

Hey, GPT, Can We Have a Chat?: A Case Study on EFL Learners' AI Speaking Practice

Ümran Üstünbaş¹

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Abstract:


In an era of major advances in the digital world, artificial intelligence has been a part of programs, tools, applications, and platforms. It has also been integrated into fields of education including language teaching and learning. To this end, ChatGPT, one of the most recent AI-driven systems, has been proposed to support language learners' personalized studies. Thus, this paper presents a qualitative study aiming to explore how Turkish EFL learners in higher education use ChatGPT for speaking. For a deeper understanding, the study was designed as a case study which used multiple sources to collect qualitative data. In this sense, semi-structured interviews were held with the participants, and through open-ended questions, they were asked about their study habits and any background knowledge about ChatGPT. In a following session, they were introduced the chatbot and instructed on possible ways to use it for speaking practice. Screen recordings of the usage by the participants were another source to observe and later describe the process for the researcher. A final session of the interviews planned as a stimulated recall was held to explore the participants' ChatGPT use experience through their reflection. The thematic analysis of the data revealed codes and themes leading to language teaching implications about learner characteristics and use of AI for language studies.

Keywords: Artificial intelligence, ChatGPT, L2 learning, speaking

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¹ PhD., Zonguldak Bülent Ecevit University, Ereğli Faculty of Education, Türkiye. uustunbas@beun.edu.tr,

 Orcid ID: 0000-0002-7382-6220



INTRODUCTION

Artificial intelligence (AI) is becoming widespread by facilitating tasks completed by machines and humans in turn. On the other hand, it is raising concerns by performing tasks humanlike and having an unpredictable developmental potential in the future. One of those AI-driven tools with affordances offered and concerns raised is ChatGPT, which is a chatbot designed by OpenAI. With its free basic and more sophisticated versions, it is used in many areas and could achieve tasks that are associated with humans by nature. Thus, it is at the center of debates due to its possible illegal uses. However, when used properly, it helps users find information they are searching for rapidly to a certain extent. Therefore, the assumption is that it could also be used for language learning, and emerging literature on it implies a positive effect on language learners' knowledge and skill development (Jeon et al., 2023; Kohnke et al., 2023)

Speaking skill both in the first and second languages involves by nature multiple variables, which makes it complex and demanding for second or foreign language learners (Egan, 1999; Kara et al., 2017). One of the challenges is caused by lack of opportunities to have a real conversation which is bound to a context and knowledge of pragmatics to fulfil interactive tasks. Not having practiced speaking adequately enough to cope with the challenging nature of speaking and to develop competence in language, foreign language learners may get inhibited and anxious to start and/or keep speaking. Therefore, it is necessary for them to find ways to practice language through speaking tasks.

With technological developments reflecting in language learning and teaching, Computer-Assisted Language Learning (CALL) has launched to provide insights into how language learners could benefit from digital tools and applications to increase their language knowledge and improve skills. The latest developments have also made AI integration into language learning possible, and AI-powered tools, one of which is ChatGPT, have been prompted in language learning. On the one hand, the chatbot is new with emerging research findings, on the other hand there is not as much focus on speaking as on vocabulary since the basic free model of the ChatGPT principally "chats" rather than initiating voiced conversations. Notwithstanding, it is of great wonder if it could be beneficial for L2 learners to improve their speaking skill by using this chatbot, which is the focus of this research. With this focus, there is one research question with its sub-questions as suggested by Creswell (2014) related to qualitative studies.

RQ1. How is ChatGPT used by pre-intermediate EFL learners for the speaking skill?

RQ1a. What kind of speaking practices do they make?

RQ1b. Can they manage to have human-like conversations?

RQ1c. Do they meet any problems while using it?

RQ1d. How do they consider its use for speaking?

