

Analysis on English Vocabulary Improvement Through Memrise and Google Classroom

Sri Wahyuningsih ^{1)*}, Ida Nyoman Tri Darma Putra ²⁾

¹ Sekolah Tinggi Pariwisata Mataram, Lecturer, Mataram, Indonesia

² Universitas Nusa Cendana, Lecturer, Mataram, Indonesia

Email First Author* : s.wahyunigsih28@yahoo.com

ARTICLE INFO	ABSTRACT
Article history	During the Covid-19 epidemic, Google Classroom is one of the learning tools with the greatest usage. In addition, another application is used to make the English sessions exciting and enticing to the students. In addition to Google Classroom, the Memrise application is used in this study. Consequently, the objective of this research is to determine whether or not there is a discernible gender gap in the level of vocabulary improvement achieved by males and girls while using Google Classroom and Memrise application. This study used a quantitative research approach and a comparative design, which included both a pre-test and a post-test. The number of participants in this research was 40 participants of college students. The students were separated into two groups, each of which had 20 male and 20 female students. The findings of this research indicated that it was possible for both groups of students to improve their vocabulary ability; however, when compared to the male group, the female group shown a substantially greater increase in their vocabulary capacity. In conclusion, the research suggested that Memrise is useful tool for assisting students in broadening and deepening their word knowledge.
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1. Introduction

All of the students are taught using the same methodology and material in the same classroom at the same time, and participating in the same activity. Nevertheless, male and female students are distinct individuals, and these differences manifest themselves in the ways that they behave while attending school. Men and women are not fundamentally different from one another but have distinct differences in their capacities to learn new words in the English language (Wei, 2016). However, the number of studies that have been conducted indicates that gender is often what draws the interest of researchers (Catalan, 2003). It seems that acquiring new vocabulary is one of those areas in which gender might be considered a distinguishing factor (Boyle, 1987). Aside from that, it is believed that

gender is one of the main affectional elements that play a special function and impact the process of learning a second language (Zoghi et al., 2013).

Learning and language are also intimately tied to one another because the technique of acquiring is the single most significant component of learning a language, and language is the key to the method of learning (Mehrabian, Salehi, & Branch, 2019). When it comes to studying English, having a strong vocabulary is the most crucial skill to have. Knowledge of words and what those words signify is a wide definition of the concept of vocabulary. Comprehension of the sorts of words needs to know to read more complex texts while maintaining their level of understanding via the usage of vocabulary (Nurdiansyah et al., 2019). When trying to acquire a second language, one of the most essential and important skills that one must acquire is developing one's vocabulary (Sari & Sutopo, 2018). In order to become proficient in English, one must pay attention to three aspects: vocabulary, grammar, and pronunciation; nevertheless, expanding one's vocabulary is the most important aspect of this endeavor (Beglar & Hunt, 2005).

According to Korlu and Mede (2018), learning and vocabulary are two distinct yet interrelated entities that cannot be severed from one another. Vocabulary is necessary for the process of learning a new language (Giessen, 2019). The four aspects of the English language—listening, speaking, reading, and writing—will be much simpler to comprehend if you understand vocabulary better (Indrasari, Novita, & Megawati, 2018). According to Krashen and Terrell (1983), it is impossible for students to become fluent in English without first being proficient in the vocabulary. If the vocabulary has been adequately studied, it will be easier for students to communicate with one another while they are studying and to guide their ideas, views, and information (Aisyah et al., 2019). Therefore, having a sufficient vocabulary will help students improve their English language learning.

Students have a hard time acquiring a comprehensive vocabulary in terms of its structure, pronunciation, and vocabulary, it is common for students of the English language to struggle while attempting to study English in Indonesia (Katemba, 2019; Putra, 2020). To get over these obstacles, instructors can use a variety of approaches to help students expand their vocabulary knowledge and should encourage their students to do the same. Researchers have decided that using the Memrise program is the most modern approach to instructing students in vocabulary. The vocabulary of both male and female students was improved via the use of the Memrise program, which is widely regarded as an efficient method for accomplishing

this goal. It has been shown that using these strategies may boost students' overall vocabulary knowledge. In addition, the advantages of using technology in the classroom may assist educators in working with students more simply and effectively, which is particularly important. Abrams and Walsh (2014) discovered that using technology-based games for vocabulary training can improve students' results on vocabulary assessments. Memrise was employed in the research conducted by Widyaningrum (2020) to help students improve their listening and speaking skills. According to the findings of their investigation, Memrise also played an essential part in helping students improve their listening and speaking abilities.

