

Students' Perception on Using Duolingo to Boost EFL Students' Motivation in Speaking Skills

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Abstract

This study investigates the effectiveness of using the Duolingo app to enhance EFL students' motivation in practicing speaking skills, addressing the common issue of low participation in speaking activities. The findings reveal that Duolingo positively influences students' motivation by teaching vocabulary and providing opportunities to practice in authentic contexts. Interaction with the app builds learners' confidence to speak in class, particularly benefiting low-achieving students by increasing their vocabulary and encouraging participation. However, the app had a slight negative impact on high achievers' motivation, suggesting that teachers should monitor its use to maintain engagement across all proficiency levels. Limitations include the short duration of the experiment—students used the app only three times—potentially affecting the reliability of the results. Additionally, Duolingo restricts topic selection and sequencing, limiting teachers' control over classroom content. The study underscores the potential of mobile applications in EFL instruction and recommends further research to explore their full impact and address existing challenges.

Keywords: Duolingo, speaking skill, student's motivation, improving speaking skill, EFL students.

1. Introduction

Currently, the English language is in demand as it is considered the lingua franca. As it has become essential to master this language, many countries around the world give significant attention to teaching this language in schools and universities. For example, in Oman, English is taught to students from primary school through the first year of university to ensure the effectiveness of the learning process. Therefore, English is taught as a foreign language in many countries. However, learning languages is related to developing four main skills: speaking, listening, reading, and writing, as well as gaining grammatical competence. Moreover, speaking and listening are essential for effective communication. According to Willis and Willis (2001), a foreign language classroom is where students use their target language for a communicative purpose (as mentioned in Kim & Kim, 2021, p. 714). However, it's noticeable in EFL classrooms that students avoid using the language for many reasons. According to Niah (2019), "Many students do not dare to use English in class because they are afraid of the teacher, and many students are reluctant to practice both inside and outside the classroom for fear of being laughed at by friends" (p.55). This reluctance has led many teachers and scholars who are interested in increasing students' motivation to use the language created many ways to solve this problem. One of the suggested solutions is to use technology in the classroom through apps and websites that can help students. Nowadays, there are many mobile applications that can help learners to learn new languages easily such as Duolingo. Nevertheless, as stated by Kim (2021), EFL classrooms lack practice with real audience in an authentic learning environment which provides a meaningful learning materials that are relevant to the students' life and tasks that reflects real world challenges (Herrington et al., 2013). So, "the integration of mobile technology in language learning can facilitate teachers to have authentic learning materials and to guide learners to interact with other language learners or even with the native speakers." (as stated in Blake, 2016); and a good example of such an e-learning platform is Duolingo. Therefore, this project aims to investigate the effectiveness of using the Duolingo App to enhance EFL students' motivation to practice speaking in the classroom. Moreover, the project focuses on the students' perspective as "it could affect the

learning activities designs as well as how students perceive themselves as successful learners.” (Sumakul, Hamied & Sukyadi, 2022, p.53). Accordingly, the results of this project will help improve teaching methods to better address students’ needs.

