

DIGITAL LANGUAGE LEARNING THROUGH DUOLINGO: A SURVEY STUDY OF TENTH-GRADERS

Reni Oktariani¹, Jenny Elvinna Manurung², Nita Ria, & Gaya Tridinanti³

^{1,2&3} Tridinanti University

Renioktariani1610@gmail.com, Jenny.EM@univ-tridinanti.ac.id, nitaria@univ-tridinanti.ac.id, gaya@univ-tridinanti.ac.id

ABSTRACT: The rapid development of technology, particularly in the post-COVID era, has significantly expanded individuals' perspectives, especially in the realm of education. Technology has enabled greater access to information, and numerous advanced applications are now available to specifically support the improvement of language skills. The Duolingo application is one of the technological tools that can help students become more proficient in English, and it also supports educators by offering ways to uphold the idea of technology-assisted language learning. This study aimed to investigate students' perceptions of using Duolingo. The population of this study consisted of tenth-grade students at SMA Swasta Sukajadi during the 2023/2024 academic year. The research sample consisted of 106 students, representing classes XA, XB, and XC at SMA Swasta Sandika Sukajadi. The research findings present the results of a descriptive analysis of students' perceptions. Five aspects of students' perceptions regarding the use of the Duolingo application in English learning. The data were collected using a questionnaire. The students' perceptions were divided into two major categories: positive and negative perceptions. Based on the findings, it can be concluded that the use of the Duolingo application significantly enhances the effectiveness and utility of English language learning. Most students demonstrated a higher level of interest in engaging with English learning through the Duolingo application.

Keywords: *perception, English learning, Duolingo application*

PEMBELAJARAN BAHASA DIGITAL MELALUI DUOLINGO: SEBUAH STUDI SURVEI TERHADAP SISWA KELAS SEPULUH

ABSTRAK: Perkembangan teknologi yang pesat, terutama di era pasca-COVID, telah memperluas perspektif individu secara signifikan, terutama di bidang pendidikan. Teknologi telah memungkinkan akses yang lebih besar terhadap informasi, dan berbagai aplikasi canggih kini tersedia untuk secara khusus mendukung peningkatan kemampuan berbahasa. Aplikasi Duolingo adalah salah satu alat teknologi yang dapat membantu siswa menjadi lebih mahir dalam bahasa Inggris, dan juga mendukung para pendidik dengan menawarkan cara-cara untuk menjunjung tinggi gagasan pembelajaran bahasa yang dibantu oleh teknologi. Penelitian ini bertujuan untuk menyelidiki persepsi siswa dalam menggunakan Duolingo. Populasi penelitian ini terdiri dari siswa kelas sepuluh di SMA Swasta Sukajadi pada tahun ajaran 2023/2024. Sampel penelitian terdiri dari 106 siswa yang mewakili kelas XA, XB, dan XC di SMA Swasta Sandika Sukajadi. Temuan penelitian ini menyajikan hasil analisis deskriptif persepsi siswa. Lima aspek persepsi siswa mengenai penggunaan aplikasi Duolingo dalam pembelajaran bahasa Inggris. Data dikumpulkan dengan menggunakan kuesioner. Persepsi siswa dibagi menjadi dua kategori utama: persepsi positif dan

negatif. Berdasarkan temuan tersebut, dapat disimpulkan bahwa penggunaan aplikasi Duolingo secara signifikan meningkatkan efektivitas dan kegunaan pembelajaran bahasa Inggris. Sebagian besar siswa menunjukkan minat yang lebih tinggi untuk terlibat dalam pembelajaran bahasa Inggris melalui aplikasi Duolingo.

Kata Kunci: *Persepsi, Pembelajaran Bahasa Inggris, Aplikasi Duolingo.*

INTRODUCTION

The rapid development of technology, particularly in the post-COVID era, has significantly expanded individuals' perspectives, especially in the realm of education. Technology means the development and application of various equipment or systems to solve problems faced by humans in everyday life. The technology is also the result of human thought to develop certain procedures or systems and use them to solve problems in their lives. Lowther et al. (2012) stated that in this digital era, the internet technology has a huge influence on the development of the world of information. Technology has enabled greater access to information, and numerous advanced applications are now available to specifically support the improvement of language skills. Riyanto (2014) explained that technology has a significant impact on education recently, necessitating that educators become knowledgeable about it and stay current by integrating it into the teaching and learning process. In addition, Allen (2021) explained that technology is known to have a positive effect on teaching English and its incorporation into language instruction can give students exposure to the language and greatly enhance the quality of learning. This is also very helpful and motivating for students to increase their enthusiasm for learning.

