

## CHAPTER IV

### RESEARCH FINDINGS AND DISCUSSION

This chapter presents three topics related to research findings. These are the findings of research, hypothesis testing, and discussion.

#### A. The Findings of Research

In this research, the researcher wants to know the effectiveness of using hot potatoes quiz towards students' grammar achievement in simple present tense. The effectiveness can be seen from the significant different scores of the students' grammar achievement before and after being taught by using hot potatoes quiz. The presentation of the data is also to answer the research problems presented in chapter I.

To investigate the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz, the researcher conducted pretest and posttest in a group of sample consisted of 33 students in VII C class. After getting the data, the researcher analyzed the data by using paired sample  $t$  –test though SPSS 16.0 to find out the significant difference scores of students' grammar achievement before and after being taught by using hot potatoes quiz. Mentioned below is the presentation of data in this research.

### 1. Students' Grammar Scores Before Being Taught by Using Hot Potatoes Quiz (Pretest Score)

In this section, the researcher presents the students' grammar scores before being taught by using hot potatoes quiz. That is called as pretest score. The pretest was done before a treatment process that was teaching grammar by using hot potatoes quiz was being conducted. The pretest was given to students to know their basic competence and earlier knowledge before got the treatment. Below was the students' scores resulted from the pretest. The students' names below were identified based on the initial name of the students, for example was initial AFS for the student named Ahmad Fredi Saputra.

**Table 4.1 Students' Grammar Scores Before Being Taught by Using Hot Potatoes Quiz**

Number	Student	Score
1	AFS	52
2	ANA	61
3	AA	61
4	AR	79
5	ANN	70
6	BL	79
7	BERS	76
8	CDK	64
9	DI	64
10	DW	61
11	DCP	64
12	ESN	40

13	EE	76
14	ELK	82
15	IF	61
16	IS	52
17	IF	82
18	IM	67
19	LNK	79
20	MARN	64
21	MK	67
22	MVS	64
23	RDNS	79
24	RRA	58
25	SN	82
26	SKN	58
27	SRF	70
28	VPA	73
29	YB	61
30	ZM	64
31	FUM	67
32	MRA	58
33	MNH	40

The pretest was followed by 33 students of VII C class that was taken as sample. The researcher allocated 40 minutes for administering the pretest. The pretest contained 30 questions in the form of simple completion with inflection form. It was administered on Friday, May 9<sup>th</sup>, 2014.

After getting the data, the researcher analyzed them by using SPSS 16.0. The result can be seen in table 4.2.

**Table 4.2 Frequency Statistics of Students' Pretest Scores**

Statistics		
Pretest		
N	Valid	33
	Missing	0
Mean		65.9091
Std. Error of Mean		1.90014
Median		64.0000
Mode		64.00
Std. Deviation		10.915
Variance		119.148
Range		42.00
Minimum		40.00
Maximum		82.00
Sum		2175.00
Percentiles	15	58.0000
	25	61.0000
	45	64.0000
	50	64.0000
	75	76.0000

From the table above, it can be seen that the lowest score is 40 and the highest score is 82. Besides, the mean of pretest is 65.9091, the standard error of mean is 1.90014, the median is 64, the mode is 64, and the standard deviation is 10.915.

To make the data easy to be interpreted, the researcher made the table distribution of the students' pretest scores. It can be seen in table 4.3.

**Table 4.3 Table Distribution of the Students' Pretest Scores**

<b>Interval</b>	<b>Frequency</b>	<b>Categorization</b>	<b>Percentage</b>
40-48	2	low	6.06%
49-57	2	fair	6.06%
58-66	14	good	42.42%
67-75	6	very good	18.18%
76-84	9	excellent	27.27%

From the data above, 2 students (6.06%) get score 40 to 48 in low categorization. Two students (6.06%) get score 49 to 57 in fair categorization. Fourteen students (42.42%) get score 58 to 66 and in good categorization. Six students (18.18%) are in very good categorization and get score 67 to 75. Nine students (27.27%) are in excellent categorization and get score 76 to 84.

## **2. Students' Grammar Scores After Being Taught by Using Hot Potatoes Quiz (Posttest Score)**

In this section, the researcher presents the students' grammar scores after being taught by using hot potatoes quiz. That is called as posttest score. The posttest was done after a treatment process that was teaching grammar by using hot potatoes quiz was being conducted. The test was given to students to know their grammar scores after getting the treatment.