2. Relevant Research

2.1. Speaking Skill

Speaking is one of the most important skills that language learners should develop to be able to communicate with other native speakers. As English is considered a global language, many people are expected to know how to speak it.. As mentioned in Leong & Ahmadi (2017), for effective communication, speakers need to be both listeners and speakers at the same time.. Therefore, there is a significant relationship between speaking and listening as Krashen (1998) found that speaking provides evidence of acquiring the language. Accordingly, some teachers ‘jump to teaching other skills such as reading and writing’ which reduces the learners’ opportunity to practice speaking as well as the development of their speaking skills. All of this affects their motivation to speak in class. However, according to Tuan & Mai (2015), many teachers noticed some problems in students’ speaking skills, such as inhibition, lack of topical knowledge, low participation, and mother-tongue use”. Moreover, those problems cause low student motivation to use the language inside or outside the classroom. Furthermore, speaking a foreign language requires the integration of several language aspects, such as appropriate vocabulary, accurate grammar and sentence structure, and clear pronunciation (Kim, 2021). Therefore, students’ confidence to speak is influenced by all of the language aspects that they need to use. For example, a lack of vocabulary affects students' speaking skills as vocabulary is considered one of the essential components that the speaker needs to use to convey the ideas that they have. No one can speak without knowing vocabulary as well as its use and pronunciation. As Seffar (2015), Adam (2016), and Khan et al. (2018) agreed, a lack of vocabulary is considered a major obstacle and hinders the real communication of EFL learners to a great extent. Similarly, a study conducted by Hamad (2013) on female Saudi EFL learners indicates that a lack of vocabulary knowledge results in poor performance in speaking. Anthony (2009) also carried out a study to “identify the prospective involvement of early childhood learners’ vocabulary and its progression in creating phonological understanding” (p. 409). This study found a correlation between vocabulary and oral skills. However, students’ pronunciation is another common problem in speaking. According to Thornbury (2005), learners usually pay little attention to pronunciation, which is essential to master for accurate speaking. Therefore, the lack of such language aspects may lead to student anxiety, resulting in decreased class participation. In relation to this, Tanveer (2007) emphasized that anxiety lowers the learners’ speaking performance. Thus, students’ speaking skills can improve if both learners and teachers pay attention to all language aspects that are related to speaking to reduce students’ anxiety about participating in class and increase their confidence.

2.2. Using Technology in EFL Classrooms

Nowadays, using technology in the classroom has become essential and is considered one of the main criteria for an effective lesson. As Alharbi (2023) stated, ‘The use of technology in the classroom has significantly changed in response to COVID-19’ (p. 3), as the pandemic forced students and teachers to shift to online classes. Moreover, technology has clear benefits, as learners often enjoy the learning process when using it. Consequently, people are engaging in online learning more than ever before. Accordingly, there has been an increase in massive open online courses (MOOCs) and mobile-assisted language learning (MALL) due to the growing demand from learners around the world. Therefore, many universities and institutions offer such programs and courses. As mentioned by Popenici and Kerr (2017), there are 90,000 students from 200 countries enrolled in MOOCs offered by the University of Edinburgh. In addition, many mobile applications help learners study independently, while teachers can integrate tools such as Duolingo, Kahoot, and others into classroom instruction. According to Hidayati and Diana (2019), mobile technology in language learning provides teachers with authentic materials and allows learners to interact with other language learners and native speakers. Such interaction gives learners the chance to practice the target language. Although many scholars encourage the use of mobile applications to normalize the learning process, as today’s generation prefers to use them, Hidayati and Diana (2019) found that students do not explore app functions if they are not interested in using them, making mobile learning applications a new

experience for many learners. Several factors reduce students' interest in using apps, such as complexity, subscription requirements, and the need for an internet connection. Therefore, teachers should carefully select the most suitable mobile applications for their classrooms.

2.3. EFL Students' Motivation

Students' motivation to learn is an essential aspect of learning. Hidayati and Diana (2019) and Habibie (2020) agreed that second language motivation is viewed as a combination of three complex elements: enthusiasm, desire to learn the language, and attitude toward language learning activities" (p. 192). Therefore, if students believe that learning a language is difficult, their motivation will be affected, and they may not be able to learn effectively, as they are likely to engage in other activities that motivate them more than studying. Nurjannah, Sukirlan, and Ginting (2013) stated that motivation plays an important role in stimulating students' mastery of the target language. Therefore, 'the lower the motivation they have in expressing their ideas, the lower their chance of being successful in learning English, especially in speaking' will be (p. 3). However, speaking English is not an easy task, as speakers should know many significant components, such as pronunciation, grammar, vocabulary, fluency, and comprehension. Therefore, 'learners should pay enough attention to the accuracy and completeness of language form when speaking, such as focusing on grammatical structures, vocabulary, and pronunciation' (as cited in Leong and Ahmadi, 2017, p. 36). This often causes anxiety for students when they are required to speak, especially in English classes. According to Park and Lee's (2005) research, students' anxiety levels were negatively correlated with their oral performance. Accordingly, many scholars, such as Habibie (2020) and Hidayati & Diana (2019), suggest that using technology can help improve students' motivation as well as language performance. Hidayati and Diana (2019) stated, 'The multifunctionality of mobile technology was also reported as potentially motivating' (p. 194). Also, Habibie's (2020) findings indicated that students are generally quite enthusiastic about using mobile applications and enjoy their flexibility and practicality. For instance, using Duolingo in the classroom makes students feel like they are learning while playing, as it combines visuals with audio to teach vocabulary. Nevertheless, giving students the confidence to practice the language in an enjoyable way will reduce stress and improve oral performance, which is influenced by factors such as self-confidence, vocabulary knowledge, and the classroom environment, whether encouraging or not (Urrutia and Vega, 2010).

