CHAPTER IV

RESEARCH FINDINGS AND DISUSSION

In this chapter, the researcher presented discussion about research findings, hypothesis testing and discussions of the research findings.

A. Research Findings

In this section, the researcher presented the students writing skill before and after being taught by Picture Word Inductive Model (PWIM). The researcher conducted test as the instrument to collect the data. The test was administered to VII B class at MTs Darul Falah. There were 28 students as the subject at this research. The data of this research were pre-test and post-test scores.

The instructions in pre-test and post-test were same, but the topic was a bit different. The topic of pre-test was idol, whereas in post-test the researcher chose family as the topic. In both of the tests, the students should write a descriptive text about the characteristic of someone.

To know the students' achievement was good or not, the researcher used the criteria as follows:

Table 4.1 Criteria Students' Score

The table below states the classification of the scores by Haris (1969)

No.	Grade	Level	Range of score
1.	A	Excellent	81-100
2.	B	Good	61-80
3.	C	Fair	41-60
4.	D	Poor	0-40

After getting the result of the pre-test and post-test scores. The scores were computed by using SPSS 16.0.

The researcher conducted pre-test before the treatment, it was held on February, 26th 2019. This test was intended to know the students' writing descriptive text skill before the students got treatment. The scores could be seen in appendix E and the result was shown in the table 4.1 below:
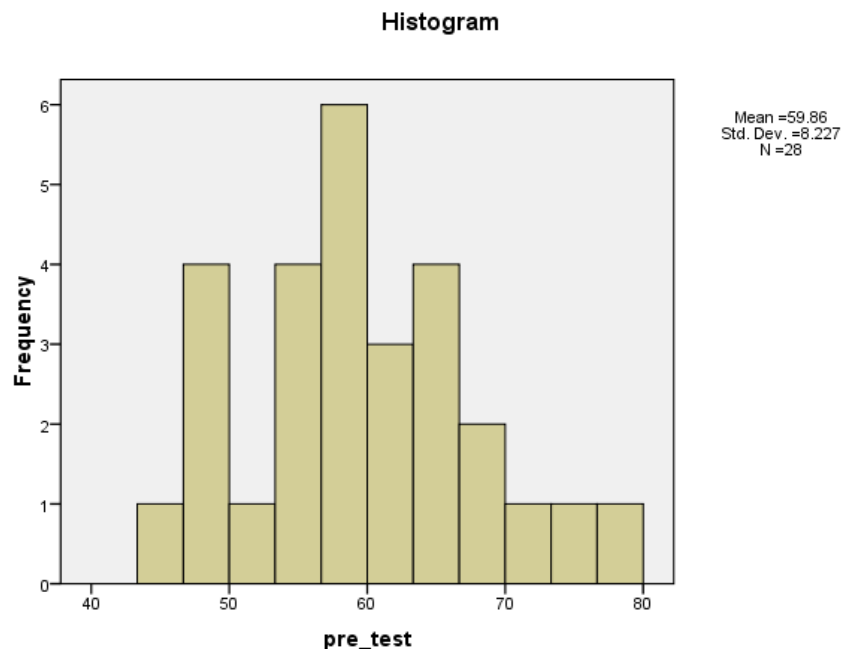
Table 4.2 Descriptive of Pre-Test

Statistics

pre_test

N	Valid	28
	Missing	0
Mean		59.86
Median		58.00
Mode		58

From the table 4.2 above, the students consisted of 28 students. It showed that the mean score in pre-test was 59.86. Based on the criteria of students' score 59.86 is fair score. Then the median of pretest was 58.00 and the mode was 58, so there were many students got fair score in writing descriptive text.

Table 4.3 Frequency of Pre-test

pre_test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	45	1	3.6	3.6	3.6
	50	4	14.3	14.3	17.9
	53	1	3.6	3.6	21.4
	54	3	10.7	10.7	32.1
	55	1	3.6	3.6	35.7
	58	6	21.4	21.4	57.1
	61	1	3.6	3.6	60.7
	63	2	7.1	7.1	67.9
	66	4	14.3	14.3	82.1
	68	1	3.6	3.6	85.7
	70	1	3.6	3.6	89.3
	71	1	3.6	3.6	92.9
	75	1	3.6	3.6	96.4
	78	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Figure 4.1 Histogram of Students' Pre-test Score

Histogram

Mean =59.86
Std. Dev. =8.227
N =28

Based on table 4.3 above the frequency of pretest after distributed there were 16 students got score between 41-60, it meant that students'

writing descriptive text skill was fair, and 12 students got score between 61-80, it meant that students' writing descriptive test skill was good.

