

CHAPTER IV

FINDINGS AND DISCUSSION

A. Findings

In this chapter, the writer presents the data description of the eleventh grade at SMAN 1 Murung about teaching learning process by using Teams Games Tournament. There are two class that the writer uses as research class. They are eleventh grade MIA 3 as control class who do not use Teams Games Tournament and eleventh grade IPS 2 as experiment class who use Teams Games Tournament. To find out more about the students' reading comprehension achievement by using Teams Games Tournament. The teacher at SMAN 1 Murung had given the both of class pre-test and post-test. So, in this chapter, the writer describes about result of the research of the eleventh grade at SMAN 1 Murung who taught using Teams Games Tournament and who taught without Teams Games Tournament.

The writer did the research on October 2017 until November 2017. Here, the researcher described about the result of the research on the field that collected by techniques of data collection, that were interview, observation, and test. English learning process at SMAN 1 Murung for eleventh grade student have been done one time in a week. It is on Tuesday for class MIA 3 and Thursday for class IPS 2 which taught by Mrs. Herly Dadang S.pd.

To find out the reading comprehension achievement of students who taught using Teams Games Tournament and taught without using Teams Games Tournament, the writer used the test which conducted when before and after the

treatment were given. Here were the results of students test in reading comprehension.

1. Description about The Students' Reading Comprehension Achievement by Using Teams Games Tournament in Pre-Test and Post-Test of class IPS 2.

To know the reading comprehension achievement of students who taught using Teams Games Tournament between pre-test and post-test of the eleventh grade at SMAN 1 Murung, the writer use Microsoft Office to make easier to count, and the result can be seen on the appendix 9.

Based on the appendix 9, the highest pre-test score of the students in the experiment class was 80, and the lowest was 32. Meanwhile, the highest post-test score was 96 and the lowest score in the experiment class was 48. After the writer collect the data in SPSS 16, the writer got the mean score of pre-test was 55.17 and the mean score of post-test was 76.

As the result, there is an increase on students' reading comprehension achievement between pre-test and post-test who taught by using Teams Games Tournament of experiment class at SMAN 1 Murung academic year 2017/2018.

2. Description about The Students' Reading Comprehension Achievement without Using Teams Games Tournament in Pre-Test and Post-Test of class MIA 3.

To know the reading comprehension achievement of students who taught using Teams Games Tournament between pre-test and post-test of the eleventh grade at SMAN 1 Murung, the writer use Microsoft Office to make easier to count, and the result can be seen on appendix 10.

Based on the appendix 10, the highest pre-test score in the controlled class was 76 and the lowest was 32. Meanwhile, the highest post-test score in the experiment

class was 84 and the lowest was 36. After the writer collect the data in SPS 16, the mean score of pre-test was 55.44 and the mean score of post-test was 65.3.

As the result, there is an increase on students' reading comprehension achievement between pre-test and post-test who taught without using Teams Games Tournament of control class at SMAN 1 Murung academic year 2017/2018.

As the result, there is significant difference on students' reading comprehension achievement between the scores pre-test and post-test of students who taught with Teams Games Tournament and pre-test and post-test who taught without using Teams Games Tournament of control class at SMAN 1 Murung academic year 2017/2018.

This result of students' reading comprehension achievement using Teams Games Tournament of the eleventh grade at SMAN 1 Murung. To know the students' reading comprehension achievement between who using Teams Games Tournament and without using Teams Games Tournament.

- a. H_a : Students' reading comprehension achievement that use Teams Games Tournament better than students' reading comprehension achievement without use Teams Games Tournament.

- b. Mean score of students' reading comprehension achievement that use Teams Games Tournament:

$$M_{X1} = \frac{604}{29}$$

$$M_{X1} = 20.82$$

- c. Mean score of students' reading comprehension achievement without use Teams Games Tournament:

$$M_{x2} = \frac{288}{29}$$

$$M_{x2} = 9.93$$

As a result, there is significant difference on students' reading comprehension achievement who taught by using Teams Games Tournament and without using Teams Games Tournament of the eleventh grade at SMAN 1 Murung academic year 2017/2018.

