

STUDENTS' PERCEPTION IN USING DUOLINGO APPLICATION IN SPEAKING ACTIVITIES IN STATE JUNIOR HIGH SCHOOL 4 LANGGAM

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ABSTRACT

This study explores the perceptions of students using the Duolingo application for speaking activities at State Junior High School 4 Langgam. The subject of this research is all eight students State Junior High School 4 Langgam. The data were collected through questionnaires. The questionnaire answers were analyzed descriptively using SPSS 21 and Microsoft Excel. Participants were instructed to select one Likert scale answer in each area based on the statement. By employing a quantitative descriptive method, the research aims to determine the effectiveness of Duolingo in enhancing speaking skills, based on students' experiences and feedback. The results indicate a mixed perception among students, highlighting both the advantages and challenges of integrating Duolingo into the language learning curriculum.

Keywords: *Duolingo, speaking activities, student perception, language learning, educational technology*

INTRODUCTION

With the advent of digital technology, language learning has undergone significant transformations. Technology offers new avenues for interactive and engaging learning experiences that were not possible in traditional classroom settings. One such technological advancement is the use of language learning applications, which provide learners with accessible, flexible, and personalized learning opportunities (Fauzan & Kasim, 2020). Among the various language learning applications available, Duolingo has gained widespread popularity. Duolingo is a free, gamified language learning platform that offers courses in multiple languages, including English. It is designed to make language learning fun and engaging through interactive exercises, immediate feedback, and motivational elements such as points, levels, and rewards. The application covers various language skills, including reading, writing, listening, and speaking, making it a comprehensive tool for language acquisition (Jaelani & Sutari, 2021).

Duolingo's approach to teaching speaking skills involves a combination of repetition, pronunciation practice, and contextual usage. The application uses speech recognition technology to evaluate learners' pronunciation and provides instant feedback, helping users correct their mistakes and improve their accuracy. Additionally, Duolingo's interactive exercises encourage learners to practice speaking in a supportive, non-threatening

environment, which can reduce anxiety and build confidence (Fauzan & Kasim, 2020). However, despite its advantages, Duolingo's effectiveness in enhancing speaking skills has been a topic of debate among educators and researchers. Some studies suggest that while Duolingo is effective in vocabulary acquisition and pronunciation practice, it may fall short in developing the deeper, contextual speaking abilities required for real-life communication (Fiqi Khotimah, 2021). This limitation is partly due to the structured and often decontextualized nature of the exercises, which may not fully simulate the complexities of authentic conversational interactions.

State Junior High School 4 Langgam, located in Langgam, Riau, implements the Merdeka Curriculum, which emphasizes flexibility, student-centered learning, and the integration of technology in education. The school aims to create a conducive learning environment where students can explore and develop their skills through various innovative approaches. As part of this initiative, the school has incorporated Duolingo into its English language curriculum to support students in improving their speaking skills.

Despite these efforts, teachers at State Junior High School 4 Langgam have observed that many students still struggle with speaking English confidently. Factors contributing to this issue include limited exposure to English outside the classroom, fear of making mistakes, and a preference for using their native language in daily interactions. To address these challenges, this study investigates students' perceptions of using the Duolingo application in their speaking activities and examines its impact on their language learning experience.

Research Problem

The primary research question guiding this study is: How do students perceive the use of the Duolingo application in speaking activities at State Junior High School 4 Langgam? By understanding students' perceptions, this research aims to identify the strengths and weaknesses of Duolingo as a tool for developing speaking skills and to provide insights for educators on how to effectively integrate technology into language instruction.

LITERATUR REVIEW

The integration of technology into language learning has revolutionized the way languages are taught and learned. Modern language learning tools, particularly applications, offer new opportunities for learners to practice and enhance their language skills in a flexible and engaging manner. Among these, Duolingo has emerged as a prominent platform, known for its gamified learning approach. This application provides exercises in reading, writing, listening, and speaking, aiming to make language learning accessible and enjoyable (Fauzan & Kasim, 2020). The gamification of language learning, characterized by the use of points, levels, and rewards, is designed to increase learner motivation and engagement, which are critical factors in effective language acquisition.

Studies have shown that technological tools can significantly impact language learning outcomes. For example, Godwin-Jones (2015) argues that mobile-assisted language learning (MALL) applications like Duolingo provide learners with the flexibility to practice language skills at their own pace and convenience, making learning more personalized. This flexibility

is particularly beneficial in contexts where classroom time is limited and students need additional practice outside the traditional classroom setting. Furthermore, the immediate feedback provided by these applications allows learners to identify and correct mistakes promptly, which is essential for effective learning (Burston, 2014).