Artificial Intelligence in Language Learning

Fast evolving technology has enabled people to take advantage of digital machines, tools, and applications to engage in second and/or foreign language learning, and thus, it proves benefits to teachers and students even in the pre-school (Prince, 2017). According to Blake (2013), if used appropriately, technology can assist language learners to engage in a target language, which is particularly crucial if learners have no opportunities to be exposed to the target language in its natural setting. There exist quite a lot of digital resources making language learning process fun and easier. Computer-Assisted Language Learning (CALL) and Technology-Enhanced Language Learning (TELL) are shaped around the use of digital, computerized systems that principally support language learners' out-of-class studies (Bećirovic et al., 2021; Chang & Hung, 2019). According to Bećirovic et al. (2021), engaging in the content provided by technological digital tools and the internet, language learners could access audio-visual materials and equipment, get help for their assignments, and increase their language knowledge and vocabulary, and through effective guidance on the use of technology, these learners could be self-regulated, autonomous language learners.

Self-regulated learning is defined as "a process by which learners direct and coordinate their efforts, thoughts, and feelings in order to achieve their learning goals" (Zimmerman, 2000, p. 15). In language learning, it is generally associated with learners with high level of proficiency as they have been reported to be more autonomous (e.g., Zimmerman, 2000). Furthermore, with its affordances such as access to natural language use through authentic content at any place and time, digital learning encourages self-regulated learning by allowing language learners to plan learning compatible with their own pace and learning needs (Carrier, 2017). Similarly, in the literature review conducted by Perry (2021), it was supported by evidence that digital, self-access resources had a strongly positive effect on second language learners' efficacy. Yet, the point is that digital literacy is essential to achieve learning goals, thus connecting self-regulated learning, digital literacy, and use of digital resources to learn a second and/or foreign language (Hamouma & Menezla, 2019; Perry, 2021; Yang et al., 2022)

In addition to digital resources, artificial intelligence (AI), referring to computerized systems that "think and act like humans" (Zhang & Chen, 2021, p. 6), has launched to be utilized in many fields and integrated into CALL or TELL for two decades. Since then, AI-driven tools have ubiquitously been used for language learning purposes as they promote learner-centeredness (Celik, 2023) and provide authentic input through interactive, individualized contexts (Lin & Chang, 2020). Concerning their benefits, chatbots defined as "virtual agents that can interact with users by processing input using natural language" (Jeon et al., 2023, p. 2) are one of the most popular AI-driven tools in language learning. In a general sense, it is stated that they have a positive impact on increasing L2 motivation and autonomy and decreasing speaking anxiety (Jeon, 2022; Tai & Chen, 2020). In the literature, there is also evidence on their positive effects specific to language skills; listening and

reading (e.g., Haristian, 2019), listening (e.g., Sharadgah & Sa'di, 2022), writing (e.g., Zhang et al., 2023) and speaking (e.g., Rahimi & Fathi, 2022). For instance, Zhang et al. (2023) searched for the effect of chatbot training on improving EFL learners' writing self-efficacy and proficiency in argumentative writing. The study conducted with fifteen participants through pre- and post- questionnaires, semi-structured interviews and evaluation of their writing performance has been reported to find out that while the training was likely to increase writing proficiency, it tended to decrease writing self-efficacy. On the significance of chatbots in the speaking skill, Rahimi and Fathi (2022) put an emphasis on the use of these tools in countries where there are few opportunities to practice English with limited exposure to natural language use only at school or language program. Similarly, Bibauw et al. (2022) highlighted the positive impact of the chatbots on increasing learners' accuracy and proficiency in language use. Ayedoun et al. (2019) stated that of all language skills, AI tools (chatbots) could be used the most effectively for listening and speaking skills. On the contrary, Sharadgah and Sa'di (2022) suggested that there were paralinguistic elements peculiar to listening and speaking such as gestures, emotions, and body language that the machines could not achieve.

Regarding the chatbots in language learning, a revolutionary era has started with the introduction of ChatGPT, a chatbot developed by OpenAI. The reason for its being considered as ground-breaking is in its high potential in operating human-like conversations and texts and presenting information that the user is searching for in seconds, which makes it ubiquitous in various areas. Moreover, it provides responses in the user's language. Also, topics and language could be changed during a chat. Even if AI use in language learning in general has been claimed to be still underrepresented (Huang et al., 2023), the existing research on the use of ChatGPT provides evidence on the significance of it in language learning (Huang et al., 2022; Jeon, 2021; Jeon, 2022; Lee & Jeon, 2022). Considering its affordances, it is even regarded as a "guardian angel" (Tlili et al., 2023, p. 1) for language learners. In this sense, the assumption could be that language learners' views about its use are quite positive, which has been supported by research findings. For instance, in a study relating ChatGPT usage and informal digital learning of English based on technology acceptance model, Liu and Ma (2023) found out that the participants viewed its usage positively, supporting evidence on its high potential to be a powerful CALL tool. Concerning its high potential, in their review, Kohnke et al. (2023) presented several suggestions to language learners and teachers on how to use it effectively. Specific to speaking skill, they suggested that it could be utilized to conduct dialogs, and ChatGPT could benefit to all proficiency levels as it could adjust complexity of dialogs in accordance with the user's language proficiency level.

