). AI and ChatGPT in particular, can facilitate a constructivist approach by providing interactive and dynamic language learning experiences. Learners engage in meaningful conversations, receive immediate feedback, and adapt their understanding based on real-time interactions with the AI. In addition, Social Learning Theory stresses the importance of social interactions in the learning process (Bandura, 1976). ChatGPT can simulate social interactions by providing a conversational partner who responds contextually and encourages dialogue. Language learners can benefit from the social dimension of language learning by improving their communication skills through AI-driven interactions. Furthermore, Technology Acceptance Model (TAM) examines how users accept and use technology based on perceived usefulness and ease of use (Cakır & Solak, 2014). This study explores language learners' perceptions of the effectiveness and ease of use of ChatGPT compared to traditional language learning methods. Understanding users' attitudes can provide insights into the adoption and integration of AI in language education.

### **Method**

The purpose of this study was to investigate the role of ChatGPT as an artificial intelligence tool in language teaching and learning. This study used a phenomenological design, which is a type of qualitative research. In phenomenology, a researcher explores different perceptions of a particular phenomenon. The researcher hopes to gain an insight into the world of his or her participants and to describe their perceptions and reactions. Data is usually collected through in-depth interviews. The researcher then attempts to identify and describe aspects of each individual's perceptions of their experience in some detail (Fraenkel et al, 2012, p. 432). The participants in the study were English language learners with a background in English language learning and English language teachers with teaching experience at various levels. Purposive sampling, which is a non-probability sampling technique, was used to select the participants for the study. A purposive sample consists of individuals who have

special qualification or are considered representative based on prior evidence (Fraenkel et al, 2012, p.107). As the focus of the study was ChatGPT and Artificial Intelligence in language learning and teaching, few learners and teachers had any experience with it. Therefore, there were 8 language learners and 3 language teachers who used ChatGPT in their language learning or teaching process. The identities of the participants were kept confidential in order to protect them and to collect more reliable data. The selection of the participants was voluntary and explained at the beginning of the interview. The characteristics of the learners are shown in Table 1.

Table 1. The Characteristics of the Learners

<b>Participants</b>	<b>Age range</b>	<b>gender</b>	<b>Language level</b>
Learner1	15-25	female	Intermediate
Learner2	15-25	male	Intermediate
Learner3	15-25	male	Intermediate
Learner4	15-25	female	Advanced
Learner5	26-35	male	Advanced
Learner6	15-25	male	Advanced
Learner7	15-25	female	Advanced
Learner8	15-25	male	Advanced

Table 1 shows the characteristics of the learners in terms of age, gender and language level. 7 of the learners were in the 15-25 age range. Only one learner was in the 26-35 age group. While 5 learners were male, 3 participants were female. As for the language level of the participants, 5 were at the advanced level and 3 were at the intermediate level in English.

Table 2. The Characteristics of the Language Teachers

<b>Participants</b>	<b>Teaching experience</b>	<b>Gender</b>	<b>Teaching Level</b>
Teacher1	11-15	male	Advanced
Teacher 2	0-5	female	Intermediate
Teacher 3	11-15	male	Intermediate

Table 2 depicts the characteristics of the language teachers in terms of teaching experience, gender and teaching level. While 2 teachers had 11-15 years of teaching experience, only one had 0-5 years. There were 2 male and 1 female teacher who participated in the study. 2 teachers taught at the intermediate level and only 1 was teaching at the advanced level.

### **Data Collection Process and Instruments**

The data was collected using a semi-structured interview form designed by the researcher. First, the relevant literature on ChatGPT and artificial intelligence was reviewed and several questions were formulated by the researcher. Then, these questions were revised by 3 expert researchers specialized in this topic to ensure the credibility of the study. Some of the questions in the interview form are listed below:

- ✓ What has been your experience of using ChatGPT to learn/teach a foreign language and how can it be

compared with other methods of language learning?

