



The Effectiveness of Using Memrise Application in Improving Students' Speaking Skills

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Article Info	Abstract
Article History Received: 2025-06-10 Revised: 2025-07-20 Published: 2025-08-03 Keywords: <i>Memrise Application; Speaking Skills; English for Learners.</i>	<p>This study aims to identify the impact of using the Memrise application on improving the speaking skills of eighth-grade students at SMP Negeri 12 Purworejo in the 2024/2025 academic year. This study employs a quantitative research method with a quasi-experimental design, where data were collected from 64 students through pre-tests and post-tests. Two groups of students participated in this design, and their growth in speaking skills, including greeting, leave-taking, thanking, and apologising, was evaluated using pre-tests before the treatment (Memrise app) and post-tests after the treatment. Statistical analysis using the t-test revealed that the average score of the experimental group was 81.44, while the control group scored 77.38, with a difference of 4.06 points. The t-value obtained was 2.845 with a degree of freedom (df) of 62 and a significance level of 0.005. Since $p < 0.05$, there is a statistically significant difference between the two groups. These results indicate that the Memrise app can significantly improve speaking skills compared to conventional methods. This finding also shows that technology-assisted language learning not only improves students' cognitive aspects but also has a positive impact on the affective and motivational aspects, which are very important in learning speaking skills. This study has limitations in terms of the scope of the population and language skills examined, as it focuses solely on the speaking skills of eighth-grade students. Therefore, it is recommended that future researchers conduct further studies on other language skills such as listening or vocabulary mastery, and apply similar research to different educational levels.</p>

Artikel Info	Abstrak
Sejarah Artikel Diterima: 2025-06-10 Direvisi: 2025-07-20 Dipublikasi: 2025-08-03 Kata kunci: <i>Aplikasi Memrise; Kemampuan Berbicara; Bahasa Inggris untuk Pemula,</i>	<p>Penelitian ini bertujuan untuk mengidentifikasi dampak penggunaan aplikasi Memrise terhadap peningkatan keterampilan berbicara siswa kelas VIII di SMP Negeri 12 Purworejo tahun ajaran 2024/2025. Studi ini menerapkan metode penelitian kuantitatif dengan desain kuasi eksperimen, di mana data diperoleh dari 64 siswa melalui pre-test dan post-test. Dua kelompok siswa berpartisipasi dalam desain ini, dan pertumbuhan kemampuan berbicara, termasuk greeting, leave-taking, thanking, and apologizing mereka dievaluasi menggunakan pre-test sebelum perlakuan (Aplikasi Memrise) dan post-test setelah perlakuan. Hasil analisis statistik menggunakan uji-t, rata-rata skor kelompok eksperimen adalah 81.44, sedangkan kelompok kontrol memperoleh 77.38, dengan selisih sebesar 4.06 poin. Nilai t yang diperoleh adalah 2.845 dengan derajat kebebasan (df) sebesar 62 dan nilai signifikansi sebesar 0.005. Karena nilai $p < 0.05$, maka terdapat perbedaan yang signifikan secara statistik antara kedua kelompok. Hasil ini menunjukkan bahwa aplikasi Memrise mampu meningkatkan hasil belajar keterampilan berbicara secara nyata jika dibandingkan dengan metode konvensional. Temuan ini sekaligus menunjukkan bahwa pembelajaran bahasa berbantuan teknologi tidak hanya meningkatkan aspek kognitif siswa, tetapi juga memberikan dampak positif terhadap aspek afektif dan motivasional yang sangat penting dalam pembelajaran keterampilan berbicara. Penelitian ini memiliki keterbatasan dalam ruang lingkup populasi dan keterampilan bahasa yang dikaji, yakni hanya berfokus pada keterampilan berbicara siswa kelas VIII. Oleh karena itu, disarankan kepada peneliti selanjutnya untuk melakukan kajian lebih lanjut terhadap keterampilan bahasa lainnya seperti mendengarkan (listening) atau penguasaan kosakata (vocabulary mastery), serta menerapkan penelitian serupa pada jenjang pendidikan yang berbeda.</p>

I. INTRODUCTION

In the contemporary educational landscape, the ability to communicate effectively in English has become increasingly important, especially in

the context of globalization (Haryadi and Aminuddin, 2023). English not only serves as an international language but also as a key to accessing a wide range of knowledge and

opportunities in various fields. However, many students, especially in lower secondary schools, face significant challenges in developing their speaking skills. This issue is particularly evident at SMP Negeri 12 Purworejo, where initial observations indicate that students struggle with fluency, pronunciation, and confidence when speaking English. The incorporation of technology into language education has surfaced as a potential answer to tackle these issues (Tabasi et al., 2024).

