

THE EFFECTIVENESS OF USING MEMRISE APPLICATION FOR STUDENTS VOCABULARY MASTERY ELEMENTERY SCHOOL

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Abstract

This research aims to find out whether the memrise application has an effect and significant differences toward vocabulary for fifth grade at SD Negeri 2 Kalibening. This research uses Quasi-Experimental Research. The sample of this research is fifth grade at SD Negeri 2 Kalibening. The result of first hypothesis test is the Sig (2-tailed) was less than 0.05 ($0.000 < 0.05$), indicating that H_a is accepted, Alternative Hypothesis (H_a) There is an effect of using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kalibening. In second hypothesis test is the significant value (2-tailed) is 0.016, this indicates that the significant value is smaller than 0.05 ($\text{sig} < 0.05$), H_a is accepted. There is a significant difference when using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kelibening. In conclusion, the Memrise application offers a valuable tool for improving vocabulary mastery and should be considered a beneficial addition to the language learning curriculum.

Keyword: Memrise, Vocabulary, Elementary School

INTRODUCTION

Mastery of vocabulary in English is very important both for listening, speaking, reading, and especially in writing (Ávila-Varela et al., 2021; Hidayati, 2016; Setiawati & Refai, 2017). According to Juhendi in Apriadari (2019), in his research his research says that vocabulary is an important aspect of language, because it is present in loyal language skills which include listening, speaking, reading and writing. Many people realize that their vocabularies are very limited so they get difficulties in conveying their ideas have difficulty in conveying their ideas. To make it easier for children to learn a language, it is necessary to understand vocabulary which is an important part of the learning process of a language, so it is important for someone to master and continue to improve their language skills (Ulfa, 2019).

Mastery of vocabulary will also support students' activities in expressing opinions, as well as expressing their intentions and goals (Azizah, 2020; Lin & Guo, 2021; Priyastuti et al., 2020). Thus, vocabulary is a basic element that a student must master before learning a language (Anindyajatii & Choiri, 2017; Muhyidin, 2018). Without sufficient vocabulary mastery, ideas cannot be conveyed. Students must know the meaning of the vocabulary, be able to spell

the vocabulary correctly, be able to use the vocabulary appropriately in sentences and be able to pronounce it correctly. According to Linse (Fajriah, 2013) "Vocabulary is the collection of words that an individual knows". This statement can be interpreted that vocabulary is a collection of words that everyone knows. Fajriah (2013) explained that vocabulary is one of the components of English that has an important role in the learning process.

Currently, technology is advancing and many websites have been created to facilitate access and use for students, one of which is Memrise application. Memrise is a powerful and versatile language learning tool that uses mnemonic techniques and scheduled repetition to improve information retention. With interactive features, videos from native speakers, and user-generated content, Memrise offers a fun and effective learning experience. With consistency and the right approach, users can achieve significant progress in their language learning using Memrise.

Memrise is an internet learning tool that specializes in vocabulary development and was founded by Ed Cooke, the Grand Master of Memory, and Greg Detre, a Princeton neuroscientist specializing in the science of memory and forgetting. This tool contains a very specific audience that wants to know about vocabulary development. Memrise is the best android application categorized as an educational application for learning English, but this application course is not only presented and focused on learning English only, but many other languages such as French, Italian, English, German, Portuguese, Spanish, Chinese, Arabic, Chinese and many others even almost all languages in the world are in this one application. (Candra & Kusumadewi, 2018). Memrise is an educational application used by language learners to learn irregular verbs, this application can be said to be a "digital" learning media application. As said by Mahmudah (2018) "Learning media with various forms in the form of audio, visual and audio visual are present to facilitate the teaching and learning process of Arabic because they can encourage student learning motivation". Therefore, every teacher who wants to encourage their students to know their vocabulary data or every student who wants to improve their vocabulary in a simple and very fun method is expected from the users of this tool. Memrise is very easy to use. To increase the speed of learning and remembering memrise uses flash card repetition (Aminatun & Oktaviani, 2019). This application can be used with the website, and login using a Google or Facebook account, but it can also be done by downloading the application on the play store or mobile app store so that it can be used more easily and practically.