- ✓ What do you think about the effectiveness of ChatGPT in promoting language learning, and what do you think are some of the advantages of using this technology in language teaching?
- ✓ What are some of the challenges you have faced when using ChatGPT to learn/teach a foreign language, and how have you overcome these challenges?
- ✓ What are your thoughts on the potential use of ChatGPT to provide feedback on language learning performance?
- ✓ How do you think ChatGPT can be used to develop learners' speaking, listening, reading and writing skills?
- ✓ How do you think ChatGPT can be used to develop learners' vocabulary and grammar?
- ✓ What do you think about ChatGPT in terms of privacy and ethical issues such as cheating and plagiarism?
- ✓ What role do you see for ChatGPT in the future of language learning, and how do you think it could be integrated into traditional classroom teaching or other language learning contexts?

The interview with each participant lasted approximately 30 minutes and was transcribed the verbatim by the researcher. A triangulation technique was used to ensure the validity of the data. This involves checking one informant's description of something against another informant's description of the same thing (Fraenkel et al, 2012, p. 458). The collected data was analyzed in tables and no software was used for analysis. As the collected data was divided into themes and codes in a qualitative research, the participants' responses were divided into themes and codes. Themes were identified as the effectiveness of ChatGPT, language learning skills and ethical considerations. Firstly, the theme of effectiveness included benefits, challenges, feedback and future role. Secondly, the language learning skills theme included listening, speaking, reading, writing, grammar and vocabulary. Thirdly, privacy and the ethical considerations were discussed in the ethical considerations theme. As respondents did not answer every question correctly, only significant answers were taken into account.

## Findings

In this section, the findings of the study are discussed under the themes and codes and presented in tables. In the tables, learners are abbreviated as L (Learner) and teachers as T (Teacher). The following tables are analyzed from the perspectives of learners and teachers based on the relevant theories.

Table 3. Statements Related to Advantages of ChatGPT Code under the Theme of Effectiveness of ChatGPT

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L1: This technology is effective in promoting language learning, especially for beginners and intermediate-level learners. ChatGPT can personalize the learning experience by adapting to learners' language levels, interests, and learning styles.

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L2: I enjoyed having a chat with a machine from the internet because it is such a new experience even for people who were born in the technology era. It is similar to having a chat online with another English speaker.

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L3: ChatGPT allows me to get faster and clearer answers compared to others and makes our job easier.

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L4: Since there is no real person, it can help people who are ashamed to speak a foreign language in front

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of other people.

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L5: It can provide instant answers and suitable solutions to my needs in language learning when compared to other methods.

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L6: It provides immediate responses to questions, translations, and even generates practice exercises. It also has the advantage of being available 24/7, which is not possible with human tutors or language classes.

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T1: As this tool can provide more personalized information, I believe it can be adapted to every need of a language student. ChatGPT also provides real-time conversation opportunities without the need of feeling any hesitation, shame, or doubt. It can be a tool that helps the teacher or the student to break so called language barrier.

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T2: It allowed me to have access to various teaching activities in quite a short time. It made it easier to provide students with activities in related contexts. When I am preparing teaching materials for students, I just type the topic, the level and give the proper instructions and the activity is generated within seconds. When I think the activity is lacking certain learning objectives, I just adapt it by making necessary changes. This way I can use it comfortably and make use of it with no problems.

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T3: I use that tool to prepare scripts, checking the accuracy of the pieces I share with students.

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### **Implications for Constructivist Language Learning Theory**

- Constructivist principles are evident as learners and teachers appreciate ChatGPT's adaptability to individual needs, real-time interactions, and personalized learning experiences. Statements that support this theory are:
- L1 and L3 highlight the effectiveness of ChatGPT in personalizing language learning, adapting to individual levels and providing quick and clear responses.
- L2 emphasizes the novelty of the experience, especially for tech-savvy learners, which is similar to online conversations with native speakers.
- L4 points out the benefit of anonymity, which helps shy learners who are uncomfortable with face-to-face language practice.
- L5 and L6 highlight the platform's strengths in providing instant answers, translations, and 24/7 availability for practice.
- T1 recognizes ChatGPT's potential for personalized learning, breaking down language barriers, and supporting real-time conversations without hesitation.
- T2 and T3 emphasize the efficiency of ChatGPT in quickly generating teaching materials, activities, and the checking script accuracy.