Duolingo's design incorporates various learning theories, such as spaced repetition and active recall, which are proven to enhance language retention and recall. Several empirical studies have explored the effectiveness of Duolingo in different aspects of language learning. For instance, Vesselinov and Grego (2012) conducted a large-scale study comparing Duolingo users to traditional language learners and found that Duolingo users showed significant improvements in their language skills, comparable to those who had completed a semester of college-level language instruction. This suggests that Duolingo can be an effective tool for language learning when used consistently.

Research specifically focusing on vocabulary acquisition through Duolingo has yielded positive results. Sapril Siregar (2019) conducted an experimental study on the impact of Duolingo on vocabulary learning and found that students who used Duolingo regularly demonstrated a marked improvement in their vocabulary test scores compared to those who did not use the application. This improvement was attributed to the application's frequent repetition and contextual use of new words, which help reinforce learning. Similarly, Erfiani (2022) noted that Duolingo's interactive exercises and instant feedback mechanisms significantly aid in vocabulary retention.

Despite its success in enhancing vocabulary and pronunciation, Duolingo's effectiveness in developing speaking skills has been less conclusive. Speaking skills require not only the knowledge of vocabulary and grammar but also the ability to use language spontaneously and interactively in real-life situations. This is a complex skill that involves cognitive processes such as planning, monitoring, and evaluating speech in real-time (Thornbury, 2005). Fiqi Khotimah (2021) used a mixed-method approach to examine the impact of Duolingo on speaking skills and found that while students appreciated the pronunciation practice provided by the app, they felt it lacked opportunities for interactive and spontaneous speaking practice. The structured nature of Duolingo's speaking exercises, which often involve repeating phrases or sentences, does not fully simulate the dynamics of real-life conversations.

Other studies have highlighted similar limitations. Laila Mahmudah (2015) conducted a quasi-experimental study focusing on pronunciation improvement through Duolingo and found positive results, with students showing better pronunciation accuracy and confidence. However, Mahmudah also noted that the application did not provide sufficient practice in contextually using language in conversations. Jaelani & Sutari (2021) echoed these findings, pointing out that while Duolingo is effective for learning vocabulary and improving pronunciation, it falls short in preparing students for real-life communicative situations where they need to think and respond spontaneously.

RESEARCH METHOD

This research used a quantitative research as the research method. According to Sugiyono (2018), the data with numbers or extrapolated quantitative data is referred to quantitative data. Then Goertzen (2017), defined that quantitative research is a type of research that focuses on data that can be measured numerically to assess information, objectively and the results of the data can be evaluated using statistical analysis. Creswell (2014) defines the quantitative approach as a research method that uses post-positive claims to develop knowledge and collects statistical data in a fair and objective manner using predetermined instruments.

Furthermore, this research used descriptive quantitative as the research design. Khaldi (2017) stated that descriptive quantitative research, as the name suggests, helps the researcher to collect data about conditions, situations, and events that occur in the present.

This research was conducted on December 2023. The research took place at State Junior High School 4 Langgam which is located on Jl. Lintas Gondai Penarikan, Pangkalan Gondai, Kec. Langgam, Kab. Pelalawan, Riau, 28381.

The subject of this research is all eight students State Junior High School 4 Langgam. The object of this research is the Students' Perception using the Duolingo application in Speaking Activities in State Junior High School 4 Langgam.

Technique of Collecting Data

To collect the data from the sample participant, the researcher used a Questionnaire.

1. Questionnaire

To simplify the data gathering procedure, the researcher using closed-ended questionnaires administered using paper form and distribute it to students. Data collection procedures were conducted in one meeting. The researcher distributed questionnaires to students to fill in. After the students filled in the questionnaires, the researcher asked them to collect them back. The questionnaire was used to measure students' perceptions using the Duolingo application in speaking activities has two categories based on Irwanto (2002) which includes 20 statements, namely 10 positive statements and 10 negative statements of student perceptions of the use of Duolingo which contains several elements in the Duolingo application (Usability, Content, Context, control and Connectivity & mobility) These statements were adapted from previous research conducted by U.Imtinan, V.Chang and T.Issa (2013).