The writer concludes from the result that have been obtained, that the experiment class almost as same increased as the control class in reading comprehension achievement.

3. Data Testing

In this research, the normality test is performed before the calculation of t_{test} value to determine if the data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. The data is analyzed by the use of SPSS Statistic 16. The result of the test can be seen as follows:

a. Normality Test

Hypothesis:

H_0 : the data distributed normally

H_a : the data not distributed normally

The data could be said completed the hypothesis if;

Significance score > 0.05 , so H_0 was accepted and H_a was rejected.

Significance score < 0.05 , so H_0 was rejected and H_a was accepted.

1. Normality of the Pre-test

Table 4.1 Test of Normality Data of Pre-test

Tests of Normality							
Class		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Pre-test	exs	.148	29	.107	.968	29	.507
	cont	.117	29	.200 [*]	.955	29	.249

a. Lilliefors Significance Correction

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

From the table above Table 4.3 above, it can be seen that the L_0 in significance scores of data for pre-test 0.107 in experiment class and significance scores of data pre-test 0.200 in control class. That is mean $0.107 > 0.05$ and $0.200 > 0.05$. So, H_0 was accepted, the distributed normally.

2. Normality of the Post-test

Table 4.2 Test of Normality Data of Post-test

Tests of Normality							
Class		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Post-test	exs	.155	29	.072	.951	29	.196
	cont	.170	29	.051	.953	29	.224

a. Lilliefors Significance Correction

From the table above Table 4.3 above, it can be seen that the L_0 in significance scores of data for post-test 0.072 in experiment class and significance scores of data post-test 0.51 in control class. That is mean $0.072 > 0.05$ and $0.51 > 0.05$. So, H_a was accepted, the distributed normally.

b. Homogeneity Test

Hypothesis:

Ho: the data distributed homogeneity

Ha: the data not distributed homogeneity

The data could be said completed the hypothesis if;

Significance score > 0.05 , so Ho was accepted and Ha was rejected.

Significance score < 0.05 , so Ho was rejected and Ha was accepted.

1. Homogeneity of the Pre-test

Table 4.3 Test of Homogeneity Data of Pre-test

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.053	1	56	.818

The writer used homogeneity test via SPSS 16t. From the table above Table 4.7 above, it can be seen that the F_0 in significance column was 0.818. Meanwhile, the F_{table} was 0,05. It can be conclude that $0.818 > 0.05$ and it means the data was homogeny.

2. Homogeneity of Post-test

Table 4.4 Test of Homogeneity Data of Post-test

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.000	1	56	.984

The writer used homogeneity test via SPSS 16, especially used One-Way Anova test. From the table above Table 4.7 above, it can be seen that the F_0 in significance column was 0.984. Meanwhile, the F_{table} was 0,05. It can be conclude that $0.984 > 0.05$ and it means the data was homogeny.

