

THE EFFECT OF PUZZLE GAME TOWARDS STUDENT'S VOCABULARY MASTERY AT THE EIGHTH GRADE STUDENTS OF MTS TANWIRUL KUTUB BAYAH LEBAK – BANTEN IN ACADEMIC YEAR 2021/2022

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ABSTRACT

In learning English, one of the language components that should be acquired by students is vocabulary. It is the element that connects the four English skills such as listening, speaking, reading, and writing. The objective of the research is to find out is there any significant of Puzzle Game towards student's vocabulary mastery at the eighth grade students of MTS Tanwirul Kutub Bayah. In this method, the researcher uses a quasi-experimental method with two groups the experimental class and the control class. The population of the research is all the eighth grade students of MTS Tanwirul Kutub Bayah which consisted of 2 classes, with a total of 66 with a sample of 33 students in class VIII A and class VIII B as many as 33 students. The instrument for collecting quantitative data was a pre-test and a post-test with a total of 25 questions. The Researcher calculated data by using SPSS 2.2. Based on the analysis using paired samples test, it can be concluded that $t\text{-count} = -7.430$ and signification value ($p\text{-value}$) = $0.000 < \alpha = 0.05$, so H_1 is accepted and H_0 is rejected. On the other word, there is a significant effect of puzzle game towards Student's vocabulary mastery.

Keyword: puzzle game, vocabulary mastery

INTRODUCTION

Countries in the world including Indonesia, use English as an international language. The language that is often used by the international community is English. However, English has a very important role in the development of education, especially in Indonesia, one of which is the importance of language skills. Given the importance of English in the world of education, therefore the Indonesian government decided to make

English a subject in various schools, from elementary schools to universities. Teaching English at a good level from elementary to high school will be different at each level, as well as teaching that must be done at the secondary school level is that students need to learn in a fun and enjoyable way.

In learning English, one of the language parts that ought to be procured by understudies is vocabulary. There are the four basic English skills that are quite

important to communicate in English, the four basic skills are listening, speaking, reading, and writing. Basically in learning English, vocabulary is one part of the language that must be possessed by students in language skills. There are four basic English skills that must be possessed by students, namely listening, speaking, reading, and writing. These four are quite important to communicate in English. The first thing that students must master in learning English is vocabulary. Thus if students are already proficient in mastering more vocabulary items, it means they will have a better chance of mastering language skills.

Objective of the research Based on the formulation of the problem above, the researchers wanted to know: is there any significant effect of puzzle games towards students' vocabulary mastery at the eighth grade students of MTs Tanwirul Kutub Bayah.

Vocabulary

Vocabulary is basic part of learning English. This is a fundamental perspective in reading, listening, writing, and speaking. Vocabulary is likewise a significant variable that impacts language abilities for of correspondence. It implies words assist us with sharing our thoughts and assist us with grasping others' thoughts. While listening,

speaking, reading and writing with words. It can be said that students will track challenges in dominating English skills. However, assuming they have a limited vocabulary. Sans an adequate vocabulary, somebody can't convey successfully or express thoughts since somebody thinks research a word.

According to Hanson and Padua (2011: 5) I vocabulary refers to words we use to communicate in oral and print language. Receptive vocabulary refers to the words we understand through reading and listening. To communicate effectively using spoken and written language, we should have the option to flexibly use words that we know and understand.

According to Fachrozi et al. (2021: 250) at al Vocabulary is the first basic part in English. The more vocabulary they take, the more they improve their English vocabulary skills, but also improve their speaking, reading, listening and even writing skills. According to Yun in Elsa

According to Faud mas'ud in ummah (2020: 20) named as follows:

- 1) Noun: is a word that refers to or refers to places, things, people, events, even to quality. For example like: Johns, teacher, chair, hospital, orange tree, cow and others

