

EFL Students' Perception in Using Duolingo for Developing Speaking Ability

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Abstract

English-speaking ability is an essential skill for EFL students to communicate effectively; however, many students face challenges such as limited vocabulary, lack of motivation, and low self-confidence. Therefore, the study "EFL Students' Perception in Using Duolingo for Developing Speaking Ability" aims to analyze students' perceptions of using Duolingo to improve their speaking skills, focusing on how the application's features assist in speaking development and its effectiveness in English language learning at senior high schools in the Greater Jakarta area. This research using quantitative method, with data collected through a Likert-scale questionnaire administered to 25% of 187 randomly selected students. The results indicate that students have a positive perception of Duolingo due to features such as a reward system, learning reminders, and game-based multimedia content, which enhance motivation, confidence, learning flexibility, and active participation in speaking. However, challenges such as limited vocabulary and fear of making mistakes still persist, suggesting that while Duolingo is an effective learning tool, its use should be supplemented with conventional teaching methods for optimal improvement in English-speaking skills.

Keywords: Students' Perception; Duolingo; Speaking Ability

INTRODUCTION

English is an international language used in many aspects of life, including education, business and technology. In Indonesia, English is taught as a foreign language (English as a Foreign Language - EFL), as the majority of people use their mother tongue more often in their daily lives (Riadil, 2020). This causes many students to experience difficulties in mastering English speaking skills, especially in the aspects of fluency, pronunciation, and confidence (Fitria et al., 2023). Speaking skills are the ability to utter articulation sounds or words to express, state, and convey thoughts, ideas, and feelings to others. This skill is also based on self-confidence to speak naturally, honestly, correctly, and responsibly by eliminating psychological problems such as shyness, inferiority, tension, and others (Marzuqi, 2019). However, many students experience difficulties in speaking due to limited vocabulary, lack of practice, and fear of making mistakes in pronunciation or grammar (Jiang et al., 2020). Therefore, innovative learning methods are needed so that students can be more confident in speaking English. Along with the development of technology, digital-based learning methods (e-learning) are increasingly being applied in education. E-learning has become an increasingly popular teaching method and is recognized as an effective approach in meeting the needs of modern education (Sinh et al., 2021). According to (Thu et al., 2021), students can use various electronic resources such as YouTube videos, BBC news, Duolingo app, ELSA, and online dictionaries to practice their speaking skills. These platforms allow students to learn independently and flexibly by using multimedia-based technologies, such as sound, image, and video.

Duolingo is one of the language learning apps increasingly used by EFL students. It offers gamification-based learning, where students can learn in a fun way through interactive exercises, reward systems, as well as learning reminders. A study conducted by (Jiang et al., 2020) showed that Duolingo is effective in improving reading and listening skills. In addition, the pronunciation feature in Duolingo allows students to practice speaking and receive auto-correction, which can help boost their confidence in using English. However, although Duolingo has many benefits, some challenges are still faced by students, such as limited vocabulary and fear of making mistakes when speaking (Fitria et al., 2023). In addition, research by (Syafrizal et al., 2022) found that regular use of this app can improve students' fluency and pronunciation, but some students also noted that Duolingo has limitations in interaction features and lack of in-depth grammar explanations (Pramesti & Susanti, 2020). Based on observations made by the researcher while teaching in one of the high schools in Jabodetabek, the researcher conducted a brief interview with students regarding their experience in using Duolingo. The results show that most students have used Duolingo as an English learning tool. Furthermore, the researcher observed that some students who used Duolingo showed improvement in their speaking skills, especially in fluency and courage to speak in English. However, there were still students who experienced difficulties, especially in terms of limited vocabulary, pronunciation, and lack of confidence when speaking. Therefore, the researcher is interested in conducting a study focusing on EFL Students' Perception in Using Duolingo for Developing Speaking Ability, in order to understand how this application can help students in developing their speaking skills. Through this study, students' perceptions regarding the use of Duolingo in improving their English speaking skills will be analyzed. Specifically, this study will answer the following questions:

- a. How do students perceive the use of Duolingo app in improving their English speaking skills?
- b. What features in Duolingo help students in developing their speaking skills?
- c. To what extent is Duolingo effective as a speaking learning tool in the context of English language learning in high schools in the Greater Jakarta area?

