CHAPTER IV

RESEARCH FINDING AND DISCUSSION

In this chapter, the researcher presents about research finding which have been collected during research that include the description of data, hypothesis testing, and discussion about the data of the research.

A. The Description of Data

In this section, the researcher presented the data of the students' score in vocabulary mastery of the research that was the students' vocabulary mastery before being taught by using Modified Domino Cards Game and after being taught by using Modified Domino Cards Game. The researcher did pre-experimental research design by using one group pre-test post-test with quantitative approach. The seventh A class of first grade student in MTs Assafi'iyah Gondang Tulungagung that consists of 35 students consisting 21 males and 14 females was chosen by the researcher. The researcher used test as research instrument to get the data, the research used pre-test and post-test were developed by the researcher. The researcher used three steps to get the data: pre-test, treatment using modified domino cards game, and post-test.

The research conducted in five meetings. First meeting was administering pre-test, the second up to the fourth meeting were giving treatment by using Modified Domino Cards Game to teach vocabulary mastery, and the last meeting was administering post-test.

The test was given to the seventh A class as first grade in MTs Assyafi'iyah Gondang Tulungagung as a single group. The researcher presented and analyzed the data through two kinds of test, they were pre-test and post-test. The pre-test was given to the students before the researcher teaching the class by using Modified Domino Cards Game and post-test was given to the students after the researcher teaching the class by using Modified Domino Cards Game. The collected data were described in the form of table that includes the pre-test and post-test score in a single group.

1. **Description of Students' Score in Vocabulary Mastery before being taught by using Modified Domino Cards Game.**

   Pre-test in this research was the test consists of questions in the form of multiple-choices test which consists 15 questions items. Every item has four choice, there was A, B, C and D. The other test is matching test which consists of 5 questions and arrange test which consists of 5 questions. There were 35 students as respondents or subjects of the research. The test was conducted before teaching using Modified Domino Cards Game by the researcher. This test was to know the students' vocabulary mastery and the students' score before the students got treatment. The descriptions presented in the following table:

   Table 4.1 the students' score pre-test in vocabulary mastery before being taught by using modified domino cards game

No.	Students' Name	Pre-test score
1.	AAB	56
2.	AYS	56
3.	AZL	56
4.	BAH	52
5.	CAA	56

6.	DS	56
7.	DRF	64
8.	DF	76
9.	DIS	72
10.	EAA	68
11.	EUS	60
12.	FM	56
13.	FA	72
14.	FEK	60
15.	KYN	52
16.	LM	64
17.	LN	44
18.	MRI	76
19.	MNFS	56
20.	MFA	68
21.	MAA	64
22.	MABN	56
23.	MBA	60
24.	MFD	56
25.	MHA	64
26.	MSZ	52
27.	NHS	72
28.	RWS	60
29.	RA	72
30.	SRM	60
31.	SAH	64
32.	TSK	56
33.	WT	72
34.	ZSA	56
35.	ZF	48
Total score		**∑ 2132**
Mean		60.91

Based on the table above, there were 35 students of the seventh A class of seventh grade in MTs Assyafi'iyah Gondang Tulungagung as respondents or subjects of the research. All of them join in pre-test. The highest score of pre-test is 76 which were gotten by two students and the lowest score of pre-test is 44 which were gotten by one student. The mean score of pre-test is 60.91

Furthermore, the data of the students' pre-test can be arranged in the form of frequency. The result of frequency can be seen below:

a. The frequencies of pre-test

The pre-test was given to the students before treatment by using Modified Domino Cards Game to teach vocabulary. The pre-test was in the form of multiple-choice test, matching test and arrange test. There were 15 questions of multiple-choice, 5 questions of matching test and 5 questions of arrange test. The frequency of pre-test can be seen in Table 4.2

Table 4.2 the Frequencies of Pre-Test

Statistics

pretest

N	Valid	35
	Missing	0
Mean		60.91
Median		60.00
Mode		56
Sum		2132

pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	44	1	2.9	2.9	2.9
	48	1	2.9	2.9	5.7
	52	3	8.6	8.6	14.3
	56	11	31.4	31.4	45.7
	60	5	14.3	14.3	60.0
	64	5	14.3	14.3	74.3
	68	2	5.7	5.7	80.0
	72	5	14.3	14.3	94.3
	76	2	5.7	5.7	100.0
	Total	35	100.0	100.0	

Based on the Table 4.2, it can be showed that there were 35 students as the subject of the research. The mean score was 60.91 meaning that the average score of the student was 60.91. The median score was 60.00. The mode score was 56. And the total score of pre-test was 2132.

