

CHAPTER IV

FINDINGS AND DISCUSSION

A. FINDINGS

After the writer conducted a research to investigate the Comparative between Students who Play and who do not Play Clash of Clans Game on Students' Vocabulary Mastery at the Eighth Grade Students of MTsN Kelayan, the data that have been obtained are classified based on the problem statements. Before being analyzed, the data are presented in the description as follows:

1. Students who Play and who do not Play Clash of Clans Game

To get the data, the writer distributes a questionnaire consists of 5 questions to 26 respondents.

a. Students who know Clash of Clans Game

This question is to know the students who know or never know Clash of Clans game.

Table 4.1. Students know Clash of Clans game.

No	Answer	Frequency	Percentage
1	Yes	26	100%
2	No	0	0%
Total		26	100%

The table above indicates that 100% students know clash of clans game. There is no students known clash of clans game.

b. Students who ever Play Clash of Clans Game

This question is to know the students' who ever play clash of clans game.

Table 4.2. Students who ever play clash of clans game.

No	Answer	Frequency	Percentage
1	Yes	10	38.46%
2	No	16	61.53%
Total		26	100%

The table above shows that 38.46% or 10 of students who ever play clash of clans game and also 61.53% or 16 students who ever play clash of clans game.

c. Students' Frequency of Playing Clash of Clans Game

This question is used to know the students' frequency of playing clash of clans game.

Table 4.3. Students' frequency playing clash of clans game.

No	Answer	Frequency	Percentage
1	3 times - >	8	30.76%
2	Less 3 times	18	69.23%

Total		26	100%
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The table above indicates that 30.76% or 8 students who play clash of clans game three times or more in a day and 69.23% or 18 students who play clash of clans game less of three times or never in a day.

d. Students' Source of Knowing Clash of Clans Game

This question is used to know how students source of knowing clash of clans game.

Table 4.4. Students' source of knowing clash of clans game.

No	Answer	Frequency	Percentage
1	Friend/parent	20	76.92%
2	Internet	6	23.07%
Total		26	100%

The table above indicates that there are 76.92% or 20 students who recognize clash of clans game from friend or parent and 23.07% or 6 students who recognize clash of clans game from internet.

e. Students' Vocabulary is Improved by Playing Clash of Clans Game.

This question is used to know students' vocabulary improved by playing clash of clans game.

Table 4.5. Students' vocabulary improved by playing clash of clans game.

No	Answer	Frequency	Percentage
1	Enough	10	38.46%
2	Never	16	61.53%
Total		26	100%

The table above shows that there are 38.46% or 10 students' vocabulary are improved and 61.53% or 16 students do not improved they vocabulary.

2. Students' Vocabulary Mastery

To get the data, the writer conducts a test consists of 35 questions in three part, in part A consist of 10 questions, each question has 2 score, in part B consist of 15, each question has 4 score and the last part B consist of 10 question, each question has 2 score. The total score of all the correct answers is 100.

The result of the students' vocabulary test can be seen in the table below.

Table 4.6. The score of students' vocabulary mastery test for they who play and .who do not play clash of clans game

No.	Name	Score
1	AA	90
2	AB	86
3	AC	90
4	AD	90
5	AE	92
6	AF	90
7	AG	86
8	AH	84
9	AI	90
10	AJ	90
11	AK	88
12	AL	76
13	AM	88
14	AN	80

15	AO	86
16	AV	82
17	AQ	86
18	AR	78
19	AS	80
20	AT	82
21	AU	88
22	AV	82
23	AW	82
24	AX	78
25	AY	88
26	AZ	30
	N = 26	$\Sigma = 2.162$

Based on the table above, the mean score for students' vocabulary mastery is as follows:

$$M = \frac{\Sigma}{N}$$

M = Mean score

Σ = a number of score

N = a number of students

$$M = \frac{2162}{26}$$

$$M = 83.15$$

The calculation above shows that the mean score of students' vocabulary mastery is 83.15 in which, after being consulted with the table of the category of students' vocabulary mastery, it is in fair category.

