The Effect of Use of Matching Word Games towards Students' Vocabulary Mastery at MTs Muhammadiyah Tanjung Belit Airtiris

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Abstract

This experimental research was carried out in eighth grade at MTs Muhammadiyah Tanjung Belit Airtiris. This research aims to determine the effect of the Matching Word Game on students' vocabulary mastery. This research methodology uses a quasi-experimental design. The sample for this research was class VII A as the experimental class and VII B as the control class. The experimental class consists of 17 students and the control class consists of 17 students. The instrument used in the research was a vocabulary test. Data were analyzed using the SPSS 25 program. Based on the research results, the average student score in the experimental class was 65.15 and 52.15 in the control class. Data analysis shows significance (2-tailed) 0000 < 0.05, which means Ha is accepted. It can be concluded that there is an influence on the use of the Matching Word Game on students' vocabulary mastery.

Keywords: Vocabulary Mastery, Quasi Experimental, Matching Word Game.

Introduction

The basic component of language is vocabulary. The ability to understand vocabulary is essential for anyone who wants to learn a language. Because communication is based on language, students who have limited vocabulary will have difficulty interacting with other people. According to Hiebert & Kamil in (Manik & Christiani, 2016) defines "knowledge about the meaning of words." This implies that children speak more easily the more languages they learn.

One of the key components of language that plays an important role in communication is vocabulary. This is because language is an important part of communication. In this regard, Aswandi (Muslimin et al., 2017) In this sense, vocabulary is very important for learning English. A person's vocabulary is a collection of all the words they can understand or all the words they will use to form sentences. This means that vocabulary and language are inseparably linked.

Communication will not run well without an adequate vocabulary. According to (Ayu et al., 2022) Many students feel lazy because there is a lot of foreign vocabulary and sentence patterns that are different from Indonesian. This fear then makes them dislike English. Therefore, they find it difficult to learn English. Although various efforts have been made to increase students' enthusiasm for learning English, many problems are encountered in the field.

Students who are able to master vocabulary will be more effective in communicating ideas, knowledge and information. When students develop their vocabulary, their knowledge of speaking will increase. Then they can communicate effectively. Of course, there are many ways to master vocabulary, one of which is through games. There are many games that can be used to learn vocabulary, one of which is the word matching game. This game can be used by students to learn while playing. Through the use of this game, students can grasp vocabulary easily.

According to (Matondang et al., 2018) claims that games are often used to fill boredom in teaching which would be better served by language-rich conversations. That said, adding a few games can help make the words easier to remember, and like it or not, adding a few games can often enliven even the most lethargic student. With this game, students can learn vocabulary in a fun way. Students will feel comfortable in learning because they learn while playing. That way, students' interest in learning and understanding vocabulary will increase (Masrul, 2015).

Based on preliminary research at MTs Muhammadiyah Tanjung Belit Airtiris by conducting observations, the author saw that there were several difficulties that students encountered in their vocabulary, students had several problems in the process of learning English. For example, students are bored, afraid to learn, and still passive in class. This makes student learning achievement low. Knowing them in understanding vocabulary makes their performance below standard. They don't understand English Language Learning.

Another problem students face when learning English is that although they can remember new words and their meanings, they are too slow to look them up in a dictionary. The three teachers instructed them to research the definitions of terms they had difficulty learning. Students not using words in appropriate phrases is another problem. In the teaching and learning process it comes from them. Many students struggle to succeed.

This game aims to help students master vocabulary more easily. This can be applied in the learning process so that students feel learning is more meaningful. Applying this word matching game can help students to deepen their vocabulary. Students will feel that learning is not just systematic material, but learning is fun. So student enthusiasm will continue to increase through this learning method.

(Khoirunnisa, 2019) emphasizes that teachers can attract students' attention to language learning by using games to create an interesting environment. When students feel they are making progress, they learn more effectively. In other words, when children learn while having fun, games delight students and arouse their interest in language acquisition.

In line with this opinion, Wright, Betteridge, & Buckby (Lina et al., 2020) games involve students' emotions and support them in maintaining their interest and efforts in language acquisition. Therefore, using games to teach and acquire vocabulary is more successful because the entertaining learning elements can help students remember the terms they learn.