3. Methodology

3.1 Instrument

To collect data for this study, I used mixed methods, which included an experimental study, qualitative methods, and quantitative methods. Regarding the experimental study, the students are going to experience having speaking classes with and without using Duolingo. I first observed the students' motivation in speaking classes without using Duolingo (through traditional teaching) and then with Duolingo in three speaking classes. The students used Duolingo for about 40 minutes during class. Afterward, they discussed a topic related to the vocabulary they had learned in the application. During this time, I observed them to collect qualitative data. After the experiment, I gave them a questionnaire in class to collect data about their perception of their motivation with and without using the application. The questionnaire consisted of 25 questions, divided into three main parts, along with an introductory section on personal information. The three main parts focused on the use of Duolingo, students' perceptions of using Duolingo to increase their motivation to speak, and two objective questions requiring participants to provide and justify their answers. In the first part, participants were asked to choose responses that reflected their experience using the app. In the second part, they evaluated statements using a Likert scale (from strongly agree to strongly disagree) to reflect their opinions. In the final part, participants answered two questions about their experiences in classes with and without Duolingo, as well as the relationship between using Duolingo and their motivation to speak in class. The questionnaire was designed using Google Forms, as it was easier for participants to complete on their phones. Also, I provided translations for all of the questions to ensure that the participants understood them without any issues. Furthermore, as the teacher of the class, I conducted the observation myself by taking notes. I preferred to do it myself, as I believed that having another teacher present would affect the experiment's results. The use of mixed methods is significant as it helps to improve the quality of the collected data. According to Salehi and Golafshani (2010), 'findings from qualitative methods can be supported by findings from quantitative methods in the same study, while the two methods independently provide

different perspectives on the phenomenon being studied.’ Moreover, using a questionnaire for this study is significant as it will ensure the accuracy of the data that are collected from the participants as it reflects the participants’ perception toward using Duolingo and their motivation to speak. Moreover, scholars agree that it is a flexible method and is easy to collect and analyze. Observation also allows the researcher to gain deeper insights into the problem and to compare results from multiple perspectives.

3.2 Participants

The participants of this study were 24 foundation program students in their first year at A’Sharqiyah University in Oman. Five were male and 19 were female. Convenience sampling was used to select the participants, as they were easy to reach and observe because they were the researcher’s students. Moreover, the 24 students were from the same class and were placed at the same level after taking the placement test. Thus, they represented intermediate-level students by participating in this experiment. They came from different majors and had different interests. Their performance in class varied, ranging from high to low achievers. Their motivation to learn the language also differed, as some had intrinsic motivation while others had extrinsic motivation. Consequently, their motivation influenced their participation and oral performance in class.

3.3 Procedure

Firstly, I obtained consent to conduct this experiment from the head of the department, and his written approval is attached in the appendix. After that, I informed the participants about the experiment and obtained their consent, assuring them that it would not affect their participation marks. I also clarified that they could withdraw at any time during the experiment and that they would remain anonymous when the data were presented and discussed in the paper. The students were also informed about the classes in which the experiment would take place. Before starting the experiment, students were asked to download Duolingo and were given a practical session on how to use it, during which they completed the diagnostic test. All of them started at the first level in the app. In the first two classes, I taught them vocabulary and then gave them a discussion topic related to the vocabulary they had learned. In the following two classes, I asked them to use Duolingo for 40 minutes. In the first Duolingo class, the topic was describing family, while in the second class it was about animals. After that, they had a traditional speaking class before the final Duolingo session, allowing me to observe differences in their motivation and enabling them to notice the changes as well. In the last two classes, the topic was describing the home and furniture. After the final Duolingo class, they completed a questionnaire. Before they answered the questionnaire, I clarified that their responses would remain anonymous and that no identifying information would be collected. I also informed them that they could skip any question they did not feel comfortable answering. The questionnaire was administered in class, which allowed me to provide immediate clarification if they faced any difficulties.