**Table 4.4 Students' Grammar Scores After Being Taught by Using Hot Potatoes Quiz**

<b>Number</b>	<b>Student</b>	<b>Score</b>
1	AFS	70
2	ANA	70
3	AA	61
4	AR	82
5	ANN	67
6	BL	91
7	BERS	82
8	CDK	82
9	DI	61
10	DW	70
11	DCP	76
12	ESN	55
13	EE	88
14	ELK	91
15	IF	79
16	IS	73
17	IF	82
18	IM	85
19	LNK	70
20	MARN	76
21	MK	61
22	MVS	82
23	RDNS	91
24	RRA	73
25	SN	94

26	SKN	70
27	SRF	79
28	VPA	85
29	YB	70
30	ZM	58
31	FUM	85
32	MRA	70
33	MNH	64

The posttest was followed by 33 students of C class that was taken as sample. The researcher allocated 40 minutes for conducting the posttest. The posttest contained 30 questions in the form of simple completion with inflection form. The posttest was administered on Monday, May 26<sup>th</sup>, 2014.

After getting the data, the researcher analyzed them by using SPSS 16.0. The result can be seen in table 4.5.

**Table 4.5 Frequency Statistics of Students' Posttest Scores**  
Statistics

Posttest		
N	Valid	33
	Missing	0
Mean		75.5455
Std. Error of Mean		1.82371
Median		76.0000
Mode		70.00
Std. Deviation		10.476
Variance		109.756
Range		39.00
Minimum		55.00

Maximum		94.00
Sum		2493.00
Percentiles	15	61.3000
	25	70.0000
	45	73.0000
	50	76.0000
	75	83.5000

From the table above, it can be seen that the lowest score is 55 and the highest score is 94. Besides, the mean of posttest is 75.5455, the standard error of mean is 1.82371, the median is 76, the mode is 70, and the standard deviation is 10.476.

To make the data easy to be interpreted, the researcher made the table distribution of the students' posttest scores. It can be seen in table 4.6.

**Table 4.6 Table Distribution of the Students' Posttest Scores**

Interval	Frequency	Categorization	Percentage
55-62	5	low	15.15%
63-70	9	fair	27.27%
71-78	4	good	12.12%
79-86	10	very good	30.30%
87-94	5	excellent	15.15%

From the data above, 5 students (15.15%) get score 55 to 62 in low categorization. Nine students (27.27%) get score 63 to 70 in fair categorization. Four students (12.12%) get score 71 to 78 and in good categorization. Ten students (30.30%) are in very good categorization and get score 79 to 86. Five students (15.15%) are in excellent categorization and get 87 to 94.



### 3. The Significance Different Scores Before and After Being Taught by Using Hot Potatoes Quiz

After getting the data in the form of scores in pretest and posttest, then the researcher analyzed the data to test the effectiveness of the use of hot potatoes quiz towards grammar achievement in simple present tense by using paired sample  $t$  –test through SPSS 16.0. The outputs were as follows.

**Table 4.7 Paired Samples Statistics**

Paired Sample Statistics					
	Mean	N	Std. Deviation	Std. Error Mean	
Pair 1 Pretest	65.9091	33	10.91548	1.90014	
Posttest	75.5455	33	10.47643	1.82371	

The presentation of data above is the performance of students' grammar scores before and after being taught by using hot potatoes quiz. The total number of the students ( $N$ ) both in pretest and posttest is 33. The mean of pretest is 65.9091 and the mean of posttest is 75.5455.

As stated earlier, the pretest was done to know the students' basic competence and earlier knowledge before the treatment was being conducted, while the posttest was done after conducting the treatment process to know whether there are significant difference scores before and after getting the treatment. It means that there should be any improvement from the pretest to the posttest. By looking at the mean, as the mean of pretest is 65.9091, while the mean of posttest is 75.5455, it is seen that there is any improvement from the pretest to the posttest. By looking at the mean of posttest is higher than the mean

of pretest ( $75.5455 > 65.9091$ ), it can be concluded that there is a significant difference between the pretest and posttest.

**Table 4.8 Paired Sample T- Test**

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 pretest - posttest	-9.636	8.41063	1.46410	-12.61864	-6.65409	-6.582	32	.000

From the presentation of data above, the result of  $t$ -count is 6.582 with degree of freedom ( $df$ ) = 32 and significance value (Sig. 2-tailed) 0.000. With  $df = 32$ , it is consulted to  $t$ -table with significant level 5% (0.05) and the result is 2.037.

