## CHAPTER IV RESEARCH FINDINGS AND ANALYSIS

## A. Description of the Result Study

This research used experimental study. The subject of the research was divided into experimental (VIII H), and control group (VIII F). Experimental group was given a treatment that was learning Simple Present Tense by using card game and control class that given teaching Simple Present Tense without using card game. Before the test was used as an instrument to collect the data on the sample classes, it had been tried out first to the student in try out class (VII G) to know the validity, reliability, difficulty level and the discrimination power of each item. There were 40 items prepared as the instrument of the try out test. Then test was provided by the researcher as pre test and post test that consist of 30 multiple-choice items and had been given before and after the students of both samples followed the different learning process.

Before the treatment was given, experimental class and control class must have same or equal competence level in the beginning of research. In addition, to find out the difference between the mastery of the students who are taught by using card game and the students who are not taught by using card game in Simple Present Tense in MTs Darul Ulum Purwogondo Kalinyamatan Jepara, an analysis of quantitative data was done. The data is score that was obtained by giving test to the experimental class and control class after giving a different learning both classes. Experimental class was treated used card game while control class did not use card game but used conventional method or lecturing.

The first analysis is score data from the beginning of control class and experimental class that is taken from the pre test value. To find out that there is no significant different of competence and proficiency level of both classes and have same variant and normal in beginning, so, the normality and homogeneity test was done. Then, to prove the truth of hypothesis that has
been proposed, an analysis data from the ending of control and experimental class research was done.

However, the data in this research was obtained from the test result can be elaborated as follows:

1. The Data of Experimental Class.
a. The Pre Test Data of Experimental Class.

Based on the research result of pre test on class VII H as experimental class, that is before the learning Simple Present Tense using card game, it was obtained that maximum score 77 and minimum score is 46 . Score range $(R)=30$, the number of class interval $(k)$ is 6 class, the length of class interval $(\mathrm{P})$ taken is 5 . From the computation, it was obtained $\left(\sum f i x_{i}\right)=2403$. $\sum\left(f i x_{i}{ }^{2}\right)=155335,5$. So that the average value is $=63,24$ and the standard deviation $=9,55$. For more detail can be seen in tables below:

## Table 4.1

The Distribution Frequency of Pre Test Score of Experimental
Class

| No | Class Interval | Absolute <br> Frequency | Relative Frequency <br> $(\%)$ |
| :---: | :--- | :---: | :---: |
| 1 | $47-52$ | 5 | 13,16 |
| 2 | $53-58$ | 10 | 26,32 |
| 3 | $59-64$ | 6 | 15,79 |
| 4 | $65-70$ | 7 | 18,42 |
| 5 | $71-76$ | 6 | 15,79 |
| 6 | $77-82$ | 4 | 10,53 |
| 7 | Sum | 38 | 100 |

To give more wide description, so the table of frequency distribution above can be made into chart as follow:


Figure 4.1 The Score Chart of Pre Test of Experimental Class
b. The Posttest Data of Experiment Group.

According to the research result of post test on class VII H as experiment class that learning Simple Present Tense by using card game, it was obtained that maximum score is 100 and minimum score is 47. Score range $(R)=53$, then the number of class interval $(k)$ is 6 classes and the length of class interval (P) taken is 9. From the computation, it was obtained $\left(\sum f i x i\right)=2897, \sum\left(f i x i^{2}\right)=228005,5$. So that the average value is $=76,24$, with standard deviation $=13,90$. It can be seen on the table below:

Table 4.2
The Distribution Frequency Table of Post Test Score of Experimental Class

| No. | Class Interval | Absolute <br> Frequency | Relative <br> Frequency (\%) |
| :---: | :--- | :---: | :---: |
| 1 | $47-56$ | 3 | 7,89 |
| 2 | $57-66$ | 5 | 13,16 |
| 3 | $67-76$ | 14 | 36,84 |
| 4 | $77-86$ | 7 | 18,42 |
| 5 | $87-96$ | 5 | 13,16 |
| 6 | $97-106$ | 4 | 10,53 |
| 7 | Sum | 38 | 100 |

