The Effect Of Using Mobile Legend Game Toward The Learning Vocabulary Mastery At Eight Grade Of Smp Muhammadiyah 17 Desa Pon

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ABSTRACT

The objective of the research was to find out whether there is a significant effect of using mobile legend game media on student achievement in vocabulary mastery. This type of research is quantitative research and was conducted using two classes as research samples, namely class VIII-A as an experimental class consisting of 31 students and class VIII-C as a control class consisting of 31 students. In technique of collecting data, the researcher conducted pre-test, treatment and post-test by giving an understanding test of vocabulary consisting of 20 test, namely 10 true or false questions and 10 matching questions. The result of this research show that there was a significant effect of using mobile legend game media on students' vocabulary mastery. It can be seen after calculating and analyzing the t-table df 60 (n+n-2 = 31+31-2) at t-critical 0.05, it is obtained 1.67. If compared the value of t_o and t_t, so it shows that the value of t-observed is bigger than the value of t-table or 2,56> 1,67. It means that class VIII students of SMP Muhammadiyah 17 Desa Pon apply mobile legend game media in vocabulary learning higher than without mobile legend game media. After testing the hypothesis of the research, it was found that the hypothesis was accepted.

Kata Kunci   *Vocabulary Mastery, Mobile Legend, Quantitative Research*

INTRODUCTION

Words or can be called vocabulary are one of the most important parts in language learning, because language and vocabulary cannot be separated, both are one unit. This notion is in line with Lin et al. (2013) who stated that "vocabulary is an integrated part of a language." While Harmon, Wood, and Keser (2009) stated that "vocabulary development is an important aspect of language learning". When someone wants to speak with other people, he or she should communicate it in a good and proper way; otherwise other people would not understand what is said. In other words, the use of appropriate vocabulary and grammar will facilitate the communication process. Like English, vocabulary plays an important role in learning English.

In learning vocabulary, students face many obstacles, so it is very difficult to understand all the material, namely: First, understanding the meaning of words. Most students have difficulty understanding the meaning of words,

because they may not know the meaning of each word, so it is very difficult for them to understand the lesson well, so they have to open a dictionary and look up the meaning of each word one by one. Second, in this way, they experience boredom in learning vocabulary. Because the way of learning they received seemed monotonous and boring. This makes their attractiveness in learning vocabulary low. When we talk about the reality that is happening today, many teachers teach vocabulary through traditional methods which seem monotonous. So that can make students feel bored, and lazy in the teaching and learning process. In addition, vocabulary is usually taught through memorizing words and taking notes. This method causes students to be unmotivated to learn vocabulary. This also causes students to be less able to master vocabulary. From the explanation above, the teacher must choose the appropriate procedures, subjects or materials and how to apply them in the classroom. Teachers must be creative and successful teachers in teaching English vocabulary to their students. Based on this case, the teacher must teach this subject in a variety of interesting ways, so that they can understand the material well, and the teacher must explain how important vocabulary is in mastering English.

Mastery of vocabulary owned by students is very influential in the fluency of communication. Especially in a foreign language, namely English. Because of the importance of vocabulary in a language, students must have mastery in this vocabulary. Therefore there are many ways that can be used to learn vocabulary, for example vocabulary can be learned through a game, and this has been proven by several studies. Game as one of the technologies that develop rapidly in this era can make it easier for students to learn and game can deliver it in interesting way. It is in line with McFarlane et al. (2002) in Setiyoko (2015) stated that "using game, the students experienced, fun and a relaxing atmosphere while learning". As technology advances, games are now available in computer software even online software.

Based on the statement above, the writer chooses using games in improving English vocabulary. It means that game is one of ways to relax routine of classroom, so that it will make fun. Games ignite language learners' motivation and willingness to learn English because they provide fun and enjoyable atmosphere (Gozcu&Caganaga, 2016). These days, the most popular online video game which is regularly played by young people is called Mobile Legends. Those who play must fight alone or with teams via online to destroy enemy bases while protecting their own bases. Each hero has its own characteristics in appearance, attack, and specifications. Interestingly, each hero has its own phrase that will be spoken when the hero appears or attacks. All

phrases are spoken in English. Apart from having heroes to say phrases in English, Mobile Legend also provides instructions in English. It also allows players from all over the world to participate in the same match or team. Therefore, Indonesian players can have foreign players on their team and even interact by using English.