The word matching game requires students to match a target language word with a graphic that explains the word's definition or a target language word with its explanation in their native language. Word matching games can also be played alone or with a group. This game can be used to improve students' vocabulary skills. Match (Rahmawati et al., 2020) One way of learning involves asking students to find or match pairs of words given to them. With this method, children play a game where they have to find pairs of words. The teacher provides cards with English words and cards with antonyms and synonyms of terms for a word matching approach that uses synonyms and antonyms. Because one word includes several vocabularies, using a word matching approach with synonyms and antonyms can help students' understanding and knowledge develop.

According to Aswandi (Aswandi, 2020) the matching game involves conveying information using the cards provided. Matching games can be played by one or more players. The picture and word cards must match so that students can win this game. Therefore, researchers use paired word games as a teaching and learning approach in the hope that it can help class VIII students at MTs Muhammadiyah

Tanjung Belit Airtiris, Kampar Regency, Riau, Indonesia, to learn more.

In this research, researchers conducted experimental research with the title : "The Effect of Using Matching Word Games on Students' Vocabulary Mastery at MTs Muhammadiyah Tanjung Belit Airtiris.

Method

This research aims to find out how the word matching game significantly influences the vocabulary mastery of class VIII students at MTs Muhammadiyah Tanjung Belit Airtiris. This research uses an experimental method with a control group design for vocabulary mastery. This is related to two variables using word matching games as the independent variable and students' vocabulary mastery as the dependent variable. The experimental group was taught using matching word games, the control group was taught using conventional.

This research uses a quasi-experimental research design. According to (White & Sabarwal, 2014) quasi-experimental research does not include random assignment of participants into groups and can use two or more groups to conduct experiments. This research involves two variables. The word matching game is the independent variable (X) and vocabulary mastery is the dependent variable (Y). In this research, a pre-test and post-test were carried out and two groups were used. Group one is the experimental group and group two is the control group. The author used quasi-experimental research because the author wanted to find out whether there was a significant difference in students' vocabulary knowledge between groups taught using and without using matching word games.

This research will be carried out at MTs Muhammadiyah Tanjung Belit Airtiris, especially for class VIII at MTs Muhammadiyah Tanjung Belit Airtiris, Kampar Regency. It is located on Jalan Ujung Tanjung in Airtiris, Kampar, Riau.

The population of this study was class VIII students at MTs Muhammadiyah Tanjung Belit Airtiris which consisted of 2 classes, namely VIII A and VIII B. Each class had 16 students. The sampling technique used in this research is random sampling because sampling from the population is carried out randomly without paying attention to the strata in the population (West, 2016) . The samples were taken from two classes in class VIII, the two selected classes were drawn by lottery, namely the control class and the experimental class. The results obtained were that class VIII A was the experimental class and class VIII B was selected as the control class.

The instruments used are tests from several sources. The researcher will ask several questions related to the student material. This is used to measure their vocabulary knowledge.

This research involved the participation of students in classes VIII A and VIII B MTs Muhammadiyah Tanjung Belit Airtiris in learning the ability to know Vocabulary Knowledge using a word matching game. Data was obtained by collecting vocabulary test results. The test was carried out 2 times, namely pre-test and post-test. Before a test is used to collect data, the test must be tested first to obtain valid and reliable research data. In this research, the subjects of the validity test were 16 students in class VIII A.

To determine whether the research results were statistically significant, researchers analyzed them using the t-test. To find out whether a t-score is significant, the degrees of freedom must be determined after the t-test is calculated. The alternative hypothesis (H_a) is accepted if the T-Test results are higher than the T-table. This shows that there is a significant difference in scores between before and after implementing the Matching Word Game in second grade. The Null Hypothesis (H_o) is rejected if the T-Test value is smaller than the T-table. This means that there is no significant difference in scores between

before and after using *the Matching Word Game* in class II.

Results and Discussion
Experimental Class Data
Table 1. Students' Vocabulary Mastery Scores in the Experimental Class

Information	Pretest	Posttest
Number of Values	970	1245
Average	57.06	73.24

Source: Results of Research Data Processing

The table above shows that the total score of the pre-test average score is 57.06 and post-test 73.24. The statistics analyzed in the experimental class can be seen in the following table:

Table 2. Statistics Analyzed in the Experimental Class

Statistik deskriptif							
	N	Minimum	Maksimum	Jumlah	Berarti	Std. Deviasi	Perbedaan
Penguasaan Kosakata	34	45	85	2215	65,15	10.187	103.766
Valid N (daftar)	34						

Source: Results of Research Data Processing

Based on the data above, it is known that the minimum score is 45 and the maximum score is 85. For the calculation results using the SPSS program, the mean is 65.15, the standard deviation is 10.187 and the variance is 103.766.

