



An Examination of the Experiences of Turkish ELLs about the Chatbot Apps to Learn English

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Abstract

In education, chatbots have been used as learning environments that provide feedback for students to repeat their knowledge. The aim of this study is to examine Turkish students' experiences about the chatbot apps they use to learn English. The study was carried out with 21 ELLs using a chatbot app at different ages. In this study, data were collected through semi structured interviews and analyzed using content analysis. The data obtained from the participants were coded and digitized into themes. The research results show that although chatbots have some shortcomings, they are seen as a sincere friend who teaches English. Moreover, participants who stated that they were embarrassed to communicate with live people expressed that learning English with chatbot applications was more convenient for them.

Keywords: English Learning, Chatbot Apps, Vocabulary, Technology

Introduction

Learning English as a second language is necessary to adapt to the globalizing world (Akkas & Coker, 2016). In making this happen, technology is a very important tool for language teachers to facilitate students' learning (Yildiz, 2021). Also, English proficiency is one of the factors that increase people's competitiveness, including workplace competition. This ability will be formed if it is supplemented by a good educational system. If English-language learning support opportunities are not enough in an educational environment, this greatly affects the number of students who have the ability to communicate in English (Sarosa et al., 2020).

In schools, the number of students per teacher is quite large. Therefore, it becomes difficult for teachers to deal with students one-on-one. As a solution, English online chat and chatbot apps have started to meet the need for learning English with the advent of many portable technological devices, and the rapid development of digital-based apps (Smutny & Schreiberova, 2020). Therefore, students who cannot reach the teacher, check their own learning simultaneously, ask questions to chatbots and control their own learning pace

(Demirci & Yavuz, 2009).

Chatbots use artificial intelligence to understand questions faster and give efficient answers. Therefore, conversation in online chat and /or with chatbot can be in the form of text (text chat) or voice (voice chat), as if the user is talking to the teacher (Oracle Turkey, 2014). Tosun and Yildiz (2015) note that “as it is difficult to motivate students in whole period of lesson time some techniques are essential to be used (p.62)” in and out of the classroom. With this in mind, the advantage of this system is that users who need to practice English can be served about 24 hours a day. Therefore, the problem of time to learn English has disappeared. Chatbots simulate human conversations and make sense of free text entered by the user thanks to language processing technology, determine the correct answer and presents it as feedback to the user (Wikipedia, 2021). Chatbot apps are similar to instant messaging apps that use natural chat. They interact with the user on a specific topic or in a specific area using text and/or audio (Oracle Turkey, 2014). For example, personal digital assistants such as Siri from Apple, Alexa from Amazon, Cortana from Microsoft or Assistant from Google are at the forefront of voice recognition and artificial intelligence technology. These digital assistants use machine-learning techniques and can manage some of the daily tasks of traditional assistants or secretaries to help their users be more effective (Smutny & Schreiberova, 2020). On the other hand, people tend to ask the question on their mind and wait for an answer when chatting with a chatbot. Nevertheless, Weinberg (2017) reported that 70% of Facebook's chatbot interactions failed, meaning that artificial intelligence could not understand what users were saying.

Moreover, Grudin and Jacques (2019) state that chatbots can be used as a suitable learning environment because they provide feedback for students to repeat their knowledge about previous topics. Also, chatbots have the potential to encourage anxious or shy students to ask questions about participating in apps (Verleger & Pembridge, 2018).

Although there are many studies related to the design and development of chatbots in the literature, there are a limited number of studies involving the use of chatbots in educational settings. Previous studies have considered the use of chatbots in learning English. In particular, Chocarro et al. (2021) examined the attitudes of teachers towards chatbots in education. The study results confirmed a positive and significant effect of perceived practicality of using chatbots in educational settings. Similarly, Chen et al. (2020) conducted his research with a group of students. Results of the study showed that chatbots significantly improve students' learning achievements. However, the researchers noted that while chatbots provide benefits for learning Chinese vocabulary, various adjustments should be made to the functionality, including ease of use for further progress.

Deveci Topal, Dilek Eren, and Kolburan Geçer, (2021) investigated the effects of chatbots on students' achievements and revealed students' opinions about the use of chatbots in science course. The researchers did not find a significant difference between the experimental and control groups in terms of academic achievement. However, they

found that the the chatbot application has decisively influenced the online learning experience of the experimental group students. The students' opinions about the chatbot were that it was useful and fun, they wanted to use it in other lessons, it was useful for learning outside of the classroom, and it allowed them to repeat the lesson.

There are not enough studies investigating the experiences of Turkish ELLs who use “Chatbot” to learn English. Therefore, the aim of this study is to reveal students' perspectives on Chatbots for learning and writing English by Turkish students.