### **Implications for Technology Acceptance Model TAM Theory**

- Perceived Usefulness: Both learners and teachers perceive ChatGPT as effective in promoting language learning, providing personalized learning experiences, and breaking down language barriers.
- Perceived Ease of Use: Users find ChatGPT enjoyable, especially for learners born in the technology era. It provides quick and clear answers, making language learning more accessible.

- Attitude Toward Use: Positive attitudes are observed in terms of breaking language barriers, providing authentic materials, and improving teaching processes.

### Implications for Social Learning Theory

- Observational Learning: Learners observe the positive experiences of others in using ChatGPT. Positive statements from both learners and teachers act as models for potential users, influencing their perceptions of the tool's effectiveness.
- Imitation: The positive experiences reported by participants, such as personalized learning and breaking language barriers, can encourage others to imitate and adopt ChatGPT for language learning.

Table 4. Statements Related to Challenges of ChatGPT Code under the Theme of the Effectiveness of ChatGPT

L1: Sometimes ChatGPT does not offer me an exact or appropriate responses.
L2: Sometimes it does not answer my questions properly. Repetitions occur too. On some rare occasions, website crashes completely and a reset is needed.
L3: Sometimes instead of answering in the language you ask, it can answer in English. There are also slow typing and incomplete issues when typing text. In such cases, it is necessary to ask again, but it is not always a solution.
L4: It can give you false information not just about language learning but also about everything. Therefore, people should always be careful while dealing with ChatGPT.
L5: Sometimes it provides false answers since it may not understand the context.
L6: It does not always provide accurate translations or may not understand the nuances of certain phrases. It is essential to use ChatGPT as a supplement to other language learning methods and not rely on it entirely.
L8: ChatGPT is a useful tool for education but sometimes it does not understand the sentence and can give wrong answers.
T1: The biggest problem for me was the cultural differences and interlingual errors however; these can be moderated and changed. It needs editing depending on the contextual material that is being generated.
T2: Sometimes I do not think that the activities generated by artificial intelligence quite fit what I have in mind for students. However, I overcome this problem by adapting it to my classroom and teaching process.

### Implications for Constructivist Language Learning Theory

- Challenges align with constructivist theory by recognizing the need for constant interaction and adaptation, emphasizing the tool as a supplement rather than a stand-alone solution. Statements that support this theory are:
- L1 to L6 highlight issues such as inaccurate or incomplete responses, occasional crashes, providing false information, and the need for caution when using ChatGPT.
- T1 and T2 discuss challenges such as cultural and interlingual errors, the need for editing, and occasional mismatches with the teacher's vision for activities.

### **Implications for Technology Acceptance Model TAM Theory**

- Perceived Usefulness: Users face challenges, such as inaccurate responses, technical problems, and the need for adaptation. Perceived usefulness is affected by issues such as slow typing, incomplete responses, and potential misinformation.
- Perceived Ease of Use: Some users struggle with the tool's limitations and the need for editing or adapting generated content.
- Attitude Toward Use: Users acknowledge the tool's utility but express concerns about reliability and the need for manual adjustments.

### **Implications for Social Learning Theory**

- Observational Learning: Users observe and report challenges, such as inaccurate answers and potential misinformation, which may influence the decisions of potential users. Observational learning from negative experiences can lead to cautious or hesitant adoption.

Table 5. Statements Related to Feedback Given by ChatGPT Code under the Theme of the Effectiveness of ChatGPT

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L2: It is very useful in fixing errors and it can give objective feedback. On the other hand, it can be used to cheat on homework and tasks.

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L4: Before ChatGPT when I wrote something I needed someone with sufficient knowledge about the language to check it. Now I have ChatGPT. I just copy what I wrote, and it tells me the spelling and grammatical mistakes. It is very helpful.

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L5: I think it will be improved gradually and will be more effective in language learning in the future.

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L6: ChatGPT has the potential to provide feedback on language learning performance, but this feature is still in the early stages of development. It can identify common errors and provide suggestion for improvement, but it cannot replace the feedback provided by a human teacher.

