

Eighth-Grade EFL Learners' Perceptions of Duolingo for English Vocabulary Learning: A Quantitative Survey in Vietnam

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ABSTRACT: Mobile-assisted language learning has become increasingly common among young EFL learners, especially through vocabulary learning applications such as Duolingo. This study examined eighth-grade students' vocabulary learning challenges, their patterns of mobile app and Duolingo use, and their perceptions of Duolingo's usefulness for English vocabulary learning. A quantitative survey design was used. Data were collected from 50 students aged 13–14 through a paper-based questionnaire and analyzed using descriptive statistics. Reliability was assessed using Cronbach's alpha and corrected item-total correlation respectively. The results showed that the students faced several difficulties in vocabulary learning. The highest mean score was in pronunciation ($M = 4.90$), followed by lack of motivation ($M = 4.84$), word usage, multiple meanings, and limited learning materials. Participants reported a high use of mobile applications to learn English vocabulary (70% very often). Most students were also familiar with Duolingo; 94% stated that they were aware of and used the application, and almost half of the valid participants had been using it for more than six months. Students' perception of Duolingo was positive with the highest scores for pronunciation and correct vocabulary use ($M = 4.62$), motivation and interest ($M = 4.57$), real-life vocabulary use ($M = 4.21$), and vocabulary retention ($M = 4.06$). The descriptive comparison between the challenge and usefulness items indicates that students find Duolingo most useful in the most challenging aspects of language learning, namely pronunciation and motivation. However, since the study relied on self-reported data, future research should incorporate vocabulary tests or classroom evidence to examine actual learning gains.

KEYWORDS: perceived usefulness, vocabulary learning challenges, Duolingo-assisted learning, pronunciation support, learner motivation, secondary EFL learners.

1. INTRODUCTION

Vocabulary is a major part of foreign language learning. When learners lack vocabulary, they can not understand the texts, express ideas, communicate with others, or develop the four major language skills. The significance of vocabulary learning for secondary EFL learners is that it is important for classroom performance and as a foundation for future language development. Previous research showed that limited vocabulary might cause a big problem to English learning, especially in secondary education (Habib, 2023). Students in lower secondary schools also have difficulties learning vocabulary, because they have difficulties with meaning, pronunciation, spelling, and word use (Rosyada-AS & Apoko, 2023).

These problems can be very frustrating and discouraging when learning vocabulary. According to Rahmat and Mohandas (2020), vocabulary acquisition is not only influenced by learning strategies but also by the obstacles of affective and motivational factors. Motivation is especially crucial for young learners since vocabulary learning involves repeated practice, review and long-term effort.

Simultaneously, mobile-assisted language learning has been increasing in popularity in English education. Mobile applications allow learners to study outside the classroom, to repeat lessons, get feedback, and practice at their own pace. Drigas and Angelidakis (2017) indicated that mobile applications can facilitate flexible and personalized learning in educational settings. Regarding learner engagement in learning languages, Shortt et al. (2023) did a systematic review of the literature on Duolingo and found that gamification feature of Duolingo could make language practice more engaging.

Duolingo is one of the most popular mobile apps for language learning. It offers short lessons, vocabulary activities, pronunciation activities, gamified activities, awards and progress tracking. Duolingo is a mobile application that can assist people in learning a second language by structured lessons and game-like features (Nushi & Egbali, 2017). Several studies found Duolingo to be positive for learning English vocabulary. For example, Ajisoko (2020) found that Duolingo could assist vocabulary learning

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through repeated practice on the app. Other experimental studies also proved the positive effect of using Duolingo on students' vocabulary mastery (Aulia et al., 2020; Permatasari et al., 2022; Sari et al., 2023).