Table 4.7. The score of students' vocabulary mastery test for they who play clash of clans game

No.	Name	Score
1	AA	90
2	AB	90
3	AC	84
4	AD	86
5	AE	90
6	AF	92

7	AG	90
8	AH	90
9	AI	86
10	AJ	90
	N= 10	$\Sigma X = 888$

Table 4.8. The score of students' vocabulary mastery test of they who do not play clash of clans game

No.	Name	Score
1	AK	88
2	AL	78
3	AM	82
4	AN	82
5	AO	82
6	AP	88
7	AQ	80
8	AR	78
9	AS	82

10	AT	86
11	AU	80
12	AV	88
13	AW	86
14	AX	76
15	AY	88
16	AZ	30
	N= 16	$\Sigma Y = 1.274$

The tables above show that the total scores of the students who play clash of clans game is 888 and the total scores of the students who do not play clash of clans game is 1.274.

3. The Comparative of Students who Play and who do not Play Clash of Clans Game in their Vocabulary Mastery

After getting the data about students who play and who do not play clash of clans game and students' vocabulary mastery, the writer analyzes them and makes conclusion by using the "t-test" formula.

Table 4.9. Work table Mean and Standard Deviation of both samples

No.	Score		x	y	x^2	y^2
	Play	Do not Play	($X-M_1$)	($Y-M_2$)		

	(X)	(Y)				
1	90	86	1.2	3.4	1.44	11.56
2	90	88	1.2	5.4	1.44	29.16
3	86	80	-2.8	-2.6	7.84	6.76
4	90	86	1.2	3.4	1.44	11.56
5	92	82	3.2	-0.6	10.24	0.36
6	90	78	1.2	-4.6	1.44	21.16
7	86	80	-2.8	-2.6	7.84	6.76
8	84	76	-4.8	-6.6	23.04	43.56
9	90	88	1.2	5.4	1.44	29.16
10	90	82	1.2	-0.6	1.44	0.36
	$\Sigma X = 888$	$\Sigma Y = 826$			$\Sigma x^2 = 57.6$	$\Sigma y^2 = 160.4$
					Type equat	Type equat

a. The writer counts the mean of each major

To know the comparative study in a research, the first step is count mean of each variable.

1) Mean of students who play clash of clans game.

$$M1 = \frac{\sum x}{N}$$

$$M1 = \frac{888}{10}$$

$$M1 = 88.8$$

2) Mean of students who do not play clash of clans game.

$$M2 = \frac{\sum x}{N}$$

$$M2 = \frac{826}{10}$$

$$M2 = 82.6$$

b. The writer counts the standard deviation of each major

The second step to know the comparative study is count the standard deviation of each variable.

1) Standard deviation of students who play clash of clans game

$$SD_1 = \sqrt{\frac{\sum x^2}{N}}$$

$$SD_1 = \sqrt{\frac{57.6}{10}}$$

$$SD_1 = \sqrt{5.76}$$

$$SD_1 = 2.4$$

2) Standard deviation of students who do not play clash of clans

$$SD_2 = \sqrt{\frac{\sum y^2}{N}}$$

$$SD_2 = \sqrt{\frac{160.4}{10}}$$

$$SD_2 = \sqrt{16.04}$$

$$SD_2 = 4$$

c. The writer counts the standard error of mean from each major

The third step to know the comparative study is count the standard error of mean from each major.

