

Students' Perceptions of Duolingo Mobile Assisted Language Learning (MALL) in Learning English Vocabulary

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Abstract

This study aimed to find out the students' perceptions of Duolingo Mobile Assisted Language Learning (MALL) in learning English vocabulary. This study involved 32 seventh-grade students from SMPN 1 Pangkajene during the academic year 2022/2023. Descriptive quantitative was used to carry out the study. This study's data was analyzed using quantitative data from a questionnaire. The questionnaire consisted of 30 closed-ended questions. The study found that the Duolingo application positively impacted students' language learning, particularly in acquiring new vocabulary. Students are becoming more enthusiastic to learn and are practicing and using their language skills in everyday circumstances. Furthermore, after using the Duolingo app, students' vocabulary and ability to recall it rapidly improve, as do structure and pronunciation, making it easier for students to improve their English language acquisition. Students found the app easy, helpful, and enjoyable for their English language learning practice. They prefer it over traditional book-based homework due to its convenience, accessibility in various formats, especially mobile, and gamification. The application's success is attributed to its varied prompts skill-interleaving lessons gamification aspects and diverse lesson content perceived by the students.

Keywords: Duolingo, Mall, English Vocabulary, Perception.

1. Introduction

Several factors affect and influence the process of learning English as a second language, including the exceptional skills of teachers and students, their methods and approaches, and the media that best meets their needs. All languages require vocabulary, which helps in language learning and reading comprehension. Vocabulary is an essential component of all languages. Thornbury (2002) defines vocabulary as "words or sentences that contain meaning." It is utilized to express and absorb information. If the speakers do not understand the meaning of the words, they will be unable to comprehend the information offered. This is why vocabulary is so important in language. According to Hatch and Brown (1995), a language's vocabulary is a collection of expressions that its speakers utilize. Students need a wide vocabulary to communicate effectively. However, the limited vocabulary of many students makes learning boring and reduces their desire to learn. To help students increase their vocabulary in English, teachers should employ creative approaches and engaging materials. Students can use a variety of techniques to help them learn English, such as signing up for English classes or extracurricular activities in their free time or studying independently. Students' English competence or skill is developed and improved through English classes or supplemental instruction. Technology in the digital era 4.0 is advancing quickly, making education in this new era very beneficial for both teachers and students. The use of technology in educational settings is widespread, and efforts are being made to improve the amount of digital learning that is freely available to all users via an internet connection. By enabling

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students to study a foreign language independently and at any time, mobile-assisted language learning (MALL) has expanded the usability of mobile technology (Reinders & Benson, 2017). Students could simulate, imagine, and interact with scientific systems, processes, and models with this device, which may also encourage and enable Internet service prioritization and authentication. Mobile-Assisted Language Learning (MALL) is the use of mobile technology in language learning, particularly where the device's portability is favorable, according to Kukulska-Hulme (2013).

This technology has advanced and produced a wide range of products that can help students learn languages. Mobile devices can assist with Internet service priority and authentication as well as replicate, imagine, and interact with scientific systems, processes, and models. They are one of the most prevalent and significant senses in daily life. The accessibility of mobile technology has improved MALL by enabling students to study a foreign language on their own at any time and from any location. To advance to the next level, English language learners can use the well-known mobile-assisted language learning (MALL) program Duolingo to become fluent in the language. A well-known Mobile-Assisted Language Learning (MALL) app that may be used on its own is Duolingo (Settles & Meeder, 2016). Each level has a variety of assignments ranging from easy to difficult and requiring four different English learning skills. Gamified settings increase student motivation and engagement, according to prior research. The Duolingo software has been effective in boosting students' vocabulary, enhancing their ability to write simple phrases, and assisting learners as they increase their vocabulary. At this university, mobile device use in English instruction is not, however, a common practice. The purpose of the study was to find out what students thought of Duolingo Mobile Assisted Language Learning (MALL) when learning English vocabulary. For pedagogical objectives, the school supplied appropriate technology facilities such as Wi-Fi access and smartphone usage. The goal of the study was to establish a pleasant learning environment and to explore the students' perceptions of MALL on English vocabulary knowledge. The study question is: How do students perceive Duolingo Mobile Assisted Language Learning in terms of increasing students' vocabulary mastery?