Gamification is a technique that may be used in the realm of education to engage students in creative classroom activities without jeopardizing the objectively scientific character of the curriculum (Nolan & McBride, 2014). Within a learning environment, gamification inspires students to develop their capacity for critical thinking and multitasking (Kapp, 2012). Gamification can make both teaching and learning more pleasant and boost students' desire to learn (Resmayani, 2020). According to Karjo (2018), Memrise is an online learning platform that helps users expand their vocabulary. This app provides over 150 language courses in a total of 25 languages, including English, French, Spanish, Japanese, German, Russian, Chinese, etc. In addition, the structure of Memrise is quite similar to that of the Duolingo program in terms of its appearance. Memrise is a learning platform that enables users to study a wide range of topics on a number of devices, including mobile phones and tablets (Wahyuningsih, 2020). Another learning site the researchers employ, in addition to Memrise, is Google Classroom. Memrise is used in the classroom to teach vocabulary.

Google Classroom is a software developed by Google that can interface with other services such as YouTube, Drive, Gmail, and Hangouts. The tools provided by Google Classroom will make it simpler for educators to facilitate educational activities with their students. Students have the ability to access their Google online courses whenever, whenever, and from whatever device they want, so the classroom isn't the only location where learning is supposed to take place. In schools, Google Classroom will act as a platform for blended learning, making it simpler to develop assignments and give grades to students in a paperless setting. These well-known web tools have the potential to be utilized for teaching and learning, much like many other tools available on the internet (Abid Azhar & Iqbal, 2018).

2. Research Method

This study makes use of a quantitative research approach combined with a comparative research approach. Quantitative research is distinguished by its emphasis on objective measurement and statistical, mathematical, or numerical analysis of data gathered via a pre-test and post-test design and managed statistically through a computer. The research tool underwent preliminary testing to determine whether it was valid and reliable. The results were analyzed with the help of the SPSS software tool. Because the data analysis demonstrated high validity and reliability, it was chosen as the pre-and post-test.

The research was conducted with college students at Mataram Tourism College. The students and the researchers who taught the session participated in a lesson that was held online using Google Meet twice a week. Students spent one hour of their time online participating in a Google Meet meeting, and the remaining two hours of their time was spent doing the Google Classroom exercises that had been given to them. The researcher gave the students a pre-test before the treatment and then gave them a post-test after the treatment. This activity aimed to analyze and quantify the extent to which students' vocabulary expanded due to their use of Google Classroom and Memrise. The experimental group consisted of forty students instructed to use Memrise. The students completed the tasks, submitted their completed assignments, and received their grades. The researcher used these two classes to carry out the same treatment and technique. The students were split up into two groups, each of which had 20 male and 20 female students. The students were randomly assigned to these groups. This study found that the vocabulary improvement of female students who were taught using the Memrise and Google Classroom was significantly different from that of male students who were taught using the Memrise and Google Classroom. Specifically, the difference was significant when comparing the vocabulary improvement of students taught using Memrise and Google Classroom. The female and male classrooms used Google Meet, Memrise, and Google Classroom as their primary online learning tools.

3. Research Findings and Discussion

Research Findings

The computation results showed a validity value of 0.85, indicating that the test used in this study is valid and good. While the reliability rating was 0.86, which indicates that the test may be trusted.

Table 1 Validity Criteria Score

Coefficient of Correlation	Correlation	Validity Interpretation
$0,90 \leq r_{xy} \leq 1,00$	Very high	Very proper/ very good
$0,70 \leq r_{xy} < 0,90$	High	proper/ good
$0,40 \leq r_{xy} < 0,70$	Medium	Fairly proper/ Fairly good
$0,20 \leq r_{xy} < 0,40$	Low	Not proper/ bad
$r_{xy} < 0,20$	Very low	Very not proper/ Very bad

Table 2 Reliability Criteria Score

Reliability	Interpretation
0.90 and above	Excellent reliability
0.80 - 0.90	Very good
0.70 - 0.80	Good
0.50 - 0.60	Fair, revision is needed
< 0.5	Poor

The results of validity and reliability test enabled the researchers to select all of the valid and reliable items that were going to be used for the instrument, which was the vocabulary test. This test was used as a pre-test before the program, and it was also used as a post-test after the program had concluded. After the data from the pretest had been collected, they were analyzed using SPSS 28.0.