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T1: I believe that using ChatGPT to correct linguistic mistakes and errors can be a finer choice, as low-level language students can struggle with many logic, grammar, or vocabulary mistakes. The correctional nature of the tool may help in this area.

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T3: When you ask about a piece of written text, it gives a good amount of reflection and an average score over 100, mostly giving some dimension as well. Therefore, it is quite a tool to receive feedback for students.

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### **Implications for Constructivist Language Learning Theory**

- Positive feedback aligns with constructivist principles by providing learners with immediate, personalized feedback, enhancing the learning experience.
- Both learners and teachers appreciate ChatGPT's utility in correcting language errors, providing feedback, and assisting with tasks such as homework and script preparation.

### Implications for Technology Acceptance Model TAM Theory

- Perceived Usefulness: Users view ChatGPT feedback positively for fixing errors and providing objective feedback.
- Perceived Ease of Use: The tool is considered helpful for homework and assignments, but there is a recognition that improvement is needed in feedback capabilities.
- Attitude Toward Use: Positive attitudes toward using ChatGPT for linguistic correction, but recognition of its early stage of development.

### Implications for Social Learning Theory

- Observational Learning: Positive feedback experiences reported by learners and teachers may serve as models, encouraging others to use ChatGPT for linguistic correction and feedback on language learning performance.
- Imitation: Users may imitate the behavior of seeking feedback from ChatGPT as a way to improve their language skills based on the positive reports of others.

Table 6 Statements Related to the Role of ChatGPT in the Future Code under the Theme of the Effectiveness of ChatGPT

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L1: ChatGPT cannot replace other language learning methods. While it can help to provide a better understanding of certain grammar structures and language expressions, it cannot replace the more traditional methods of language learning.
L2: I think ChatGPT-based educational programs and applications will be very common in the near future. They will be advised to students to use them. Maybe there will be smart boards that run on ChatGPT or they will be ChatGPT-integrated.
L3: Teachers can create classroom materials using ChatGPT. But if we think further, if ChatGPT is integrated with artificial intelligence such as Podcastle, Invideo or Fliki, it can replace a teacher except for emotions.
L4: I think it will replace a lot of the language teaching apps. It is for now free for everyone, which makes it very good for teachers and students. It will make their lives easier and therefore will make language teaching and learning better eventually.
L6: Privacy and ethical considerations are important when using ChatGPT for language learning. Learners should be aware that their conversations and data may be recorded and stored.
L7: If a teacher knows how to use technology, especially ChatGPT, she can integrate it into the class with some games or activities.
T2: I don't think our students are as in control of themselves as we wish them to be while using ChatGPT. It will continue to create so many problems for quality of education. Because, students are aware that there is such a technology that make their job much easier in every sense.
T3: I think AI tools will be much more common in the future of education. Instead of ignoring this phenomenon, we should find ways to foster learning by using these innovations.

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### **Implications for Constructivist Language Learning Theory**

- Constructivist ideals are evident as participants envision ChatGPT's future integration into education, though concerns highlight the importance of ethical considerations.
- Both learners and teachers express positive views on ChatGPT's future role, anticipating its integration into education but expressing concerns about privacy and potential misuse by students

### **Implications for Technology Acceptance Model TAM Theory**

- Perceived Usefulness: Users anticipate ChatGPT's integration with other applications and foresee shared use. However, concerns about privacy and ethical considerations are raised.
- Perceived Ease of Use: Positive attitudes towards the future integration of ChatGPT into education are balanced by concerns about misuse and potential negative effects.
- Attitude Toward Use: Users express optimism about the tool's future role but remain cautious about privacy issues and potential negative effects on educational quality.

### **Implications for Social Learning Theory**

- Observational Learning: Anticipated positive developments, such as ChatGPT integrating with other applications and becoming a common tool, may influence others to expect and adopt similar practices in the future.
- Modelling: Positive attitudes towards the future role of ChatGPT, especially when integrated with other technologies, serve as models for potential users, influencing their expectations and decisions.

Table 7. Statements Related to the Listening, Speaking, Reading and Writing Code under the Theme Language Learning Skills.

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L1: ChatGPT is unable to provide users with audio and video, its performance is suffering because of the lack of visual and video options. When it comes to reading, it is a good place for language learners to practice and get better.