- 2) Pronoun: is a word used to replace a noun. Model: *I, this, who, which, another, etc.*
 - 3) Adjective: words that describe nouns. Example: Blue, weak, sad, short, happy, kind, beautiful, handsome and others.
 - 4) Verb: is a type of word that describes an activity, action, condition, or experience. Example: *Ask, buy, hit, make, show, etc.*
 - 5) Adverbs: words that add information to other verbs, adjectives, phrases or adverbs. For example: slow, careful, not yet, soon, etc.
 - 6) Preposition: is a part of speech that is placed before the noun. Example: in between, after, below, above.
 - 7) Conjunctions: serves to connect words, phrases, or clauses. For example: for, will, nor, or, which
 - 8) Interjection: is a word used to express different levels of emotion. Example: oh good!, ‘Oy, look at me!’, wow, etc.
- Vocabulary becomes vital to any language procurement process particularly in presenting and combining new lexical things. According to Thorn burry Mastering vocabulary implies that students have far reaching information about the vocabularies which incorporate the implications, the verbally expressed structure, the composed

structure, the linguistic way of behaving, the word induction, word collocation, word list - expressed and composed, the meaning or relationship of the endlessly word recurrence. (Aisyah, 2017: 294).

Puzzle Game

Games are a way to make learning activities more interesting or less boring for individuals or groups. Games can be applied in the school climate as well as in the grounds climate so understudies are not excessively intense about learning and can figure out learning. Games can likewise relieve when some of the stressful felt by a portion of their students are bored at study and eventually feel tired of studying. Game can increase students' appetite to learn, make students feel bored and lack understanding. For this reason, researchers provide games so that students are not exhausted and keen on learning, particularly English. In view of the above explanation, the researcher can conclude that the game is a way to make learning English more interesting involving an individual or group.

According to Sabiqoh in Fachrozi (2021: 250) states that puzzle games is effective teaching tool of terminology, definition, spelling, and pairing key concepts with related name, resulting in greater retention and memorization of facts.

According to Juliana (2020: 183) Crossword puzzles, frequently abridged as TTS, are word games as boxes and normally contain even and plunging questions. The point of the game is to fill the containers with letters, structure specific words or expressions, by finishing pieces of information that lead to specific responses. other than crossword puzzles is a game that can add understanding information. crosswords can help understudies' advantage in learning. since crosswords should be possible by anybody, including grown-ups.

According to Suci (2016) there are many kids of puzzle, among other are: Word Search Puzzle, Scramble Letters Puzzle, and Crossword Puzzles. Related to the statement above, the researcher uses the three types of puzzle games above, namely word search puzzles, scrambled letter puzzles and crossword puzzle games which are learning media used to increase students' vocabulary mastery.

In this section, the researcher describes several previous studies with Improve students' vocabulary mastery through any teaching strategies and media. There have been many previous studies investigating vocabulary mastery.

Elinda Feni Fela (2020) investigate the use of crossword puzzle game to improve students' vocabulary mastery of descriptive

text (an experimental study of the seventh-grade students of SMP Negeri 1 Sayung in the Academic Year 2018/2019). The research sample is the experimental group and the control group. It could be proven by the improvement of the students' scores in the the experimental group which was higher than the control group. The study found that the crossword puzzle game is more effective than the conventional learning method in improving students' vocabulary mastery of descriptive text about the animal.

Suci Kurnia Sari (2017) investigation the effectiveness of crossword puzzle game towards students' vocabulary mastery (an experimental study at the second grade of SMP Puspita Bangsa Ciputat).The population of this study was 70 students. All of populations are used as sample. To collect the data, this research used test (pre-test and Non-test). The post-test was given in multiple choices also. Crossword puzzle game is effective towards students' vocabulary mastery at the second grade of SMP Puspita Bangsa Ciputat.

Widyasari (2010) investigation the use of crossword puzzle to improve vocabulary mastery (a classroom action research in the first year students of MA Al Bidayah Candi Bandungan in the Academic Year 2009/2010).The population of this study was 26 students. To collect the data, this research

used test (pre-test and post-test) there is a significant difference between pre-test and post-test, where the post test is greater than the pre-test. It shows that crossword puzzles have a certain influence in increasing students' vocabulary, because student achievement has increased after students do crossword puzzles. It means the crossword puzzle according to the situation and conditions of students at MA Al Bidayah in learning vocabulary.