The environment of English language learning has been reshaped by technology. ICT integration in ELT helps students become more proficient in the language while also preparing them to succeed in a world that is becoming more digitally connected (Jumeidi & Dianti, 2024). While technology has introduced new tasks and responsibilities for educators, it has also created opportunities to enhance creativity, productivity, and engagement in English learning. The requirement to stay current with trends is one of the main problems that technology presents for English learning. Teachers need to be able to modify their teaching strategies to make appropriate use of the continuously evolving new technologies. Although it can be difficult, this is also a chance to learn new things and maintain the relevance and interest of ELT. Davis (2003) wrote that the four language skills, including listening, reading, speaking, writing, and all, can be enhanced with the use of technology.

The first of the language skills is the listening skill. It is an important part of practicing English language skills and has an important impact (Fisher, 2011). Listening is an important skill and ability in learning a new language that students should learn. It is a receptive skill, meaning that students who learn a language receive new words from what they hear. The second, reading skills, is an important way to practice English. Through reading, we will capture many words and store them in our minds to be used when it is time for writing and speaking. The third language learning skill is writing. This skill requires more time, patience, and consistency to learn. Writing is our opportunity to express ideas using the English words we have learnt. Unlike reading and listening, where the language we need to read and hear is already available, writing requires us to create something new. The fourth skill that must be mastered is speaking. Like writing, speaking English also requires producing our own words. According to Fisher (2011, p. 14), speaking in English can be the most challenging skill because English words come straight out of our mouths. Therefore, mastering the four skills in learning English is not easy for students to master the four skills at once; they require media by integrating them into technology. The important role of technology by integrating technology in foreign language acquisition would lead to the easiest way in accordance to fulfill English skills.

However, the use of media and technology in English language learning is improper. Thus, to assist students' understanding of concepts fully and to develop their English language skills, teachers must use the appropriate medium, such as technology integration. Teachers and students can gain from the use of hardware and software technology in English language learning and teaching in several ways, including cost savings, instant access to resources, and rapid learning. Using the Duolingo application is one of the technological tools that can help students become more proficient in English. For teachers looking for a fun and varied way to teach English, they can choose the Duolingo application for learning. Additionally, it supports educators by offering ways to uphold the idea of technology-assisted language learning. Some studies have dealt with the benefits of Duolingo application use. It allows teachers to easily track students' language learning progress, and students can share their language learning progress directly with their teachers, who can then track their progress via a special dashboard (Nushi & Eqbali, 2017). The teachers can track the students' progress, they can plan lessons, assign Duolingo application skills as homework, and assign extra credit points if needed.

In addition, various studies have focused on the implementation of the Duolingo application. It motivates the students continually to progress and break previous records, and students can also compete with their friends. Students can also earn experience points (XP) and pass various levels to earn "LINGOTS" for item purchases and learning bonuses. Apart from being easy to get and very easy to use for English learning practice, Duolingo offers a good balance of translation practice, matching listening, speaking, writing, reading, vocabulary, and pronunciation. Lastly, the voice recognition program is not too bad. According to Hasan et al (2021), it is said that Duolingo can influence students' learning to improve listening. Matra (2020) added that Duolingo brings benefits for training students in listening, especially in English lessons, and the impact can help the students to learn English easily and happily using the Duolingo application. Based on the results of observations by researchers at the SMAS Sandika Sukajadi school, students enjoy using the Duolingo application with various existing features. students feel interested when learning using the Duolingo application, so that learning becomes more fun and not boring.

Therefore, in the previous paragraph, it is assumed that the use of the Duolingo application can help students in learning English. Based on the reason above, the researcher was interested in conducting research entitled: "Students' Perceptions towards Duolingo Application in English Learning at The Tenth Graders of SMAS Sandika".