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L2: I do not think it is useful in speaking and listening because it does not use any sounds but it is very useful for reading and writing. It is possible to get advice on reading materials or essay ideas. It can check for any mistakes in texts. It can give clear definitions of words and good examples for use in writing.

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L3: I do not think it will have any effect as ChatGPT does not have speaking and listening capabilities. However, in writing, it can contribute to the development by closing the deficiencies in the text you have written, offering you alternative options and detailing your mistakes.

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L4: I don't know if ChatGPT can contribute to speaking and listening skills that much but reading and writing skills can be improved a lot with it. You can just ask it to provide you with a story or any reading text with the right level and then to give you questions about the text. You have your book.

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L5: It can provide various resources for reading. For writing skills, we can benefit from it to check the

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accuracy of our writing but to improve our writing skills we need to make our sentences and organize our ideas. However, for speaking skills, I don't think that ChatGPT could be beneficial.

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L6: ChatGPT can be used to develop learners' speaking, listening, reading, and writing skills by providing conversational practice, listening exercises, reading comprehension questions, and writing prompts. However, it is important to note that ChatGPT cannot replace the benefits of practicing with a human partner.

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T2: It might be of great help in improving reading skills. Reading passages can be generated on any topic along with comprehension questions, which might enable students to work on their reading skills. When it comes to writing, students are not willing to edit the texts or change things to personalize the ideas. In this sense, it negatively affects their writing skills. However, if they use it to see how the writing is organized, how the outline of the passage is created, which words and grammar are used etc., it can greatly help them. I am not sure about listening and speaking.

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T3: It is a good source for proper input and gives you nice feedback. Moreover, when you ask it to write a text on a specific topic, it gives you one in minutes and you could use it to read as you wish. The only missing thing here is listening but I think soon they will handle this as well.

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### **Implications for Constructivist Language Learning Theory**

- Constructivist principles are evident as participants identify specific areas where ChatGPT excels and acknowledge its limitations, emphasizing the need for different approaches to learning.
- Learners and teachers recognize ChatGPT's strengths in reading and writing activities but express doubts about its effectiveness in developing speaking and listening skills.

### **Implications for Technology Acceptance Model TAM Theory**

- **Perceived Usefulness:** ChatGPT is recognized for its contribution to reading and writing skills. However, limitations in listening and speaking skills are highlighted.
- **Perceived Ease of Use:** Users find benefits in reading and writing activities but express uncertainty about its impact on listening and speaking skills.
- **Attitude Toward Use:** Positive attitudes towards reading and writing activities, with reservations about its effectiveness in developing listening and speaking skills.

### **Implications for Social Learning Theory**

- *Observational Learning:* Reports of using ChatGPT for reading and writing skills, along with reservations about its impact on listening and speaking skills, may influence others in choosing specific activities for language learning.
- *Modelling:* Users may model their language learning activities based on the reported effectiveness of ChatGPT for reading and writing, while being cautious about its limitations for listening and speaking skills.

Table 8. Statements Related to the Grammar and Vocabulary Code under the Theme Language Learning Skills.

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L1: The ChatGPT can offer quizzes, tailored word lists, and conversational words. Additionally, ChatGPT can offer personalized grammar drills, grammar explanations and examples, and real-time grammatical correction for students.

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L2: It can work as a dictionary. It can give definitions, synonyms or antonyms for any word. It can also teach grammar structures when asked. I think it can improve both vocabulary and grammar.

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L3: It can be effective in vocabulary studies because it explains the words you ask very quickly with examples such as using them in a sentence and the vocabulary is very wide.

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L4: If you have a target vocabulary, you can give those vocabulary items as a prompt and have it write you a text involving those items. You can get many texts with the same items and if you read them in time, it will teach you those vocabulary items. However, about grammar, I am not so sure. I think all you can do is to check your mistakes if you have.

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L5: It can provide us with a substantial amount of resources related to different fields. Therefore, we can come across various vocabulary and grammatical structures. As a result, our knowledge of grammar and vocabulary can be increased.