Teaching vocabulary could be achieved in many ways. Generally the successful of teaching and learning are influenced by good technique and good media. One of the good media used to teach vocabulary is a puzzle game. By using puzzle games, students are more easily attracted because it will be easier to memorize new vocabulary in learning English. In short, the learning process by using puzzle games will be fun and enjoyable. A hypothesis is an assertion of the examination presumption about the connection between two factors that the scientist intends to test inside the system of the specialist review. From the above assessment, that's what the scientist estimate:

Ha : There is a significant effect of crossword puzzle game towards Student's vocabulary mastery.

Ho : There is no significant effect of crossword puzzle game towards Student's vocabulary mastery.

METHOD

In this study, the researcher uses a quantitative approach because it will use numbers or statistics. The goal is to conclude a characteristic or relationship between variables to the parent population. In this method, the researcher uses a quasi-experimental method with pre-test and post-test designs. The experimental design was divided into several designs. However, the determination of the class that was utilized as the experimental class and the control class was not chosen randomly, but based on the teacher's evaluation, the experimental class was treated using a puzzle game while the control class was traditional games by a card game. Then a test was given to both classes due to find out the results of the pre-test and post-test.

Population

The population in this study were all eighth grade students of MTs Tanwirul Kutub Bayah which consisted of 2 classes, with a total of 66 students. To be specific class VIII A and class VIII B.

Sample

The sample in this study were students of class VIII A and class VIII B at MTS

Tanwirul Kutub Bayah. The sample to be taken from the population of class VIII is class VIII A as the experimental class and class VIII B as the control class.

Research Instrument

Research instruments are tools used to collect, measure, and analyze data related to research interests. The test instrument used to measure student scores in English subjects was an objective test with multiple choice questions consisting of 25 multiple choice questions. Each question has one point for an answer that is considered correct and zero points for an answer that is considered wrong.

Data Collecting Techniques

In the technique of collecting data the researcher used the quasi-experimental, there are pre-test, treatment and post-test, to measure the final test and the researcher knows a data in the final between the experimental group and control group.

Data Analysis Technique

The technique of data analysis in this research is using t-test. Before the researcher calculates t-test, the data should be normally distributed and homogenous. Both of them are used as pre-requirement analysis data. To analyze the data, the researcher uses statistical computation using SPSS 2.2, All data collected and calculated

using the SPSS 22.0 program in this case used a sample T-test. Because researchers want to know is there any influence from the puzzle game in teaching vocabulary mastery. First, the researchers conducted a pre-test. After conducting the pre-test, the researcher provides treatment. Researchers are taught by using puzzle puzzles in teaching vocabulary. And then after treatment, the students were tested again. Finally, the average of the two tests was compared to find out that there were significant differences.

DISCUSSION

Descriptions of the Data

To know the result of the tests (pre-test and post-test), the researcher displayed the table descriptions of the data from both classes (the experimental class and the control class).

Table 1. Description of the data

	Descriptive Statistics								
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Pre-test Experimental	33	38	42	80	2084	63.15	1.647	9.461	89.508
Post-test Experimental	33	38	56	94	2394	72.55	1.382	7.942	63.068
Pre-test Control	33	36	42	78	2063	62.52	1.309	7.517	56.508
Post-test Control	33	34	48	82	2148	65.09	1.414	8.125	66.023
Valid N (listwise)									

Based on the table above, it can be seen from the results of the pre-test in the experimental class with 33 students, namely:

Test of Homogeneity of Variances

Hasil Pre-Test Kelas control & Experimental

Levene Statistic	df1	df2	Sig.
.214	1	64	.646

the highest score is 80, the lowest score is 42, and the total score = 2,084. Meanwhile, the test results in the control class with 33 students were: the highest score is 78, the lowest score is 42, and the total score = 2063. While the post-test results in the

Test of Homogeneity of Variances

Hasil Post-Test Kelas Control & Experimental

Levene Statistic	df1	df2	Sig.
2.348	1	64	.130

experimental class with 33 students were: the highest score is 94, the lowest score is 56, and the total score = 2394. Meanwhile, the post-test results for the control class with 33 students were: the highest score is 82, the lowest score was 48, the total score = 2148.