Besides vocabulary outcome studies, perception studies have found that many learners have a positive perception of Duolingo because of its accessibility, gamified design, and engaging learning activities. Perception-based studies have also examined Duolingo from different learner groups and research designs. Tiara et al. (2021) reviewed the previous studies related to students' perception toward Duolingo and proposed that this app could help English vocabulary learning. Anton Adi Purwanto and Syafryadin (2023) found that the eighth-grade students felt more encouraged to learn vocabulary with Duolingo because the app made learning easier to follow and less boring. At the tertiary level, Apoko et al. (2023) found that university students perceived Duolingo as a simple, accessible, and motivating tool for vocabulary learning. Fakhurriana et al. (2024) also found that the students of English department gave generally positive responses, especially because the use of Duolingo made vocabulary learning more enjoyable. Overall, these studies show that learners often appreciate Duolingo for the following reasons: it is easily accessible, it provides opportunities for repeated practice, and it may make vocabulary learning more engaging.

Duolingo and vocabulary learning have been studied previously, yet more studies are needed to understand how young secondary EFL learners perceive the application in relation to their own vocabulary learning challenges. Many studies have focused on general vocabulary improvement, overall satisfaction, or learners at higher education levels. Fewer studies have examined the connection between lower-secondary students' reported vocabulary barriers and the specific support they perceive from Duolingo. This issue is important because learners may value Duolingo not simply because it is popular, but because it appears to respond to practical difficulties they face, such as pronunciation, motivation, vocabulary retention, and word use.

This study focuses on eighth-grade students aged 13–14. The significance of this group is that the students of this level are expected to increase their vocabulary while improving pronunciation, word use and habits of independent learning. Knowledge of their vocabulary learning difficulties and perceptions of Duolingo could give useful information to teachers who want to integrate mobile applications into vocabulary learning. The study answers the following research questions:

1. What vocabulary learning challenges do eighth-grade EFL learners report?
2. What are students' patterns of mobile app use and Duolingo use for English vocabulary learning?
3. How do students perceive Duolingo's usefulness as a supplementary tool for English vocabulary learning?

2. METHODS

2.1. Research Design

This study used a quantitative survey design. This design was appropriate because the study aimed to examine students' reported vocabulary learning challenges and their perceptions of Duolingo through numerical data. The study did not aim to test actual vocabulary improvement through an experimental design. Instead, it focused on students' self-reported experiences and perceptions.

2.2. Participants

The participants were 50 eighth-grade students aged 13–14. They were selected because they were at an age when vocabulary development is important for English learning. The sample composed of 29 female students (58%) and 21 male students (42%). The students were asked to complete a questionnaire on challenges in learning vocabulary, use of mobile applications, and perceptions of Duolingo.

2.3. Instrument

The main instrument used in this study was a researcher-developed questionnaire. The questionnaire was designed based on the research questions and focused on three areas: students' vocabulary learning challenges, their patterns of mobile app and Duolingo use, and their perceptions of Duolingo's usefulness for English vocabulary learning. The items were written in simple language to suit eighth-grade students aged 13–14. Before data collection, the questionnaire was reviewed by an expert in the application of information technology in English language teaching for children. The expert examined whether the items were suitable for the participants' age, the research objectives, and the context of technology-supported vocabulary learning. Based on the expert's comments, several items were revised for clarity, wording, and relevance.

The questionnaire was divided into three sections. Section A collected background information and learning habits such as gender, years of learning English, frequency of use of the mobile app, familiarity with Duolingo and length of Duolingo use. Section B measured students' perception on vocabulary learning difficulties including learning materials, motivation, multiple meaning, pronunciation and word usage. Section C examined students' perceptions of the usefulness of Duolingo to learn vocabulary. This section had 11 items on pronunciation and accurate vocabulary use, motivation, real life vocabulary use, retention of vocabulary, general language support, appropriateness of level, satisfaction, variety of exercises, ease of use, free access, and level-specific vocabulary lessons.