4. Analysis of the Data

1. Determining mean of variable x (variable 1) with the formula:

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

$$M_x = \frac{604}{29}$$

$$M_x = 20.82$$

2. Determining mean of variable y (variable 2) with the formula:

$$M_y = \frac{\sum y}{N}$$

$$M_y = \frac{238}{29}$$

$$M_x = 9.93$$

3. Determining Standard Deviation of variable x (variable 1) with the formula:

$$SD_x = \sqrt{\frac{\sum x^2}{N_1}}$$

$$SD_x = \sqrt{\frac{3627.22}{29}}$$

$$SD_x = \sqrt{125.07}$$

$$SD_x = 11.18$$

4. Determining Standard Deviation of variable y (variable 2) with the formula:

$$SD_y = \sqrt{\frac{\sum y^2}{N_1}}$$

$$SD_x = \sqrt{\frac{1651.79}{29}}$$

$$SD_x = \sqrt{56.95}$$

$$SD_x = 7.54$$

5. Determining Standard Error of variable x (variable 1) with the formula:

$$SE_{Mx} = \frac{SD_x}{\sqrt{N_1 - 1}}$$

$$SE_{Mx} = \frac{11.18}{\sqrt{29 - 1}}$$

$$SE_{Mx} = \frac{11.18}{\sqrt{28}}$$

$$SE_{Mx} = \frac{11.8}{5.29}$$

$$SE_{Mx} = \frac{11.8}{5.29}$$

$$SE_{Mx} = 2.11$$

6. Determining Standard Error of variable y (variable 2) with the formula:

$$SE_{My} = \frac{SD_y}{\sqrt{N_2 - 1}}$$

$$SE_{Mx} = \frac{7.54}{\sqrt{29 - 1}}$$

$$SE_{Mx} = \frac{7.54}{\sqrt{28}}$$

$$SE_{Mx} = \frac{7.54}{5.29}$$

$$SE_{Mx} = 1.42$$

7. Determining Standard Error of the different mean between variable x and variable y with the formula:

$$SE_{Mx-My} = \sqrt{SE_{Mx}^2 + SE_{My}^2}$$

$$SE_{Mx-My} = \sqrt{2.11^2 + 1.42^2}$$

$$SE_{Mx-My} = \sqrt{4.45 + 2.01}$$

$$SE_{Mx-My} = \sqrt{6.42}$$

$$SE_{Mx-My} = 2.53$$

8. Determining Test Observation with the formula:

$$t_0 = \frac{M_x - M_y}{SE_{Mx-My}}$$

$$t_0 = \frac{20.82 - 9.93}{2.53}$$

$$t_0 = \frac{10.89}{2.53}$$

$$t_0 = 4.31$$

9. Determining T-Table in significance of level 5% with df.

$$Df = (N1 - N2) - 2$$

$$Df = (29 - 29) - 2$$

$$Df = 58 - 2$$

$$Df = 56$$

To find the t_{table} , the writer use table of distribution table. Thus, the writer

gained t_{table} : Degree of significance 5% = 1.673

10. Hypothesis Testing

From the calculation above, it was found that the calculated t-test of t_0 was 4.31 and the degree of freedom (df) was 56. In this research, the writer used the degree of significance 5%, so she gained the critical t-test 1.673.

By comparing the result of t_0 was 4.31 and the t_{table} on the degree of significance 5% = 1.673, thus the writer summarized that t_0 was higher than the t_{table} .

The research is held to answer the question whether the use of Teams Games Tournament (TGT) technique has any effectiveness on students' reading comprehension at eleventh grade of SMAN 1 Murung. In order to provide answer for the question above, the Alternative Hypothesis (H_a) and Null Hypothesis (H_0) are proposed as follow:

- a. H_0 (Null Hypothesis): there is no significance effect of using Teams Games Tournament towards students reading comprehension at eleventh grade in SMAN 1 Murung.

- b. H_a (Alternative Hypothesis): there a significance effect of using Teams Games Tournament towards students reading comprehension at eleventh grade SMAN 1 Murung.

To prove the hypothesis, the obtained data from experiment class and control class are calculated by using t_{table} formula with assumption as follows:

- a. If $t_0 < t_{table}$, in significant degree of 5%, the Null Hypothesis (H_0) is accepted and the Alternative Hypothesis (H_a) is rejected. It means that there is not effect of using Teams Games Tournament technique on students' reading comprehension at eleventh grade in SMAN 1 Murung.
- b. If $t_0 > t_{table}$, in significant degree of 5%, the Null Hypothesis (H_0) is rejected and the Alternative Hypothesis (H_a) is accepted. It means that there is an effect of using Teams Games Tournament technique on students' reading comprehension at eleventh grade in SMAN 1 Murung.