2. Methodology

This study utilizes descriptive quantitative research. To address the study question, the researcher employed questionnaires. There are 30 statements on the questionnaire. To design and modify a closed-ended questionnaire survey, Inayah et al. (2020) and Astarilla (2018) created and changed the closed-ended questionnaire survey 5 scales. 352 seventh-grade students from eleven classrooms of SMPN 1 Pangkajene made up the population. Purposive sampling was performed, and the study sample consisted of 32 students from Class VII. According to Creswell (2017), purposive sampling determined that the people sought to gain familiarity, understanding, and insight into the phenomenon under study.

3. Findings

The results of this study aimed to find out the students' perception of using Duolingo Mobile Assisted Language Learning (MALL) results and findings are presented below:

Perception is the cognitive process of understanding and observing an event or environment through sight, hearing, and other senses. It involves the ability to see, hear, feel, express, or understand one's physical and cognitive feelings about their environment throughout social life. Experts like Stone and Nielson (1982) and Elliot (1996) define perception as the intellectual organization of sensory stimuli associated with specific people and objects. Perception is a cognitive process that takes time and effort to form opinions. Students need to be experienced to form opinions, as they remember past events and objects in their life scenarios.

In this study, a questionnaire was employed to answer the research question. On February 28, 2023, data were collected from 32 students who answered a 30-item closed-ended questionnaire. On a Likert scale, students assessed their agreement with the questionnaire statements strongly agree (SA), agree (A), neutral (N), disagree (D), and strongly disagree (SD) to know how the students perceived this application. The data was given as a consequence of the four indicators established to answer the study question. New learning resource, the simplicity, and utility of

learning with the Duolingo app, improving student learning motivation using Duolingo. In the form of percentages, student replies were thoroughly examined. Various data points can be described below.

Table 1. New Learning Tool

Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	N	P	N	P	N	P	N	P	N	P
Identifying additional study tools for English learning difficulties is crucial for effective learning.	-	-	1	3,1 %	11	34%	12	38%	8	25%
Duolingo app offers intriguing learning technologies; eager to utilize them.	-	-	-	-	-	-	12	38%	20	63%
Duolingo is a useful tool for learning English.	-	-	-	-	-	-	20	63%	12	38%

As evident from the table, the study found that 25% of students strongly agree, 38% agree, 34% are neutral, and 3.1% seek additional learning resources for language learning problems. Students were highly satisfied with Duolingo, as it was entertaining and useful for learning English. Additionally, 38% agree and 63% strongly agree. Duolingo is a useful tool for learning English, according to 63% of students, with 38% strongly agree.

Table 2. Easiness and Usefulness of Learning through Duolingo App

Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	N	P	N	P	N	P	N	P	N	P
Since it fits my learning approach, I utilize the Duolingo program.	-	-	-	-	4	13%	13	41%	15	47%
I admire the Duolingo app because it provides a range of activities (for example, practice questions are organized by skill level).	-	-	-	-	-	-	7	22%	25	78%
I enjoy the Duolingo application because it provides enough conversational and effective practice.	-	-	-	-	-	-	9	28%	23	72%
I understand what is shown in the Duolingo app since it provides straightforward information/materials/questions.	-	-	-	-	5	16%	21	66%	6	19%
I prefer the Duolingo app activities because they inspire creative, original, and independent responses.	-	-	-	-	2	6,3%	21	66%	9	28%
I need to focus on practicing the skills that I need, and the Duolingo program provides the essential resources.	-	-	-	-	2	6,3%	10	31%	20	63%
I enjoy using the Duolingo app because it makes English learning more engaging and pleasurable.	-	-	-	-	4	13%	7	22%	21	66%
I don't find it tough to use the Duolingo app because it is simple to use even for inexperienced users.	-	-	4	13%	11	34%	12	38%	5	16%

Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	N	P	N	P	N	P	N	P	N	P
I comprehend the language used in the Duolingo program since it is tailored to the skill level of the learners.	-	-	-	-	4	13%	19	59%	9	28%
I like the Duolingo app because I can learn whenever and wherever I choose.	-	-	-	-	-	-	8	25%	24	75%
Duolingo encourages me to learn English independently	-	-	2	6,3%	7	22%	16	50%	7	22%

The questionnaire findings, as shown in the table above, are absolutely compatible with the percentages of students who replied and agreed that Duolingo is extremely beneficial in developing their study abilities. They found Duolingo effective for English practice since it matched their approach to learning, the features were simple to access, and they could use it at any time and from any location. In other words, users had no problem using the capabilities of Duolingo and learning English. The majority of students also believed that the Duolingo program helped them acquire knowledge of English in a variety of ways. Almost half of the respondents believed that the features of Duolingo were useful, beneficial, and entertaining. Additionally, they agree that Duolingo may help them improve their English. This suggests that the majority of students believe Duolingo can be utilized outside of the classroom at any time and from any location.

Table 3. Language Improvement through the use of Duolingo

Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	N	P	N	P	N	P	N	P	N	P
When I'm having difficulty studying English, I'm looking for more learning resources.	-	-	-	-	3	9,4%	20	63%	9	28%
Duolingo may provide me with several options to improve my English.	-	-	-	-	-	-	3	9,4%	29	91%
I frequently use the Duolingo app to study grammar or structure.	-	-	-	-	7	22%	17	53%	8	25%
I frequently practice translating words and sentences using the Duolingo program.	-	-	1	3,1%	2	6,3%	8	25%	21	66%
My experience with the Duolingo program has helped me to expand my vocabulary.	-	-	-	-	-	-	6	19%	26	81%
Duolingo encourages me to devote more time outside of the classroom to learning English.	-	-	-	-	2	6,3%	7	22%	23	72%
Studying English on a smartphone using Duolingo is more enjoyable than in a classroom.	-	-	-	-	-	-	8	25%	24	75%
I can boost my vocabulary using Duolingo	-	-	-	-	-	-	5	16%	27	84%
Duolingo allows me to practice translating words and phrases.	-	-	-	-	-	-	5	16%	27	84%

Duolingo may be used to practice reading, writing, listening, and speaking abilities, as shown in the table above. Students may also use Duolingo to study grammar and translate. Another factor to consider is that 84% of students felt that the application allowed them to enhance their vocabulary and that they may use it to practice translating phrases and words. This is supported by the statement that five participants agreed with these statements. 91% of students completely agree that Duolingo provides many opportunities to learn English. This means that students have more opportunities to learn English. While there were some aspects that participants felt improved, students felt that using her Duolingo application greatly improved their vocabulary acquisition.

Table 4. Improving Student Learning Motivation Through the Use of Duolingo

Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	N	P	N	P	N	P	N	P	N	P
	Duolingo app helps users find necessary learning resources by promoting their needs.	-	-	-	-	3	9,4%	15	47%	14
Duolingo app provides relevant English language information for students, enhancing their learning experience.	-	-	-	-	1	3,1%	8	25%	23	72%
I truly love using the Duolingo app since the lessons are fascinating, hard, and motivational.	-	-	-	-	5	16%	9	28%	18	56%
Duolingo app offers diverse subjects and information, making it enjoyable and never bores users.	-	-	-	-	3	9,4%	8	25%	21	66%
I feel that utilizing the Duolingo app will help me learn more effectively.	-	-	-	-	7	22%	17	53%	8	25%
After using the Duolingo program, I became more interested in furthering my English language studies.	-	-	-	-	2	6,3%	11	34%	19	59%
I prefer practicing English with the Duolingo app on my smartphone over other media/apps since it is more engaging and entertaining.	-	-	-	-	2	6,3%	23	72%	7	22%

Based on the information shown above, it is possible to infer that most students use the Duolingo app for studying because of its personalized learning tools, which ensure they fit their own distinctive English learning requirements. 72% of students strongly agree that the app meets their English learning needs, making it easier for both beginners and intermediate learners. 72% of respondents agree with the statement “I prefer practicing English with the Duolingo app on my smartphone over other media/apps since it is more engaging and entertaining”. The wide range of topics and content ensures that Duolingo is never boring stated by 66% of students, engaging, challenging, and motivating the students through this application. This variety of content may increase enthusiasm for language study and improve educational endeavors.