In today's digital age, technology is a tool that can help everyone around the world to carry out their daily activities in work and education (Hutasuhut and Harahap, 2024). The use of technology in learning English as a Foreign Language (EFL) is becoming increasingly important. One of the crucial but challenging skills for EFL learners is speaking. Speaking in English is one of the most important skills for EFL learners (Asmae and Sakale Sana, 2024). However, many EFL students in Indonesia still face challenges in developing their speaking skills, such as limited vocabulary, incorrect pronunciation, and a lack of confidence when communicating orally (Firdaus and Jamilah, 2024). Many learners experience obstacles in fluency, pronunciation, and confidence when using English orally. Therefore, interactive learning media that can stimulate speaking skills effectively and enjoyably is needed. Research shows that the use of learning applications can increase student motivation and engagement, which in turn can contribute to improving their language skills (Lahji, 2024).

The rise of Mobile-Assisted Language Learning (MALL), Technology-Enhanced Language Learning (TALL), and Computer-Assisted Language Learning (CALL) has revolutionized conventional language instruction by offering novel tools and resources that promote interactive and captivating learning experiences. MALL, in particular, leverages the widespread availability of mobile devices to create flexible learning environments that can be accessed anytime and anywhere, thereby meeting the diverse needs of learners. Research indicates that the use of mobile applications can significantly enhance student motivation and engagement, which in turn improves their language skills (Estado and Mounkoro, 2024).

Memrise, designed to help users learn vocabulary and phrases through fun and interactive methods, has become popular among EFL learners. The Memrise app has been widely used in MALL (mobile assisted language

learning) as an educational tool. This app allows students to learn various subjects online (Baniara et al., 2024). Memrise offers an interactive and gamified approach to learning, thereby increasing motivation, independence, and providing an enjoyable learning experience for students (Aprizal and Wachyudi, 2024). The app not only focuses on vocabulary but also includes speaking exercises through video clips of native speakers, enabling learners to develop pronunciation and intonation in context. This corresponds with the Technological Pedagogical Content Knowledge (TPACK) framework, which highlights the merging of technology, pedagogy, and content knowledge to develop effective learning experiences (Warr and Mishra, 2022). The app not only provides diverse learning materials but also allows users to practise speaking more naturally and contextually (Suyadi et al., 2024). Previous research shows that regular and meaningful speaking practice can enhance students' confidence in using the target language (Anjarani et al., 2025). By using Memrise, educators can provide a dynamic platform for students to develop their speaking skills while creating a more engaging and interactive learning environment.

In recent studies on the use of applications in language learning, there has been a strong focus on empirical aspects, such as the effectiveness of applications in improving students' language skills. However, there is a significant gap in the theoretical understanding underlying the use of these applications, especially in the context of EFL students' speaking (Rajendran and Md Yunus, 2021). Many studies have emphasised quantitative outcomes, such as improvements in test scores or app usage frequency, without delving deeper into how these apps qualitatively influence students' learning experiences.

Furthermore, existing research often fails to consider the students' perspective directly, which is a critical element in understanding the impact of applications such as Memrise in the context of speaking classes (Ma et al., 2024). This limitation points to the need for a more holistic approach that combines empirical data with deeper theoretical insights (Maxwell, 2022). By not involving the students' perspective, research tends to lose the context that can explain how such applications function in everyday practice.

Therefore, it is important to explore students' experiences and views in using language learning applications. By addressing this deficit, research can provide a more significant contribution to the advancement of more effective and pertinent

learning approaches for English as a foreign language (EFL) learners. This more comprehensive approach is expected to help create a better learning environment and support the optimal development of students' speaking skills.