2. **Description of Students' Score in Vocabulary Mastery after being taught by using Modified Domino Cards Game.**

Post-test in this research was the test consists of questions in the form of multiple-choices test which consists 15 questions items. Every item has four choice, there was A, B, C and D. The other test is matching test which consists of 5 questions and arrange test which consists of 5 questions. There were 35 students as respondents or subjects of the research. The test was conducted after teaching using Modified Domino Cards Game by the researcher. This test was to know the students' score after the students got treatment. The descriptions presented in the following table:

Table 4.3 the students' score post-test in vocabulary mastery after being taught by using modified domino cards game

No.	Students' Name	Post-test
1.	AAB	80
2.	AYS	80
3.	AZL	84
4.	BAH	60
5.	CAA	76
6.	DS	76
7.	DRF	84
8.	DF	84
9.	DIS	80
10.	EAA	84
11.	EUS	80
12.	FM	68

13.	FA	92
14.	FEK	80
15.	KYN	64
16.	LM	80
17.	LN	92
18.	MRI	84
19.	MNFS	80
20.	MFA	84
21.	MAA	80
22.	MABN	68
23.	MBA	80
24.	MFD	68
25.	MHA	80
26.	MSZ	64
27.	NHS	80
28.	RWS	80
29.	RA	80
30.	SRM	68
31.	SAH	80
32.	TSK	68
33.	WT	92
34.	ZSA	84
35.	ZF	56
Total score		$\sum$ **2720**
Mean		77.71

Based on the table above, there were 35 students of the seventh A class of seventh grade in MTs Assyafi'iyah Gondang Tulungagung as respondents or subjects of the research. All of them join in post-test. The highest score of post-test is 92 which were gotten by three students and the lowest score of post-test is 56 which were gotten by one student. The mean score of post-test is 77.

Furthermore, the data of the students' post-test can be arranged in the form of frequency. The result of frequency can be seen below:

b. The frequencies of post-test

The post-test was given to the students after the treatment that was using Bingo Game to teach vocabulary. The post-test was in the form of

multiple choice test and matching test. There were 20 questions of
multiple choice and 10 questions of matching test. The frequency of post-
test can be seen in Table 4.4:

Table 4.4 the Frequencies of Post-Test

Statistics

posttest

N	Valid	35
	Missing	0
Mean		77.71
Median		80.00
Mode		80
Sum		2720

posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	56	1	2.9	2.9	2.9
	60	1	2.9	2.9	5.7
	64	2	5.7	5.7	11.4
	68	5	14.3	14.3	25.7
	76	2	5.7	5.7	31.4
	80	14	40.0	40.0	71.4
	84	7	20.0	20.0	91.4
	92	3	8.6	8.6	100.0
	Total	35	100.0	100.0	

Based on Table 4.3, it can be showed that there were 35 students as
the subject of the research. The mean score was 77.71 meaning that the
average score of the student was 77.71. The median score was 80.00. The
mode score was 80.00 means that many the students got score 80.00. And the
total score of post-test was 2720, it was higher than the total score of pre-test
that was 2132.

B. Hypothesis Testing

The hypothesis testing of this research examined the effectiveness of before and after by using modified domino cards game in vocabulary mastery. The hypothesis which is examined in this research as follows:

1. H_o: $\mu_1 = \mu_2$. (The null hypothesis)

   There is no any significant difference between the students' vocabulary score being taught by using modified domino cards game and the one of those taught not using modified domino cards game.

2. H_a: $\mu_1 \neq \mu_2$. (The alternative hypothesis)

   There is any significant difference between the students' vocabulary score being taught by using modified domino cards game and the one of those taught not using modified domino cards game.

The computation used to know the effectiveness of modified domino cards game in vocabulary mastery. However, to know whether there was significant different score of the students before the students were taught by using modified domino cards game and after the students were taught by using modified domino cards game. These subjects are referred as paired because they are drawn from same subject. The researcher used statistical test by using paired sample t-test on SPSS 16.0 to analyze the data. The result is as follow:

Table 4.5 Paired Samples Statistics

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest	60.91	35	8.005	1.353
	posttest	77.71	35	8.747	1.478

Based on the table 4.7, the data presented are performances score of the members of one group which the students were taught before and after by using modified domino cards game in vocabulary mastery. The output of paired sample statistics as descriptive statistic shows that there are differences of the mean score between pre-test and post-test. The mean score of pre-test was 60.91 and the mean score of post-test was 77.71. So, the mean score of post-test is higher than the mean score of pre-test. The test items of pre-test and post-test are 25 items in the form of multiple-choice test (15 questions), matching test (5 questions) and arrange test (5 questions) that given by the researcher. The pre-test was done before gave the treatment and post-test was done after gave the treatment. The number of subjects or respondents of each sample (N) both pre-test and post-test was 35 students.