Santri (2020) in his research concluded that there is a significant effect in using the English memrise application to improve the vocabulary skills of Second Grade students of MA DDI Kanang. Rahmawati (2021) also concluded that The Memrise program was shown to be beneficial in improving vocabulary skills of SMPN 9 Mesuji Raya Palembang students during the COVID-19 pandemic. Fadilah (2021) also concluded that the Memrise application was effectively employed in the vocabulary learning process since students gained something new by studying vocabulary using Memrise. This part of the research will integrates and contributes to the results of previous research especially in the

context of teaching vocabulary and using memrise application. In the previous research, the researcher strongly believed that this research is better than all of the previous research.

This research aims to find out whether the memrise application has an effect and significant differences toward vocabulary for fifth grade at SD Negeri 2 Kalibening. The research questions in this research as follows:

1. Is there any effect of memrise application toward vocabulary for fifth grade at SD Negeri 2 Kalibening?
2. Is there any significant differences when use memrise application toward students vocabulary for fifth grade at SD Negeri 2 Kalibening?

Meanwhile, there are 2 hypothesis based on the research questions. In each hypothesis, there are 2 types of hypothesis, alternative hypothesis (H_a) and null hypothesis (H_o).

(First Hypothesis)

1. Alternative Hypothesis (H_a): There is an effect of using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kalibening.
2. Null Hypothesis (H_o): There is no effect of using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kalibening.

(Second Hypothesis)

1. Alternative Hypothesis (H_a): There is a significant difference when using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kelibening.
2. Null Hypothesis (H_o): There is no significant difference when using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kelibening.

METHOD

In this research, the researcher used quantitative research. According to (Creswell, 2014) quantitative research is an approach that tests objective theories by examining the relationship between variables. In this research, the researcher applied an experimental design with one pre-test, post-test and control group to compare with the experimental group (Creswell, 2014). The researcher used this design to find out the difference before and after using Memrise App as a medium to teach vocabulary. This research used a quasi-experimental approach to the learning process, which clearly separated the experimental and control groups. The sample of this research is SD Negeri 2 Kalibening which class V A as the experimental class group and class V B as the control class group by using the Total Sampling method. Class V B amounted to 11 students who acted as the control class and class V A as the experimental class amounted to 11 students.

The researcher arranged the instrument in multiple choice questions because the test was used to know students vocabulary mastery. There were 20 questions given to the students with 40 minutes finished the test. The multiple choice questions related to the material about greetings, days and colors. The

validity test of instrument uses face validity. Assessing by experts conducted in this validity test to test the validity of the instrument to be used.

In the technique of data collection the researcher used quantitative data or test. The tests were pre-test and post-test. The former was administered at the start of the investigation. This research was conducted in both the experimental and controlled class. The second was the post-test, which was given after the class treatment. This test was offered to both the experimental class and the controlled class. The aim of the test was to determine the progress of student learning and also the effect of the Memrise application.

In data analyzing technique, the formula that used is normality and homogeneity test before hypothesis test. To determine normality, the Sig score can be used which is in the results of the Shapiro-Wilk calculation (Anwar, 2009). the researcher used ANOVA with SPSS calculations as a homogeneity test (Anggara & Anwar, 2017, p. 98). The criteria for normality test and homogeneity test according to (Nurgiyantoro et al., 2015, p. 124) as follows:

1. If the Significant value (Sig) ≥ 0.05 , the data distribution is normal.
2. If the Significant value (Sig) < 0.05 , the data distribution is not normal.

A statistical hypothesis is a precise speculation that defines a process of generating data regarding the distribution parameters of random variables. There are two hypothesizes in this research that was explained in chapter II above. The first hypothesis tested using Paired Sample T Test and the second hypothesis tested using Independent Sample T Test (Anwar, 2009).

RESULTS AND DISCUSSION

In the results, the description of the pre-test and post-test data consists of the minimum and maximum score of the experimental class and control class, mean, and standard deviation. Data description is obtained using the SPSS 27 application. The table below is a description of the pre-test score data.