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L6: ChatGPT can be used to develop learners' vocabulary and grammar by generating practice exercises and providing explanations of grammar rules. It can also provide translations of new vocabulary words and suggests related words and phrases to learn.

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L7: It can make a list of cognate words or most commonly used words, so we can memorize them.

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T1: This tool can be used to identify grammatical mistakes. Thanks for the immediate feedback.

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T2: It can be a reliable source on how to use correct vocabulary and grammar in related contexts. As the application is also capable of generating test questions on given topics, students have the chance to improve themselves in the areas they think they're lacking.

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T3: According to the level of the language you ask for, it gives you material. Therefore, it helps you develop any fields or areas.

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### **Implications for Constructivist Language Learning Theory**

- Aligns with constructivist theory by emphasizing the role of the tool in providing tailored, immediate support for grammar and vocabulary development.
- Both learners and teachers found ChatGPT to have a positive impact on grammar and vocabulary, providing personalized exercises, explanations, and resources.

### **Implications for Technology Acceptance Model TAM Theory**

- Perceived Usefulness: ChatGPT is recognized for its contribution to improving grammar and vocabulary through personalized exercises, explanations, and real-time correction.
- Perceived Ease of Use: Users find the tool reliable for identifying grammatical errors and learning correct vocabulary usage.

- Attitude Toward Use: Positive attitudes towards using ChatGPT to improve language skills, particularly grammar and vocabulary.

### Implications for Social Learning Theory

- Observational Learning: Positive reports about the contribution of ChatGPT to improving grammar and vocabulary can serve as models for others, influencing their decisions to use the tool for language improvement.
- Modeling: Users can model their grammar and vocabulary learning strategies based on the reported benefits of personalized exercises, explanations, and real-time correction.

Table 9. Statements Related to Privacy and Ethical Considerations Code under the Theme of Ethical Considerations.

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L1: ChatGPT ensures that students' personal information and data are kept private. Teachers must give students explicit instructions on how to use ChatGPT properly.
L3: Advanced artificial intelligence can also be used for malicious purposes. Although attempts are made to prevent it with updates, it will be bypassed forever.
L4: People can cheat with anything. ChatGPT just makes it easier, I think.
L5: As far as I know, when we create a ChatGPT account, it saves private information about us. For example, telephone number, location, Ip address, or some private information that contains the text we write in the chatbot. So I think it is not completely safe in terms of privacy.
L6: Learners should be aware that their conversations and data are stored. Additionally, using ChatGPT to cheat or plagiarize is unethical and can result in severe consequences.
L8: I think ChatGPT is kind of cheating for exams. When you ask for questions, it suddenly gives you the correct answer during the exam. Therefore, it is a cheating.
T2: This has been a huge concern for teachers as the exams have been online. As a lecturer myself, we have detected countless AI-generated texts in student's answers. It was almost impossible to find students who did not cheat using ChatGPT. It gave them a huge opportunity to complete the tests in a significantly short time with no mistakes at all. However, these students mostly are not capable of creating even the most basic structures of the language. It created a huge problem of plagiarism and cheating in the exams, regarding ethical considerations.
T3: It is not about ChatGPT, but it is about the morals you have. You can't control such technology. If you trust your students, you may ask them to use it beneficially, not to copy and paste.

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### Implications for Constructivist Language Learning Theory

- Highlights the importance of ethical considerations in the use of AI tools, with a recognition of potential challenges and the need for responsible use.
- Participants raise concerns about privacy, ethical considerations, and potential misuse of ChatGPT, particularly in the context of online exams.

### **Implications for Technology Acceptance Model TAM Theory**

- Perceived Usefulness: Concerns about privacy and ethical considerations are raised, emphasizing the need for explicit guidance on appropriate use.
- Perceived Ease of Use: Users express concerns about the potential misuse of ChatGPT, particularly in cheating during exams.
- Attitude Toward Use: Concerns about cheating in exams and the need for moral responsibility are highlighted, with suggestions for ethical training and strict regulations.

### **Implications for Social Learning Theory**

- Observational Learning: Concerns and cautions about privacy and ethical considerations serve as models for responsible use. Observing the negative consequences reported by others may discourage unethical behavior.
- Modeling: Users can model their behavior regarding ChatGPT use, taking into account the ethical considerations raised by others and adopting responsible practices in their interactions with the tool.