Limitations are inevitably expected in relation to any digital tools. As for the ChatGPT's limitations in language learning, concerns center around its potential to evoke plagiarism. ChatGPT can generate texts and complete tasks that learners are supposed to do. Thus, it raises a concern about ethicality and plagiarism. Moreover, the chatbot could

provide inaccurate responses. Reliance on what is provided by ChatGPT has potential to lead further concerns and problems. Highlighting necessity of digital literacy, Kohnke et al. (2023) stated that training students on how to use ChatGPT effectively, raising awareness about the concerns and limitations could be a way to dispel concerns, which has supports in the literature (eg., Hamouma & Menezla, 2019; Perry, 2021; Yang et al., 2022)

Overall, considering the affordances, benefits of ChatGPT that are generally associated with self-regulated learning and, thus, high level of language proficiency and the nature of speaking skill with paralinguistic, pragmatic features, this study focuses on how it is used by EFL learners for speaking practice purposes.

METHOD

Research Design

Addressing the research question(s), the current research was designed as a qualitative study. As stated by Creswell (2014), in order to “collect detailed information using a variety of data collection procedures over a sustained period of time” (p. 101), the study was determined as a case study. Therefore, the participants’ ChatGPT use for speaking was examined over an eight-week period through screen-recordings and individual online interviews each week. While screen-recordings included the participants’ recording of their screen while or after they have used ChatGPT, the online interviews were stimulated-recalls in which they were encouraged to reflect on their experience. In an introductory online meeting, the participants were explained the research and procedures involved in it. In this meeting, background information about their language learning experience, their attitudes towards using digital and AI tools in language learning, their possible experience in using ChatGPT in language learning was gathered. Furthermore, they were introduced ChatGPT and provided with suggestions and prompts on how to use it for speaking purposes. The prompts included contextual dialogs in which various speech acts were performed such as asking for permission and requesting. Later, the participants used the chatbot for eight weeks. An online stimulated-recall interview was held at the end of each week, and they reflected on their practice. Finally, a semi-structured interview was held about their overall reflection on the use of ChatGPT. The interviews were held in the participants’ mother tongue; Turkish and translated into English.

The Researcher’s Role

Indicating the researcher’s role in data collection and analysis is fundamental in qualitative research design (Creswell, 2014) as there could be biases negatively influencing the process in which the researchers interpret the results. Therefore, it is necessary to explain researchers’ background in relation to the research purpose and design to avoid any misconception. The biases that could be involved in this research are related to the research interests of the researcher in which the speaking skill and especially how to improve it particularly by integrating technology are among the primary ones. Thus, ChatGPT in

language learning as an AI tool has been an insight for the researcher. Yet, she avoided sounding as if she favored its use, and no interruption was made to the participants during data collection. Objectivity was the principle underlying all phases in the research.

Research Ethics

In this study, ethical issues were meticulously handled. To this end, the ethical approval to conduct the study was gained from Zonguldak Bülent Ecevit University on the date of 28.03.2023. Furthermore, before pooling the participants, they were informed about the ethical issues and procedures concerning the research on a written form. Only voluntary students who agreed on participating in the research were involved in the study. During the interviews, the participants were informed about data recording and sharing principles. No personal data were shared with third parties.

Participants

The participants were four language learners (3 female and 1 male at the age of 18-25) studying English at the School of Foreign Languages of a state university in Türkiye in the 2022-2023 academic year. Purposeful sampling was the main method in determining the target group. Concerning research purposes, pre-intermediate level group at the program was selected as the possible sample. Before recruiting the participants, the students in this group were informed about the research, and four of them were voluntary to participate in it. A pseudonym was picked for each participant, and they are to be addressed with the pseudonym in the rest of the paper.