Table 1 Descriptive Statistics of Pre-Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
pre test control	11	15	40	25.45	9.070
pre test experiment	11	10	45	25.45	11.716
Valid N (listwise)	11				

Source: Statistical Package for Social Science 27

The table above presents descriptive statistics of pre-test scores for the control and experimental groups. The table shows that each group consisted of 11 students (N=11). The minimum pre-test score for the control group was 15, while the maximum score was 40. Similarly, the minimum score for the experimental group was 10, and the maximum score was 45. Despite the variation in the range of scores, both groups had identical mean scores of 25.45, indicating that the initial vocabulary proficiency level was equal to the mean. However, the standard deviation for the control group was 9.070, while that for the experimental group was higher at 11.716.

Table 2 Descriptive Statistics of Post-Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
post test control	11	70	95	78.64	8.394
post test experiment	11	70	95	87.73	7.862
Valid N (listwise)	11				

Source: Statistical Package for Social Science 27

The table above provides descriptive statistics of post-test scores for the control and experimental groups. Each group consisted of 11 students (N=11). In the control group, the minimum post-test score was 70, with a maximum score of 95, and a mean score of 78.64. The standard deviation for the control group was 8.394. On the other hand, the experimental group, which used the Memrise application, also had a minimum score of 70 and a maximum score of 95, but the mean score was higher at 87.73. The standard deviation in the experimental group was slightly lower at 7.862.

Before conducting hypothesis testing, the researcher compared the mean scores of the pre-test and post-test in the experimental class to determine the average difference and assess the improvement in students' vocabulary mastery.

Table 3 Mean Score of Pre-Test and Post-Test in Experimental Class

Group	N	Mean Pre Test	Mean Post Test	Mean Different
Experimental	11	25.54	87.73	62.28

Source: The Students Score in Experimental Class

The mean score in the pre-test was 25.45, indicating the initial level of vocabulary knowledge. After the treatment using the Memrise application, the post-test mean score increased significantly to 87.73. This substantial rise in the mean score highlights an improvement of 62.28 points on average in the experimental class. The difference between the pre-test and post-test means suggests that the Memrise application had a positive effect on students' vocabulary mastery, providing a preliminary indication of the effectiveness of the intervention prior to conducting formal hypothesis testing.

In data analyzing technique, there are two part of data analysis. The first data analysis to test the first hypothesis that used Paired Sample T Test and the second data analysis to test the second hypothesis that used Independent Sample T Test. Table 4 and table 5 shows the results of hypothesis test.

Table 4 Result of Paired Sample T Test

Paired Samples Test							
Paired Differences					t	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			

Pair	pre test	-	10.808	3.259	-69.534	-55.012	-	10	.000
1	experiment - post test experiment	62.273					19.109		

Source: Statistical Package for Social Science 27

The results of the Paired Sample T-Test showed a significant difference between the pre-test and post-test scores. The Sig (2-tailed) was less than 0.05 (0.000<0.05), indicating that H_a is accepted. Alternative Hypothesis (H_a) There is an effect of using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kalibening.

Table 5 Result of Independent Sample T 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
score	Equal variances assumed	.088	.770	-2.622	20	.016	-9.091	3.468	-16.324	-1.857
	Equal variances not assumed			-2.622	19.915	.016	-9.091	3.468	-16.326	-1.855

Source: Statistical Package for Social Science 27

Based on the table above, the significant value (2-tailed) is 0.016, which is lower than the error level of 5% (0.05). This indicates that the significant value is smaller than 0.05 (sig<0.05). Consequently, the second hypothesis (H_a) is accepted. There is a significant difference when using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kelibening.

Santri (2020) in his research concluded that there is a significant effect in using the English memrise application to improve the vocabulary skills of Second Grade students of MA DDI Kanang. Rahmawati (2021) also concluded that The Memrise program was shown to be beneficial in improving vocabulary skills of SMPN 9 Mesuji Raya Palembang students during the COVID-19 pandemic. Fadilah (2021) also concluded that the Memrise application was effectively employed in the vocabulary learning process since students gained something new by studying vocabulary using Memrise. Previous research concluded that the Memrise application has an influence on students' vocabulary skills in each school level, MA DDI Kanang, SMPN 9 Mesuji Raya, and SMA Ar-Raudhah. The results of this research support the findings of previous studies in the context of using the Memrise application in vocabulary learning. The sample of this

research was grade V students of SD Negeri 2 Kalibening where the average age of students was 10-12 years. Research conducted on fifth grade students of SD Negeri 2 Kalibening concluded that the Memrise application had a significant influence and difference in vocabulary skills.