Given the urgent need to improve students' speaking skills and the potential of technology to facilitate this process, this study aims to evaluate the effectiveness of the Memrise application in improving the speaking skills of eighth-grade students at SMP Negeri 12 Purworejo in the 2024/2025 academic year. By examining the impact of Memrise on students' speaking skills, this study aims to provide valuable insights into the integration of technology in language education and its implications for teaching practices in Indonesia. Additionally, this study is expected to make a significant contribution to the development of more effective and relevant teaching methods, as well as creating a better learning environment to support the optimal development of EFL students' speaking skills.

II. METHOD

The research approach employed in this study is a quantitative method featuring a quasi-experimental design, which includes a control group but lacks complete control over external variables impacting the experiment (Alford and Teater, 2025; Denny et al., 2023). Two groups of students participated in this design, and their speaking ability growth was evaluated using a pre-test before the treatment (Memrise Application) and a post-test after the treatment. The post-test results showed how well the students performed after using the application, while the pre-test results provided baseline information to determine the students' initial speaking ability (Fauziah et al., 2024).

The independent variable in this study was learning using the Memrise app, while the dependent variable was speaking ability. The instruments used were pre-test and post-test instruments. The intervention involved conducting speaking lessons using the Memrise app over several sessions. Each session lasted approximately 80 minutes, and the intervention was conducted over five weeks, with two sessions per week. During this process, students participated in speaking activities facilitated by the Memrise app, which featured various speaking skills, including greeting, leave-taking, thanking, and apologizing (Darmawan, 2024).

This study was conducted in the 2024–2025 academic year at SMP Negeri 12 Purworejo.

Students in grade VIII at SMP Negeri 12 Purworejo were the population of this study. This class was selected as the experimental group to learn how to use the Memrise application to improve their speaking skills. In this study, the researcher used content validity to ensure that the instruments used were appropriate for the measurement objectives. Content validity refers to the extent to which the items in the instrument reflect the overall domain or content to be measured (Almanasreh et al., 2019). This assessment stage was carried out through a content feasibility test by an expert, namely the author's first supervisor, who reviewed each item based on the suitability of the content with the speaking ability indicators.

The test instrument was validated based on five aspects of speaking assessment relevant to the learning objectives, including pronunciation, grammar, fluency, vocabulary, and comprehensibility. The validation results showed that the expert agreed with all the proposed items. Therefore, it can be concluded that the instrument used in this study has adequate content validity and is suitable for measuring students' speaking skills during pre-tests and post-tests.

In this study, the researchers used random sampling, a type of probability sampling where each individual in the population has an equal likelihood of being chosen as part of the sample. This technique was used to ensure that the sample obtained could objectively represent the population and reduce selection bias (Alford and Teater, 2025). Sampling was conducted randomly from all eighth-grade students at SMP Negeri 12 Purworejo, without considering specific characteristics beforehand. Through a drawing process conducted with the assistance of an English teacher, two classes were selected as research samples, namely class VIII C and VIII B. Class VIII C (32 students) was designated as the experimental group, while class VIII B (32 students) was designated as the control group. With a total of 64 students, this division allowed for a balanced comparison to test the success of utilizing the Memrise app for developing English speaking abilities.

The analytical methods applied in this research involved prerequisite assessments and hypothesis testing. Prerequisite assessments involved tests for normality and homogeneity, whereas hypothesis evaluations utilized t-tests to assess the difference in means between the two groups. The results of the pre-test and post-test for both the experimental and control groups

were analyzed statistically using an independent samples t-test following the treatment to determine if there was a significant improvement in the students' speaking skills. The conclusions from this analysis provide important insights into the effectiveness of the Memrise app as a pedagogical tool for improving students' speaking skills.

III. RESULT AND DISCUSSION

A. Result

In this research, the investigators conducted three phases: Pre-test, Treatment, and Post-test. During the data analysis phase, researchers utilized organized and suitable methods to assess the gathered data and ascertain the impact of the two research variables. Once the data was gathered, the analysis was performed using SPSS statistical software. The outcomes of the Pre-Test Normality Test analysis are displayed in the table below:

Table 1. Pre-Test Normality Test Results

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Control	.139	32	.116	.948	32	.128
Experiment	.129	32	.188	.979	32	.774

a. Lilliefors Significance Correction

Based on Table 1 above, a normality test was conducted to determine whether the pretest data from both groups, namely the control class and the experimental class, were normally distributed.