In summary, the findings of the study are in line with constructivist principles and highlight the importance of personalized, interactive, and adaptable learning experiences facilitated by ChatGPT in language teaching. However, challenges and ethical considerations stress the need for a balanced and responsible integration of AI tools into language learning environments. While users perceive ChatGPT as a valuable tool for language learning, there are challenges and concerns related to reliability, privacy, and ethical considerations. The overall attitude towards use is positive, but caution is advised in addressing potential drawbacks. The findings are consistent with Social Learning Theory as they demonstrate the influence of observational learning, modelling, expectations, and behaviors regarding the use of ChatGPT for language learning. Positive experiences and reports serve as models for adoption, while challenges and concerns act as warnings and considerations for potential users.

## **Discussion**

This study explored the experiences of English language learners and teachers of ChatGPT and AI in learning and teaching the English language. Among the advantages of the ChatGPT code, this study found that ChatGPT was enjoyable for young learners born with technology, helped shy learners to speak and provided instant responses and translation 24/7 hours. From the teachers' perspective, ChatGPT provided authentic materials, activities and texts at different levels to use in teaching and helped to personalize the teaching process. The following studies had similar findings to the present study and also proved that AI offers numerous advantages in language learning and teaching (Gawate, 2019; Li, 2020; Wang, 2019; Chinonso, Theresa, & Aduke 2023; Haristiani, 2019; Liu 2009; Hwang et al. 2019; Yang 2020; Cao et al. 2020; Fitria 2021; Woo & Choi 2021; Aljohani, 2021; Sumakul et al. 2022; Jia et al., 2022; Zitouni, 2022).

Under the challenges of the ChatGPT code, the results of the present study showed that learners could not receive

proper or correct answers and translations to their questions and the answers were not reliable. Teachers pointed out that ChatGPT did not take into account the cultural and interlingual nuances and responses needed revision and editing. In parallel to the findings of this study, Steenbergen-Hu and Cooper (2014) also suggested that AI had a minimal effect on students' learning. Furthermore, Wilson et al. (2021) highlighted that the language generated by AI was often unnatural, inappropriate, and decontextualized. Chinonso et al. (2023) also pointed out that inaccurate answers, limited results and lack of references were sometimes offered to learners by ChatGPT. The limited pedagogical design of the AI applications was one of the problems with the implementation of AI in the classroom (Zawacki-Richter et al., 2019).

Under the feedback given by the ChatGPT code, this study revealed that both learners and teachers had a positive attitude towards feedback provided by ChatGPT. It was seen as a helpful tool for doing homework and some assignments. It gave a good reflection on linguistic mistakes, errors, spelling and grammar. Woo and Choi (2021) also found in their studies that AI-based language learning tools helped to assess language skills, find mistakes, and provide feedback. They also claimed that the language skills and knowledge of the learners improved after using these tools. Alharbi (2023) suggested that students used a variety of AI-based writing tools to improve their writing.

Regarding the role of ChatGPT in the future code, this study showed that both learners and teachers had positive attitudes towards the future of ChatGPT. They stated that the tool would become more widespread by integrating it with other applications. However, they claimed to be concerned about the privacy of knowledge and laziness. Similarly, Yang (2020) also pointed out that the use of artificial intelligence in teaching English was very promising. He encouraged the reform of English teaching. The deep integration of artificial intelligence and English teaching would replace traditional language teaching as the new norm. Jain and Jain (2019) also came to similar conclusions suggesting that AI significantly improved students' learning capacity in higher education institutions and it had great potential in the higher education sector. However, Cope et al., (2021) claimed that artificial intelligence will never take over the position of a teacher because its operation and performance are fundamentally different from human intelligence. Furthermore, Gocen and Aydemir (2020) investigated the role of AI in education for the future of schools. The study found that most participants had positive attitude toward AI, though there were some concerns about the future of education, particularly among teachers and academics.