The findings of this study using the Memrise application support the theory of using game-based learning applications in vocabulary learning. Mahmudah (2018) said that "Learning media with various forms in the form of audio, visual and audio visual are present to facilitate the teaching and learning process because they can encourage student learning motivation". In the Memrise application, students can choose appropriate topics such as Art & Literature, Math & Science, Natural World, History & Geography, Memory Training, Professionals and Careers, Standardized tests or trials and Entertainment. The Memrise application can be accessed via the website (Aminatun & Oktaviani, 2019) making it easier for students to use Memrise as a learning medium.

The positive results of this research have important implications for educational practices. The effectiveness of the Memrise application suggests that integrating digital tools into the curriculum can enhance vocabulary acquisition and overall language learning. Schools should consider incorporating such applications to complement traditional teaching methods, providing students with additional resources to engage with and practice new vocabulary. Moreover, educators should be trained to effectively integrate these tools into their lesson plans to maximize their impact on student learning.

Future research should explore several areas to build on these findings. Longitudinal studies could assess the long-term effects of using digital applications on vocabulary mastery and language skills. Additionally, research could investigate the impact of different types of digital tools on various aspects of language learning, such as reading comprehension and writing skills. Comparative studies between different digital applications could also provide valuable insights into the most effective features and strategies for enhancing vocabulary mastery.

In conclusion, this research highlights the effectiveness of the Memrise application in improving vocabulary mastery among fifth-grade students and supports the broader use of digital tools in education. By integrating these applications into the learning process, educators can offer students innovative and engaging ways to enhance their language skills, ultimately contributing to their overall academic success.

CONCLUSION AND SUGGESTION

The findings of this research demonstrate the effectiveness of the Memrise application in improving the vocabulary mastery of fifth-grade students of SD Negeri 2 Kalibening. The results of the Paired Sample T-Test for the first hypothesis showed a significant increase in students' vocabulary scores from pre-test to post-test after using the Memrise application, confirming that the application has a positive impact on their vocabulary skills. Similarly, the Independent Sample T-Test for the second hypothesis showed a significant

difference in vocabulary mastery between students who used the application and those who did not, further supporting the effectiveness of Memrise as a learning tool.

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The second hypothesis, the significant value (2-tailed) is 0.016, which is lower than the error level of 5% (0.05). This indicates that the significant value is smaller than 0.05 ($\text{sig} < 0.05$). Consequently, the second hypothesis (H_a) is accepted. There is a significant difference when using Memrise application to the mastery of English vocabulary for fifth grade students at SD Negeri 2 Kelibening.

In conclusion, the Memrise application offers a valuable tool for improving vocabulary mastery and should be considered a beneficial addition to the language learning curriculum.

This research also suggests to teacher, students and future researchers about vocabulary and using memrise application.

1. For Teacher

Teachers are encouraged to integrate digital game-based learning tools, such as the Memrise app, into their language learning curriculum to enhance vocabulary instruction. By combining these tools with traditional methods, teachers can create a more engaging and interactive learning environment that caters to a variety of learning styles. In addition, it is important for teachers to provide guidance on how to use the app effectively, ensuring that students get the most out of its features.

2. For Students

Students should take advantage of digital apps like Memrise to improve their vocabulary and overall language skills. These tools offer a fun and interactive way to learn, allowing students to practice at their own pace and repeat challenging material as needed. To optimize learning, students are encouraged to use these apps regularly as a complement to classroom learning.

3. For Future Researchers

This research focused on the effect and significant difference of Memrise application in vocabulary mastery using experimental research in 3 times treatments. Future researchers should examine the long-term effects of using digital learning tools like Memrise on language acquisition, particularly across educational settings and across age groups. Comparative studies examining the effectiveness of different digital applications would provide valuable insights into which features are most effective for language learning. Additionally, further research could investigate how the use of digital tools impacts other language domains, such as reading comprehension and writing skills. Expanding the scope of research to include a variety of subjects and diverse student populations would enrich our understanding of the role of technology in education.

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