The standard deviation of pre-test was 8.005 and the standard deviation of post-test was 8.727. The standard error mean for pre-test was 1.353 and for post-test was 1.478. It can be concluded that the mean or average score of the students in pre-test and post-test was different, the mean score of pre-test was less than the mean of post-test (60.91 < 77.71) or the mean score of post-test was higher than pre-test (77.71 > 60.91). The researcher concludes that there was increasing score from the pre-test to post-test means that there was significant different score after the students were

taught by using modified domino cards game in increasing vocabulary mastery.

Table 4.6 Paired Sample Test

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	pretest - posttest	-16.800	8.105	1.370	-19.584	-14.016	-12.263	34	.000

Based on the table 4.7, the output of paired samples test as inferential statistic showed that the result of this research with using T-test in SPSS 16.0. Mean in column had purpose to know the average score before and after the students taught by using domino cards game. The result mean score of pre-test and post-test were -16.800. The symbols (-) is indicated that mean on post-test is higher than pre-test.

The next column the result of standard deviation was 8.105. Standard deviation tells about difference of standard deviation between before and after by using modified domino cards game. Standard error mean was 1.370. There are two values in confidence interval of the difference, for the lower difference was -19.584 and the upper difference was -14.016. The result of t was -12.263 with degree of freedom (df) was 34 and the sig. (2-tailed) was 0.000.

The P-value (sig.) was 0.000 and the significance level is 0.05. It means that the P-value (sig.) is smaller than significance level (0.000<0.05). So, it can be concluded that the null hypothesis (H_o) was rejected and alternative hypothesis (H_a) was accepted. It means that there is any significant difference score on the students' vocabulary mastery before and after being taught by using Modified Domino Cards Game.

The researcher's hypothesis testing that the students' vocabulary score being taught by using modified domino cards game is better than the one of those not by using modified domino cards game. It can be concluded that using modified domino cards game in teaching vocabulary mastery of seventh grade at MTs Assyafi'iyah Gondang Tulungagung is effective.

C. Discussion

The objectives of this research were to find out the score of vocabulary (vocabulary mastery) of the students on seventh grade students at MTs Assyafi'iah Gondang Tulungagung in the academic year of 2016/2017 before and after they were being taught by using Modified Domino Cards Game and to find out whether there was significant different scores of students in vocabulary before and after they were taught by using Modified Domino Cards Game.

The researcher conducted some steps to reach the objectives of the research. The researcher used test as instrument of the research to get the data and the method to collect the data was administering test. The researcher did

some steps, there were administering pre-test, giving treatment, and administering post-test in five meetings in the class.

The researcher got the data from the score of pre-test and post-test. Then, the data analyzed by using paired sample t-test on SPSS 16.0. The output of paired sample statistic showed that the mean score of pre-test was 60.91 and the mean score of post-test was 77.71. It is increased the students' achievement because the mean score of post-test is higher than the mean score of pre-test. It is found that there is difference of mean score between pre-test and post-test is 16.80 after computing T-test. While in T-test analysis the result of t is -12.263.

It can be interpreted that the vocabulary mastery of the students had been improved after getting the treatment. On the output of paired sample test shown that the score of t was 12.263 with the df 34, the score of level significance was 0.000. Based on the data, the researcher known that the level of significance less than 0.05 (0.000 < 0.05) it means that the null hypothesis (Ho) was rejected, alternative hypothesis (Ha) was accepted. It be concluded that there was any significant different scores of students in vocabulary before and after they were taught by using Modified Domino Cards Game.

From the result of data analysis above, game can be used to teach in increasing vocabulary mastery of the students like Modified Domino Cards Game. According Baker and Wetrup (2000: 38), Domino cards here means matching words and picture, or matching word to their meaning. In this case, Dominoes game was utilized as a game which use card as the media made of

any particular paper content of a word of target language on one side and the other side is the meaning of the word in the first language learner. The researcher modified the Domino Cards Game as technique to teach vocabulary in junior high school especially in MTs Assyafi'iyah Gondang Tulungagung. This Domino Cards Game can be used effectively in the classroom to increase vocabulary mastery of students at junior high school.