Table 1

Demographic and Background Information about the Participants

Duygu	Female, no experience in ChatGPT use before
Neşe	Female, no experience in ChatGPT use before
Sevinç	Female, no experience in ChatGPT use before
Umut	Male, uses ChatGPT for his studies

Data Analysis

Qualitative data analysis was performed on the data collected from the interviews and screen-recordings about the participants' ChatGPT use. Hand coding was conducted for the content analysis, and the data were categorized in accordance with common themes and codes that were then sustained through *member checking* (Creswell, 2014). Finally, participants' responses were used as explanations for them.

RESULTS

This research aimed to focus on how ChatGPT is used by pre-intermediate EFL learners to practice speaking as part of out-of-class studies. For in-depth analysis, several sub-questions were addressed. First of all, what kind of practices they made was explored. As the importance of training has been emphasized in the existing literature, they were guided on possible ways to practice speaking on ChatGPT. The guidelines were based on contextual conversational patterns and speech acts such as asking for permission. The analyses of screen-recordings of the participants' ChatGPT usage revealed that the participants who got acquainted with ChatGPT only through guiding in this study practiced conversational patterns like the ones in the guiding session (Duygu, Neşe and Sevinç). They did not try any other uses. However, Umut, who had already had experience in using ChatGPT for various language study purposes, practiced speaking differently from the way that was suggested in the guiding session. He practiced it without any focus on a specific pattern or pragmatic action. Examples as evidence on this finding are as follows:

Examples from Duygu's ChatGPT practice

İngilizce B1 Seviyesinde 'Opinions' cümlelerine örnek verir misin ?

Tabii ki! İşte B1 seviyesinde "opinions" (fikirler) konusunda örnek cümleler:

1. In my opinion, traveling is the best way to broaden one's horizons.
(İnancıma göre, seyahat etmek, bir kişinin ufuklarını genişletmenin en iyi yoludur.)
2. I think technology has made our lives easier in many ways.
(Sanırım teknoloji, hayatımızı birçok açıdan kolaylaştırdı.)
3. From my point of view, exercise is essential for maintaining good health.
(Benim bakış açımına göre, egzersiz iyi bir sağlık için önemlidir.)

Teşekkürler , Birde ' Agreeing Opinions ' cümlelerine ingilizce B1 seviyesinde örnek verebilir misin ?

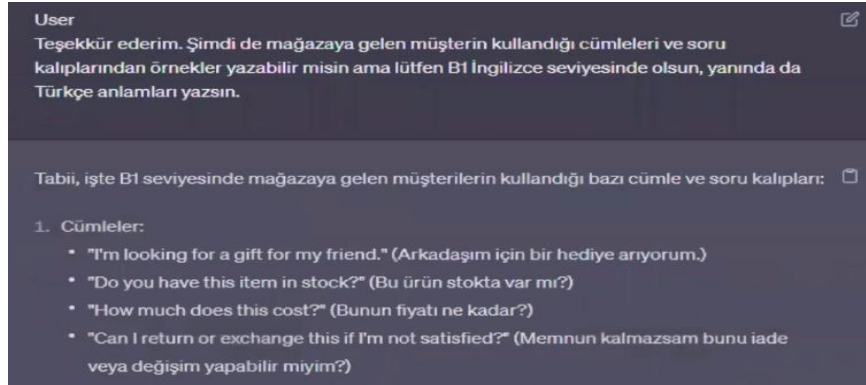
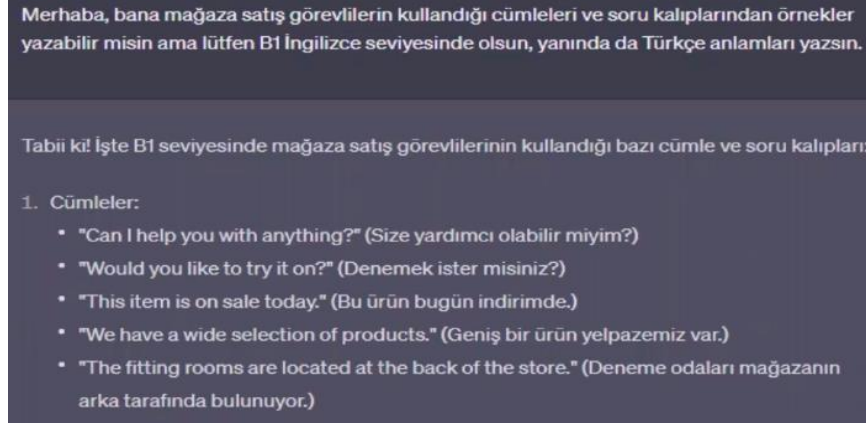
Elbette! İşte B1 seviyesinde "agreeing opinions" (fikirlere katılım) konusunda örnek cümleler:

1. I agree with you completely. The new policy will definitely improve the situation.
(Seninle tamamen aynı fikirdeyim. Yeni politika kesinlikle durumu iyileştirecektir.)
2. I couldn't agree with you more. Learning a second language is an invaluable skill.
(Seni daha fazla destekleyemem. İkinci bir dil öğrenmek paha biçilmez bir yetenektir.)
3. You're absolutely right. The company should invest more in employee training.
(Kesinlikle haklısın. Şirket, çalışan eğitimine daha fazla yatırım yapmalı.)

As seen in the extracts, Duygu preferred practicing in her mother tongue, Turkish, even though they were suggested about the use of English and Turkish in the session. The translation of her messages in the first extract is "Can you give me examples about how to

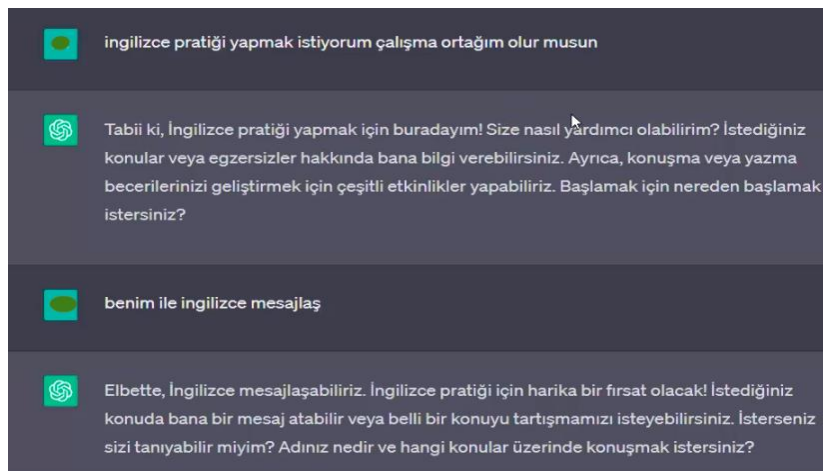
express opinions in English in B1 level? Accordingly, the chatbot gives examples about expressing opinions and agreeing on them in Turkish and English on sentence level.

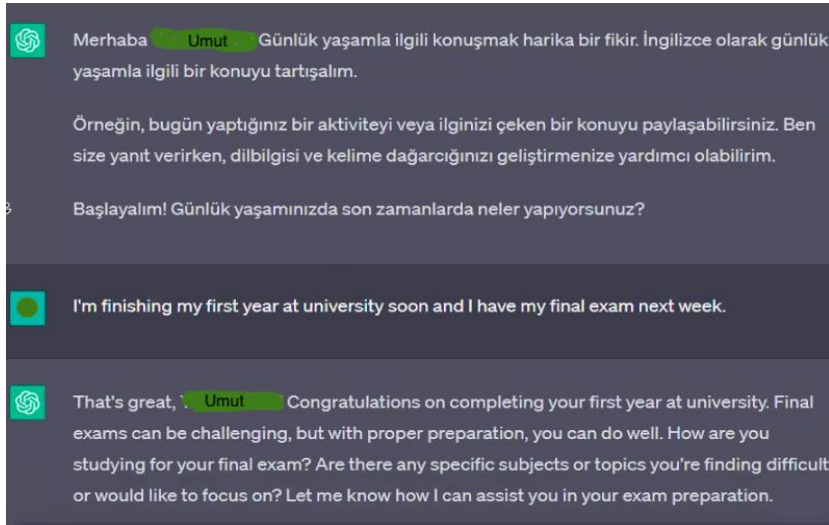
Examples from Neşe's ChatGPT practice



As in Duygu's examples, Neşe's prompt was in Turkish, and she practiced shopping in English. For this purpose, she asked ChatGPT to provide shopping phrases in English and Turkish translation of them. She also stated her language level as B1. In the first screenshot, she asked about what a shop assistant could say, and she asked about what a customer can say in the second one. ChatGPT appropriately responded to her requests. Sevinç also wrote her prompts in Turkish and had practice in the same way as Duygu and Neşe, but Umut's prompts were different from theirs.