By understanding students' experiences in using Duolingo, this research is expected to provide new insights into the role of technology in language learning, as well as provide recommendations for the development of more effective technology-based learning methods in the future.

METHOD

This study aims to explore EFL students' perceptions of using Duolingo and examine its influence on the development of their speaking skills. The research was conducted at a public senior high school in the Jabodetabek area, with data collection taking place from July 2024, after receiving the necessary research permits. The study using quantitative method and descriptive research methods. According to (Sugiyono, 2011), descriptive research is used to assess the value of independent variables without making comparisons or establishing relationships with other variables. The population for this study consists of senior high school students in Jabodetabek, with 187 students selected as the sample population for the research. A sample represents a subset of the population, and it must be representative (Sugiyono, 2011). According to Arikunto (2010), if the population is under 100, the sample should be taken 100%, but if it exceeds 100, a sample of 10-25% may be selected. This study used simple random sampling, where 25% of the 187 participants were chosen for the sample, with computations performed using SPSS. According to (Dewi & Sudaryanto, 2020), a questionnaire is a tool for gathering data through a list of questions. The Likert scale, as explained by (Dr. Dyah Budiastuti, Augustinus bandur, 2018), measures attitudes, morals, and understanding through

declarative statements. This study will use a closed-ended questionnaire based on the Likert scale, where participants will respond to carefully chosen statements. Descriptive statistics are used to characterize the frequency distribution, mean, median, and standard deviation of the data that was collected. Utilizing Validates and reliability analysis (Cronbach's Alpha), one can evaluate the questionnaire's internal consistency.

RESULTS AND DISCUSSION

Results

This study aims to assess how Jabodetabek students perceive Duolingo for speaking improvement using a Likert scale ranging from 1 to 5. The sample consists of 25% of the population, and the questionnaire is adapted from (Serhan, 2020) and (Pramesti & Susanti, 2020), includes 20 questions has the following categories; students' perceptions of the usefulness, content, control, attitude, and impact of Duolingo on speaking skills.

Table 1. Students Perception Duolingo Usability

Item	Statements	Frequency	Mean	Median	Std. Deviation
1.	I like Duolingo because it is easy to use	56	4.04	4.00	1.026
2.	I like Duolingo because it easy to understand	56	4.07	4.00	1.234

Table 1 presents students' perceptions of Duolingo's usability. It shows that students generally find Duolingo easy to use and understand. For the statement "I like Duolingo because it is easy to use," the mean score is 4.04, indicating agreement, with a median of 4.00 and a standard deviation of 1.026, suggesting moderate consistency in responses. The statement "I like Duolingo because it is easy to understand" has a mean score of 4.07, slightly higher than the first item, with a median of 4.00 and a standard deviation of 1.234, indicating a bit more variation in students' responses.

Table 2. Students Perception Duolingo Content

Item	Statements	Frequency	Mean	Median	Std. Deviation
1.	I like Duolingo because it displays colourful cartoon, picture, and funny sound	56	4.07	4.00	1.234
2.	I like Duolingo because the content in it is like a game	56	4.05	4.00	1.151
3.	I like Duolingo because it relates to my learning experience	56	4.13	4.00	.935
4.	I like Duolingo because the content in it related to my daily activities	56	3.89	4.00	1.155

Table 2 illustrates the students' perceptions of the content provided by Duolingo. Overall, students expressed positive opinions about the app's content. The majority of students indicated that they enjoyed Duolingo's use of colorful cartoons, pictures, and amusing sounds, with a mean score of 4.07. This suggests that the visual and auditory elements of the app are engaging and enhance the overall learning experience. Additionally, many students appreciated the game-like nature of Duolingo, which contributed to a fun learning environment, reflected in a mean

score of 4.05. Moreover, the content’s relevance to their learning experience was rated the highest, with a mean score of 4.13, showing that students felt the app supported their educational goals effectively. However, the connection between Duolingo’s content and students’ daily activities received a slightly lower mean score of 3.89, indicating that while the app was relevant in many ways, there was less alignment with their day-to-day lives. Despite this, the overall positive perceptions towards Duolingo's content suggest that it is an enjoyable and useful tool for learning.