Method

In this study, qualitative research method was used to reveal evaluation of “chatbots” for learning and writing English. According to Patton (2014), in qualitative research, researchers try to reveal the facts that they work on in a certain process to adhering to the original. In this study, the Case Study model was adopted as the research model to reveal the cases. In a case study, which is one of the most frequently used types of qualitative research, researchers focus on how these situations are affected (Shuttleworth, 2008). A qualitative case study examines one or more cases in depth. In other words, various variables (environment, method, event, process, etc.) related to a case are examined with a holistic approach.

The most frequently used method to collect data in qualitative research is the interview method (Yıldırım, 2011). Therefore, data were collected from the participants by open-ended interview method in this study. Before the interview, the participants were informed about the research. Semi-structured questions that obtained from results of the literature review were asked to the participants via online interviews and e-mail. Thus, it was ensured that data were collected from the participants. Additional questions were asked to the participants in case of missing or incomprehensible cases (Merriam, 2013).

Sampling

The researcher started to study by asking, "Who knows more about this topic? Who should I talk to?" (Patton, 2014). Therefore, snowball-sampling method was preferred in the determination of the participants. Snowball-sampling method is one of the purposive sampling methods. According to snowball sampling method, the participants direct the researcher to the relevant people and thus the study group is formed. This study was carried out with 21 participants, 12 males and 9 females, in the 2021-2022 academic year (in Table 1).

Semi-structured interview forms have been prepared for users' experience of using chatbots to learn and write English. Semi-structured interview forms consist of two parts. In the first part, there are questions that reveal the personal information of the interviewed participants, and in the second part, there are questions that reveal the experiences of the

users using chat robot apps. The questions were prepared in accordance with the literature.

Table 1: Demographic information of the user

Gender	Male	12
	Female	9
Age	15-20	10
	21-25	8
	25 and Up	3
Educational Status	High school	8
	University preparatory student	3
	Undergraduate student	7
	Graduate	3

Analysis of the Data

In this study, the data obtained from the semi-structured interview forms were analyzed with the descriptive analysis technique. Descriptive analysis is used to process data that does not require in-depth analysis. The data obtained in descriptive analysis is summarized and interpreted according to the previously determined themes (Yıldırım & Şimşek, 2011). In this study, the data obtained from the participants were coded and digitized into themes. The frequencies of the codes and themes that emerged as a result of the interview transcripts were presented to the readers in tables.

Findings

The findings of the research aiming to reveal students' perspectives on chatbots for English learning and writing by Turkish students; it is grouped under two themes as positive, negative and inadequacies.

Positive Feedback from Users about the Chat Robot

When users were asked their opinions about the chat robot, the positive views from their responses were coded and shown in Table 2.

Table 2: Opinions of users about the chat robot

Theme	Sub-theme	f*
Opinions of users about the chat robot	Effective way to learn English	15
	Like a sincere person.	3
	More suitable for shy people	6
	It provides instant and effective feedback	7
	Useful for learning grammar and vocabulary	7
	Effective for daily conversation.	6

*Some opinions have been collected under more than one theme.

As seen in Table 2, the opinions of users about the chat robot are: Effective way to learn English, like a sincere person, more suitable for shy people, it provides instant and effective feedback, useful for learning grammar and vocabulary, effective for daily conversation.

Sample sentences from user opinions for the themes are given below:

“Really an excellent app. It is not like other English speaking apps with people you don't know. It is much more pleasant to talk to the robot. Communicate with the robot every day, and your English will become perfect over time. Thanks to the maker. I am very pleased with the app.”

“This app is a great one! It helps me learn English and gives me the feeling of my sincere friend.”

“It's really beautiful. He puts it back into routine by texting daily. Therefore, English is always in your life. An advantageous app for someone who has never spoken English around him.”

“I like it. He responds instantly. It may be difficult at first. However, if your vocabulary is large, you will not have difficulty. I think it's a good practice to improve yourself.”

“I like this app. Because it is an app that can help, you have a dialogue with someone, add speaking and writing practice to you, and has a tutorial feature at the forefront. It can help improve your English. I like it and I recommend it to you as well.”

“In a word, it is amazing. Asked where I was from. I said I am from Turkey. In addition, its answers were really, really good. He really sounded like a friend. Unlike other apps, its English is very simple. Even

speakers who have very little English can improve his/her English with this app.”

The Disadvantages and Inadequacies Faced by Users about Chat Robot

Users were asked about the negativity they faced when using a chat robot, their responses were coded and shown in Table 3.