Examples from Umut's ChatGPT practice





Umut also used ChatGPT in Turkish to practice speaking in English. His prompt was “I want to practice English. Could you be my partner?”. ChatGPT responded positively to his request with the message “Of course, I am here to help you to practice English. You can inform me about what topics and exercises you want to practice on. Also, we could make various practices to improve your speaking and writing. Where do you want to start?”. Umut’s response was “write messages to me in English”. ChatGPT asked him to specify the topic on which they were going to have a chat, and they agreed on daily routines. As the chat was still in Turkish, ChatGPT asked about Umut’s daily routine in Turkish. Umut responded in English, so the chat continued in English. As seen in ChatGPT’s message, the chat was not about Umut’s daily routine, but about the future. When he wrote about his final exam, ChatGPT offered to help him about exam preparation. In the examples, it is seen that ChatGPT adjusts complexity in the language use (B1 level) and responses (daily routine-future) in line with the user’s prompts.

While the second sub-question addressed if the participants had human-like conversations with ChatGPT, the third one focused on whether they had any problems when using it. To this end, these two research questions seem connected. As for the findings of these questions, the examples concerning the participants’ ChatGPT use provide evidence for human-like conversations with the chatbot. On the other hand, the conversations were not always without problems. The examination of screen-recordings put forward that the participants occasionally had problems when ChatGPT misunderstood the prompts, provided long responses, or the participants could not express what they really asked for in their prompts. An example could be found in Sevinç’s experience.

An example from Sevinç's ChatGPT practice

S: Bu ifadeleri Türkçe ve İngilizcesiyle birlikte diyalog halinde örnekleyebilir misin?

C: Tabii, işte Türkçe ve İngilizce olarak örnek bir diyalog:

Türkçe

Müşteri: Merhaba, kolsuz bir yaz elbisesi arıyorum. Çiçek desenli olanlardan var mı?

Satıcı: Merhaba, evet tabii ki. İşte size çeşitli çiçek desenli yaz elbiseleri

İngilizce:

Customer: Hello, I am looking for a sleeveless summer dress. Do you have any with floral prints?

In this chat, Sevinç practiced making a dialog about shopping. First, she asked about what phrases to use. When ChatGPT provided some phrases, she asked if the chatbot could use the phrases in dialogs in Turkish and English. Thereupon, ChatGPT first provided a dialog in Turkish and the translated version of the dialog in English. The analysis of recordings revealed that Duygu used a strategy to deal with this problem by making ChatGPT wait for her responses.

An example from Duygu's ChatGPT practice

Tamam ben şimdi cevaplarımı tek tek yazıcam . Benim cevaplarımı bitirmemi bekle.

Tabii, sizi dinliyor olacağım. Cevaplarınızı yazdığınızda bana bildirin, bekliyorum olacağım.

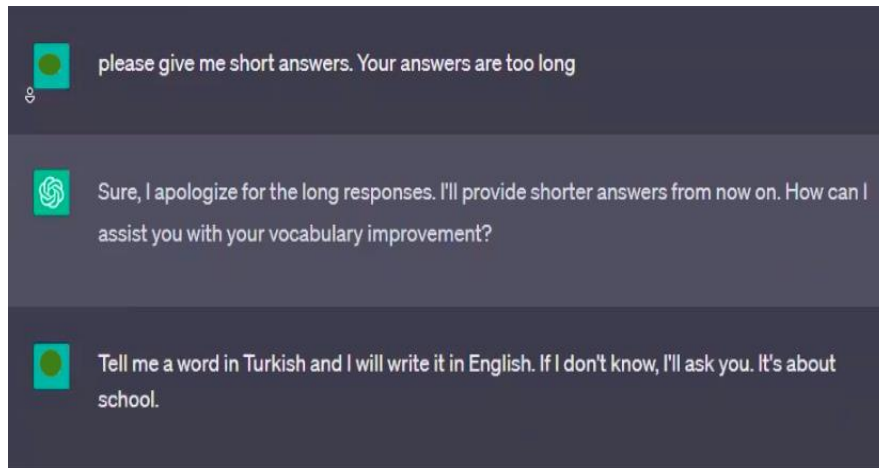
1. A: I agree with you

B: That's great to hear. It's always nice to find common ground on opinions.