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The Likert scale items were measured on a five-point scale ranging from 1 = strongly disagree to 5 = strongly agree. Higher scores indicated stronger agreement with each statement. To examine the reliability of the questionnaire, Cronbach's alpha and corrected item-total correlation were calculated. Both the vocabulary learning challenge scale and the students' perception of Duolingo's usefulness for vocabulary learning scale showed good reliability, with a Cronbach's alpha of .808 and .815, respectively. All corrected item-total correlations were above .30, indicating satisfactory internal consistency for subsequent analyses.

2.4. Data collection

The data were collected through a paper-based questionnaire. Before collecting the data, the researchers obtained written informed consent from the parents of all participating students. The students were also asked for verbal assent after the purpose of the study and their role in it had been explained in clear and age-appropriate language. They were told that participation was voluntary and that they could stop taking part at any time without any impact on their grades or learning at school. The students were also informed that their answers would be anonymous and used only for research purposes. The questionnaire was sent to 50 students and all questionnaires were collected and used for the analysis.

2.5. Data analysis

The data were analyzed using SPSS. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarize students' responses. Cronbach's alpha and corrected item-total correlation were also used to check the reliability of the Likert-scale sections.

3. RESULTS

This section presents the findings according to the three research questions. The first part reports students' vocabulary learning challenges. The second part describes students' patterns of mobile app use and Duolingo use. The third part presents students' perceptions of Duolingo's usefulness for English vocabulary learning. The final part compares students' main vocabulary learning challenges with the Duolingo features they perceived as useful.

3.1. Vocabulary Learning Challenges

The first research question asked: What vocabulary learning challenges do eighth-grade EFL learners report? The results showed that all participating students reported some difficulty in learning English vocabulary. Among the five vocabulary learning challenges, pronunciation received the highest mean score ($M = 4.90$, $SD = 0.30$). This meant that the students strongly agreed that pronunciation was a major problem in vocabulary learning. The second most common challenge was lack of motivation ($M = 4.84$, $SD = 0.37$), indicating that many students found it hard to maintain interest and effort in studying vocabulary (see Table 1). Other challenges were reported but at lower levels. Difficulty of word usage had a mean score of 3.52 ($SD = 0.58$) and confusion of multiple meanings of word had a mean score of 3.44 ($SD = 0.58$). The mean score of the five items was lowest in lack of appropriate vocabulary learning materials ($M = 3.38$, $SD = 0.49$). Although these scores were lower than pronunciation and motivation, they still showed that students experienced difficulty using words correctly and understanding word meanings in different contexts. Overall, pronunciation and motivation were the two most serious vocabulary learning challenges reported by the students.

Table 1. Students' reported vocabulary learning challenges

Vocabulary learning challenges	Mean	SD
I have difficulty pronouncing new English words correctly.	4.90	0.30
I lack motivation to study English vocabulary regularly.	4.84	0.37
I have difficulty using new English words correctly in sentences.	3.52	0.58
I feel confused because many English words have more than one meaning.	3.44	0.58
I have difficulty finding suitable materials to learn English vocabulary.	3.38	0.49

3.2. Patterns of Mobile App Use and Duolingo Use

The second research question asked: What are students' patterns of mobile app use and Duolingo use for English vocabulary learning? The findings showed that mobile applications were already familiar to most participants. Out of 50 students, 35 students, or 70%, reported that they used mobile applications very often to learn English vocabulary. Thirteen students, or 26%, reported occasional use, while only two students, or 4%, reported rare use. No student selected "never." These results suggest that mobile-assisted vocabulary learning was common among the participants. (see Table 2)

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Table 2. Frequency of mobile app use for vocabulary learning

Frequency of mobile app use	N	Percentage
Very often	35	70.0%
Occasionally	13	26.0%
Rarely	2	4.0%
Total	50	100.0%

Most students were also familiar with Duolingo. Forty-seven students (94%) stated that they knew and used Duolingo. 2% of the students (one student) knew Duolingo but did not use it, and 4% of the students (two students) did not know about the application. This shows that Duolingo was familiar to most students in this study. (see Table 3)