The post-test was given by asking the students to describe their family. It was done after the treatment (teaching by using Picture Word Inductive Model). This test was conducted to know the students' skill after got the treatment. Post-test was held on April, 9th 2019. The data of students' posttest score could be seen in appendix E.
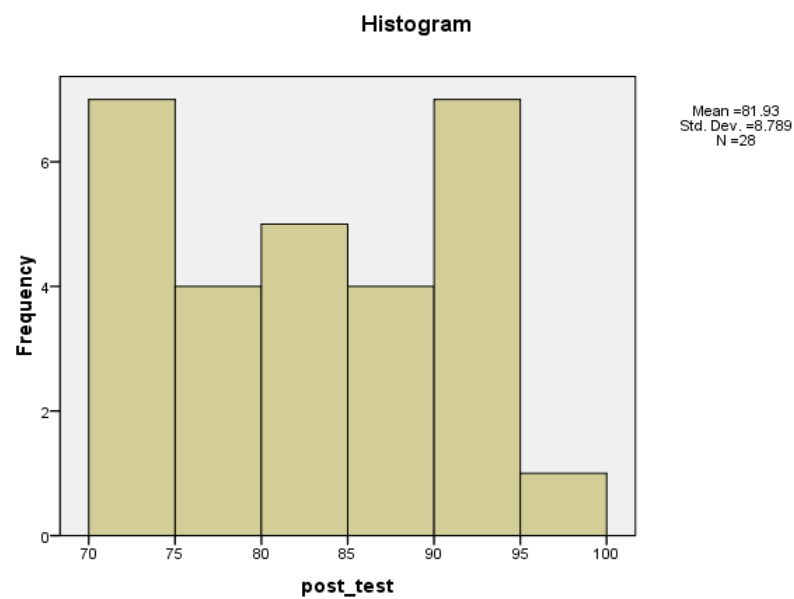
Table 4.4 Descriptive of Post-Test

Statistics

post test

N	Valid	28
	Missing	0
Mean		81.93
Median		83.00
Mode		91

From the table 4.4 above, the students consisted of 28 students. It showed that the mean score in pre-test was 81.93. Based on the criteria of students' score 81.93 was excellent score. Then the median of pretest was 83.00 and the mode was 91, so, there were many students got excellent score in writing descriptive text.

Table 4.5 Frequency of Post-test

post_test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	5	17.9	17.9	17.9
	71	2	7.1	7.1	25.0
	75	4	14.3	14.3	39.3
	83	4	14.3	14.3	53.6
	84	1	3.6	3.6	57.1
	88	4	14.3	14.3	71.4
	91	6	21.4	21.4	92.9
	93	1	3.6	3.6	96.4
	95	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Figure 4.2 Histogram of Students' Post-test Score

Histogram

Mean =81.93
Std. Dev. =8.789
N =28

Based on table 4.5 above the frequency of posttest after distributed there were 11 students got score between 61-80, it meant that students' writing descriptive text skill is good, and 17 students got score between 81-100, it meant that the students were categorized excellent level.

So, there were some differences of data presentation between before and after taught by using Picture Word Inductive Model (PWIM). The score of data presentation after taught by using Picture Word Inductive Model (PWIM) was higher than before taught by using Picture Word Inductive Model (PWIM).

B. Hypothesis Testing

The researcher analyzed the significant difference of data by using the formula of *Paired Sample Test*. It is aimed to prove statistically whether there is any significant difference between students' writing ability both in pre-test and post-test. The hypothesis was stated as follows:

1. H_0 : There is no significant difference of using Picture Word Inductive Model (PWIM) on students' skill in writing descriptive text before and after giving treatment.

2. H_a : There is any significant difference of using Picture Word Inductive Model (PWIM) on students' skill in writing descriptive text before and after treatment.

To find out whether there are any differences of students' writing skill in descriptive text before and after being taught by using Picture Word Inductive Model (PWIM), the calculating result should show whether H_0 is rejected meanwhile H_a is accepted. The researcher used statistical test using SPSS 16.0 to ensure the effectiveness of Picture Word Inductive Model (PWIM) on the students' writing descriptive text skill. The result was as follows:

Table 4.6 Paired Sample Statistics

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE TEST	59.86	28	8.227	1.555
	POST TEST	81.93	28	8.789	1.661

The data based on table above was the students' score before and
after taught by using Picture Word Inductive Model (PWIM) as the
treatment. The mean score of pre-test was 59.86 while the mean score of
post-test was 81.93. the number of students (N) both in pre-test and post-
test was 28. The standard deviation of pre-test was 8.227 while in post-test
was 8.789. The error mean in pre-test was 1.555 while in post-test was
1.661.

Based on the result of mean, it could be concluded that the mean
score of pre-test was different from the mean score of post-test. The mean
score of pre-test was 59.86 and the mean of post-test was 81.93. It meant
that there was an increasing on students writing skill since the mean score
of post-test was higher than pre-test.