2. B: I couldn't agree with you more !

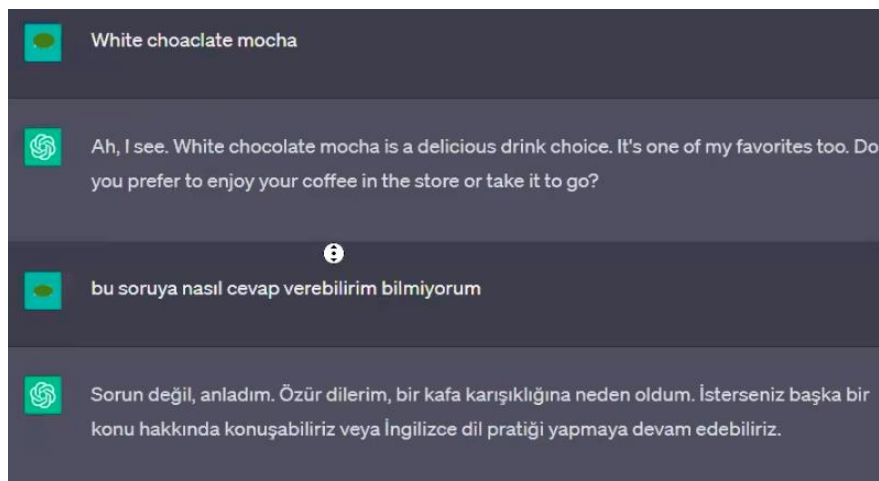
In this example, Duygu wrote "OK, I will write my responses one by one. Wait until I finish writing." ChatGPT agreed on that, and there were no problems in their understanding each other. Moreover, ChatGPT's long responses and not being able to respond were problems had by Umut.

An example from Umut's ChatGPT use



As seen in the example, Umut explained that ChatGPT's responses were too long, which is in fact a strategy to deal with this problem. He also expressed when he did not know how to respond what ChatGPT had asked.

An example from Umut's ChatGPT use



As seen in the example, they started conversation in English, and Umut switched into Turkish when he expressed that he did not know how to respond. Conforming his response, ChatGPT went on in Turkish, and apologized for the confusion.

The last sub-question focused on the participants' views about their experience in using ChatGPT for the speaking skill. Content analysis of the interviews suggested themes and codes which are as follows.

Table 2. Content analysis of the interviews about the participants' views

Benefits	Drawbacks
Providing opportunity to practice speaking in English	Incorrect responses
Scaffolding with detailed explanations and constructive feedback	Long responses
The importance of prompts	The importance of prompts
Flow in speaking	Misunderstanding leading to disruption in the chat

In keeping with the examples of the participants' ChatGPT use, the interviews confirmed that the participants had some problems when using the chatbot. Nevertheless, their overall reflection was that it could be effective to use it for speaking, and they had positive views about using it. In that regard, two of the responses are as follows:

Duygu "It was a good experience for me. Before that, I had not known ChatGPT. I practiced dialogs a lot, and it was helpful as we do not have many opportunities to practice speaking outside of the classroom."

Neşe "While using ChatGPT for speaking, I felt as if there had been a human that I was chatting except that I could not see his or her gestures. Yet, they were obvious enough in the conversations. I think this tool is effective when used properly."

In sum, the findings suggested the participants who had practiced speaking through ChatGPT found it useful, but they had several problems while using it such as break down in conversation which was caused by ChatGPT's misunderstanding.