Table 3. Students' familiarity with Duolingo

Familiarity with Duolingo	N	Percentage
Yes, and I have used it	47	94.0%
Yes, but I have not used it	1	2.0%
No	2	4.0%
Total	50	100.0%

Among students who answered the question about length of Duolingo use, the largest group had used the application for more than six months. Specifically, 22 students, or 47.8%, reported using Duolingo for more than six months. Twelve students (26.1%) used Duolingo for three to six months, seven students (15.2%) used it for one to three months, and five students (10.9%) used it for less than one month. The results show that a large number of students had enough experience with Duolingo to evaluate its contribution to vocabulary learning. (see Table 4)

Table 4. Length of Duolingo use

Length of Duolingo use	N	Percentage
Less than 1 month	5	10.9%
1–3 months	7	15.2%
3–6 months	12	26.1%
More than 6 months	22	47.8%
Total valid responses	46	100.0%

3.3. Students' Perceptions of Duolingo's Usefulness for Vocabulary Learning

The third research question asked: How do students perceive Duolingo's usefulness as a supplementary tool for English vocabulary learning? To make the results align with the revised questionnaire structure, the original perceived benefits and perception items were integrated under one broader construct: students' perceptions of Duolingo's usefulness for vocabulary learning. After removing the overlapping item on pronunciation practice through game-based lessons, this section included 11 items.

Overall, students perceived Duolingo positively. The highest-rated item was "Duolingo helps me improve my pronunciation and use vocabulary more accurately" ($M = 4.62$, $SD = 0.77$). This finding is important because pronunciation was also the strongest vocabulary learning challenge reported by students. The second highest item was "Duolingo makes me feel more motivated and interested in learning English vocabulary" ($M = 4.57$, $SD = 0.80$). This result connects closely with the earlier finding that lack of motivation was one of the main challenges in vocabulary learning. Students also agreed that Duolingo helped them use vocabulary accurately in real-life situations ($M = 4.21$, $SD = 0.69$) and remember English vocabulary better ($M = 4.06$, $SD = 0.79$). Other items scored positively, but at a lower level, such as improvement in English language skills, level of challenge, satisfaction, diverse exercises and vocabulary practice, ease of use, free access and level-based lessons. This pattern reflects that students

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found Duolingo most valuable when its features directly met their vocabulary learning needs, specifically pronunciation practice, motivation, real-life vocabulary use and vocabulary retention. (see Table 5)

Table 5. Students' perceptions of Duolingo's usefulness for English vocabulary learning

No.	Questionnaire statement	Mean	SD
1	Duolingo helps me improve my pronunciation and use vocabulary more accurately.	4.62	0.77
2	Duolingo makes me feel more motivated and interested in learning English vocabulary.	4.57	0.80
3	Duolingo helps me use vocabulary accurately in real-life situations.	4.21	0.69
4	Duolingo helps me remember English vocabulary better.	4.06	0.79
5	Duolingo helps me improve my English language skills.	3.89	0.87
6	Duolingo provides an appropriate level of challenge for my English proficiency.	3.72	0.71
7	I am satisfied with Duolingo as a tool for learning English vocabulary.	3.70	0.72
8	Duolingo provides diverse exercises and vocabulary practice.	3.55	0.62
9	Duolingo is easy to use.	3.51	0.69
10	Duolingo is free to use for learning vocabulary.	3.26	0.44
11	Duolingo provides level-based vocabulary lessons.	3.26	0.44

3.4. Descriptive Alignment Between Vocabulary Learning Challenges and Duolingo's Perceived Usefulness

To better understand whether students' perceptions of Duolingo corresponded to the vocabulary learning challenges they reported, the main challenge items were compared descriptively with the most relevant usefulness items. This comparison did not test a statistical relationship. Instead, it showed whether the areas where students experienced difficulty were also the areas where they perceived Duolingo as useful. (see Table 6)

The strongest alignment appeared in pronunciation. Students strongly agreed that Duolingo helped them improve pronunciation and use of vocabulary more accurately ($M = 4.62$) and pronunciation was the highest rated challenge ($M = 4.90$). This suggests that students found Duolingo helpful in the area they had the most trouble. That pattern was also true with respect to motivation. The second most prominent challenge was lack of motivation ($M = 4.84$). Students also rated Duolingo highly for making them feel more motivated and interested in learning English vocabulary ($M = 4.57$). This suggested that students thought Duolingo was useful in making vocabulary learning more interesting.