4. Findings

The observation results are generally positive as they describe the significant changes that happened to the students’ motivation with and without using Duolingo. The table below has notes that describe students’ motivation in each class:

Table 1: Observation summary results

Class	Speaking Topic	Without Duolingo	With Duolingo
1	Describe your family	<div><div>-</div><div>Not all of the students participated</div><div>-</div><div>They seemed bored</div><div>-</div><div>All of them used their first language from time to time.</div></div>	<div><div>-</div><div>Students seemed happy while using the App.</div><div>-</div><div>They focused on what they were doing.</div><div>-</div><div>They were trying to imitate and pronounce the words correctly.</div></div>

		<ul style="list-style-type: none"> - Some of them didn't participate at all despite the teachers' encouragement. 	<ul style="list-style-type: none"> - During the discussion, all of them were participating. - They were trying to use what they learned when they speak
2	Animals	<ul style="list-style-type: none"> - High achievers the only ones who participated in the discussion. - Some low achievers tried to participate but they couldn't talk fully in a good and accurate English. - Some pronunciation mistakes when they participated. 	<ul style="list-style-type: none"> - Low achievers participated more than high achievers. - The atmosphere was positive. - Some students were helping each other to pronounce difficult words. - Some students were using photos to describe some difficult words. - High achievers performance and motivation decreased.
3	Describing home and furniture	<ul style="list-style-type: none"> - Students were interested in the topic. - The majority of them tried to participate - Low achievers used their first language from time to time. - Students were bored after the first 15 minutes of the lesson. 	<ul style="list-style-type: none"> - The motivation of high achievers decreased - Low achievers' participation increased - They were trying to use words correctly while speaking.

Based on the results of the observation presented in Table 1 above, using Duolingo in the classroom increased students' motivation and enthusiasm for learning the language. However, some students who were active in traditional classes (a minority) became inactive in Duolingo classes. This decrease in motivation may have been caused by several factors, such as lack of interest in the topic or in using Duolingo itself. A questionnaire was administered to the 24 students who participated in the experiment. The questionnaire results reflect the students' perceptions of using Duolingo to improve their speaking skills and whether they noticed any improvement in their motivation to speak in class. Moreover, students reported feeling happy and excited whenever they were told that they would be using Duolingo. Thus, using the app created a positive classroom atmosphere, which reduced students' anxiety and enhanced their confidence and motivation. According to the results of the first part of the questionnaire, 45.5% of the participants had been learning English for more than five years. In addition, 95.8% of them reported that they knew Duolingo, and 50% had been using it before the experiment. Moreover, Chart 1 illustrates the duration of application use, showing that about 42% of the participants had started using it more than three months ago.



If yes, how long have you been using Duolingo?
(إذا كانت إجابتك على السؤال السابق "نعم"، منذ متى تستخدم تطبيق Duolingo؟)

رأى 17

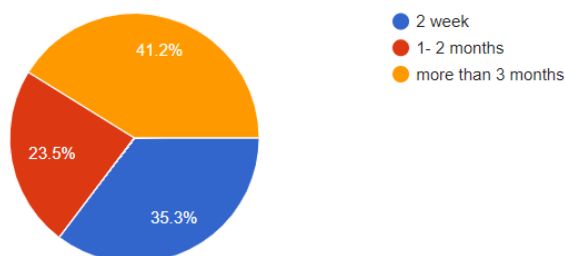


Chart 1: Chart indicates how long students were using Duolingo before the experiment.