Table 2. Tests of Normality

		Tests of Normality					
	Kelas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Belajar Siswa	Pretest_Experimental	.097	33	.200 [*]	.970	33	.475
	posttest_experimental	.111	33	.200 [*]	.977	33	.681
	Pretest_control	.127	33	.197	.968	33	.436
	Posttes_control	.144	33	.079	.968	33	.417

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

That the statistical results show that the homogeneity score in the pre-test of the two classes between the Control and Experiment classes is higher than = 0.05. From the table above, it can be seen that if the p-value (0.646) > = 0.05. Homogeneity test results

are accepted. This means that the data comes from the same population

Table 3. Test of Homogeneity of Variance

The statistic result showed that the score of homogeneity of pre-test between Control and Experimental class is higher than $\alpha = 0.05$. From the table above could be seen that if p-value (0.151) > $\alpha = 0.05$. The result of Homogeneity test is accepted. It means that the data is from equal population.

Table 4. Test of Homogeneity of Variance

That the statistical results show that the homogeneity score in the post-test of the two classes between the Control and Experiment classes is higher than = 0.05. From the table above, it can be seen that if the p-value (0,130) > = 0.05. Homogeneity test results are accepted. This means that the data comes from the same population.

From the results of the analysis of researchers who have carried out (normality and homogeneity tests), after the data meets the prerequisites, the next step is to analysis the hypothesis.

Table 5. The Result of hypothesis analysis
 used t-test

		Paired Samples Test						t	df	Sig. (2-tailed)
		Paired Differences			95% Confidence Interval of the Difference					
		Mean	Std. Deviation	Std. Error	Lower	Upper				
Pair 1	Pre-test Experimental - Post-test Experimental	-7.515	5.810	1.011	-9.575	-5.455	-7.430	32	.000	
Pair 2	Pre-test Control - Post-test Control	-3.455	5.922	1.031	-5.554	-1.355	-3.351	32	.002	

Based on the output SPSS on table 4.6.

- 1) Based on the output of pair 1, the value of sig. (2-tailed) is (p-value) = 0.000 < α = 0.05, so it can be concluded that there is a difference in the average student learning outcomes of the pre-test experimental class and the post-test experimental class (Puzzle Game)
- 2) Based on the output of pair 2, the value of sig. (2-tailed) (p-value) = 0.002 < α = 0.05, so it can be concluded that there is a difference in the average student learning outcomes of the control class pre-test and the control class post-test (traditional games with cards games)

Based on the discussion of the output pair 1, it can be concluded that the t-count is = -7.430 and the significance value (p-value) = 0.000 < = 0.05, it can be said that H1 is accepted and H0 is rejected. In other words, there is a significant effect of puzzle games on students' vocabulary mastery.

A. Discussions

Based on the calculations of the researchers, that students who were taught by the puzzle game method were better than the students who were not taught by the puzzle game method. In chapter II, previous research has shown that research conducted by Elinda feni fela (2020), Suci kurnia sari (2017) and Widiasari (2010), all of them claim that the use of crossword puzzles in teaching English can improve vocabulary mastery for students. . The results of the three previous researchers have supported the findings of the researchers conducted in class VIII at Mts Tanwirul Kutub Bayah. The researcher found that the use of puzzle games for class VIII students at MTs Tanwirul Kutub Bayah could significantly improve students' vocabulary mastery.

From the research findings. This study found that there was a significant difference in students' vocabulary mastery between students who were taught using puzzle games and students who were taught traditional games with card games. Students are motivated, relaxed, and fun in the process of learning vocabulary when taught using puzzle games they will memorize vocabulary differently, namely by rewriting vocabulary so that it can sharpen students' memory. Therefore, the use of puzzle games can increase students' motivation and

interest in the topic at hand. Through puzzle games, students can practice social skills.