Table 4.7 Paired Samples Correlations

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRE TEST & POST TEST	28	.602	.001

Based on the table above, the output of paired sample correlations
showed the large correlation between samples. The numeral both
correlations were 0.602 and numeral of significance was 0.001. For

interpretation of decision based on the result probability achievement, that is:

    a. If the probability > 0.05 then the null hypothesis cannot be rejected.

    b. If the probability < 0.05 then the null hypothesis is rejected.

In other words, the large numeral significance 0.001 was smaller from 0.05, so the hypothesis clarified that Picture Word Inductive Model (PWIM) is effective in teaching students' writing descriptive text skill.

Table 4.8 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	PRE TEST - POST TEST	-22.071	7.611	1.438	-25.022	-19.120	-15.346	27	.000

Based on the table above, output paired sample test showed the result of compare analysis with using T-test. The mean of pretest and posttest was -22.071, standard deviation was 7.611, mean standard error was 1.438. The lower different was -25.022, while the upper different was -19.120. the result of t_{count} was -15.346 with df 27 and significance was 0.000.

The null hypothesis would be accepted is the significant value was greater than 0.05 whereas if the significant value was smaller than 0.05, the null hypothesis would be rejected.

From the result of t-test by using SPSS 16.0 version, it could be seen that the significant value was 0.000. Therefore, the significant value was

lower than 0.05. It meant that the null hypothesis which stated that there was no significant difference of using Picture Word Inductive Model (PWIM) on students' skill in writing descriptive text before and after conducting treatment was rejected.

In the other words, the alternative hypothesis was accepted. So, it could be concluded that there is a significant difference of using Picture Word Inductive Model (PWIM) on students' skill in writing descriptive text before and after conducting treatment.

C. Discussion

Regarding to the research findings above, the calculation of output data using Paired Sample Test showed the mean of pre-test was 59.86 and in post-test was 81.93. It meant that the students' achievement in writing descriptive text after being taught by using Picture Word Inductive Model (PWIM) had better that students' achievement before taught by using Picture Word Inductive Model (PWIM). Therefore, from both mean of the test it could be concluded that there is significant difference in the students' writing achievement on descriptive text. So, Picture Word Inductive Model (PWIM) strategy is effective to teaching writing.

Based on the result of the statistical computation using T-test, the result showed that there was significant difference of students' score. On the output of t-test, the significant value of the t was 0.000. Because it was lower than the significant 0.05, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. In the other words, it could be

concluded that there was a significant difference in the students' writing achievement on descriptive text.

Regarding on the result of data above, it strongly with previous study also had proved that Picture Word Inductive Model (PWIM) can be effective in English learning. It was supported by some previous studies; a study was conducted by Wahyuni (2016) found that there was significant difference on students' Pre-test and post-test score and she stated that Picture Word Inductive Model (PWIM) could enrich the students' vocabulary. Another study was conducted by Marbun and Sumarsih (2015) found that Picture Word Inductive Model has a significant effect on students' achievement in writing procedure text. Indra (2016) found that there was improvement of the students' ability in writing narrative text after they implemented PWIM technique. It was also parallel to Mc Donald's study (2010) which found that Picture Word Inductive Model is very effective for creating a customized vocabulary bank based on the theme.

Therefore, to implement Picture Word Inductive Model (PWIM), the teacher should follow the particular procedure (Calhoun, 23:199): 1) select the picture 2) ask students to identify and label what they see in the picture 3) read and review the picture word chart 4) lead the students to create a title for the picture words chart 5) ask the students to generate a sentence, sentences, or a paragraph, and 6) read and review the paragraph.

By using those steps in implementing the teaching technique, the researcher found that there was significant difference of students' writing

scores. The students could write descriptive text with correct structure, grammar, spellings, and punctuation. These findings were in line with Calhoun (1999) who defined that PWIM that is designed to develop and support the students in sharing common meaning through words and composing sentences and paragraphs that conveys ideas for readers.

The finding of this research stated that Picture Word Inductive Model (PWIM) strategy is considered as effective for the students' ability in writing descriptive text. It could be seen in the treatment process, the students were more interested and joyful when the researcher applied this strategy. Andriani (2014) showed that the students became more attentive, active, and attracted in joining the classroom after teaching and learning by using Picture Word Inductive Model (PWIM). It was the same as Kibtya's study (2017) who had proven the implementation of Picture Word Inductive Model (PWIM) strategy seems more effective and the students' achievement was better, and it was found that the students have good motivation in teaching and learning process.

Considering from the explanation above, it could be concluded that the use of Picture Word Inductive Model (PWIM) in teaching writing descriptive text is effective in this research. It expected that the teachers are recommended to utilize Picture Word Inductive Model (PWIM) strategy on teaching writing skill.