Further, there was a clear association with vocabulary use. Students reported difficulty in using new English words correctly in sentences ($M = 3.52$). They also agreed that Duolingo helped them to use vocabulary correctly in real life situations ($M = 4.21$). This means that students found Duolingo useful not only for memorizing words but also for practicing the use of vocabulary in context. But the alignment was not the same across all challenges. The students reported confusion due to multiple word meanings ($M=3.44$). However, the questionnaire did not specifically ask the students whether Duolingo helped them to understand different meanings of the same word. Similarly, lack of suitable learning materials received the lowest challenge score ($M = 3.38$), and the related item on diverse exercises and vocabulary practice received a moderate score ($M = 3.55$).

Overall, the comparison suggests that students perceived Duolingo as most useful for pronunciation, motivation, vocabulary use, and vocabulary retention. However, these findings should be interpreted as perceived alignment, not as evidence that Duolingo directly solved students' vocabulary learning problems.

Table 6. Descriptive alignment between students' vocabulary learning challenges and perceived usefulness of Duolingo

Reported vocabulary learning challenge	Mean	Related perceived usefulness of Duolingo	Mean	Interpretation
I have difficulty pronouncing new English words correctly.	4.90	Duolingo helps me improve my pronunciation and use vocabulary more accurately.	4.62	Strong alignment. Pronunciation was the biggest challenge, and students also rated Duolingo highly for pronunciation support.
I lack motivation to study English vocabulary regularly.	4.84	Duolingo makes me feel more motivated and interested in learning English vocabulary.	4.57	Strong alignment. Students saw Duolingo as useful for increasing motivation, which directly matched one of their main difficulties.
I have difficulty using new English words	3.52	Duolingo helps me use vocabulary accurately in	4.21	Moderate to strong alignment. Students reported difficulty using words, and they

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Reported vocabulary learning challenge	Mean	Related perceived usefulness of Duolingo	Mean	Interpretation
correctly in sentences.		real-life situations.		also perceived Duolingo as helpful for vocabulary use in context.
I feel confused because many English words have more than one meaning.	3.44	Duolingo helps me remember English vocabulary better.	4.06	Partial alignment. Duolingo may support vocabulary retention, but the questionnaire did not directly measure whether it helps students understand multiple meanings.
I have difficulty finding suitable materials to learn English vocabulary.	3.38	Duolingo provides diverse exercises and vocabulary practice.	3.55	Partial alignment. Students saw Duolingo as providing vocabulary practice, but this benefit was rated lower than pronunciation and motivation support.

4. DISCUSSION

This study examined eighth-grade EFL learners' vocabulary learning challenges, their patterns of mobile app and Duolingo use, and their perceptions of Duolingo's usefulness for English vocabulary learning. The findings show three main points. First, students reported clear difficulties in vocabulary learning, especially pronunciation and motivation. Second, mobile applications and Duolingo were already familiar to most participants. Third, students perceived Duolingo positively, particularly for pronunciation practice, motivation, vocabulary retention, and vocabulary use.