For give more wide description, so the table of frequency distribution above can be made into chart as follow:


Figure 4.2. The Score Chart of Post Test of Experimental Class.
c. The Description of Teaching Learning Process

Experimental group was given treatments that are learning Simple Present Tense by using card game. The students were divided into groups and each group was given a deck of domino cards that consist of 28 cards. They played the dominoes activities with by combining the words in the right of each domino with the word on the left of each domino until the last card, so new sentences of Simple Present Tense could be formed. The students were expected to be able to identify and understand the Simple Present Tense while playing. The learning activity can be seen on appendix 1 .
2. The Data of Control Class.
a. The Pre Test Score Data Control Class.

According to the research result of pre test on class VII F (control class) it was obtained that maximum score is 77 and minimum score is 40 . Score range $(R)=37$, the number of class interval $(k)$ is 6 class, the length of class interval (P) taken is 6 . From the computation, it was obtained $\left(\sum\right.$ fi. $\left.x_{i}\right)=2236$ and $\sum\left(\right.$ fi. $\left.x_{i}{ }^{2}\right)=135656$. So that the
average value was $=58,84$, with standard deviation $=10,51$. For more detail can be seen in tables below:

Table 4.3
The Distribution Frequency of Pre Test Score of the Control Class

| No. | Class Interval | Absolute Frequency | Percentage (\%) |
| :---: | :--- | :---: | :---: |
| 1 | $40-46$ | 5 | 13,16 |
| 2 | $47-53$ | 8 | 21,05 |
| 3 | $54-60$ | 9 | 23,68 |
| 4 | $61-67$ | 7 | 18,42 |
| 5 | $68-74$ | 6 | 15,80 |
| 6 | $75-81$ | 3 | 7,89 |
| Sum |  | 38 | 100 |

For give more wide description, so the table of frequency distribution above can be made into chart as follow:


Figure 4. 3. The Score Chart of Pre Test of Control Class
b. The Post Test Score Data of Control Group.

According to the research result of post test on class VII F (control class) it was obtained maximum score is 90 and minimum score is 40 . Score range $(R)=50$, the number of class $(k)$ is 6 class, the class interval ( P ) taken is 8 . From the computation, it was obtained ( $\sum$ $\left.f i x_{i}\right)=2581 . \sum\left(f i . X i^{2}\right)=181505$. So that the average value is $=67,92$,
with standard deviation $=12,95$. For more detail can be seen in tables below:

Table 4.4
The Distribution Frequency of Post Test Score of Control Class

| No. | Class Interval | Absolute <br> Frequency | Relative <br> Frequency (\%) |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $40-48$ | 3 | 7,89 |  |  |  |
| 2 | $49-57$ | 6 | 15,80 |  |  |  |
| 3 | $58-66$ | 6 | 15,80 |  |  |  |
| 4 | $67-75$ | 14 | 36,84 |  |  |  |
| 5 | $76-84$ | 4 | 10,53 |  |  |  |
| 6 | $85-93$ | 5 | 13,16 |  |  |  |
| Sum |  |  |  |  | 38 | 100 |

For give more wide description, so the table of frequency distribution above can be made into chart as follow:


Figure 4. 4 The Score Chart of Post Test of Control Class.
c. The Description of Teaching Learning Process

Control group was given treatments that are learning Simple Present Tense without using card game or by taught by conventional method that is lecturing. On the teaching learning process, the students listened the teacher explanation of Simple Present Tense. Then, the students were give exercises to know their ability. The learning activity can be seen on appendix 2 .

## B. The Data Analysis and Hypothesis Test

## 1. Data Analysis

a. The Normality Test.