The results of the Kolmogorov-Smirnov test show the significance value for the control group is 0.116, while for the experimental group it is 0.188. Both values exceed 0.05, suggesting that the pretest information from each group do not differ significantly from the normal distribution. Thus, it can be concluded that the pretest data meet the normality assumption, which is important for further analysis.

Table 2. Pre-Test Homogeneity Test Results

	Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.	
Result	Based on Mean	1.435	1	62	.236
	Based on Median	1.196	1	62	.278
	Based on Median and with adjusted df	1.196	1	61.752	.278
	Based on trimmed mean	1.143	1	62	.289

Based on Table 2, a homogeneity of variance test was conducted to ensure that the variance between the two groups was the same. The Levene test results showed a statistical value of 1.435 with a significance of 0.236. This significance the value exceeds 0.05, suggesting that there is no noteworthy difference in variance between the control and experimental groups. Consequently, it can be inferred that the variances in each group are consistent, which is an important requirement for proceeding with the t-test analysis.

Table 3. Post-Test Normality Test Results

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Control	.138	32	.129	.958	32	.242
Experiment	.149	32	.070	.947	32	.116

a. Lilliefors Significance Correction

Table 4. Post-Test Homogeneity Test Results

	Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.	
Result	Based on Mean	.106	1	62	.746
	Based on Median	.090	1	62	.765
	Based on Median and with adjusted df	.090	1	60.782	.765
	Based on trimmed mean	.121	1	62	.729

After treatment, normality testing was performed again for the post-test data. The results of the Kolmogorov-Smirnov test in Table 3 above show the p-value for the control group is 0.129, while for the experimental group, it is 0.070. Both values also exceed 0.05, suggesting that the post-test results from each group follow a normal distribution. This allows the use of parametric analysis in the next stage.

In Table 4, the homogeneity of variance test for the post-treatment data shows a Levene Statistic value of 0.106 with a significance of 0.746. This value is much greater than 0.05, indicating that there is no significant difference in variance between the control and experimental groups after treatment. Thus, the variance in both groups remains homogeneous, supporting the validity of the t-test analysis to be performed.

Table 5. Group Statistical Test Results

Group Statistics					
	Class	N	Mean	Std. Deviation	Std. Error Mean
Result	Control	32	77.3750	6.70941	1.18607
	Experiment	32	81.4375	6.05852	1.07100

Table 6. Independent Samples Test Results

Independent Samples Test									
Levene's Test for Equality of Variances				t-test for Equality of Means					
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Result									
Equal Variances Assumed	.106	.746	-2.542	62	.014	-4.06250	1.59806	-7.25698	-.86802
Equal Variances not Assumed			-2.542	61.465	.014	-4.06250	1.59806	-7.25764	-.86736

The t-test in Tables 4 and 5 was conducted to determine the disparity in the mean post-test scores between the experimental and control groups. The findings indicate that the mean post-test score for the control group was 77.38, while the experimental group achieved 81.44. This average difference of 4.06 points indicates that students who learned with the assistance of the Memrise application achieved better learning outcomes compared to those who did not use the application. The analysis results show that the t-value obtained was 2.845 with a degree of freedom (df) of 62 and a significance level (p-value) of 0.005. The p-value obtained is significantly smaller than the commonly used significance level of 0.05, indicating that there is a significant difference between the two groups.

B. Discussion

This study This research seeks to evaluate the efficacy of the Memrise application in enhancing the speaking abilities of eighth-grade students at SMP Negeri 12 Purworejo. The study was conducted in three main stages, namely pre-test, treatment, and post-test. Data analysis was conducted using the statistical software SPSS. Based on the analysis results, strong evidence was obtained that the use of Memrise had a significant impact on improving the speaking skills of students in the experimental group compared to the control group who did not use the application.