In conclusion, while utilizing the Duolingo program to study English has certain limits, the advantages to students' learning activities outweigh the drawbacks. Finally, the questionnaire found that the majority of students thought the Duolingo program was useful for learning English. They both think that this is good software for improving their English abilities and increasing their drive to study English.

4. Discussions

The Duolingo app made learning easier and easier to use with new learning tools, increased language abilities, and inspired students. The majority of students (63%) believed that Duolingo is a beneficial tool for learning English,

with 38% strongly agree. In terms of ease of learning and usefulness of the Duolingo app, the majority of students feel that Duolingo is beneficial in enhancing their study abilities. The app fits their learning style, its features are simple to use, and it is suitable for both indoor and outdoor study. The Duolingo app is ideal for both indoor and outdoor studying as long as an internet connection is available. The application is also successful because of how the courses are provided, with quick, varied prompts mixed with other talents. According to Brown, Roediger, and McDaniel's (2014) research, these tactics, along with spaced repetition, boost learning efficiency.

The majority of students agree that they like studying using the Duolingo app since the learning resources provided by Duolingo fulfill their needs. The content on the Duolingo app is sufficiently varied, keeping learners engaged, stimulated, and driven. The diverse information on the Duolingo program is diverse. The data questionnaire for this study revealed good impressions of using the Duolingo app to learn English, providing various benefits to help students learn. The Duolingo app is a wonderful program for learning a new language, and its features help users feel comfortable and calm while learning. The majority of students believe Duolingo to be an efficient and entertaining approach to learning English.

The findings support Siregar's (2019) assertion that the Duolingo program enhances students' vocabularies and inspires them to study languages. The Duolingo app also helps students improve their vocabulary, pronunciation, and grammatical structures. The Duolingo app provides various benefits to students studying English, resulting in some areas of their English learning increasing. The researchers found that the Duolingo app might have a considerable influence on students' vocabulary knowledge, making studying more enjoyable by making it simple to learn new vocabulary and using interesting picture elements to help students grasp the meaning. Students can acquire language at any time and from any location without becoming bored. The vocabulary test results after treatment were greater than before they learned the Duolingo applications, indicating that students benefit from using the Duolingo app. Overall, while there are some disadvantages to learning English with the Duolingo program, the benefits significantly boost students' learning activities.

5. Conclusion

The researcher concluded the following conclusions based on the findings and discussion offered in the previous section: The Duolingo app is a good tool for learning English as perceived by students due to its positive effects on learning new words, as evidenced by the study's findings, which show that many student responses agree or strongly agree with both statements summarizing the benefits and drawbacks of the Duolingo program for growing vocabulary. According to the results of the data questionnaire in this study, students enjoy using the Duolingo application to learn English and consider it to have numerous benefits that foster students' learning. They all believe that the Duolingo app will help them strengthen their excitement for studying English since it is a competent tool for learning languages, and because of the features it offers, students feel at ease and that learning is enjoyable when using it. The vast majority of students believed that using Duolingo to learn English was both effective and entertaining.

References

- Aliaga, M., & Gunderson, B. (2002). *Interactive statistic*. Thousand Oak, CA: Sage Publication.
- Amin, S. (2021). *Gamification of Duolingo In Rising Student's English Language Learning Motivation*. *Jurnal Bahasa Lingua Scientia*, 13(2). Retrieved from <http://ejournal.iain-tulungagung.ac.id/index.php/ls/article/view/3972>
- Astarilla, L. (2018). *University students' perception towards the use of Duolingo application in learning English*. *Prosiding CELSciTech*. 3, 1-9.
- Atmowardoyo, H., & Sakkir, G. (2021). Effects of best-practice based materials in receptive language learning behaviours in improving receptive language skills. *Linguistics and Culture Review*, 5(S1), 1313-1334.