Table 3. Students Perception Duolingo Control

Item	Statements	Frequency	Mean	Median	Std. Deviation
1.	I like Duolingo because it has learning reminder	56	3.98	4.00	1.198
2.	I like Duolingo because it has reward system when I finished	56	4.00	4.00	1.095

Table 3 shows that students positively perceive Duolingo's control features. With a mean score of 3.98, they appreciate the learning reminders, which help them stay engaged. The reward system, with a mean score of 4.00, also motivates students to complete lessons, reinforcing their learning. These features are key in maintaining students' interest and encouraging consistent use of the app.

Table 4. Participants’ Attitudes Toward Duolingo Usability and Convince

Item	Statements	Frequency	Mean	Median	Std. Deviation
1.	I prefer studying alone using Duolingo, as it enhances my confidence in speaking	56	4.02	4.00	1.152
2.	I would like to continue using Duolingo to practice speaking in other languages	56	4.16	5.00	1.141
3.	Using Duolingo allows flexibility in my language learning schedule	56	4.09	4.50	1.210
4.	Overall, I enjoy using Duolingo to improve my speaking ability	56	4.05	4.00	1.151

Table 4 shows that participants have a positive perception of Duolingo’s usability and its impact on their speaking skills. Most students feel more confident speaking after using Duolingo, with an average score of 4.02. They are also interested in continuing to use Duolingo to practice other languages, with an average score of 4.16. Many students appreciate the flexibility that the app offers (average score of 4.09), and overall, they enjoy using Duolingo to improve their speaking ability (average score of 4.05). The standard deviation, ranging from 1.095 to 1.210, indicates that while most participants agree, there is some variation in their experiences.

Table 5. Impact of Duolingo on Speaking Ability (Motivated and skill development)

Item	Statements	Frequency	Mean	Median	Std. Deviation
1.	Using Duolingo has improved my ability to speak in the target	56	4.05	4.00	1.151
2.	Duolingo has helped me learn and practice speaking the language effectively	56	4.07	4.00	1.059

3.	Duolingo motivates me to actively practice speaking and engage more with the language	56	4.02	4.00	1.213
4.	Using Duolingo motivates me to actively participate in speaking exercises	56	4.04	4.00	1.128
5.	Duolingo makes it easier for me to engage in speaking activities and discussions	56	3.91	4.00	1.210
6.	Using Duolingo increases my interaction with teacher	56	4.02	4.00	1.104
7.	Duolingo enchances my interaction with classmate for speaking	56	4.25	5.00	1.100
8.	Duolingo motivates me to seek help from tutor, classmates, and teacher for speaking improvement	56	4.25	4.00	1.113

Table 5 provides insights into the impact of Duolingo on students' speaking ability, motivation, and skill development. Most students reported that Duolingo improved their speaking ability (mean 4.05) and helped them practice effectively (mean 4.07). The app also motivated them to engage more actively with the language (mean 4.02) and participate in speaking exercises (mean 4.04). Furthermore, students felt that Duolingo made speaking activities and discussions easier (mean 3.91). In terms of interaction, Duolingo increased their interaction with teachers (mean 4.02) and classmates (mean 4.25), motivating them to seek help for speaking improvement (mean 4.25). The standard deviations ranging from 1.059 to 1.213 indicate moderate variability in students' experiences, with some variation in their responses.

Table 6. Validity Test

Variable	Statement	Rhitung	Rtable	Result
Students' Perception using Duolingo (X)	X1	.723	.263	Valid
	X2	.737	.263	Valid
	X3	.701	.263	Valid
	X4	.743	.263	Valid
	X5	.605	.263	Valid
	X6	.706	.263	Valid
	X7	.814	.263	Valid
	X8	.801	.263	Valid
	X9	.734	.263	Valid
	X10	.824	.263	Valid
	X11	.844	.263	Valid
	X12	.800	.263	Valid
Speaking Ability (Y)	Y1	.696	.263	Valid
	Y2	.812	.263	Valid
	Y3	.876	.263	Valid
	Y4	.839	.263	Valid
	Y5	.774	.263	Valid
	Y6	.679	.263	Valid