According to the statistical calculation above, the value of t_0 was 4.31 and the degree of freedom is 56 with 5% degree of significant used by the writer. Based on the significance, it can be seen that on $df = 56$ in significance 5% the value of the t_{table} is 1.673. By comparing the result of t_{table} and t_0 , in the degree of significance of 5%, $t_0 > t_{table} = 4.31 > 1.673$. According that result, it can be concluded that the Null Hypothesis (H_0) is rejected and the Alternative Hypothesis (H_a) is accepted. It means there are significance achievement in reading comprehension between students who taught by using Teams Games Tournament strategy and who taught without using Teams Games

Tournament.

B. Discussion

After all obtained data are presented, they are also needed to be interpreted. To interpret the data, the writer describe the description based on result of the research and conformity with the problem statement which are stated on the chapter I. The results of the research were used to prove whether the use of Teams Games Tournament will improve students' reading comprehension achievement in the teaching and learning process. Everyone was free to express their opinions, feelings, and suggestions related to the implemented actions. During the research process, the writer observed the teaching learning English process of the eleventh grade at SMAN 1 Murung. The researcher chooses the report text as a material, also for taking the test that's using a report text. During the observation process, the writer got some information. First, the process of teaching and learning in both classes, experiment class and control class, was well done. The students in the experiment class and control class are the students who generally have the same level of achievement. To know how the students' reading comprehension achievement in experiment and control class, it can be seen on the description below:

1. Students' Reading Comprehension Achievement in Control Class

During the writer observed in the control class, the control class was very different with the experiment class. After got the pre-test, the teacher gave the explanation about the material. During the teaching learning process, the teacher

did not special treatment to teach English. Next, all of the exercises and practice were finished individually. No discussion, no sharing, etc. The high achievers and low achiever students work individually without any interaction. Then the teacher's role is as the leader in the class. Students cannot learn actively. The teacher dominates the learning process. Students cannot explore their difficulties with the others. They also cannot share their idea to solve the problems. The exercises form was only answer the question of report texts. It is look like conventional drills. When the writer compared the pre-test and post-test score, many students got higher score, same score, and lower score.

Based on the observation in control class during teaching and learning process, the writer could see that there are some problems happened in the class, for example:

- a. some the students got confuse about the lesson.
- b. They also were too worried when the teacher gave them task about reading comprehension.
- c. Almost all of the students in the class just played and did not do the task.
- d. Some of them looked bored and lost so much time because they did not focus when they had more times.
- e. The students just answered some of the tasks.

2. Students' Reading Comprehension Achievement in Experiment Class

During the teaching learning process in the class, the teacher gave the students an explanation of report text. Next, the students should be able to identification its structure. They also should be able to decide where the main ideas are. All of the students paid much attention with the text. This text has special text structures; they

are general classification and description. After explanation session, the writer divided the students in the experiment class into five groups. Each group consisted of five or six members. Each of the groups got a same report text to read. The writer gave the time for students to read along 10 minutes.

The writer observed them during the reading process. Their eyes were focus in the text, and their brain of course tried to work to know the text content. The writer believed, it was what the Harmer (1991, p. 190) said about reading process. He said that reading is an exercise dominated by the eyes and the brain. The eyes tried to receive the messages and the brain then has to work out the significance of these messages. These reading purposes are one of the kinds of reading purposes like what Grabe stated. Grabe (2002, p. 6) said that there are some purposes of reading; reading to search for simple information, reading to skim quickly, reading to learn from texts, reading to integrate information, reading to write, reading to critique texts, and reading for general comprehension. The main goal of the reading in this case was for general comprehension. The students were guided to comprehend the text which they read.

This is because reading as an activity will be a meaningful activity by comprehending. Without understanding the text, the reader only did reading as meaningless process. They cannot get the message from the author. After finishing their reading, each group did a discussion with their members. The group was modified by the teacher. Each group contains of the high achiever students, medium achiever, and also low achiever students. The students who were low achiever and got some difficulties will ask the help from their friend in a group who were high

achiever students along the discussion process. The lower achiever students would make question about what the part of the text that they did not understand. They also would make question to know the vocabularies that they did not know. The difficulties that the lower students feel were the problems in reading commonly.