METHODOLOGY

1. Research Design

This study used a quantitative method by using a survey approach. Cosenza (2013) stated that a survey method was a research method that uses a questionnaire as a research tool and is carried out in big and small populations, but the data studied was from samples drawn from that community. The survey approach serves several purposes, including determining the relative occurrence, distribution, and relationship between variables, both social and psychological. The other definition of survey research is the collection of information from a sample of individuals through their responses to questions. This type of research allows for a variety of methods for recruiting participants, collecting data, and utilizing various instrumentation methods.

Singleton et al (2010) stated that survey research can employ quantitative research strategies (e.g., using numerically rated questionnaires), qualitative research strategies (e.g., using open-ended questions), or both (i.e., mixed methods). They added that surveys were frequently used in social and psychological research because they were used to describe and investigate human behavior. When survey research is used for the right reasons and properly implemented. The sample of the research was 118 students, which consisted of class X A, X B, and X C at SMAS Sandika Sukajadi. However, in collecting the data, the students who completed the questionnaire were only 106 students.

2. Techniques for Collecting the Data

The data collection in this study used a closed-ended questionnaire technique as a data collection method. In this study, the researchers used only a questionnaire to collect the data. For the instrument, the researcher distributed questionnaires to all respondents. McLeod (2018) stated that the questionnaire is a research tool consisting of a series of questions designed to obtain information from respondents. The questionnaire is a data collection method carried out by providing several types of questions related to the research problem. According to Sugiyono (2017), a questionnaire is a data collection method carried out by collecting written questions or statements for respondents to answer. To collect a piece of information regarding students' perceptions, the researchers used indicators for the students' perceptions. These indicators are elaborated into items or statements in the questionnaire. It had been distributed online through a Google form. There were 24 items in the questionnaire using 5 5-point Likert scale. To determine the percentage of the analyzed topics, closed-ended questions were used. From that, the obtained responses were calculated, analyzed, and described. Next, the Likert scale measurement was used to calculate the data score of questionnaire results. Table 1 below presents the Likert Scale used by the researchers.

Table 1. The Likert Scale

Options	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

3. Techniques for Analyzing Data

The data was analyzed by using descriptive statistics. The descriptive data is presented by using the percentage results (Apuke, 2017). Percentage analysis refers to a special kind of rate; percentages are used in making comparisons between two or more series of data. The formula to describe the variable is shown in the figure below.

According to Apuke (2017), data analysis techniques are the process of systematically searching to obtain data. Quantitative data analysis is the process of simplifying data into a form that is easily interpretable so that it is easier to understand. The data analysis process is presented in Figure 1 below.

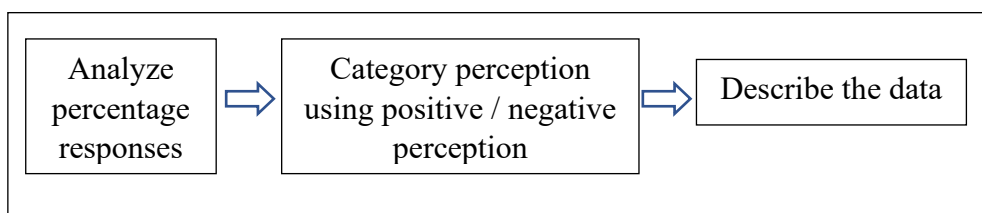


Figure 1. Data Analysis Process

The negative or positive perception of students towards the Duolingo application in English learning was known based on the answers of 106 active students as respondents who were still taking courses and experiencing online learning directly, with an average choice of answers ranging from 50% to 100%. If the respondent's choice answers did not reach 50%, then the students' perceptions that had taken place online were in the poor category (Ary et al, 2009). Table 2 presents the categories of the perception questionnaire.

Table 2. Category of Perceptions

Perception	Category for Strongly Agree + Agree
Positive	50% - 100%
Negative	Less than 50%

FINDING AND DISCUSSION

The research findings describe the results of a descriptive analysis of students' perceptions. Five aspects of students' perceptions of the Duolingo application in English learning were assessed in this questionnaire. The researcher selected three classes of tenth graders students from SMAS Sandika Sukajadi, totaling 106 students. The students completed the questionnaire by reviewing the answer provided via the Google form link. The questionnaire items were written in English and translated into Indonesia. The results of the percentage analysis is presented in Table 3 below.

