## CHAPTER IV

## RESEARCH FINDINGS AND DISCUSSION

## A. Research Findings

1. Students' Reading Comprehension Data Taught by Using Visualization Strategy

The data of students' reading comprehension who were given Visualization Strategy were gotten from pre-test and posttest of class VIII. D as experimental class. Data can be seen on the table below :

Table IV. 1
Students Score of Experimental Class

| No | Name | Class | Score Pre-Test | Score Post-Test | Gained Score |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Student 1 | VIII.D | 49 | 84 | 42 |
| 2 | Student 2 | VIII.D | 63 | 91 | 28 |
| 3 | Student 3 | VIII.D | 49 | 84 | 35 |
| 4 | Student 4 | VIII.D | 42 | 77 | 42 |
| 5 | Student 5 | VIII.D | 77 | 84 | 21 |
| 6 | Student 6 | VIII.D | 70 | 91 | 21 |
| 7 | Student 7 | VIII.D | 84 | 91 | 16 |
| 8 | Student 8 | VIII.D | 35 | 77 | 49 |
| 9 | Student 9 | VIII.D | 42 | 84 | 42 |
| 10 | Student 10 | VIII.D | 14 | 70 | 63 |
| 11 | Student 11 | VIII.D | 56 | 77 | 21 |
| 12 | Student 12 | VIII.D | 49 | 84 | 35 |
| 13 | Student 13 | VIII.D | 56 | 91 | 42 |
| 14 | Student 14 | VIII.D | 49 | 70 | 49 |
| 15 | Student 15 | VIII.D | 42 | 84 | 42 |
| 16 | Student 16 | VIII.D | 56 | 77 | 28 |
| 17 | Student 17 | VIII.D | 56 | 84 | 28 |
| 18 | Student 18 | VIII.D | 35 | 77 | 42 |
| 19 | Student 19 | VIII.D | 42 | 84 | 42 |
| 20 | Student 20 | VIII.D | 35 | 84 | 49 |
| 21 | Student 21 | VIII.D | 84 | 91 | 16 |
| 22 | Student 22 | VIII.D | 77 | 98 | 23 |
| 23 | Student 23 | VIII.D | 21 | 63 | 49 |
| 24 | Student 24 | VIII.D | 77 | 100 | 23 |
| 25 | Student 25 | VIII.D | 77 | 84 | 23 |
| 26 | Student 26 | VIII.D | 77 | 91 | 23 |
| 27 | Student 27 | VIII.D | 77 | 100 | 23 |
|  | Total |  | 1.491 | 2.272 | 924 |
|  | Mean |  | 55 | 84 | 34 |

Based on the table above, the writer found that the total score of pre-test in experimental class was 1.491, while the highest score was 84 and the lowest score was 14 . For the posttest, the writer found that the total score of post-test in experimental class was 2.415 , while the highest score was 100 and the lowest score was 77 .

Table IV. 2
The Distribution of Frequency of the
Students' Pre-Test Scoreof Experimental Class

|  | Frequency | Percent | Valid Percent | Comulative Percent |
| ---: | :---: | :---: | :---: | :---: |
| Valid14 | 1 | 3,7 | 3,7 | 3,7 |
| 21 | 1 | 3,7 | 3,7 | 7,4 |
| 35 | 3 | 11,1 | 11,1 | 18,5 |
| 42 | 4 | 14,8 | 14,8 | 33,3 |
| 49 | 4 | 14,8 | 14,8 | 48,1 |
| 56 | 4 | 14,8 | 14,8 | 63,0 |
| 63 | 1 | 3,7 | 3,7 | 66,7 |
| 70 | 1 | 3,7 | 3,7 | 70,4 |
| 77 | 6 | 22,2 | 22,2 | 92,6 |
| 84 | 2 | 7,4 | 7,4 | 100,0 |
| Total | 27 | 100,0 | 100,0 |  |

Based on the table above, it was obtained that in pre-test 1 student ( $3.7 \%$ ) got score 14,1 student ( $3.7 \%$ ) got score 21,3 students ( $11.1 \%$ ) got score 35,4 students (14.8\%) got score 42,4 students ( $14.8 \%$ ) got score 49,4 students (14.8\%) got score 56, 1 student (3.7\%) got score 63, 1 student (3.7\%) got score 70, 6 students ( $22.2 \%$ ) got score 77 , and 2 students ( $7.4 \%$ ) got score 84 .