1) Standard error of mean from students who play clash of clans

game

$$SE_{M1} = \frac{SD_1}{\sqrt{N-1}}$$

$$SE_{M1} = \frac{2.4}{\sqrt{10-1}}$$

$$SE_{M1} = \frac{2.4}{\sqrt{9}}$$

$$SE_{M1} = \frac{2.4}{3}$$

$$SE_{M1} = 0.8$$

2) Standard error of mean from students who do not play clash of clans game

$$SE_{M2} = \frac{SD_2}{\sqrt{N-1}}$$

$$SE_{M2} = \frac{4}{\sqrt{10-1}}$$

$$SE_{M2} = \frac{4}{\sqrt{9}}$$

$$SE_{M2} = \frac{4}{3}$$

$$SE_{M2} = 1.33$$

d. The writer counts standard error from both samples

The fourth step to know the comparative study is count the standard error from both samples.

$$SE_{M1-M2} = \sqrt{SE_{M1}^2} + \sqrt{SE_{M2}^2}$$

$$SE_{M1-M2} = \sqrt{0.8^2} + \sqrt{1.33^2}$$

$$SE_{M1-M2} = \sqrt{0.64} + \sqrt{1.76}$$

$$SE_{M1-M2} = \sqrt{2.4}$$

$$SE_{M1-M2} = 1.54$$

e. The writer counts *t-test*

The fifth step is count the *t-test*. Based on calculation of Mean variable I and II also the differences of Standard Error of its mean which are $M_1 = 88.8$ and $M_2 = 82.6$, the writer substitutes them in pattern of *t-test* as follow:

$$t = \frac{M_1 - M_2}{SE_{M_1 - M_2}}$$

$$t = \frac{88.8 - 82.6}{1.54}$$

$$t = \frac{6.2}{1.54}$$

$$t = 4.02$$

f. Giving interpretation for “t” with consulting *t-table*

1) Looking for degree

After having the *t-test* score, the writer looks at the *t-table* by calculating the degrees of freedom.

$$\begin{aligned} df/db &= N_1 + N_2 - 2 \\ &= 10 + 10 - 2 \\ &= 18 \end{aligned}$$

2) Consulting score of “db/df” with “t table”

After the writer finds the *df* (the degrees of freedom), the writer refer to *t-table* at 18 degrees of freedom with the significance level 5% and also with the significance level 1%. By referring

the *t-test* of the students to the *t-table* at 18 degrees of freedom and find the calculate value of *t* lies between critical values of 2.10 at 5% and 2.88 at 1%. The table can be seen in appendix.

g. The writer makes a conclusion

Based on the explanation of the formulas above, it is clearly seen that *t* count (4.02) > *t*-table 5% (2.10) < *t*-table 1% (2.88). *t*-table is lower than *t* count. *H*₀ (Zero Hypothesis) is rejected and *H*_a (Alternative Hypothesis) is accepted. By this result, the writer concludes that *H*_a is **accepted**.

As the result, there is significance difference between students who play and who do not play clash of clans game in their vocabulary mastery at the eighth grade of MTsN Kelayan school year 2015/2016. It means that the vocabulary mastery of the students who play clash of clans game is better than the students who do not play clash of clans game.

B. DISCUSSION

After presented about students who play and who do not play clash of clans game on their vocabulary mastery, then both of them can be analyzed as follow:

1. Students who Play Clash of Clans Game on their Vocabulary Mastery.

From the table above, it is seen mean score of students who play clash of clans game is 88.8. The vocabulary mastery of the students who play clash of clans game is in **very good** category.

2. Students who do not Play Clash of Clans Game on their Vocabulary Mastery

Mean score of students who like watching western movies is 82.6. The vocabulary mastery of the students who do not play clash of clans game is in **good** category.

3. Students who Play and who do not Play Clash of Clans Game on their Vocabulary Mastery

Based on data presentation, $t\text{-count} (4.02) > t\text{-table } 5\% (2.10) < t\text{-table } 1\% (2.88)$. It is concluded that *t-count* is higher than *t-table*, which means that there is difference between students who play and who do not play clash of clans game in their vocabulary mastery at the eighth grade of MTsN Kelayan school year 2015/2016.

By this conclusion, it means that students who play clash of clans game are better than students who do not play clash of clans game in their vocabulary mastery. It is concluded that by playing clash of clans game the students can improve their vocabulary.