The hypotheses are:
$\mathrm{H}_{0}$ : The distribution is normal.
$\mathrm{H}_{\mathrm{i}}$ : the distribution is not normal
The criterion is that $\mathrm{H}_{0}$ is accepted if $\chi^{2}$ count is lower than $\chi^{2}$ table. The following table shows the result of normality test:

Table 4.5
The Chi Square List of Pre Test and Post Test

| No | Class | Competence | $\chi^{2}$ count | $\chi^{2}$ table | Note |
| :---: | :--- | :--- | :---: | :---: | :--- |
| 1 | Experiment | Pre Test | 5,069 | 7,81 | Normal |
| 2 | Control | Pre Test | 5,176 | 7,81 | Normal |
| 3 | Experiment | Post Test | 3,892 | 7,81 | Normal |
| 4 | Control | Post Test | 3,938 | 7,81 | Normal |

The computation of normality test can be seen on appendix $10,11,12$, and 13 .
b. The Homogeneity Test.

Но : $\sigma_{1}^{2}=\sigma_{2}^{2}$
На: $\sigma_{1}^{2} \neq \sigma_{2}^{2}$
The criteria is if $\chi_{\text {count }}^{2}<\chi_{\text {table }}^{2}$. for $\alpha=0,05$ and $\mathrm{df}=\mathrm{k}-3$, So, the data has homogenous distribution. The following is the result computation of the pre test and posttest homogeneity of experiment and control class:

Table 4. 6
The List of Barlett Test of Pre Test and Post Test

| No | Competence | $\mathrm{x}^{2}{ }_{\text {count }}$ | $\mathrm{x}^{2}$ table | Note |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Pre Test | 0,835 | 3,84 | Homogenous |
| 2 | Post Test | 0,170 | 3,84 | Homogenous |

The computation of homogeneity test can be seen in appendix 14 and 15 .

## 2. The Hypothesis Test

a. The Hypothesis Test of Pre Test.

Hypothesis:
$\mathrm{H}_{\mathrm{o}}=\bar{X}_{1}=\bar{X}_{2}$
$\mathrm{H}_{\mathrm{a}}=\bar{X}_{1} \neq \bar{X}_{2}$
$\bar{X}_{1}$ : Average data of experiment group
$\bar{X}_{2}$ : Average data of control group

## Test of hypothesis:

Based on the computation of the homogeneity test, the experimental class and control class have same variant. So, the T-Test formula:

$$
\begin{aligned}
& t=\frac{\overline{\mathrm{X}}_{1}-\overline{\mathrm{X}_{2}}}{\mathrm{~S} \sqrt{\frac{1}{\mathrm{n}_{1}}+\frac{1}{\mathrm{n}_{2}}}} \\
& S=\sqrt{\frac{\left(n_{1}-1\right) S_{1}^{2}+\left(n_{2}-1\right) S_{2}^{2}}{n_{1}+n_{2}-2}}
\end{aligned}
$$

Note:
$\bar{X}_{1}$ : The mean score of the experimental group
$\bar{X}_{2}$ : The mean of the control group
$\mathrm{n}_{1}$ : The number of experiment group
$\mathrm{n}_{2}$ : The number of control group
$\mathrm{S}_{1}{ }^{2}$ : The standard deviation of experiment group
$\mathrm{S}_{2}{ }^{2}$ : The standard deviation of both groups
Table 4.7
The Pre Test Data of the Research

| Variant Source | Experiment | Control |
| :---: | :---: | :---: |
| Sum | 2408 | 2247 |
| N | 38 | 38 |
| $\overline{\mathrm{X}}$ | 63,37 | 59,13 |
| Variant $\left(S^{2}\right)$ | 85,696 | 116,171 |
| $S$ | 9,27 | 10,78 |

## The Computation:

$$
\begin{aligned}
S & =\sqrt{\frac{\left(n_{1}-1\right) S_{1}^{2}+\left(n_{2}-1\right) S_{2}^{2}}{n_{1}+n_{2}-2}} \\
S & =\sqrt{\frac{(38-1) \cdot 85,969+(38-1) \cdot 116,171}{38+38-2}} \\
& =\sqrt{101,07} \\
S & =10,053
\end{aligned}
$$