## 2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau

 b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.


Table IV. 3
The Descriptive Statistic of Pre-Test in Experiment Class

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-Test Experiment | 27 | 14 | 84 | 55,22 | 19.350 |
| Valid N | 27 |  |  |  |  |
| (Litewise | 27 |  |  |  |  |

Based on the table above, it can be seen that the mean score of students' reading comprehension in the Experimental Class Pre- Test was 55,22 and the standard deviation was 19.350. for more details can be seen in the following table:

Table IV. 4
The Descriptive Statistic of Post-Test in Experiment Class

|  | N | Minimum | Maximum Mean | Std. Deviation |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Post-Test Experiment | 27 | 63 | 100 | 84,15 | 8.943 |
| Valid N <br> (Litewise | 27 |  |  |  |  |

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Table IV. 5
The Distribution of Frequency of the Students' PostTest Score of Experimental Class

|  | Frequency | Percent | Valid Percent | Comulative Percent |
| ---: | :--- | :---: | :---: | :---: |
| Valid 63 | 1 | 3.7 | 3.7 | 3,7 |
| 70 | 2 | 7.4 | 7.4 | 7,4 |
| 77 | 5 | 18,5 | 18,5 | 18,5 |
| 84 | 10 | 37,0 | 37,0 | 33,3 |
| 91 | 6 | 22,2 | 22,2 | 48,1 |
| 98 | 1 | 3.7 | 3.7 | 63,0 |
| 100 | 2 | 7.4 | 7.4 | 66,7 |
| Total | 27 | 100,0 | 100,0 |  |

Based on the table above, it was obtained that in post-test 1 student (3.7\%) got score 63, 2 students ( $7.4 \%$ ) got score 70,5 students (18.5\%) got score 77, 10 students (37.0\%) got score 84 , 6 students ( $22.2 \%$ ) got score 91,1 student (3.4\%) got score 98 and 2 students (7.4\%) got score 100.

## 2. Students Reading Comprehension Data Taught Without

Using Visualization Strategy.
Students answer multiple choice question about descriptive text taugh with using Visualization Strategy. Class VIII. F as Control class, it can be seen on the table below:

Table IV. 6
Students Score of Control Class

| No | Name | Class | Score Pre-Test | Score Post-Test | Gained Score |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Students 1 | VIII.F | 63 | 77 | 14 |
| 2 | Students 2 | VIII.F | 56 | 63 | 7 |
| 3 | Students 3 | VIII.F | 42 | 63 | 21 |
| 4 | Students 4 | VIII.F | 49 | 70 | 14 |
| 5 | Students 5 | VIII.F | 70 | 70 | 0 |
| 6 | Students 6 | VIII.F | 63 | 77 | 14 |
| 7 | Students 7 | VIII.F | 35 | 56 | 21 |
| 8 | Students 8 | VIII.F | 56 | 70 | 14 |
| 9 | Students 9 | VIII.F | 56 | 70 | 14 |
| 10 | Students 10 | VIII.F | 42 | 63 | 7 |
| 11 | Students 11 | VIII.F | 49 | 63 | 14 |
| 12 | Students 12 | VIII.F | 63 | 77 | 14 |
| 13 | Students 13 | VIII.F | 63 | 84 | 14 |
| 14 | Students 14 | VIII.F | 84 | 84 | 0 |
| 15 | Students 15 | VIII.F | 49 | 70 | 21 |
| 16 | Students 16 | VIII.F | 77 | 77 | 0 |
| 17 | Students 17 | VIII.F | 49 | 63 | 14 |
| 18 | Students 18 | VIII.F | 63 | 77 | 14 |
| 19 | Students 19 | VIII.F | 42 | 56 | 14 |
| 20 | Students 20 | VIII.F | 56 | 63 | 7 |
| 21 | Students 21 | VIII.F | 28 | 42 | 14 |
| 22 | Students 22 | VIII.F | 56 | 70 | 14 |
| 23 | Students 23 | VIII.F | 42 | 56 | 14 |
| 24 | Students 24 | VIII.F | 56 | 77 | 21 |
| 25 | Students 25 | VIII.F | 84 | 100 | 16 |
| 26 | Students 26 | VIII.F | 42 | 56 | 14 |
| 27 | Students 27 | VIII.F | 56 | 70 | 14 |
|  | Total |  | 1.491 | 1.853 | 345 |
|  | Mean |  | 55 | 69 | 13 |