Reading text in foreign language makes some students get difficulties, hence some of them can do it well. The low achiever students must get more attention from the teacher. Actually it was because they need more treatment or helping. However, the guidance here, not always only come from the teacher. It also can come from the others students. That is why the next step was clarifying. Overall, this step is the students' high achiever responsibility. They must help their friend and give the clarification. The last step was summarizing. Each group made a summary about what they read and what they found during the process. Moreover, all of the steps above actually are the Teams Games Tournament strategy.

Based on the observation during teaching and learning process, the writer can conclude some points, they are:

The students seen enthusiastic when teacher announced about Teams Games Tournament.

- a. The students enjoyed their reading comprehension when they discussed in groups.
- b. The students got more focus when they discussed in groups.
- c. The students more interested when they played games.
- d. The students seem enthusiastic when they did the tournament.
- e. The students more understood about the material that they learned while

teaching and learning reading comprehension process.

It was supported by Prasetyo (2012, p. 4) as one of the teaching strategy in teaching and learning process, Teams Games Tournament (TGT) has some advantages as follows:

- 1) Students are more active during the learning process.
- 2) Students will better mastery in the material provided.
- 3) Improve the student communication skill to each other.
- 4) Learning process will be more attractive.
- 5) Improving the teaching quality.

It can be concluded that teaching learning process using Teams Games Tournament strategy, the students more active and more attractive.

3. The Use of Teams Games Tournament in Improving Students' Reading Comprehension Achievement

Based on statistical measurement above, it shows:

- a. Based on the data above, student was taught with Teams Games Tournament strategy in experiment class show better perform than control class. Research findings above show that in the post test, students from experimental class show better score than students from control class. It can be seen from the result of the average score of post-test of controlled class and experimental class. The averages score of post-test of controlled class is 76. While, the average score of post-test of experimental class is 65.3793. So the average score of post-test of experimental class higher than average score of post-test of controlled class. $76 > 65.3793$.
- b. Afterward, the experiment class and control class students' gain score illustrates that the average gain score for experiment class students is higher

than the average gain score for controlled class students. The average gain score of experimental class is 20.8275. while the average gain score of controlled class is 9.93.

- c. From the result of statistical calculation above, the value of t_0 was 4.31 and the degree of freedom is 56 with 5% degree of significant used by the writer. Based on the significance, it can be seen that on $df = 56$ in significance 5% the value of the t_{table} is 1.673. By comparing the result of t_{table} and t_0 , in the degree of significance of 5%, $t_{table} < t_0 = 1.673 < 4.287$. According those results, it can be concluded that the Null Hypothesis (H_0) is rejected and the Alternative Hypothesis (H_a) is accepted. It means:

1. If the result of t observation is higher than t table ($t_0 < t_{table}$), the null hypothesis (H_0) is accepted and the alternative hypothesis (H_a) is rejected. It means that there is no a significant difference achievement between students who taught by using Teams Games Tournament and students who taught without using Teams Games Tournament.
2. If the result of t observation is higher than t table ($t_0 > t_{table}$), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. It means that there is a significant difference achievement between students who taught by using Teams Games Tournament and students who taught without using Teams Games Tournament.

Based on the result of the research, the writer gives the interpretation that Teams Games Tournament can improve students' reading comprehension achievement in experiment class besides students' reading comprehension without

using Teams Games Tournament also increased. Therefore, it can be concluded that Teams Games Tournament can adapted as a teaching and learning strategy to improve students' reading comprehension achievement and make students more active and students can be centered in learning reading process. So, teachers do not just use a monotonous way. Moreover, as stated in chapter II, Teams Games Tournament do not just improve students' reading skill but also develop their social skills, through games they learn how to cooperate and to compete.