نسخ □ If you use Duolingo, approximately how much time (per day) you spend using it
 إذا كنت تستخدم تطبيق Duolingo، كم من الوقت تستغرق في استخدام التطبيق؟
 21 ردًا

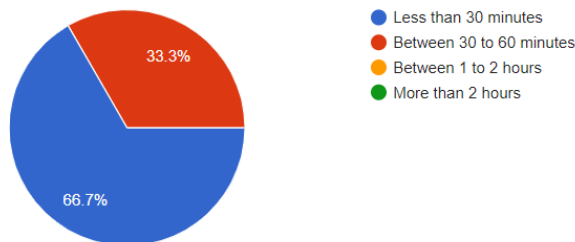


Chart 2: Chart shows how much time a day do students spend on using Duolingo

Furthermore, chart (2), shows that the majority of the students who were using Duolingo, they use it less than 30 minutes a day. Also, about 55% of the participants stated that their aim of using the App is to improve their vocabulary as it's shown in chart (3).

نسخ □ Which aspect of English you intend to improve when using ?Duolingo
 ما هي المهارة التي تريد تطويرها من خلال استخدام تطبيق Duolingo؟
 24 ردًا

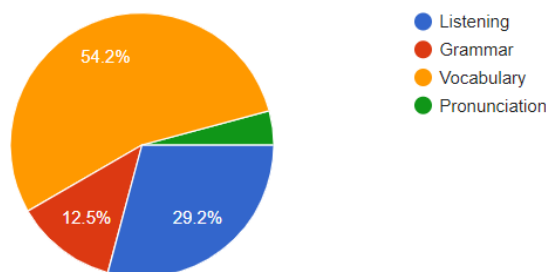


Chart 3: Shows the aspects of the language that the students' aims to improve by using Duolingo.

Moreover, the second part of the questionnaire investigates students' perspectives about their motivation in speaking and using Duolingo. According to the table below, table (2), the majority of students' feedback towards using Duolingo to increase their motivation to speak in class is positive.

Table 2: Show to extent that the participants agree or disagree of the statements that describes their motivation and Duolingo

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Duolingo is effective to use for learning English.	25%	66.7%	4.2%	4.2%	0
Duolingo is easy to use to learn English vocabulary.	29.2%	62.5%	4.2%	4.2%	0
Duolingo is easy to use to improve speaking skill.	20.8%	54.2%	16.7%	8.3%	0
I learned a lot of new words from Duolingo.	25%	50%	16.7%	8.3%	0
Duolingo teaches me how to pronounce the new words correctly.	37.5%	50%	0	12.5%	0

Learning vocabulary through Duolingo helps me to memorize a lot of words.	21.7%	69.9%	4.3%	4.3%	0
Duolingo helps me to feel motivated to use the new words in speaking.	20.8%	41.7%	33.3%	0	4.7%
Using Duolingo helps me to use words correctly in my daily life conversation.	20.8%	62.5%	8.3%	8.3%	0
Learning using Duolingo allows me to learn more effectively	12.5%	79.2%	4.2%	4.2%	
Duolingo uses topics that match my interests	25%	41.7%	29.2%	0	4.2%
I feel more motivated to study using Duolingo	20.8%	54.2%	12.5%	12.5%	0
I was shy to speak in class before using Duolingo	25%	4.2%	41.7%	16.7%	12.5%
I am more confident to speak in English after using Duolingo	8.3%	50%	29.2%	8.3%	4.2%
I participate more in class after using Duolingo	12.5%	50%	29.2%	4.2%	4.2%
I enjoy the classes when we use Duolingo	29.2%	50%	16.7%	0	4.2%
The class becomes boring when we use Duolingo	0	21.7%	39.1%	17.4%	21.7%
I feel excited when the teacher asks us to use Duolingo	8.3%	33.3%	25%	12.5%	20.8%

According to items 1, 2, 3, 9, 15, and 17 in the table above, students appeared to have a positive attitude toward using Duolingo in class. In addition, the majority agreed that using the app helped them increase their vocabulary competence, as shown in items 4, 5, and 6. Moreover, data from items 7, 8, 11, 12, 13, and 14 indicate that students felt Duolingo helped them increase their motivation and confidence to speak both inside and outside the classroom.