The first research question focused on students' vocabulary learning challenges. Pronunciation received the highest mean score ($M = 4.90$), followed by lack of motivation ($M = 4.84$). This suggests that students did not only struggle with remembering word meanings. They also had a problem in pronouncing English words correctly and to stay interested in learning vocabulary. The finding is consistent with previous studies which found that pronunciation, spelling, meaning, word use, and affective factors influence the learning of vocabulary (Habib, 2023; Rahmat & Mohandas, 2020; Rosyada-AS & Apoko, 2023). English and Vietnamese have different sound systems so the pronunciation may be difficult for Vietnamese learners at lower-secondary level. Students may not use new words orally due to lack of knowledge of their pronunciation. This may be a limitation to vocabulary development and oral communication.

Lack of motivation was also a big challenge. Vocabulary learning requires repeated exposure, review, and regular use, so for students 13-14 years old, it can be boring if it is based on memorization, copying or word lists. This finding reinforces the opinion that the process of learning vocabulary is not only cognitive but also affective (Rahmat & Mohandas, 2020). Vocabulary teaching should not be only concerned with the meaning of words and their forms.

Other difficulties, including word use, multiple meanings, and lack of suitable learning materials, were reported at lower levels. The findings show that learning vocabulary is more than just remembering individual words. Students also need to know how to use the vocabulary correctly in sentences, and how to understand meanings in different contexts. This is important because students may know the Vietnamese meaning of a word but still struggle to pronounce it, remember it, or use it correctly in communication.

The second research question examined students' patterns of mobile app and Duolingo use. The results showed that mobile-assisted vocabulary learning was already common among the participants. Seventy percent of the students reported using mobile applications very often to learn English vocabulary, while 94% reported that they knew and used Duolingo. This suggests that mobile applications were not unfamiliar tools for these learners. Instead, they were already part of students' vocabulary learning habits outside the classroom.

This finding reflects the wider role of mobile-assisted language learning in EFL education. Shortt et al. (2023) showed that Duolingo has become a major focus in MALL research because it combines flexible app-based learning with gamified features such as short tasks, rewards, levels, and progress tracking. This helps explain why students in the present study may have viewed Duolingo as motivating and easy to fit into their learning routines. Irawan et al. (2020) also examined Duolingo as a mobile application for English vocabulary learning and reported that it could be used as a learning medium to support students' understanding of English vocabulary. The present study adds a more specific point: students valued Duolingo most when its features matched the difficulties they actually faced.

The third research question examined students' perceptions of Duolingo's usefulness. Students rated Duolingo most highly for helping them improve pronunciation and use vocabulary more accurately ($M = 4.62$). This is important because pronunciation was also the strongest vocabulary learning challenge. In other words, the usefulness item that students rated most highly directly matched their main reported difficulty. The result is in line with previous studies claiming that Duolingo is a useful tool for vocabulary learning due to the fact that it provides repeated practice, short lessons, and interactive tasks (Ajisoko, 2020; Nushi & Eqbali, 2017).

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Students also said that Duolingo was useful in motivating them. They strongly agreed that Duolingo made them feel more motivated and interested in learning ($M = 4.57$). This finding is in line with studies showing that learners often view Duolingo positively because of its game-like design, accessibility, and engaging learning activities (Apoko et al., 2023; Anton Adi Purwanto & Syafryadin, 2023; Tiara et al., 2021). Some of the features that can help make vocabulary learning less stressful and more fun are points, rewards, progress tracking, short lessons and repeated exercises. Such features could be useful for younger learners as they encourage regular practice and do not create a sense of learning being too formal.

The results also indicated that Duolingo was beneficial to the students' vocabulary retention. The item related to vocabulary memorization had a positive score ($M = 4.06$) which indicated that the students thought Duolingo helped them memorize new words better. This might be due to repeated exposure and short practice tasks in the app. Previous studies have also reported positive results for vocabulary mastery and vocabulary improvement (Ajisoko, 2020; Aulia et al., 2020; Permatasari et al., 2022; Sari et al., 2023). However, the present study should be interpreted more cautiously because it did not include pre-tests or post-tests. The data show that students perceived Duolingo as helpful, but they do not prove that Duolingo directly improved students' vocabulary mastery.