The researchers computed each class's pre-test, and post-test. The results are shown in table 3.

Table 3. Pre-Test and Post-test Score

	Female Students		Male Students	
	Mean	Standard deviation	Mean	Standard deviation
Pre-Test	81.85	6.0622	78.95	6.7290
Post-Test	92.32	3.0278	89.76	6.3419

In table 3, the mean score on the pre-test for the female group was 81.85, and the standard deviation for that score was 6.0622. However, the mean score on the post-test was 92.32, and the standard deviation for that score was 3.0278. The pre-test mean for the male group was 78.95, and the standard deviation was 6.7290. After the test, the male group's mean increased to 89.76, and the standard deviation decreased to 6.3419. The normality test was carried out to establish whether or not the data population has a normally distributed distribution. The results of the normality test are shown in table below.

Table 4. Normality of Pre-Test and Post-test Score

	Pre-Test		Post-Test	
	Male	Female	Male	Female
Value	0.894	0.873	0.902	0.781
Sig.	0.201	0.124	0.023	0.152

According to the criterion for normality, the data were considered to have a normal distribution if the sig. value was larger than 0.05. According to the calculation of the normality test, the pre-test and post-test scores were normally distributed. The significant value of the result for the female group was found to be $0.873 > 0.05$, whereas the significant value for the result for the male group was found to be $0.902 > 0.05$. The outcome of the pretest showed that the significant values for males were much higher than those for females. The researchers next conducted the homogeneity test to see whether or not the populations were similar to one another. The homogeneity test was carried out to ascertain whether or not the population variances were homogenous. The result showed that the Sig. Based Mean was $0.003 < 0.05$, indicating that the data variations of the female and male post-test were not homogenous.

According to the requirements for the Mann-Whitney test, the null hypothesis must be rejected if the value of the standardized deviation is less than 0.05. If the value of Asymp.Sig. is greater than 0.05, on the other hand, this indicates that the null hypothesis is accepted. The computation revealed that the Asymp.Sig. (2-tailed) was 0,001 0,05. Therefore, it is possible to draw the conclusion that female and male students have significantly different levels of learning outcomes while using Memrise to acquire new vocabulary. It is possible to draw the conclusion that utilizing the Memrise program has an impact on the learning process of acquiring vocabulary. One further finding from this investigation reveals that female groupings' education levels are greater. The usage of Memrise has the potential to improve the vocabulary of both male and female users, although the female user has a greater accomplishment level.

Discussion

The outcome of the pretest showed that the significant values for males were much higher than those for females. The researchers next conducted the homogeneity test to see whether or not the populations were similar to one another. The homogeneity test was carried out to ascertain whether or not the population variances were homogenous. Therefore, it is possible to draw the conclusion that female and male students have significantly different levels of

learning outcomes while using Memrise to acquire new vocabulary. It is possible to draw the conclusion that utilizing the Memrise program has an impact on the learning process of acquiring vocabulary. This work is backed by a number of scholars that have previously conducted research on Memrise. Research that Affandi (2018) conducted demonstrated that Memrise was beneficial in helping students increase their knowledge, particularly in acquiring new knowledge vocabulary. The research conducted by Fathi et al., (2018) confirmed that using the Memrise app improved students' self-regulated capacity in vocabulary learning. This was directly connected to learner motivation and played a significant role in the process of making learners self-regulated. According to Abarghoui and Taki's (2018) the use of Memrise increased students' levels of interest, as well as their levels of confidence and positivity, and level of concentration on completing the quizzes.

4. Conclusion

The findings of the data show that both groups have made progress in terms of expanding their vocabularies. The study results demonstrate that there has been an increase in vocabulary for both groups, however, the study results for the female group show a substantially larger enhancement than those for the male group. Because the value score of female users on Memrise is greater than that of male users, one conclusion can be drawn from this: the Memrise program is more appropriate to the female demographic. These strategies have favorable consequences since they are increasingly effective in boosting the students' vocabulary.

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