Table I
Blue Print of the Test

No	Indicators	Number of statements	Statements	
			Positive	Negative
1	Usability	4	1,2	11,12
2	Content	4	3,4	13,14
3	Context	4	5,6	15,16

4	Control	4	7.8	17,18
5	Connectivity & mobility	4	9,10	19,20
TOTAL		20	10	10

Every question or statement in the questionnaire have five answer choices. The answer from the respondent writer by giving the checklist on the available questionnaire, there are Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree. For positive (favorable) items, “Strongly Agree” was given score 5, “Agree” was given score 4, “Neutral” was given score 3, “Disagree” was given score 2 and “Strongly Disagree” was given score 1. Meanwhile, for negative (unfavorable) items, “Strongly Agree” was given score 1, “Agree” was given score 2, “Neutral” was given score 3, “Disagree” was given score 4 and “Strongly Disagree” was given a score 5. The questionnaire in this instrument used Likert Scale. According to Sugiyono (2014) claimed that the Likert Scale is used to measure attitudes, opinion and perceptions a person or group of people about social phenomena.

2. Validity

The validity test was carried out before the questionnaire was distributed to the research instrument. Before starting the research, the questionnaire was given to 31 students who were not part of the research sample. After that the questionnaire results were analyzed using Microsoft excel and SPSS 21. To find out whether the questionnaire is valid or not, it must be in accordance with the category, namely $r \text{ count} \geq r \text{ table}$, then the item is declared valid and if $r \text{ count} < r \text{ table}$, the item is declared invalid. To determine the validity of the linkert scale, it is calculated using the Product Moment correlation formula.

3. Reliability

According to Gay et el , Mills, and Arisan (2012), reliability is the the extent to which a test consistently measures whatever it measures. To determine reliability, researchers used the SPSS 21 program to find out whether the test is reliable or not.

Technique of Analyzing Data

To analyze the quantitative data, this study used descriptive statistical methods. This data describes students’ perceptions using the Duolingo application in speaking activities. The questionnaire answers was analyzed descriptively using SPSS 21 and Microsoft Excel. Participants are instructed to select one Likert scale answer in each area based on the statement. After the data is collected, the researcher will conduct an analysis to determine the results. In analyzing the data, researchers used the Likert scale interval level classification.

FINDINGS AND DISCUSSION

The questionnaire distributed to students has five categories consisting of strongly agree, agree, neutral, disagree and strongly disagree. The score for the positive (favorable) category "strongly agree" is 5, "agree" is 4, "neutral" is 3, "disagree" is 2 and "strongly disagree" is 1.

And for the negative (unfavorable) category "strongly agree" is 1, "agree" is 2, "neutral" is 3, "disagree" is 4 and "strongly disagree" is 5.

The score obtained from 37 respondents with a total of 2,714, the mean score obtained is 73.35. It can be concluded that students' perception using the duolingo application in speaking activities is categorized into the positive category.

Based on the findings, students' perceptions about the usefulness of the duolingo application are 22 Students (59.5%) answered strongly agree, 8 Students (21.6%) answered agree and 7 Students (18.9%) answered neutral. And there are no students who answer disagree and strongly disagree. From the table above, it shows that the highest frequency is 22 Students (59.5%) strongly agreeing with the questionnaire. The researcher concluded that students strongly agree that the duolingo application is easy to use and easy to understand.

It can be described that students' perceptions of difficulties in duolingo are 7 Students (18.9%) answered strongly agree, 4 Students (10.8%) answered agree, 3 Students (8.1%) answered neutral, 15 Students (40.5%) answered disagree and 8 Students (21.6%) answered strongly disagree. This statement is a Negative (unfavorable) statement where the score is the opposite of the Positive (favorable) score. From the negative (unfavorable) statement above, the highest percentage is 40.5% (15 Students) disagreeing with the questionnaire statement. Researchers concluded that students felt that the duolingo application was easy to understand.

With regard to students' perceptions of the usefulness of duolingo in negative (unfavorable) statements can be seen in the percentage, namely 3 Students (16.2%) answered strongly agree, 3 Students (8.1%) answered agree, 5 Students (13.5%) answered neutral, 10 Students (27.0%) answered disagree and 13 Students (35.1%) answered strongly disagree. From the negative statement, the highest percentage was 35.1% (13 Students) who strongly disagreed. The researcher concluded that the voice in the speaking feature in the duolingo application is clear.