The alignment between students' challenges and perceived Duolingo support is the main contribution of this study. The strongest perceived benefits of Duolingo were closely related to students' main difficulties: pronunciation and motivation. This suggests that students did not value Duolingo simply because it was popular, free, or easy to use. They valued it because it appeared to support areas where they experienced real difficulty. However, this alignment was not equally strong for all challenges. For example, the study did not directly show whether Duolingo helped students understand multiple meanings of words. Therefore, Duolingo should be seen as a useful supplementary tool, not a complete solution to all vocabulary learning problems.

The findings have implications for English vocabulary teaching in practice. For the teachers, Duolingo can be used as an extra tool for practicing pronunciation and reviewing vocabulary outside the classroom. Practice with the apps should be combined with classroom learning. For instance, students may practice vocabulary at home with Duolingo, and then apply related words in speaking tasks, writing activities, or classroom games. The role of the teacher is still important because vocabulary learning involves pronunciation, spelling, meaning, grammar, collocation and appropriate use in context. Without guidance, students may complete app exercises mechanically without learning how to use new words in communication.

In summary, this study suggests that Duolingo can support vocabulary learning by providing a more accessible, engaging and motivating practice. Its strongest perceived value was found in areas that matched students' reported difficulties, especially pronunciation and motivation. However, because this study relied on self-reported questionnaire data, the findings should be understood as evidence of perceived usefulness rather than direct evidence of vocabulary gains. Future research should include vocabulary pre-tests and post-tests, classroom observations, or interviews to check whether the perceived benefits reported by students are reflected in actual vocabulary development.

5. CONCLUSION

This study explored the difficulties encountered by eighth grade students in learning English vocabulary and their perceptions of Duolingo as a supporting tool. The results revealed that students encountered some problems in vocabulary learning, especially pronunciation and lack of motivation. Students also reported word usage, multiple meanings and learning materials as problems. Most participants were aware of Duolingo and many had used the application for months. Students reported positive attitude toward Duolingo especially for pronunciation and correct vocabulary use, motivation, use of vocabulary in real life and retention of vocabulary. These findings suggest that Duolingo may help create a more engaging vocabulary learning environment and may support learners in areas where they commonly experience difficulty.

The findings offer some practical suggestions for vocabulary teaching and learning. Teachers can recommend Duolingo for extra vocabulary practice outside class, but students still need guidance on how to use it well. For example, teachers can help students set clear goals, review words regularly, and use new vocabulary in speaking or writing tasks. Duolingo should not be the only learning tool. Learning happens when Duolingo is used together with lessons in the classrooms and speaking practice while the teacher provides feedback. Curriculum designers may consider incorporating mobile-assisted vocabulary learning into English learning programs as a type of out-of-class practice. Extra activities can be given as short Duolingo tasks, followed by discussion, vocabulary review, or communication tasks in the classroom. It can connect app-based learning and classroom teaching.

Several limitations were found in this study. Because only 50 participants from one context were involved, the findings cannot be generalized to all secondary EFL learners. In addition, the study relied on self-reported questionnaire data, which may reflect students' perceptions rather than actual vocabulary improvement. Vocabulary tests were not included before and after Duolingo use. Future studies should use experimental designs with larger samples. Vocabulary tests should also be included to measure actual learning gains, not only students' perceptions. Interviews or classroom observations may also help researchers understand how students use Duolingo in real learning situations.

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Overall, Duolingo can be a useful extra tool for young EFL learners, especially for pronunciation practice and motivation. However, its value depends on how it is used. Duolingo should be combined with teacher guidance, classroom vocabulary practice, and meaningful communication tasks so that students can apply new words beyond the app.