So, the computation t-test:

$$
\begin{aligned}
t & =\frac{\overline{\mathrm{X}}_{1}-\overline{\mathrm{X}_{2}}}{\mathrm{~S} \sqrt{\frac{1}{\mathrm{n}_{1}}+\frac{1}{\mathrm{n}_{2}}}} \\
& =\frac{63,368-59,13}{10,053 \sqrt{\frac{1}{38}+\frac{1}{38}}} \\
t & =\frac{4,237}{2,30} \\
& =1,837
\end{aligned}
$$

With $\alpha=5 \%$ and $\mathrm{df}=\mathrm{n}_{1}+\mathrm{n}_{2}-2=38+38-2=74$, obtained $t_{\text {table }}=1,99$. Because $t_{\text {count }}$ is lower than $t_{\text {table }}(1,837<1,99)$. Then $t_{\text {count }}$ is located in area of $\mathrm{H}_{0}$ acceptance. It can be concluded that there is no average difference of the pre test from both groups. Therefore, both samples that had been taken by cluster random sampling had equal in ability, competence level and proficiency level.
b. The Hypothesis Test of Post Test

Hypothesis:
$\mathrm{H}_{\mathrm{o}}=\bar{X}_{1}=\bar{X}_{2}$
$\mathrm{H}_{\mathrm{a}}=\bar{X}_{1} \neq \bar{X}_{2}$
$\bar{X}_{1}$ : Average data of experiment group
$\bar{X}_{2}$ : Average data of control group

## Test of hypothesis:

Based on the computation of the homogeneity test, the experimental class and control class have same variant. So, the $t$-test formula is:
$t=\frac{\overline{\mathrm{X}}_{1}-\overline{\mathrm{X}_{2}}}{\mathrm{~S} \sqrt{\frac{1}{\mathrm{n}_{1}}+\frac{1}{\mathrm{n}_{2}}}}$
$S=\sqrt{\frac{\left(n_{1}-1\right) S_{1}{ }^{2}+\left(n_{2}-1\right) S_{2}{ }^{2}}{n_{1}+n_{2}-2}}$
$\bar{X}_{1}$ : The mean score of the experimental group
$\bar{X}_{2} \quad$ : The mean of the control group
$\mathrm{n}_{1} \quad$ : The number of experiment group
$\mathrm{n}_{2} \quad$ : The number of control group
$\mathrm{S}_{1}{ }^{2}$ : The standard deviation of experiment group
$S_{2}{ }^{2}$ : The standard deviation of both groups.
Table 4.8
The Post Test Data of the Research

| Variant Source | Experiment | Control |
| :--- | :---: | :---: |
| Sum | 2817 | 2552 |
| N | 38 | 38 |
| $\overline{\mathrm{X}}$ | 74,132 | 67,158 |
| Varian $\left(S^{2}\right)$ | 188,388 | 164,515 |
| $S$ | 13,725 | 12,826 |

## The Computation:

$$
\begin{aligned}
S & =\sqrt{\frac{\left(n_{1}-1\right) S_{1}^{2}+\left(n_{2}-1\right) S_{2}^{2}}{n_{1}+n_{2}-2}} \\
S & =\sqrt{\frac{(38-1) \cdot 188,388+(38-1) \cdot 164,515}{38+38-2}} \\
& =\sqrt{\frac{6970,356+6087,055}{38+38-2}} \\
& =\sqrt{\frac{13057,411}{74}}
\end{aligned}
$$

$$
\begin{aligned}
& =\sqrt{176,4515} \\
& =13,283
\end{aligned}
$$

## So, the t-test computation:

$$
\begin{aligned}
& t=\frac{\overline{\mathrm{X}_{1}}-\overline{\mathrm{X}_{2}}}{\mathrm{~S} \sqrt{\frac{1}{\mathrm{n}_{1}}+\frac{1}{\mathrm{n}_{2}}}} \\
& =\frac{74,132-67,158}{13,283 \sqrt{\frac{1}{38}}+\frac{1}{38}} \\
& =\frac{6,974}{3,047} \\
& =2,288 \quad \text { With } \alpha=5 \% \text { and df }=38+38-2=74, \text { obtained } t_{\text {table }}=1,99 .
\end{aligned}
$$