Table I
The Frequency Distribution Students Perception

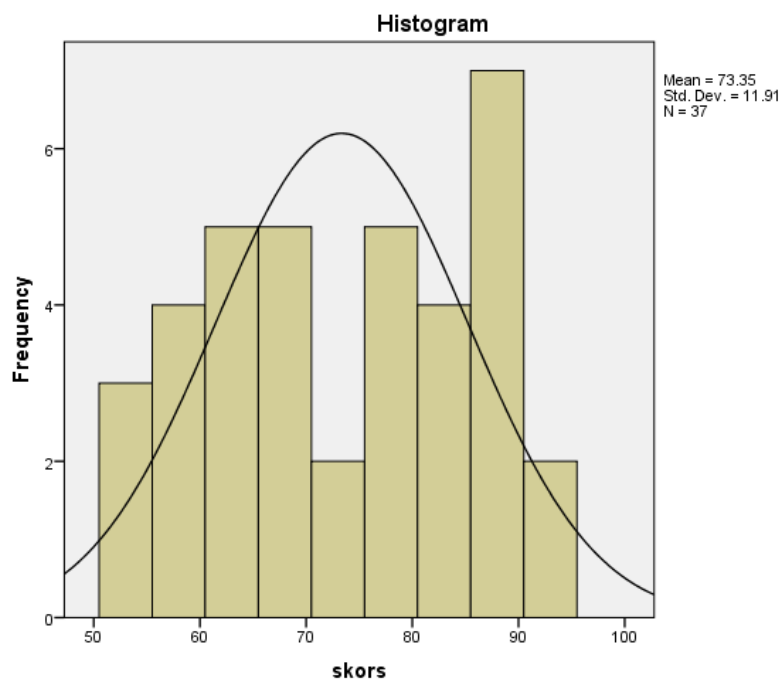
	Frequency		Percent	Valid Percent	Cumulative Percent
Valid	53	1	2.7	2.7	2.7
	55	2	5.4	5.4	8.1
	56	1	2.7	2.7	10.8
	58	1	2.7	2.7	13.5
	60	2	5.4	5.4	18.9
	61	1	2.7	2.7	21.6
	63	1	2.7	2.7	24.3
	64	1	2.7	2.7	27.0
	65	2	5.4	5.4	32.4
	67	2	5.4	5.4	37.8
	68	3	8.1	8.1	45.9
	74	2	5.4	5.4	51.4
	76	1	2.7	2.7	54.1

77	2	5.4	5.4	59.5
78	1	2.7	2.7	62.2
79	1	2.7	2.7	64.9
83	2	5.4	5.4	70.3
84	1	2.7	2.7	73.0
85	1	2.7	2.7	75.7
86	2	5.4	5.4	81.1
87	5	13.5	13.5	94.6
91	1	2.7	2.7	97.3
93	1	2.7	2.7	100.0
Total	37	100.0	100.0	

Based on the table above, it can be seen that the total number of students is 37 students. The highest score is 93 and the lowest score is 53. The highest frequency is 5 at a score of 87. The lowest frequency is 1. The researcher illustrates it in the form of the following histogram obtained from the output of the SPSS version 21 program.

Figure 1.

The Histogram of students' perception about using the Duolingo Application in Speaking Activities



Based on the above figure, it can be seen that the total number of students is 37 students. The average value (mean) is 73.35 and the standard deviation is 11.91.

Data on students' perceptions using the duolingo application in speaking activities were obtained from students' questionnaire scores consisting of 20 items.