Y7	.682	.263	Valid
Y8	.626	.263	Valid

Table 6. Reliability Test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.967	.967	20

Discussion

The discussion in this study on the use of duolingo to improve speaking skills among high school students in the jabodetabek area aligns with, and in some cases extends, the findings of previous research on duolingo's effectiveness. The following comparisons highlight how this study correlates with earlier findings:

Usability and student engagement

This study found that duolingo's user-friendly design and motivational features, such as the reward and reminder systems (tables 1 and 3), were positively perceived by students. This is consistent with (Pramesti & Susanti, 2020) and (Kamsik et al., 2023), who also emphasized duolingo's ease of use and its impact on student motivation.

Content and learning environment

Students in this study rated duolingo's multimedia content highly (table 2), although its relevance to daily life received slightly lower scores. This reflects findings from (Syafrizal et al., 2022) and (Fauzan & Kasim, 2020), who praised duolingo's engaging content but noted room for improvement, especially for advanced learners.

Students' attitudes and learning preferences

The study found that students valued duolingo's flexibility and the ability to learn at their own pace (table 4). Similar attitudes were found by (Kamsik et al., 2023) and (Thu et al., 2021), who highlighted the positive effect of duolingo's self-paced learning on student motivation.

Impact on speaking ability

Duolingo's significant impact on speaking abilities was confirmed by this study (table 5), which aligns with (Syafrizal et al., 2022) and (Kamsik et al., 2023). Both studies also found that duolingo improved speaking skills through pronunciation practice and feedback, fostering greater confidence in students.

Validity and reliability of the data

The study showed strong validity and reliability (tables 6 and 7), with a high cronbach's alpha value (0.967), ensuring reliable findings. This is consistent with the statistical confidence in previous studies like (Syafrizal et al., 2022) and (Pramesti & Susanti, 2020).

Limitations and challenges

Challenges like limited vocabulary and fear of making mistakes were noted in this study, consistent with (Fitria et al., 2023). However, duolingo's supportive features, like instant feedback, were found to help mitigate these issues, as also reported by (Fitria et al., 2023).

This study shows that Duolingo is an effective tool in improving the speaking skills of high school students in Jabodetabek, in line with previous research findings. The app received

positive ratings for its user-friendly design and motivational features such as the reward system and reminders, which encourage student engagement in the learning process. In addition, the engaging multimedia content contributed to creating an enjoyable learning environment, although its relevance to everyday life could still be improved.

Students also showed a positive attitude towards the flexibility of Duolingo, which allowed them to learn independently and customize their study time as needed, thus increasing their motivation in learning the language. Furthermore, the app proved to have a significant impact on speaking skills, especially in improving students' pronunciation and confidence when speaking in the target language. The validity and reliability of the data in this study were also assured, with high Cronbach's Alpha values, reinforcing the accuracy of the results obtained.

Despite this, there are still some challenges that students face, such as limited vocabulary and fear of making mistakes when speaking. However, Duolingo features such as instant feedback proved to help overcome these obstacles, so overall, the app remains an effective learning tool with some aspects that can still be further developed.

CONCLUSION

The study highlights the effectiveness of Duolingo in improving EFL students' speaking abilities. Students of Jabodetabek find Duolingo user-friendly and easy to understand, with high engagement due to its interactive content, such as vibrant cartoons and game-like elements. The content's relevance to daily activities and learning experiences further enhances its utility. Features like learning reminders and a reward system keep students motivated. High validity and reliability scores confirm the robustness of the findings. Overall, Duolingo proves to be a valuable and enjoyable tool for language learning, with strong potential for long-term use and effectiveness in various educational contexts. More interactive speaking tasks and real-world conversation simulations should be added to Duolingo in order to maximize its effectiveness in helping EFL students improve their speaking skills. Teachers ought to think about incorporating Duolingo exercises into their regular class activities, use its analytics to provide students with individualized feedback, and assigning extra assignments. Maintaining culturally relevant subjects and regular material updates can help keep students engaged. Putting in place a strong feedback system will also enable ongoing enhancement based on user feedback. To guarantee that Duolingo is a useful resource for language learners, future studies should concentrate on the platform's long-term effects on language.

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