Table 3. Result of Percentage Analysis

No	Question	SA	A	Perception	
				Percentage of SA+A	Category
Ease of Using and Learning using Duolingo					
1.	I think Duolingo is easy to access, whether from my mobile phone or laptop.	24.5%	61.3%	85.8%	Positive
2.	I feel Duolingo features are easy to use and to interact with other users.	40.6%	50.9%	91.5%	Positive
3.	I think it is convenient to practice English through Duolingo since I can access it anytime and anywhere.	38.7%	51.9%	90.6%	Positive
Usefulness of Learning English through Duolingo					
4.	I think Duolingo features are varied, interesting, and useful.	42.5%	45.3%	87.8%	Positive
5.	I feel Duolingo gives me opportunities to enhance my English outside the classroom.	47.2%	36.8%	84%	Positive

6.	I think Duolingo is helpful to improve my English skills.	55.7%	34%	89.7%	Positive
7.	I feel Duolingo is useful to practice my English skills.	41.5%	50%	91.5%	Positive
Effectiveness and Language Improvement using Duolingo					
8.	I think Duolingo is an effective way to improve my English anytime and anywhere.	44.3%	39.6%	83.9%	Positive
9.	I learn to practice reading and writing through Duolingo.	48.1%	41.5%	89.6%	Positive
10.	I practice hearing and speaking through Duolingo.	51.9%	36.8%	88.7%	Positive
11.	I learn grammar and structure through Duolingo.	54.7%	27.4%	82.1%	Positive
12.	I practice translating words and sentences through Duolingo.	37.7%	39.6%	77.3%	Positive
13.	I think Duolingo enriches my vocabulary.	47.2%	39.6%	86.8%	Positive
14.	I believe that my achievement is possible increased after the use of Duolingo.	44.3%	42.5%	86.8%	Positive
Attitudes towards Learning English using Duolingo					
15.	I think doing an assignment through Duolingo is more fun.	45.3%	40.6%	85.9%	Positive
16.	I think using Duolingo develops self-learning skills among students because we can measure our progress on Duolingo.	34.9%	42.5%	77.4%	Positive
17.	I feel learning English through Duolingo makes English more interesting.	46.2%	35.8%	82%	Positive
18.	I have a positive attitude towards learning English through Duolingo.	50%	38.7%	88.7%	Positive
19.	I think using Duolingo makes learning English easy.	44.3%	42.5%	86.8%	Positive
20.	I feel Duolingo encourages me to spend more time learning English.	45.3%	37.7%	83%	Positive
21.	I enjoy when I am learning English through Duolingo.	44.3%	43.3%	87.6%	Positive
Enhancing Students' Learning Motivation using Duolingo					
22.	I feel motivated to play Duolingo when I find that my friends get a higher score than me.	48.1%	35.8%	83.9%	Positive
23.	I feel Duolingo can increase my motivation in learning English.	53.8%	33%	86.8	Positive
24.	I feel motivated to practice my English skills through Duolingo outside the classroom.	44.3%	31.1%	75.4%	Positive

Due to the percentage analysis results, it can be said that the majority of students responded positively to the perception questionnaire because the average student's choice of each questionnaire item is greater than 50%.

Especially, for the first aspect of ease of use and learning through the use of Duolingo, it showed a positive response because the highest score above 30%, which stated 61.3% of students agreed on using the Duolingo application in English learning. In addition, the result of the first developed in 2011 by Luis Von Ahn and Severin Hacker shows that the performance expectancy from using the Duolingo application also showed a positive result was 5.9%, with the highest percentage.

Second, the result of the percentage analysis from the usefulness of learning English through Duolingo revealed that the highest score 50% students agreed that Duolingo is useful to practice English skills. Meanwhile, 45.3% of students agreed that Duolingo features are varied, interesting, and useful. Meanwhile, 36.8% feel Duolingo gives us opportunities to enhance our English outside the classroom. This result showed that in this aspect, showed positive result was 5.9% with the highest percentage.