From the background described above, the researcher is interested in investigating "The Effect of Using Mobile Legend Game Toward the Learning Vocabulary Mastery at Eight Grade of SMP Muhammadiyah 17 Desa Pon".

RESEARCH METHOD

In this research, the researcher used experimental research. Arikunto (2010: 28) stated that experimental research is a research which aimed to know if there is effect of the variable studied or not".

Design of experimental research is using statistical research. Therefore, this research used two groups of subject in which of them are treated with different treatment. They are, experimental class which are taught by applying the mobile legend game in vocabulary learning and the control class which is taught without applying the mobile legend game in vocabulary learning. Next, both of the groups are measured with the tests (pre-test and post-test), and the results are compared. The design of research can be seen on the table below.

Table 1.
Design of the Research

No.	Group	Pre-test	Treatment	Post-test
1	Experimental	√	Using mobile legend game	√
2	Control	√	Without mobile legend game	√

The population of this research is all of the grade VIII student of SMP Muhammadiyah 17 Desa Pon which consist of three classes and the total of students each class is an average of 31 students. The researcher take sample in this research is done by using random sampling technique. Taking sample like taking lottery. The first lottery taking as experimental class is obtained by grade VIII- A consist of 31 students. The second lottery taking as control class is obtained by grade VIII- C consist of 31 students. The experimental class is taught by using mobile legend game and control class is without mobile legend game.

For this case the researcher used objective test. The form of the test is true or false test and matching test. The test is used to get student scores, both students' scores in mastering vocabulary through mobile legend games or without using mobile legend games. The students were given a pre-test in the first meeting both in experimental group and control group. The items that was used for the pre-test consists of 20 questions. 10 items in the form of true or false and 10 items in the form of a matching test. Then, for the treatment, the experimental group is taught by using mobile legend game while the control group is without mobile legend game. In the last meeting, the researcher gave a post-test which is the same as the pre-test at the beginning to find out the result of the treatment whether this mediais effective or not and whether there is an increase after the treatment.

This research used quantitative experimental. The following test is used to determine whether the data fulfill the criteria of the quality of variance.

The following steps are taken to analyze the data:

1. Scoring the sample's steps answers.
2. Grouping their scores into two groups, namely the experimental group scores as the X and the control group as Y variable.
3. Computing statistically of experimental and control group.
4. Computing from both groups.
5. Applying the statistic test of as the following formulate researcher is using a formula, applied as:

$$t = \frac{X_1 - X_2}{\sqrt{\left(\dfrac{\sum x^2 + \sum x^2}{n_1 + n_2 - 2}\right)\left(\dfrac{1}{n_1} + \dfrac{1}{n_2}\right)}}$$

Where: X_1 : The mean of experimental group

X_2 : The mean of control group

$X_1{}^2$: The deviation of experimental

$X_2{}^2$: The deviation of control group

n_1 : The total sample of experimental group

n_2 : The total sample of control group

RESULT AND DISCUSSION

The research was conducted in class VIII-A and class VIII-C of SMP Muhammadiyah 17 Desa Pon. Below are the results of the pre-test and post-test of the two groups. In this research, the sample was divided into two groups,

namely the experimental group and the control group which were used as research data.

Table 2.
The Result of Pre-Test and Post-Test in Experimental
Group and
Control Group

N=31		Experimental Group		Control Group	
		Pre-Test	Post-Test	Pre-Test	Post-Test
	Total	1670	2615	1530	2150
	Mean Score	53.87	84.35	49.35	69.35

The experimental group and control group have same level of vocabulary mastery as indicated by pre-test are given before the treatment. The mean score of pre-test in experimental group is 53.87 and the mean score of control group is 49.35. After getting the treatment, The result showed that the mean score of post-test in experimental group (84.35) is higher than the mean score of post-test in control group (69.35). This is due to the application of legend mobile game media in learning. So that students are more enthusiastic in participating in learning. So the material will be easier to understand.