Hypotheses testing stated are if the value of  $t$ -count is higher that  $t$ -table ( $t$ -count  $>$   $t$ -table) in  $df = 32$  with significant level 0.05 and significance value  $<$  0.05, the null hypothesis ( $H_0$ ) is rejected. It means that hot potatoes quiz is effective to be applied in teaching grammar at the seventh grade students of MTs Al-Huda Bandung Tulungagung. The hypothesis testing can be got if there is any significant difference of the students' grammar scores before and after being taught by using hot potatoes quiz. Otherwise, if the value of  $t$ -count is smaller that  $t$ -table ( $t$ -count  $<$   $t$ -table) in  $df = 32$  with significant level 0.05 and significance value  $<$  0.05, the null hypothesis ( $H_0$ ) is accepted. It means that hot potatoes quiz is not effective to be applied in teaching grammar at the seventh grade students of MTs Al-Huda Bandung Tulungagung. It is got if there is not any

significant difference of the students' grammar scores before and after being taught by using hot potatoes quiz.

Table 4.8 shows that  $t$  -count is higher than  $t$  -table ( $6.582 > 2.037$ ) and the significance value is lower than significant level ( $0.000 < 0.05$ ). It can be concluded that  $H_0$  is rejected. It means that there is any significant difference on the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz at the seventh grade of MTs Al-Huda Bandung Tulungagung.

## **B. Hypotheses Testing**

The most important characteristic of a good hypothesis is testability. A testable hypothesis is verifiable; that is, deductions, conclusions, or inferences can be drawn from the hypothesis in such a way that empirical observations either support or do not support the hypothesis (Ary *et al*, 2006: 87). There are two kinds of hypotheses: null hypothesis ( $H_0$ ) and alternative hypothesis ( $H_a$ ). Null hypothesis ( $H_0$ ) is a hypothesis stating that there is no any relationship between or among variables. In this research, the null hypothesis is there is no any significant difference on the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz at the seventh grade of MTs Al-Huda Bandung Tulungagung. Alternative hypothesis ( $H_a$ ) is a hypothesis stating that there is a relationship or there is a significant difference between or among variables. In this research, the alternative hypothesis is there is any significant difference on the students' grammar achievement in simple present tense before

and after being taught by using hot potatoes quiz at the seventh grade of MTs Al-Huda Bandung Tulungagung.

The hypothesis testing is concerned on the null hypothesis ( $H_0$ ). It means that the treatment is effective if  $H_0$  is rejected and it is not effective if  $H_0$  is accepted. The hypotheses testing of this research is proved through the output of paired sample  $t$ -test calculated in SPSS 16.0. It is concerned both on the value of  $t$ -count and the significance (sig). Next, the hypotheses testing are stated as follows:

1. If  $t$ -count is higher than  $t$ -table ( $t$ -count  $>$   $t$ -table) in  $df = 32$  with significant level 0.05 and significance value is lower than 0.05 (significance value  $<$  0.05), the null hypothesis ( $H_0$ ) is rejected. It means that there is any significant difference on the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz at the seventh grade of MTs Al-Huda Bandung Tulungagung.
2. If  $t$ -count is lower than  $t$ -table ( $t$ -count  $<$   $t$ -table) in  $df = 32$  with significant level 0.05 and significance value is higher than 0.05 (significance value  $>$  0.05), the null hypothesis ( $H_0$ ) is accepted. It means that there is any significant difference on the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz at the seventh grade of MTs Al-Huda Bandung Tulungagung.

Based on the output of paired sample  $t$ -test on table 4.8, the significance value is 0.000, the value of  $t$ -count is 6.582, and the value of  $t$ -table in  $df = 32$  is 2.037. As stated earlier, if the  $t$ -count  $>$   $t$ -table and the significance value  $<$  0.05, the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted. Since the  $t$ -count is higher than  $t$ -table ( $6.582 > 2.037$ ) and the significance value is lower than 0.05 ( $0.000 < 0.05$ ), it can be concluded that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted. It means that there is any significant difference on the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz at the seventh grade of MTs Al-Huda Bandung Tulungagung. Therefore, hot potatoes quiz is effective and it is suggested to be used to teach grammar, especially at the seventh grade of MTs Al-Huda Bandung Tulungagung.