Similarly, the last part of the questionnaire asked the participants two open-ended questions to give them more space to clarify and justify their perspectives on using Duolingo. The first question asked the participants whether they felt more motivated to speak in class when using Duolingo or without it. Out of 24 participants, 20 answered this question: 13 stated that their motivation increased when using Duolingo, while one stated the opposite. However, six reported that they were motivated in both types of classes, with and without Duolingo. For the second question, which asked whether Duolingo affected their confidence in using English, 9 out of 21 participants (who responded to this question) agreed that the application positively influenced their confidence.

5. Result Discussion

As shown above, the results from the questionnaire and the observation are in line, and they support what other scholars have found. According to the results of the sixth question in the first part of the questionnaire, students recognized that learning vocabulary is an important aspect of language, as more than 50% stated that they used Duolingo to enrich their vocabulary competence. Khan et al. (2018) stated that learning a foreign language is associated with vocabulary as a lack of vocabulary is considered an obstacle to using a new language. Moreover, the relation between vocabulary and speaking is clear from the results in the second part of the questionnaire as more than 70% of the participants agreed that Duolingo teaches them new vocabulary, which they then use in their daily conversations, while also learning the correct usage and pronunciation of these words. Also, more than 80% of them believed that they memorized a lot of new words from Duolingo. So, I believe that the way of teaching that is used in Duolingo is significant as it uses visuals, sounds, and repetition. According to Hidayati & Diana (2019), visualizing words is helpful to language learners and boosts their motivation to learn and use the language. Furthermore, Duolingo uses repetition as it repeats the words that students fail to remember or to use as well as tests the learners' memory from time to time to ensure that learners remember the meaning, usage, and pronunciation. Although more than 70% of the students stated that they enjoy using Duolingo, according to item 15 on the table (2), less than 40% agreed that they feel excited to use Duolingo in class which seems contradictory. It might be due to the repetition of the words that they made mistakes when playing the game as well and they could be bored because they work individually for more than 30 minutes. Similarly, Marques-Schafer and da Silva

Orlando (2018) found that many users stopped using Duolingo because it became repetitive. Furthermore, according to the observation notes, Duolingo created a positive atmosphere to learn the language and motivated students who were not active in traditional classes began to use the language and participate in discussions. However, it was significant that students who were active and motivated during traditional classes became unmotivated while using Duolingo and although they represented only a minority of the participants. Also, it matches the questionnaire results in the second and the third part as 12.5% stated that they don't become motivated when using Duolingo. Two possible reasons for this reduction in motivation are students' interest in using technology to learn and their familiarity with the topics and vocabulary. Similarly, Loewen et al. (2019), who investigated the learning experiences and results of nine participants learning Turkish on Duolingo, felt that the motivation of some students in learning decreased when using Duolingo. Accordingly, Huynh et al. (2016) stated that more advanced students might find using such applications less interesting. Therefore, it is significant to note that high achievers' motivation may be negatively affected when using the app.

6. Conclusion

This study aimed to investigate the effectiveness of using the Duolingo App in enhancing EFL students' motivation to practice speaking skills, as many teachers observe that EFL learners often have low motivation to speak and participate in class. The findings indicate that using Duolingo in speaking classes has a positive impact on students' motivation, as it exposes them to new vocabulary and provides opportunities to practice it in an authentic context. Interacting with the application allowed students to build confidence in using the language, which transferred to their classroom participation. Although the application appeared to negatively affect the motivation of some high achievers, it supported the majority of learners—particularly low achievers—by helping them acquire more vocabulary and increasing their confidence and motivation to participate in class discussions. Therefore, teachers should carefully manage the use of Duolingo in class to ensure it remains engaging for high achievers while still benefiting lower achievers.

This project highlights the importance and potential effectiveness of integrating mobile applications into EFL classrooms. However, one limitation of using Duolingo is that it restricts the range of speaking topics available in class, as teachers cannot control the content or sequence of lessons in the application. Furthermore, due to time constraints at the end of the semester when the experiment was conducted, students were only able to use the application three times. This limited exposure may have affected the validity of the results, as it was difficult to observe substantial differences in motivation between the classes within such a short period.

Future research is needed to further explore both the advantages and disadvantages of incorporating mobile applications like Duolingo into EFL classrooms. Such studies should also investigate strategies to overcome barriers that may reduce students' motivation and to maximize the potential benefits of technology for enhancing speaking skills.

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