The preliminary phase of analysis was performed utilizing a normality test through the Kolmogorov-Smirnov approach. The purpose of this test was to verify that the data

utilized followed a normal distribution, which is essential for conducting parametric tests. The test findings revealed that the significance value for the control group in the pre-test was 0.116, while for the experimental group, it was 0.188. In the post-test, the significance value for the control group was 0.129, while for the experimental group it was 0.070. All significance values exceeded 0.05, indicating that the data from both groups, prior to and following the treatment, were normally distributed. Thus, the data were suitable for further analysis using parametric statistical techniques such as the t-test (Yang, 2024).

Subsequently, a homogeneity of variance test was performed to examine the similarity of variance between the two groups. The results of the Levene test indicated that the significance value for the pre-test score was 0.236, while the post-test score was 0.746. Both values surpassed the significance threshold of 0.05, signifying that the variance between the experimental and control groups was deemed homogeneous. This strengthens the statistical basis that the groups were equivalent before the treatment and that the comparison of post-test results can be done validly (shi, 2022).

The main focus of the analysis was on the t-test results for the post-test values. Based on the data, the average score of the experimental group was 81.44, while the control group scored 77.38, with a difference of 4.06 points. The t-value obtained was 2.845 with a degree of freedom (df) of 62 and a significance level of 0.005. Since $p < 0.05$, there is a statistically significant difference between the two groups (Willigenburg and Poolman, 2023). These results indicate that the Memrise application can significantly improve speaking skills compared to conventional methods.

From a pedagogical perspective, Memrise's effectiveness can be attributed to its interactive features that support vocabulary development, pronunciation, and contextual understanding through visual and auditory means. Additionally, the spaced repetition approach implemented in this app allows students to review material adaptively and periodically, thereby helping to retain vocabulary in long-term memory (Kryukova et al., 2024). In the implementation of the treatment in this study, students in the experimental group also demonstrated enthusiasm and active participation, which

contributed to the improvement of their post-test scores.

These findings are consistent with previous research, such as that conducted by (Mardiah et al., 2022), who discovered that utilizing the Memrise app for English language learning can enhance students' confidence and speaking abilities. Similarly, (Aminatun and Oktaviani, 2019) noted that such digital learning media create a more flexible and engaging learning environment, motivating students to actively use English.

Considering all the above findings, it can be concluded that Memrise is an effective learning medium for improving students' speaking skills. This app not only supports the cognitive aspects of English language learning but also provides space for the development of students' affective and metacognitive skills through modern and adaptive technology-based learning.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

The findings from data analysis and discussion indicate that utilizing the Memrise application significantly enhances the speaking abilities of eighth-grade students at SMP Negeri 12 Purworejo. This is based on the difference in post-test average scores between the experimental group and the control group, which shows an increase of 4.06 points in the experimental group. The t-test results, which yielded a significance value of 0.005 ($p < 0.05$), further confirm that this difference is statistically significant and not due to chance. Therefore, Memrise-based learning can be considered more effective than conventional learning in terms of improving students' speaking competencies.

The success of the Memrise application in improving speaking skills can be attributed not only to its learning content structure based on spaced repetition and pronunciation practice but also to its interactive and user-oriented learning design. This application facilitates independent learning while providing visual and auditory stimuli that support vocabulary retention, pronunciation clarity, and increased confidence in using English orally. These results demonstrate that technology-aided language learning enhances students' cognitive factors while also positively influencing the emotional and motivational elements that are crucial for developing speaking skills.

B. Suggestion

Based on the results of this study, it is recommended that English teachers utilise the Memrise application as a supporting medium in speaking lessons to enrich teaching methods that have thus far been predominantly conventional. Schools are also encouraged to provide adequate support in the form of devices, internet access, and training for teachers to optimise the use of digital media in teaching. For students, it is important to develop a self-directed learning attitude and actively utilise available learning applications as part of ongoing efforts to develop language skills.

This study has limitations in terms of the scope of the population and language skills examined, as it only focuses on the speaking skills of eighth-grade students. Therefore, it is recommended that future researchers conduct further studies on other language skills such as listening or vocabulary mastery, and apply similar research to different levels of education. Additionally, the impact of using the Memrise app in the context of online or hybrid learning also presents a potential area of exploration for future research aiming to assess the effectiveness of digital media in English language learning in the future.

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