Table II
Description of questionnaire data

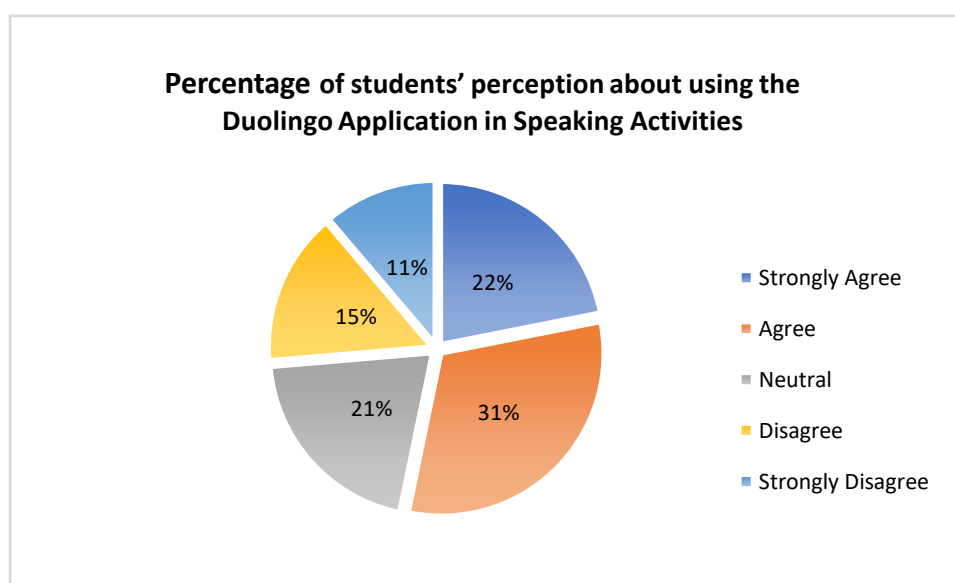
Indicators	Item	SA	A	N	D	SD
Usability	I like Duolingo because it is easy to use and easy to understand	22	8	7	0	0
	I like Duolingo because the speaking materials are very easy and fun	5	22	10	0	0
	I found the duolingo App difficult to understand	7	4	3	15	8
	I think the voice on the speaking feature in duolingo is not clear	6	3	5	10	13
Content	I like Duolingo because the content is related to my daily activities	5	26	6	0	0
	The features available in the duolingo application make my English start to improve from before	8	24	5	0	0
	I find the Speaking material in duolingo very difficult	4	4	10	14	5
	In my opinion, the duolingo app is not suitable for school-level students	6	6	4	13	8
Context	Speaking practice with Duolingo makes me more confident speaking English in front of the class	7	25	5	0	0
	I like Duolingo because it relates to my learning experience	9	20	8	0	0
	I felt terrified when I started the speaking feature in the duolingo app	7	2	15	7	6
	I don't understand the subject matter in duolingo because I haven't studied it before	7	9	3	10	8
Control	I like Duolingo because it has a reward system when I complete the exercises	10	14	13	0	0
	I like Duolingo because it has a study reminder feature	10	22	4	1	0
	The duolingo app does not provide feedback on each exercise	7	2	5	10	13
	I often forget to open the duolingo app because there is no daily study reminder	6	5	11	9	6
Connectivity & mobility	I like Duolingo because it is flexible, can be used anytime and anywhere	4	17	13	3	0
	I like Duolingo because it's free to access and only requires a data plan	22	8	7	0	0
	The subject matter in duolingo makes me feel confused	2	7	7	12	9
	I can't access duolingo because it's a paid app	8	4	10	8	7
		162	232	151	112	83

TOTAL	740
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From the table above, it shows that the percentage of students' perceptions on using the duolingo application in speaking activities can be seen in the chart below:

Figure I1

Percentage of Percentage of students' perception about using the Duolingo Application in Speaking Activities



The above figure indicated that the total percentage of strongly agree is 22% (162 Answer), agree 31% (232 answer), Neutral 21% (152 answer), disagree 15% (112 answer) and strongly disagree 11% (83 answer). From the chat above, it shows that most students with a total of 53% have a positive perception of speaking activities in using the duolingo application.

Furthermore, it is known that the total number of alternative answers from 20 questionnaire statement items is 740 times, while those who chose the answer strongly agreed 162 times, the answer agreed was 232 times, the neutral answer was 151 times, the answer disagreed 112 times and the answer strongly disagreed 83 times.

Because the overall score percentage of 67.5% and mean 77.35 is in the range of 60% - 79%, it can be concluded that the perception of class VIII students towards speaking activities using the duolingo application at SMPN 4 Langgam is classified as Positive.

DISCUSSION

This study was conducted to describe the use of Duolingo application on speaking activities based on students' perceptions. Data was collected from 37 respondents who participated in December 2023. For the research question, the overall results of the questionnaire showed that 22% strongly agreed, 31% agreed, 21% Neutral, 15% disagreed and

11% strongly disagreed. The 5 aspects that cover all facets of Duolingo include usability, content, context, control, and connectivity & mobility. The students were given 10 positive and 10 negative statements related to these 5 aspects, and almost all agreed that they liked the Duolingo app because the things in it fit into these 5 aspects.

Based on data analysis from the questionnaire, it can be seen that the percentage of students' perceptions using the duolingo application in speaking activities is included in the positive category with a total score percentage of 67.5% and mean is 73.35. This is supported by U.Imtinan, V.Chang and T.Issa (2013), who found that students' perceptions of using Duolingo in terms of usability, content, context, control, connection and mobility were positive.

CONCLUSIONS

Based on the results of research and data analysis through questionnaires that have been conducted on students' perception using the duolingo application in speaking activities at SMPN 4 Langgam amounted to 67.5%. Because the score is in the range of 60% - 79%, it can be concluded that students' perceptions using the duolingo application in speaking activities at SMPN 4 Langgam are included in the Positive Category. With a total of 37 students and the Mean Score of eighth grade students' perceptions using the duolingo application in speaking activities at SMPN 4 Langgam is 73.35. Based on student perception data, it can be seen that students agree that speaking activities in this duolingo application are categorized as positive.

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