In short, the use of puzzle games during learning can improve students' achievement in their vocabulary skills. Therefore, the application of puzzle games needs to be applied continuously in vocabulary learning. This is because the use of puzzle games can be an effective medium to help students practice vocabulary and create an enthusiastic learning process so that competency standards for the learning process can be achieved. This is in accordance with what was said by Sari in C.d (2017) and Morinaga (2017). In chapter II both explain the advantages of using puzzle games. These two explanations have supported the findings of what the researchers found in a study in class VIII at MTs Tanwirul Kutub Bayah. In addition to the many advantages in puzzle games, the researcher also found that the use of puzzle games for class VIII students at MTs Tanwirul Kutub Bayah can significantly improve students' vocabulary mastery.

Based on the criteria above, the researcher concludes that the alternative hypothesis (Ha) "There is significance effect of puzzle game towards student's vocabulary mastery at the eighth grade students of Mts Tanwirul Kutub Bayah, Lebak Banten

Academic Year 2021/2022" is **accepted**. On the other hand, null hypothesis (Ho) "There is no significance effect of puzzle game towards student's vocabulary mastery at the eighth grade students of Mts Tanwirul Kutub Bayah, Lebak Banten Academic Year 2021/2022" is **rejected**. It means that teaching vocabulary by using puzzle game has a significant influence on the vocabulary mastery of class VIII students at MTs Tanwirul Kutub Bayah. In other words, there is positive influence of teaching vocabulary using puzzle game techniques in the eighth grade of MTs Tanwirul Kutub Bayah in the 2021/2022 academic year. Besides that, teaching vocabulary by using at the eighth year of MTs Tanwirul Kutub Bayah in the 2021/2022 academic year can develop the students positive interdependence, group formation, individual accountability, and social skills.

Next, from the number of students at MTs Tanwirul Kutub Bayah in class VIII, there are 66 students divided into two classes, the classes are class VIIIA and class VIIIB with 33 students each. Previously, the two classes were given a pre-test and then given treatment which is different where class VIIIA is given a puzzle game in the learning process and this class is called the experimental class while class VIIIB is given a traditional strategy game with card

games and this class is called the control class. Finally, the two classes were given a post-test, the results of the Pre-test and Post-test were given to both classes, It can be concluded that $t\text{-count} = -7.430$ and significance value ($p\text{-value}$) = $0.000 < = 0.05$, it can be said that H_1 is accepted and H_0 is rejected. It means that teaching vocabulary by using puzzle game towards student's vocabulary mastery at the eighth grade students of Mts Tanwirul Kutub Bayah, Lebak Banten Academic Year 2021/2022. Therefore, it can be concluded that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted.

CONCLUSION

Based on the result of data analysis and interpretation of the research, it is clear that there is significance of of puzzle game towards student's vocabulary mastery at the eighth grade students of Mts Tanwirul Kutub Bayah, Lebak Banten Academic Year 2021/2022. It can be concluded that $t\text{-count} = -7.430$ and significance value ($p\text{-value}$) = $0.000 < = 0.05$, it can be said that H_1 is accepted and H_0 is rejected. It means that teaching vocabulary by using puzzle game towards student's vocabulary mastery at the eighth grade students of Mts Tanwirul Kutub Bayah, Lebak Banten Academic Year 2021/2022. Therefore, the null hypothesis

(H_0) is rejected; on the other hand, the alternative hypothesis (H_a) is accepted.

Suggestions from researchers based on the findings of researchers in the field, the researchers would like to provide suggestions as follows:

1. For English instructor
 - a) Puzzle games can be said as one of the strategies that can be seen as education to help students master English vocabulary
 - b) English teachers must be good at presenting new vocabulary in increasing students' vocabulary.
2. For students
Puzzle games can be useful for students in helping them add and maintain new vocabulary according to the topic being taught.
3. For the next researcher
The next researcher should examine new ways of puzzle game techniques in studying other language components, like language structure, spelling, pronunciations, etc.

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