Control Class Data

Table 3. Students' Vocabulary Mastery Scores in the Control Class

Information	Pretest	Posttest
Number of Values	840	950
Average	49.41	55.88

Source: Results of Research Data Processing

The table above shows that the average pre-test score is 49.41 and post-test 55.88. The statistics analyzed in the control class can be seen in the following table:

Table 4. Statistics Analyzed in the Control Class

Penguasaan Kosakata	
N	Sah	34
	Hilang	0
Berarti		52,65
Median		52,50
Mode		50
Std. Deviasi		7.710
Perbedaan		59.447
Minimum		40
Maksimum		65
Jumlah		1790

Source: Results of Research Data Processing

Based on the data above, it is known that the minimum score is 40 and the maximum score is 65. From the results of calculations using the SPSS program, it is known that the average pre-test and post-test score is 52.65 standard deviations. 7,710 and the median is 52.50.

Data analysis
Normality test

The normality test is used to determine whether the data to be analyzed is normally distributed or not. Normality test uses the SPSS program to measure data normality.

To determine the normality of the data, the formula can be seen as follows:

a. If significance > 0.05 = data is normally distributed.

b. If significance < 0.05 = the data is not of normal significance.

Table 5. Normality Test

	Kelas	Kolmogorov-Smirnov [a]			Shapiro-Wilk		
		Statistik	Df	tanda tangan.	Statistik	df	tanda tangan.
Penguasaan Kosakata	Eksperimen Pra-Tes (MWG)	0,211	17	0,043	0,915	17	0,119
	Eksperimen Pasca Tes (MWG)	0,238	17	0,011	0,860	17	0,015
	Kontrol Pra-Tes	0,140	17	,200 [*]	0,898	17	0,063
	Kontrol Pasca Tes	0,179	17	0,150	0,901	17	0,070

[*]. Ini adalah batas bawah dari arti sebenarnya.

[A]. Koreksi Signifikansi Lilliefors

Source: Results of Research Data Processing

The table above shows the significant value of the normality test in the Experiment class is 0.119 while in the Control Class it is 0.063. From these scores it can be concluded that the significance in the Experiment Class is higher than α 0.05 (0.119> 0.05) and the significance in the Control Class is also higher than α 0.05

(0.063 < 0.05). Thus H0 is accepted and means the data is normally distributed.

Homogeneity Test

Table 6. Homogeneity Test

		Statistik Levene	df1	df2	tanda tangan.
Penguasaan Kosakata	Berdasarkan Rata-rata	2.401	1	32	0.131
	Berdasarkan Median	2.000	1	32	0.167
	Berdasarkan Median dan dengan df yang disesuaikan	2.000	1	32.000	0.167
	Berdasarkan rata-rata yang dipangkas	2.415	1	32	0.130

Source: Results of Research Data Processing

From the table above, it can be seen that the significance between the Experimental Class and the Control Class is higher than the significance value (0.131 > 0.05). This means that the hypothesis H_0 is accepted, the Experiment Class and Control Class samples are homogeneous.

T-test

Researchers used the SPSS program to calculate the t-test to test the research hypothesis. The criterion H_0 is accepted if t is observed < t table and H_0 is rejected if t is observed > t-table. Then the Ha a criterion is accepted if t is observed > t table and Ha a is rejected if t is observed < t table. The results of the t test using SPSS are presented in the following table:

Table 6. T-test

		Uji Levene untuk Kesetaraan Varians		uji-t untuk Kesetaraan Sarana						
		F	tanda tangan.	T	Df	tanda tangan. (2-ekor)	Perbedaan Berarti	Std. Perbedaan Kesalahan	Interval Keyakinan 95% dari Perbedaan	
									Lebih rendah	Atas
Penguasaan Kosakata	Varians yang sama diasumsikan	2.401	0,131	8.222	32	0,000	17.647	2.146	13.275	22.019
	Varians yang sama tidak diasumsikan			8.222	30.265	0,000	17.647	2.146	13.265	22.029

Source: Results of Research Data Processing

The table shows the results of t-test calculations using the SPSS program. This table is the main table of Independent Sample T-test analysis results. The post-test results between the experimental class and the control class had the same variance. This means that the t-test calculation is used under the assumption of equal variance. The observation t result was 8.222. Then, the average difference between the experimental class and the control class was 17.647, and the standard error difference

between the experimental class and the control class was 2.146. On the other hand, *the sig (two-tailed)* value is 0.000 < 0.05 so there is a difference in points obtained between the experimental class and the control class.