Under the theme of language learning skills such as listening, reading, writing, speaking, grammar and vocabulary, this study found that both learners and teachers edited texts at different levels, received feedback on their writing and created an outline in writing skills. Reading passages were produced on any topic and at any level along with comprehension questions to practice reading skills. Participants also argued that ChatGPT helped to improve their grammar and vocabulary. It provided practice exercises and materials, identified grammatical errors, gave immediate feedback, gave the translation, synonym and antonym of the target words, used the words in sentences, provided quizzes and grammatical exercises, explained grammatical rules and gave examples. However, they pointed out that ChatGPT did not offer enough listening and speaking opportunities. Similarly, Alharbi (2023) found that students used a variety of AI-based writing tools to enhance their writing. Hence, according to Wang (2019) AI provided a real-life simulated dialogue platform for the teaching and learning of English in English.

It helped students to use English words, English writing and developed their comprehension skills. Liu (2009) demonstrated that the students' English listening and speaking skills improved through a handheld AI-based AR mobile learning system. Jia et al. (2022) designed an artificial-based English language learning system to develop the vocabulary, grammar knowledge and skills of lower-grade English language learners in a mobile learning environment and demonstrated that AIELL is a practical and usable learning system in English language teaching and learning. It was also suggested that the use of AI in language teaching improves speaking performance (El Shazly, 2020) and reading comprehension (Bailey et al., 2021).

Under the privacy and ethical considerations code, participants had concerns about the privacy and ethics of ChatGPT. It caused significant cheating problems in the exams. In addition, it had a huge database of users, which could be abused by some. Accordingly, Kannan & Murray (2018) also suggested that AI applications raise concerns, such as lack of transparency and privacy issues due to the mining of student data. Furthermore, they pointed out that new technologies could take over students' learning. Jiang (2022) argued that AI-based EFL tools and systems could face ethical challenges in avoiding emotional manipulation, respecting autonomy, and protecting data privacy. Zawacki-Richter et al. (2019) raised their concerns about the confidentiality of the data, privacy and data protection in the use of AI technology.

## **Conclusion and Implications for Language Learning and Teaching**

This study concludes that ChatGPT and AI are seen as useful tools for language learning and teaching though, they contain some challenges that can be overcome with the advancement in technology. Implications for Language Learning and Teaching can be summarized as follows.

### **Effectiveness of ChatGPT and AI**

- The recognition of ChatGPT and AI as useful tools for language learning and teaching indicates a positive shift towards integration of the technology into educational practices.
- The effectiveness in providing feedback, materials, texts, and ongoing services highlights the potential of these tools to enhance the learning experience for both students and teachers.

### **Overcoming Technological Challenges**

- The mention of challenges that can be overcome with advances in technology emphasizes the dynamic and evolving nature of digital tools. Continuous technological improvements are expected to eliminate current challenges and make these tools more robust and reliable over time.

### **Improving Diverse Language Skills**

- The recognition of ChatGPT and AI's contribution to different language skills, including reading, writing, grammar, vocabulary, and to some extent listening and speaking, highlights their versatility in addressing

different aspects of language learning. This diversity is consistent with the holistic approach to language education.

### **Integration into Language Curriculum**

- The expectation of increased use of ChatGPT and AI in the future, together with their integration into language teaching curricula, suggests a potential paradigm shift in the way language courses are designed. This shift reflects an awareness of the evolving role of technology in education.

### **Teacher and Learner Involvement**

- The improvement in technological and pedagogical content knowledge of both teachers and learners is highlighted as a crucial factor in fostering increased engagement with ChatGPT and AI. This highlights the importance of professional development and training programs for teachers and students.

### **Managing Ethical and Privacy Concerns**

- The recognition of challenges such as privacy, ethical considerations, referencing, and citation suggests the need for proactive measures. Training programs and legal measures are identified as potential strategies to address these concerns, indicating a recognition of the ethical responsibilities associated with the use of technology in education.

Overall, the implications include a positive outlook on the future role of ChatGPT and AI in language education, highlighting their effectiveness, potential integration into formal curricula, and the importance of addressing ethical and privacy concerns through training and legal measures. These implications highlight the evolving nature of language teaching and learning in the digital age.

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