DISCUSSION

AI use in language learning is such a new research field that any contribution to better understand connections among related concepts could be considered as significant. Thus, this study revealed rich empirical evidence on this emerging research. The current research that was designed as a qualitative study provided long-term data on how EFL learners with pre-intermediate level used ChatGPT for speaking. In addition to its purpose of providing evidence in a general sense, the study particularly focused on language proficiency since high proficiency is often associated with higher level of learner autonomy and self-regulated learning. Therefore, language learners with lower level of proficiency were included in the study with an inquiry that questions if they had similar learner characteristics with the ones

having high level of proficiency. In this sense, it emerged that the participants in the study used ChatGPT effectively regardless of their proficiency. This finding is opposed to what has been suggested about self-regulated learning and proficiency (e.g., Zimmerman, 2000).

Additionally, digital literacy has been stated to be crucial for effective use of any digital tools (Bećirovic et al. 2021; Hamouma & Menezla, 2019; Kohnke et al. 2023; Perry, 2021; Yang et al., 2022). In the study, participants were guided on how they could use ChatGPT for the speaking skill, and the results demonstrated that they used the chatbot in the same way as they were guided. Considering that they found using ChatGPT for speaking through a guided practice, it could be concluded that this finding supports the existing research on the necessity of digital literacy and guidance on developing it.

This study also provided empirical evidence on ChatGPT's usage in language learning by suggesting its affordances and limitations. Benefits mentioned by the participants were providing opportunities to practice language and scaffolding by adjusting language and content in line with users' proficiency and providing constructive feedback while drawbacks were about problems caused by ChatGPT's misunderstanding. These findings are significant because existing literature mainly provides findings about learners' views and perceptions (e.g., Liu & Ma, 2023). Furthermore, the findings about benefits and drawbacks could be used to comment on what Sharadgah and Sa'di (2022) indicated about the nature of speaking and lack of potential of chatbots to improve speaking as it comprises paralinguistic elements such as emotions, gestures and body language that the machines could not manage.

To sum up, this research offers results that could increase understanding about how a new AI tool, ChatGPT, is used by language learners, which has been supported with evidence collected over a long period of time.

LIMITATIONS AND RECOMMENDATIONS

While this study endeavored to provide deep insights into how EFL learners with pre-intermediate level used ChatGPT for the speaking skill, there were inevitable constraints, ranging from methodological restrictions to unforeseen external factors. For instance, limitations in this research might include limited sample size even though it was due to the nature of case studies. This limitation could impact the generalizability or applicability of the results.

To counter these limitations and enhance the robustness of future studies, the following recommendations are proposed:

1. Expand the sample size across different demographics.
2. Incorporate mixed methods to capture both quantitative and qualitative dimensions.

CONCLUSION

This study aimed to investigate how EFL learners used ChatGPT for the speaking skill. Around this main aim, it was designed as a case study the data of which were collected over a relatively long period of time. The data analysis revealed findings that could contribute to existing research by providing insight to better understand “the guardian angel” (Tlili et al., 2023, p. 1) of the rapidly changing and developing digital and AI world.

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Data Availability Declaration

Data Availability Upon Formal Request:

While the primary datasets utilized in this study are not publicly accessible due to certain constraints, they are available to researchers upon a formal request. The author has emphasized maintaining the integrity of the data and its analytical rigor. To access the datasets or seek further clarifications, kindly reach out to the corresponding author. Our aim is to foster collaborative academic efforts while upholding the highest standards of research integrity.

Author Contributions

Author Contributions:

The sole author of this research, Ümran Üstünbaş, was responsible for the conceptualization, methodology formulation, data collection, analysis, and interpretation. Furthermore, Ümran Üstünbaş took charge of drafting the initial manuscript, revising it critically for vital intellectual content, and finalizing it for publication. The author has read and approved the final manuscript and takes full accountability for the accuracy and integrity of the work presented.

Author(s)' statements on ethics and conflict of interest

Ethics statement: I hereby declare that research/publication ethics and citing principles have been considered in all the stages of the study. I take full responsibility for the content of the paper in case of dispute.

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Biographical notes:

Ümran Üstünbaş ¹²: Holding a BA degree in ELT from Anadolu University, an MA degree in TEFL from Bilkent University, and a PhD degree in ELT from Hacettepe University, she is currently working at the ELT department of Ereğli Faculty of Education in Zonguldak Bülent Ecevit University, Türkiye.

 Scopus Author ID: 57200799759

² Corresponding Author