Third, based on the result of the percentage analysis of Effectiveness and language improvement with Duolingo, it was revealed that 42.5% of 106 students agreed that achievement is possible to increase after the use of Duolingo. It means that students have a positive perception response about using the Duolingo application in English learning, with a result was 5.9%, with the highest percentage

Fourth, the result indicates that the aspect for attitudes towards learning English using Duolingo, 43.3% enjoy learning English through Duolingo. It concluded that positive response for Attitudes towards learning English with Duolingo, with the result being 5.9% with the highest percentage

Fifth, the result indicates that the aspect enhancing students' learning motivation using Duolingo, 35.8% feel motivated to play Duolingo when they find that my friends get higher scores. The data showed that most students were actively involved in English learning, with a result was 5.9%, with the highest percentage. Due to its influence on learners' engagement, effort, and achievement, motivation is crucial in language acquisition. In their pursuit of knowledge, motivated language learners are more tenacious, proactive, and creative (Abror & Setiawan, 2024).

In conclusion, from Easiness of using and learning with Duolingo (61.3%), usefulness of learning English through Duolingo (50%), Effectiveness and language improvement using Duolingo (42.5%), Attitudes towards learning English by Duolingo (43.3%), Enhancing students' learning motivation with Duolingo (35.8%). Based on the result above can conclude that using the Duolingo application is more effective and useful for English learning.

CONCLUSION

This research investigated students' perceptions of using the Duolingo application at SMAS Sandika Sukajadi. The students' perceptions were divided into two major categories: positive and negative perceptions, with the use of the Duolingo application in English learning.

Based on the study's findings, most students were more interested in English learning using the Duolingo application. Some students may be able to directly know their final score by using the Duolingo application. Some of them used the Duolingo application all over the place.

REFERENCES

- Abror, K., & Setiawan, H. (2024). The relationship between the use of social media as an English learning media and students' learning motivation of the eleventh graders. *Didascein: Journal of English Education*, 5(1), 18–29. <https://doi.org/10.52333/djoe.v5i1.343>.
- Allen, Grant. (2021). *Android for Absolute Beginners*. New York: A press
- Apuke, O. (2017). *Quantitative Research Methods: A Synopsis Approach*. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 6, 40–47. <https://doi.org/10.12816/0040336>
- Ary, et al. (2010). *Introduction to Research in Education, 8th Edition*. California: Wadsworth Publishing.
- Bambang Riyanto. (2014). *Dasar-Dasar Pembelanjaan Perusahaan, Edisi. Keempat, Cetakan Ketujuh*, BPFE Yogyakarta.
- Cosenza, F. &. (2013). *Design and Evaluation of survey questions*. Los Angeles: SAGE Publication.
- Davis, F. D. (2003). *Acceptance of Information Technology*. *MIS Quarterly*, Vol. 13(3): 319-339.
- Fisher, M.H. (2011) *Factors Influencing Stress, Burnout, and Retention of Secondary Teachers*. *Current Issues in Education*, 14, 1-37.
- Hasan, M., Milawati, Darodjat, Harapan, T. K., Tahrin, T., Anwari, A. M., Indra, I. M. (2021). *Media Pembelajaran*. Klaten: Tahta Media Group.
- Jumeidi, A. & Dianti, R. (2024). Leveraging Vlog to enhance secondary school students' speaking performance. *Didascein: Journal of English Education*, 5(1), 62–69. <https://doi.org/10.52333/djoe.v5i1.698>.
- Lowther, D. L., Inan, F. A., Ross, S. M., & Strahl, J. D. (2012). *Do one-to-one initiatives bridge the way to 21st century knowledge and skills?*. *Journal of Educational Computing Research*, 46(1), 1-30.
- Matra, S. D. (2020). Duolingo Applications as Vocabulary Learning Tools. 1(1), *Journal of English Literature, Linguistics, and Education*. Vol. 1 No. 1, February 2020, pp (46-52). Universitas Pekalongan, Pekalongan, Indonesia.
- Mcleod, S. (2018). *Erik Erikson's stages of psychosocial development*. Retrieved July 06, 2021, from <https://www.simplypsychology.org/Erik-Erikson.html>
- Nushi, M., & Egbali, M. H. (2017). Duolingo: A mobile application to assist second language learning (*App. Teaching English with Technology*, 89-98.

Singleton, Tommie W. and Singleton, Aaron J. (2010). *Fraud Auditing and Forensic Accounting Fourth Edition*. United State of America: John Willey & Sons, Inc.

Sugiyono. (2017). *Metode Kuantitatif, kualitatif, dan Bandung: Alfabeta, CV. Penelitian R&D*. Bandung: Alfabeta, CV.