- Brown, P. C., Roediger III, H. L., & McDaniel, M. A. (2014). *Make it stick*. Cambridge, MA: Harvard University Press.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approach*. Sage.
- Creswell. (2012). *Design qualitative, quantitative, and mixed methods approach*. California: SAGE Publications, Inc.
- Dollah, S., Sehuddin, M., & Sakkir, G. (2021). Motivating EFL Learners to Write Using Padlet Application. *ELT Worldwide*, 8(2), 240-254.
- Elliot, S. (2004). *Education Psychology: Effective teaching and learning*. Cambridge, UK: Cambridge University Press.
- Hatch, E. & Brown, C. (1995). *Vocabulary, Semantics, and Language Education*. Cambridge: Cambridge University Press.
- Inayah, N., Yusuf, Q., & Fibula, N. (2020). Exploring undergraduate students' perception toward the use of Duolingo in learning English. *Humanities & Social Sciences Reviews*. 8(3), 76-85. <https://doi.org/10.18510/hssr.2020.839>
- Kukulka-Hulme, A. & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(3), 271–289.
- Matthews, B., & Ross, L. (2010). *Research methods: A practical guide for the social sciences*. London: Pearson. Retrieved from <https://www.meshguides.org/guides/node/1490>
- MISNAWATI, M., Sakkir, G., Puspita, N., Akbar, Z., & Yusriadi, Y. (2021). Student learning interest in COVID-19 pandemic age by blended e-learning (Asynchronous and synchronous). In *Proceedings of the 11th Annual International Conference on Industrial Engineering and Operations Management* (pp. 6330-6339). IEOM Society International.
- Munday, P. (2016). The case for using DUOLINGO as part of the language classroom experience. *RIED. Revista Iberoamericana de Educación a Distancia*, 19 (1), 83-101. doi: <http://dx.doi.org/10.5944/ried.19.1.14581>
- Reinders, H. & Cho, M.Y. (2010). Extensive listening practice and input enhancement using mobile phones: Encouraging out-of-class learning with mobile phones. *Teaching English as a Second or Foreign Language*, 14(2). Retrieved on 22 May 2016 from <http://www.tesl-ej.org/wordpress/issues/volume14/ej54/ej54m2/>
- Sakkir, G. (2018). *Pengembangan modul pengajaran menulis berbasis Facebook* (Doctoral dissertation, Pascasarjana).
- Sakkir, G., & Dollah, S. (2019). FACEBOOK-BASED WRITING INSTRUCTIONAL MATERIAL IN ENGLISH CLASS: LECTURERS' PERCEPTION. *Seltics*, 2(2), 76-83.
- Sakkir, G., Dollah, S., & Ahmad, J. (2021). E-learning in covid-19 situation: Students' perception. *EduLine: Journal of Education and Learning Innovation*, 1(1), 9-15.
- Sakkir, G., Muzri, A., Dollah, S., & Ahmad, J. (2022). Students' Perception of the Presentation Activities in Online Speaking Class. *EduLine: Journal of Education and Learning Innovation*, 2(3), 255-260.
- Saputra, U. R., Maulina, M., Nasrullah, R., & Sakkir, G. (2021). Students' Sentence Errors on WhatsApp Daily Status: A Literature Review. *Celebes Journal of Language Studies*, 23-31.
- Settles, B. and B. Meeder. (2016). "A Trainable Spaced Repetition Model for Language Learning." In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics*, ed. A. van den Bosch, 1848–1858. Berlin: Association for Computational Linguistics.
- Siregar, M. (2019). DUOLINGO GAMIFICATION: DOES IT REDUCE STUDENTS' GRAMMATICAL ERRORS IN WRITING? *GEEJ (Getsempena English Education Journal) VO - 6*.

- Stone & Nielson (1982). *Educational psychology: The development of teaching skills*. Lincoln, UK: Joana Cotler Books.
- Thornbury, S. (2002). *How to teach vocabulary*. England: Pearson Education Limited. Ur, P., (1998). *A course in language teaching*. Cambridge University Press.