REFERENCES

- 1) Ajisoko, P. (2020). The use of Duolingo apps to improve English vocabulary learning. *International Journal of Emerging Technologies in Learning (IJET)*, 15(7), 149–155. <https://doi.org/10.3991/ijet.v15i07.13229>
- 2) Anton Adi Purwanto, & Syafryadin (2023). Students' Perception on Using Duolingo for Learning English Vocabulary. *JET (Journal of English Teaching)*, 9(1). <https://doi.org/10.33541/jet.v9i1.4506>
- 3) Apoko, T. W., Dunggio, A. A., & Chong, S. L. (2023). The students' perceptions on the use of mobile-assisted language learning through Duolingo in improving vocabulary mastery at the tertiary level. *English Review: Journal of English Education*, 11(1), 17–26. <https://doi.org/10.25134/erjee.v11i1.7069>
- 4) Aulia, H. R., Wahjuningsih, E., & Andayani, R. (2020). The effect of Duolingo application on students' English vocabulary mastery. *ELTR Journal*, 4(2), 131–139. <https://doi.org/10.37147/eltr.v4i2.71>
- 5) Drigas, A. S., & Angelidakis, P. (2017). Mobile applications within education: An overview of application paradigms in specific categories. *International Journal of Interactive Mobile Technologies*, 11(4), 4–18. <https://doi.org/10.3991/ijim.v11i4.6589>
- 6) Fakhurriana, R., Nisa, A., & Noni, N. (2024). The perceptions of using Duolingo application in learning English for student's vocabulary mastery. *BATARA DIDI: English Language Journal*, 3(1), 45–54. <https://doi.org/10.56209/badi.v3i1.82>
- 7) Habib, M. J. (2023). Poor vocabulary skills in the English language at the secondary level in Bangladesh: A barrier to learning a foreign language. *International Journal of Contemporary Research in Multidisciplinary*, 2(6), 33–36.
- 8) Irawan, A., Wilson, A., & Sutrisno, S. (2020). The implementation of Duolingo mobile application in English vocabulary learning. *Scope: Journal of English Language Teaching*, 5(1), 8–14. <https://doi.org/10.30998/scope.v5i1.6568>
- 9) Nushi, M., & Eqbali, M. H. (2017). Duolingo: A mobile application to assist second language learning. *Teaching English with Technology*, 17(1), 89–98.
- 10) Permatasari, P., Sudirman, A., & Munawaroh, T. (2022). The effect of using Duolingo application towards students' vocabulary mastery at the eighth grade of SMPN 2 Banjarsari Lebak-Banten. *Journal of English Language Learning*, 6(2), 142–148. <https://doi.org/10.31949/jell.v6i2.3624>
- 11) Rahmat, N. H., & Mohandas, E. S. (2020). Vocabulary acquisition among ESL learners: A look at strategies and barriers. *European Journal of English Language Teaching*, 6(2), 1–10. <https://doi.org/10.46827/ejel.v6i2.3431>
- 12) Rosyada-AS, A., & Apoko, T. W. (2023). Investigating English vocabulary difficulties and its learning strategies of lower secondary school students. *Journal of Languages and Language Teaching*, 11(3), 489–495. <https://doi.org/10.33394/jollt.v11i3.8404>
- 13) Sari, L. P., Hastomo, T., & Nurchurifiani, E. (2023). Assessing the efficacy of Duolingo for acquiring English vocabulary skills: Experimental research. *Journal of English Teaching, Applied Linguistics and Literatures (JETALL)*, 6(2), 193–200. <https://doi.org/10.20527/jetall.v6i2.17145>
- 14) Shortt, M., Tilak, S., Kuznetcova, I., Martens, B., & Akinkuolie, B. (2023). Gamification in mobile-assisted language learning: A systematic review of Duolingo literature from public release of 2012 to early 2020. *Computer Assisted Language Learning*, 36(3), 517–554. <https://doi.org/10.1080/09588221.2021.1933540>
- 15) Tiara, A. D., Rahman, M. A., & Handrianto, C. (2021). The students' perception about use of Duolingo application for improving English vocabulary. *International Journal of Education, Information Technology, and Others*, 4(4), 690–701. <https://doi.org/10.5281/zenodo.5775915>