Hypothesis Test

Hypothesis aims to find out whether the hypothesis is accepted or rejected. If T observed > T table then the hypothesis is accepted. If T observed < T table then the hypothesis is rejected. From the calculations it is obtained that observed t = 8.222 > t table = 1.683 at the significance level of 0.000 < 0.05. So it can be concluded that the hypothesis is accepted. So Ha which states that there is a significant influence of Matching Word Game on students' vocabulary mastery at MTs Muhammadiyah Tanjung Belit Air Tiris is accepted and H0 which states there is a significant influence of Matching Word Game on students' vocabulary mastery at MTs Muhammadiyah Tanjung Belit Air Tiris is rejected.

Discussion

Based on research findings, researchers found that the total post-test score in the experimental class was 1245, with a total of 17 students. The highest score obtained was 85, while the lowest score obtained was 65. In the experimental class, the average post-test score was 73.24. This means that after learning the word matching game, students' vocabulary mastery is considered good.

Meanwhile, in the control class the total post-test score was 950 with a total of 17 students. The highest score was 65, while the lowest score was 40. In the control group, the post-test average was 52.6. Students' vocabulary mastery is categorized as sufficient without studying it using maching word games.

In the eighth grade at MTs Muhammadiyah Tanjung Belit Air Tiris, there was a significant difference in

students' vocabulary mastery in recount texts using matching word games versus traditional techniques. To analyze the data, researchers used the paired sample test formula. Before analyzing the data, researchers tested the normality test for both classes using the Kolmogorov Smirnov formula. The researcher then looks at the homogeneity of the test to see whether the object under study has the same variance or not. Researchers found that the use of word matching games by eighth grade students at MTs Muhammadiyah Tanjung Belit Air Tiris significantly influenced students' vocabulary mastery in recount text.

Calculations from the results of data analysis show that the use of word matching games is effective in mastering student vocabulary and student motivation in learning vocabulary in class VIII MTsN 1 South Tangerang in the 2019/2020 academic year. The level of effectiveness of this technique has also been shown to be moderate. The findings of this research confirm previous research by Laily Nurindah Sari who used the make a match technique in teaching to improve students' vocabulary mastery and students became more enthusiastic in learning vocabulary. It has been proven that this technique has an effect in increasing students' vocabulary mastery. As a result, the results of this research prove Janet Allen's statement in her book entitled Words, Words, Words: Teaching Vocabulary in Grades 4–12. He states that Word Matching Games are an alternative to typical matching exercises and are a fun way for initial understanding of words and concepts. Word Matching Game is a word matching game technique that will help teachers make vocabulary teaching easier. This will help students acquire new words more easily and improve their vocabulary performance. Therefore, it becomes easier for students to master vocabulary because they can connect new information with the information they already have.

The results of this research prove that word matching games can increase students' motivation in mastering vocabulary. This is in line with the statement of Muslim, Sutapa Y., and Y. Gatot (2017) in *the Untan Journal of Education and Learning* . They state that Students become experts with different vocabulary enrichment tools such as synonyms, verbs, and special terms in a short time; a teacher can teach everything using vocabulary matching games. And most importantly, students feel happy when learning and this can motivate students to learn vocabulary. Therefore, it can be concluded that the word matching game is effective in mastering students' vocabulary. Apart from that, the use of word matching games is effective in students' motivation to master vocabulary .

Conclusion

The experimental research in this study was carried out on class VIII students of MTs Muhammadiyah Tanjung Belit Air Tiris in July 2022, in the first semester of the 2022/2023 academic year. This research aims to determine the effect of matching word games on students' vocabulary mastery in the teaching and learning process. Based on the results of data analysis and discussion, it can be concluded that there is a significant influence on students' vocabulary mastery after implementing the matching word game in class VIII MTs Muhammadiyah Tanjung Belit Air Tiris. Students' vocabulary mastery in the experimental class was higher than in the control class. It can be seen from the data analysis that many students obtained good grades in the class with matching word games compared to students in the control class.

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