### **C. Discussion**

The findings of this research were intended to answer the research problems stated in chapter I. In order to answer the research problems, the researcher conducted three steps to collect the data. The first was administering a pretest. The next step was applying the treatment that was using hot potatoes quiz in teaching grammar. The treatment was done in twice meetings. The grammar chosen by the researcher was simple present tense. In this treatment, the students were given a chance to do the quiz in computers that were connected to Internet. The researcher produced the quiz as electronic materials in the form of short answers and the students did it on a computer as a web page. The researcher

previously gave feedback for both the correct and wrong answers, therefore when doing the quiz and making mistakes, the students would realize their mistakes directly by looking at the feedback and tried to change the answers to the correct one. The last step was administering a posttest.

After the steps were conducted, the researcher got data in the form of pretest and posttest scores. Next, the researcher analyzed them by using paired sample *t* –test through SPSS 16.0. Below was the result of the data.

### **1. Students' Grammar Scores Before Being Taught by Using Hot Potatoes Quiz (Pretest Score)**

The pretest was done at the first meeting of this research. It was done before a treatment process that was teaching grammar by using hot potatoes quiz was being conducted. It was given to students to know their basic competence and earlier knowledge before getting the treatment. The pretest was given to the VII C class consisted of 33 students. The researcher allocated 40 minutes for conducting the pretest. The pretest contained 30 questions in the form of simple completion with inflection form. After getting the pretest scores, the researcher analyzed it by using SPSS 16.0. The result showed that the mean of pretest is 65.9091.

### **2. Students' Grammar Scores After Being Taught by Using Hot Potatoes Quiz (Posttest Score)**

The posttest was done at the last meeting of this research. It was done after the treatment process was given to the students. It was given to them to know their

grammar scores after getting the treatment. The researcher wanted to know whether there is any significant difference in the students' grammar understanding before and after given by treatment. The posttest was given to the VII C class consisted of 33 students. The researcher allocated 40 minutes for conducting the posttest. The posttest contained 30 questions in the form of simple completion with inflection form. After getting the pretest scores, the researcher analyzed it by using SPSS 16.0. The result showed that the mean of posttest is 75.5455.

### **3. The Significant Different Scores Before and After Being Taught by Using Hot Potatoes Quiz**

At a glance, the mean of posttest is higher than the mean of pretest (75.5455 > 65.9091). It means that the students' grammar scores in posttest are better than the the pretest one. It is seen that there is any improvement on the students' grammar scores before and after being given by a treatment.

Next, the output of paired sample  $t$ -test through SPSS 16.0 also showed that the value of  $t$ -count is 6.582 and the significance value is 0.000.. After finding the value of  $t$ -count, the researcher considered the degree of freedom ( $df$ ) =  $N - 1$ , so the  $df$  is 32. She consulted to  $t$ -table at the significant level of 5%. She found that the  $t$ -table in  $df = 32$  at significant level 0.05 is 2.037.

To answer the hypothesis testing, the researcher compared the value of  $t$ -count and  $t$ -table. The value of  $t$ -count gotten by the researcher is 6.582 and the value of  $t$ -table is 2.037. Based on the descriptions, it can be known that the  $t$ -count is higher than  $t$ -table ( $6.582 > 2.037$ ) and the significance value is

lower than 0.05 ( $0.000 < 0.05$ ), so the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted. It means that there is any significant difference on the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz at the seventh grade of MTs Al-Huda Bandung Tulungagung.

Regarding on the result of data analysis above, it is strongly related to some advantages served by hot potatoes quiz. According to Harecker and Wieternik (2011), hot potatoes quiz makes the exercise more enjoyable and fun for students.

The application of hot potatoes quiz in teaching grammar also benefited. Larsen-Freeman (1991 in Puspitasari, 2011: 174) stated that drills should be used in a meaningful and purposeful way. It means that teaching grammar is effective when it is taught in a fun and amusement activity. One way to teach grammar in a fun way is by using games and hot potatoes quiz is one kind of games.

Furthermore, it also agrees with Hadfield's book (2003) entitled "*Intermediate Grammar Games: A Collection of Grammar Games and Activities for Intermediate Students of English*". He said that the games are to be used to and remember grammatical rules and patterns. They are designed as fun activities to help lighten the load of grammar learning. Furthermore, this book was classified into intermediate learners and the sample of this research was also the intermediate learners.

All in all, the advantages above implied that the use of hot potatoes quiz gives positive effects towards students' grammar achievement. It had been proven by



the result of data analysis in this research that there is any significant difference on the students' grammar achievement in simple present tense before and after being taught by using hot potatoes quiz. Thus, it can be concluded that the use of hot potatoes quiz is effective towards students' grammar achievement and it is suggested to be used in teaching grammar, especially at the seventh grade of MTs Al-Huda Bandung Tulungagung.