Table 3: The disadvantages and inadequacies faced by users

Theme	Sub-theme	f*
The disadvantages and inadequacies faced by users	It's for beginners	11
	He repeats the same things.	6
	More vocabulary should be added.	3
	After a level, it becomes meaningless.	3
	It would be better if he were a real person.	2

As seen in Table 3, the disadvantages and inadequacies faced by users are: It is for beginners, he repeats the same things, more vocabulary should be added, after a level, it becomes meaningless, it would be better if he were a real person.

Sample sentences from user opinions for the themes are given below:

“It is a good app, but there are just some problems. The reason for my negative assessment is that I do not understand a word, and when I ask for a second time, he answers. Nevertheless, when he does not understand the answer for the third time and he says, “I am sorry; I do not have any more explanations”. Moreover, he writes unexpectedly, “Do you want to send an e-mail to those who made me?”

“It's useful at first, but then he keeps saying the same things. It is better to talk to yourself at home. Of course, he talks a lot more irrelevant than you do because he is a bot. That is why there is no subject integrity. I think it is not useful for developing languages. It's more useful to be able to talk to real people.”

“It's very nice, but it would be better for the higher levels. If you are at the beginner level, you will not understand, you may also have some difficulty at the basic level.”

“I like it very much, it is very nice as an English language development, but it would be nice if you had a little vocabulary before installing it at first. I love it.

“He really has a lot of work to do to improve my English. It is the

most useful app I've ever seen. His only problem is that sometimes he asks old questions while chatting. More words can be added to the robot's vocabulary. But I still recommend it to everyone.”

Discussion and Conclusion

Nowadays, English as a second language has become a necessity. English proficiency has become an important component that increases the competitiveness of employees. However, it is a well-known fact that English language education is not provided in sufficient degree within the Turkish education system (Bağçeci, 2004; Aydemir, 2007). Since there is not enough opportunity to support English learning in the educational environment, individuals have started to use English online chat and chatbot apps to improve their English language (Smutny & Schreiberova, 2020).

Yildiz (2016) states that “English as a Foreign Language (EFL) requires learners’ exposure to what educators call the language skills: reading, speaking, writing and listening. Therefore, language teachers’ aim is to make students acquire language skills to ensure achievement both in oral and written communication (p.161).” It is imperative that students are adequately prepared for their future career. Students who can manage their own learning will be better prepared and more likely to succeed in their educational endeavors (Yildiz & Yucedal, 2020). In this study, the experiences of participants who tried to learn English with chatbot apps were investigated. According to the opinions of the participants, this chat app contributes to the teaching of English in the form of half-teacher, half-friend. Participants were able to have small discussions with the app. Some participants stated that they had learned English grammar and expanded their vocabulary in this app. This result has also been reported in the literature. According to Shejbalová (2006), learning vocabulary is one of the most important components of learning a new language. According to Zengin (2019), students unconsciously learn foreign language vocabulary on digital platforms and especially, games played by people at all ages have very crucial role especially for children. In addition, selecting activities that will improve the motivation of the students and guiding them towards the learning objective in a motivated manner are essential elements of the educational processes (Çelik et al., 2022). Digital platforms can be considered as an educational environment used to expand vocabulary in foreign language teaching, to teach grammar rules, to improve listening comprehension and reading skills (Uluçay, 2013).

According to the study findings, the participants stated that the app was successful for beginners, but it is insufficient for advanced level English learners. This finding is similar to the conclusion stated by Weinberg (2017) that 70% of Facebook's chatbot interactions failed, that is, artificial intelligence reported that users could not understand what they were saying. Besides, the participants stated that they were hesitant to chat with

live people. This finding shows similarities with the study result of Verleger and Pembroke, (2018) who stated that chatbots have the potential to encourage anxious or shy students to participate in apps and ask questions about getting a mention in class. Students prefer to use chatbots as a learning environment that provides feedback to them. This finding also reminds us of the results by Demirci and Yavuz, (2009) that students who cannot reach the teacher control their own learning at the same time, ask questions to chatbots like their teachers and move at their own pace. The results also show similarities with the results of Grudin and Jacques (2019) that although chatbots contain some fixable problems, they can be used in English teaching and that chatbots significantly improve students' learning success. This finding is similar to the research results of Chen et al. (2020). In addition, as stated by Devci Topal, Dilek Eren, and Kolburan Eçer, (2021), the study findings also revealed that the participants found the chatbot application enjoyable and fun.

As a result, companies that develop chatbot applications are commercial institutions that focus on software. Because of this, since they do not know the exact needs of a student or an entire educational system, it will be difficult for software companies to develop Chatbot applications that will meet the basic needs and wishes of students. If cooperation is established between the education sector and software companies developing artificial intelligence applications, it will be possible to develop artificial intelligence-supported learning programs that meet the individual learning needs of students.

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