Because $t_{\text {count }}$ is higher than $t_{\text {table }}(2,29>1,99)$ and located on area of $\mathrm{H}_{0}$ refusal. It can be concluded that the average of posttest score from both groups was different or not similar. Therefore, there was significant different (not similar) in competence level between sample that had been treated by using card game and by using lecturing method.

## C. Discussion.

## 1. Pre Test Score.

Pre test score was took before the research was done to know the beginning condition of experiment and control class whether it is equal or not. Moreover, based on the result of normality test computation and Barlett test computation on both classes that were experimental and control class, it had normal distribution and homogenous. It can be concluded that the student's achievement in beginning condition before treated is same or equal and can be given with different treatment.

## 2. Post Test Score.

Based on the analysis of hypothesis test of post test of experimental and control class, it was obtained $t_{\text {count }}=2.29$ and $t_{\text {table }}=1.99$. Because $t_{\text {count }}$ is higher than $t_{\text {table }}(2.29>1.99)$ and located on area of $\mathrm{H}_{\mathrm{o}}$ refusal, so it can be concluded that learning Simple Present Tense using card game is better than learning Simple Present Tense without using card game. It can be seen on posttest average score of experimental class that was higher than posttest average score of control class. Experiment class had average score 76.24. Moreover, the average score of control class was 63.24 .

Therefore, it can be concluded that there is a difference in Simple Present Tense achievement score between students taught using card game and those taught without using card game. It means that the competence level of experimental class is different and higher than control class after given treatments.

From the elaboration above, can be concluded that the card game usage gives effectivesness toward student's achievement in Simple Present Tense on MTs Darul Ulum Purwogondo Jepara. The student's achievement on Simple Present Tense who taught by using card game is better than student who are taught without using card game. So that teaching Simple Present Tense using card game is effective and can be an alternative media to arise the student's achievement on Simple Present Tense. In this case, the use of card game is necessary needed in teaching Simple Present Tense. Card game has some positive effect for the students in improving Simple Present Tense understanding. The students were more interested and active during the learning process and improved their understanding in Simple Present Tense. There are some reasons why the students can improve their Simple Present Tense mastery by using card game. They are as follows:
a. Sharpening the students' understanding on Simple present Tense.
b. Giving an opportunity for students in studying grammar indirectly while plying the card game.
c. The students were able to learn English grammar without any pressure.
d. The students can be relaxed and enjoyed while learning Simple Present Tense thought card game.

In contrast, not all students have good English in Simple Present Tense. Those are caused by some factors that influence the students in learning English. They are as follows:
a. The assumption that English grammar is the difficult lesson in school.
b. A poor motivation and desire from the students in learning English seriously.
c. The confusion in understanding and identifying the Simple Present Tense.

In this research, the writer used the card game to improve the students' Simple Present Tense in MTs Darul Ulum Purwogondo Kalinyamatan Jepara. Therefore, the research findings are only representative in that school. The writer hopes that there are the other researchers will do more researches to prove and develop this method in improving students' understanding on Simple Present Tense.

## D. Limitation of the Research

The writer realizes that this research had not been done optimally. There were constraints and obstacles faced during the research process. Some limitations of this research are:

1. Relative short time of research makes this research could not be done maximum.
2. The research is limited at MTs Darul Ulum Purwogondo Kalinyamatan Jepara. So that when the same research will be gone in other schools, it is still possible to get different result.
3. The implementation of the research process was less smooth. This was more due to lack of experience and knowledge of the writer.

Considering all those limitations, there is a need to do more research about teaching Simple Present Tense using card game. So, more optimal result will be gained.