Table 3.
The Difference Result of Pre-Test and Post-Test of Experimental   Group

No	Students' Initial Name	Pre-test T_1	Post-test T_2	$X = T_2 - T_1$
1.	APL	60	80	20
2.	AM	45	80	35
3.	AS	55	80	25
4.	AP	50	85	35
5.	CM	50	90	40
6.	DA	50	80	30
7.	DL	70	95	25
8.	FH	35	75	40
9.	IA	55	90	35
10.	ITC	60	90	30
11.	KF	65	85	20
12.	LM	65	85	20
13.	MT	65	95	30
14.	MAP	50	80	30
15.	MHA	55	85	30

16.	NS	70	90	20
17.	NMU	45	75	30
18.	M	35	75	40
19.	RI	35	75	40
20.	RH	50	95	45
21.	RS	55	85	30
22.	R	60	90	30
23.	SA	65	90	25
24.	SHP	45	80	35
25.	S	45	80	35
26.	ZSP	50	80	30
27.	MZRA	55	80	25
28.	MFA	60	85	25
29.	RSF	65	95	30
30.	GA	70	90	20
31.	MFH	35	75	40
Total				**945**

Based on the table above, it can be counted that total score of $X = T_2 - T_1$ is 945, in order to find out the mean of experimental group the score is calculated as below:

$$\text{Mx or } M_1 = \frac{\sum X}{N_1}$$
$$= \frac{945}{31}$$
$$= 30{,}48$$

Then, the table below had shown the difference score of pre-test and post-test of control group.

Table 4.

The Difference Result of Pre-Test and Post-Test ofThe Control Group

No	Students' Initial Name	Pre-test T_1	Post-test T_2	$Y = T_2 - T_1$
1.	APPA	50	75	25
2.	BNW	45	70	25
3.	BS	45	80	35
4.	DB	45	50	5
5.	DP	50	65	15
6.	DKS	55	70	15

7.	DHP	40	70	30
8.	DNS	35	70	35
9.	EJA	35	75	40
10.	EP	40	80	40
11.	FA	60	80	20
12.	FF	50	65	15
13.	GPS	45	65	20
14.	IW	40	60	20
15.	IR	35	60	25
16.	J	35	60	25
17.	KN	45	70	25
18.	LMA	55	65	10
19.	MKP	60	75	15
20.	MA	65	75	10
21.	MIS	65	80	15
22.	MDR	65	70	5
23.	MAE	40	65	25
24.	P	45	65	20
25.	RP	50	70	20
26.	RK	55	70	15
27.	REW	50	75	25
28.	RA	50	65	15
29.	SUH	55	70	15
30.	SW	60	70	10
31.	TAI	65	70	15
Total				**630**

Based on the table above, it can be counted that total score of $Y=T_2-T_1$ is 630, in order to find out the mean of control group the score is calculated as below:

$$\text{My or } M_2 = \frac{\sum X}{N_2}$$
$$= \frac{630}{31}$$
$$= 20{,}32$$

Table 5
The Calculation to Find The "T"