This finding was related with the previous study that was using Modified Domino Cards Game to teaching vocabulary. In the previous study in this research written by Azizah Deviana Rizqi Amalia (073411047) from IAIN Walisongo Semarang with the title "Domino Card as a Medium to Teach Vocabulary (An Experimental Research at The Fifth Grade Students of SDN 1 Purwodadi Grobogan in the Academic Year of 2010/2011)". She stated that using Domino card as teaching media in teaching vocabulary was effective. It could be seen from the result of test score. It showed that the experimental class which was given treatment by using domino card as a medium to tech vocabulary got higher mean score that was 83, 8571 compared to the control class who were not given the same treatment. The control class got 79, 0667. Compared with previous research, this research used pre-experimental design while Amalia's research used quasi-experimental design. Although the findings of this research and Amalia's research were same, that is Domino Cards Game was effective in teaching vocabulary mastery.

The other previous study showed that Modified Domino Cards Game also effective was done by the researcher Andana Dika Aristika (2015)

entitled "Improving the Fifth Grade Students' Vocabulary Mastery through Modified Domino Cards at Elementary School Mergayu 1 In the Academic Year of 2014/2015". He used classroom action research design to find out to improvement of students' vocabulary mastery. From the preliminary test result, the mean of the students' score was 49, 44. There was an improvement on the mean score of the test. In the first cycle it was 61.38 and improved to 90, 00 in the second cycle. So, the use of Modified Domino Game can improve students' vocabulary mastery. Compared with previous research, this research used pre-experimental design while Andana's research used Classroom Action Reseach (CAR). Although the findings of this research and Andana's research were same, that is Domino Cards Game was effective in teaching vocabulary mastery.

Besides the proof gotten from statistical computation, during research the researcher could also see some advantages of using Modified Domino Cards Game for the students learning. According to Vuano and Ciolino (200:2) state dominoes have many advantages, those are it makes students can participate freely because they are in formal atmosphere, it makes the students to focus on a specific structure, it automatically stimulates students' interest, it is as reinforcement for the students to contribute to an atmosphere of healthy competition and ensure a great amount of student participation, it makes the teachers usually get immediate feedback by using these kinds of activities. During the research, the students looked focus, interest, and easily understand the material about vocabulary because the researcher as a teacher used

Modified Domino Card Game as technique and domino card as media to teaching vocabulary. By using domino card, the students were interested in joining the teaching learning process in the classroom. So the score of the students after being taught by using Modified Domino Card Game was increase. This finding was in line of theory from Hadfield (2001:6) states "The idea of a game is probably easier for students to grasp from seeing the cards than from a verbal explanation". The students understand the material easily if the teacher conveys the material by using a card.

The other finding from this research was the students' motivation. During the research, the students were motivated in joining the class. It can be seen from the students who were enthusiastic to join the game and play Domino Card Game. The increasing motivation of the students can be increasing the vocabulary mastery from the students which was seen from the score of the students after being taught by using Modified Domino Card Game. This finding was appropriate with the theory from Suyanto (2010:17) explain that the young learner prefers studying by using game because it makes the students motivated to study English. While Deesri (2002) state that games are effective because they provide motivation, lower students' stress, and give them the opportunity for real communication. In addition, according to Saricoban and Metin (2000) play and competition that are provided by games enhance the motivation of the students. It means that from the game, the students had high motivation to follow the teaching and learning process and it made the students success in mastering lesson from the teacher.

Based on the explanation above, teaching English word by using Modified Domino Cards Game was effective in increasing vocabulary mastery on junior high school. From the result of data analysis, there was any significant different score of students in vocabulary before and after they are taught by using Modified Domino Cards Game. Besides, the researcher gave treatment to the students in four meetings means that the treatment which was given by the researcher becomes one factor in increasing the students' score in vocabulary. The treatment that was using Modified Domino Cards Game in teaching vocabulary gave effect in vocabulary mastery of the students because the treatment was given many times, it makes the students understand the material well and the students' score was increase. It can be concluded that the use of Modified Domino Cards Game was effective toward vocabulary mastery of the seventh grade students at MTs Assyafi'iyah Gondang Tulungagung in the academic year of 2016/2017.