No	X	Y	X=(X-MX)	Y=(Y-My)	X²	Y₂
1	20	25	-10,48	4.68	109,8304	21,9024
2	35	25	4,52	4.68	20,4304	21,9024
3	25	35	-5.48	14.68	30,0304	215,5024
4	35	5	4.52	-15.32	20,4304	234,7024
5	40	15	9.52	-5.32	90,6304	28,3024
6	30	15	-0.48	-5.32	0,2304	28,3024
7	25	30	-5.48	9.68	30,0304	93,7024
8	40	35	9.52	14.68	90,6304	215,5024
9	35	40	4.52	19.68	20,4304	387,3024
10	30	40	-0.48	19.68	0,2304	387,3024
11	20	20	-10.48	-0.32	109,8304	0,1024
12	20	15	-10.48	-5.32	109,8304	28,3024
13	30	20	-0.48	-0.32	0,2304	0,1024
14	30	20	-0.48	-0.32	0,2304	0,1024
15	30	25	-0.48	4.68	0,2304	21,9024
16	20	25	-10.48	4.68	109,8304	21,9024
17	30	25	-0.48	4.68	0,2304	21,9024
18	40	10	9.52	-10.32	90,6304	106,5024
19	40	15	9.52	-5.32	90,6304	28,3024
20	45	10	14.52	-10.32	210,8304	106,5024
21	30	15	-0.48	-5.32	0,2304	28,3024
22	30	5	-0.48	-15.32	0,2304	234,7024
23	25	25	-5.48	4.68	30,0304	21,9024
24	35	20	4.52	-0.32	20,4304	0,1024
25	35	20	4.52	-0.32	20,4304	0,1024
26	30	15	-0.48	-5.32	0,2304	28,3024
27	25	25	-5.48	4.68	30,0304	21,9024
28	25	15	-5,48	-5.32	30,0304	28,3024
29	30	15	-0.48	-5.32	0,2304	28,3024
30	20	10	-10.48	-10.32	109,8304	106,5024
31	40	15	9.52	-5.32	90,6304	28,3024
Total					1.467,7424	2.496,7744

Related to the data on the above table in order to know the standard deviation. Based on the calculation of the scores in tables above, the following

formula of t-test was implemented to find out the critical value of both samples in groups as the main basic implementation to the hypothesis of this research.

$$t = \frac{X_1 - X_2}{\sqrt{\left(\frac{\sum x^2 + \sum x^2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Its means that:

X_1 : 30,48

X_2 : 20,32

$\sum X_1{}^2$: 1.467,7424

$\sum X_2{}^2$: 2.496,7744

n_1 : 31

n_2 : 31

After knowing the value as stated above, thus, the each value calculated as follows:

$$t = \frac{30,48 - 20,32}{\sqrt{\left(\frac{1.467,7424 + 2.496,7744}{31 + 31 - 2}\right)\left(\frac{1}{31} + \frac{1}{31}\right)}}$$

$$t = \frac{10,16}{\sqrt{\left(\frac{3.964,5168}{60}\right)(0,06)}}$$

$$t = \frac{10,16}{\sqrt{(66,07528)(0,06)}}$$

$$t = \frac{10,16}{66,07528 \, x \, 0,06}$$

$$t = \frac{10,16}{3,9645168}$$

t = 2,5627335

t = 2,56

The testing of hypothesis should be done in order to know whether the hypothesis is accepted or rejected. Based on t-table with df60 (n + n – 2 = 31 + 31 – 2 = 60) at t-critical 0.05 it's obtained 1.67. If compared the value of t_o and t_t, so it shows that the value of t-observed is bigger than the value of t-table or 2.56 > 1,67. It means that the hypothesis is accepted.

Based on the calculations and explanations above, it is concluded that "there is a significant effect of the mobile legend game on students' vocabulary mastery" and the hypothesis is accepted, in other words the vocabulary mastery of students who are taught using mobile legend game media in teaching vocabulary is higher than those who are not using mobile legends game.

CONCLUSIONS

After the researchers conducted research, the conclusions that can be drawn are as follows:

1. Student achievement in learning vocabulary before applying mobile legend media was sufficient category, it can be seen from the average pre-test score of the experimental group of 53.87.
2. Student achievement in learning vocabulary after applying mobile legend media was good category, it can be seen from the post-test average value of the experimental group of 84.35.
3. There is a significant effect of using mobile legend game media on student achievement in vocabulary mastery. This can be seen from the results of hypothesis testing, where based on t-table with df (degree of freedom) 60 (n + n – 2 = 31 + 31 – 2 = 60) at the-critical 0.05 it's obtained 1.67. If compared the value of t_o and t_t, so it shows that the value of t-observed is bigger than the value of t-table or 2.56 > 1.67. It means that the hypothesis is accepted.

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