Based on the table above, the writer found that the total scoreof pre-test in control class was 1.491 , while the highest score was 84 and the lowest score was 28 . For the post-test, the writer found thatthe total score of post-test in experimental class was 1.853 , while thehighest score was 100 and the lowest score was 42 .

Table IV. 7
The Descriptive Statistic of Pre-Test in Control Class

|  | N | Minimum | Maximum | Mean | Std. <br> Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Post-TestControl <br> Valid N <br> (Litewise 27 | 27 |  | 84 | 55,22 | 13.636 |

Based on the table above, it can be seen that the mean score of students reading comprehension in the Control Class Pre-Test was 55,22 and the standard deviation was 13.636. for more details can be seen in the following table:

Table IV. 8
The Distribution of Frequency of the Students' Pre-Test Score of Control Class

|  | Frequency | Percent | Valid Percent | Comulative Percent |
| :---: | :---: | :---: | :---: | :---: |
| Valid 28 |  | 3,7 | 3,7 | 3,7 |
| 35 | 1 | 3,7 | 3,7 | 7,4 |
| 42 | 5 | 18,5 | 18,5 | 25,9 |
| 49 | 4 | 14,8 | 14,8 | 40,7 |
| 56 | 7 | 25,9 | 25,9 | 66,7 |
| 63 | 5 | 18,5 | 18,5 | 88,2 |
| 70 | 1 | 3,7 | 3,7 | 88,9 |
| 77 | 1 | 3,7 | 3,7 | 92,6 |
| 8 | 2 | 7,4 | 7,4 | 100,0 |
| Total | 27 | 100,0 | 100,0 |  |

Based on the table above, it was obtained that in pre-test 1 student (3.7\%) got score 28, 1 student (3.7\%) got score 35,5 students ( $18.5 \%$ ) got score 42,4 students (14.8\%) got score 49,3 students ( $11.1 \%$ ) got score 98,7 students ( $25.9 \%$ ) got score 56,5 students ( $18.5 \%$ ) got score 63, 1 student (3.7\%) got score 70, 1 student (3.7\%)
got score 77 and 2 students ( $7.4 \%$ ) got score 84 .

Based on the table above, it can be seen that the mean score of students reading comprehension in the Control Class Post-Test was 68,63 and the standard deviation was 11.375 . for more detailscan be seen in the following table:

Table IV. 10
The Distribution of Frequency of the Students'
Post Test Score of Control Class

|  |  | Frequency | Percent | Valid Percent | Comulative <br> Percent |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Valid | 42 | 1 | 3,7 | 3,7 | 3,7 |
|  | 56 | 4 | 14,8 | 3,7 | 18,5 |
|  | 63 | 6 | 22,2 | 18,5 | 40,7 |
|  | 70 | 7 | 25,9 | 14,8 | 66,7 |
|  | 77 | 6 | 22,2 | 25,9 | 88,9 |
|  | 84 | 2 | 7,4 | 18,5 | 96,3 |
|  | 100 | 1 | 3,7 | 3,7 | 100,0 |
| Tota |  |  |  |  |  |
| 1 |  |  |  |  |  |

Based on the table above, it was obtained that in posttest 1 student ( $3.7 \%$ ) got score 42,4 students ( $14.8 \%$ ) got score 56,6 students ( $22.2 \%$ ) got score 63, 7 students ( $25.9 \%$ ) got score 70,6 students ( $22.2 \%$ ) got score 77,2 students (7.4\%) got score 84 and 1 student (3.7\%) got score 100.
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## 3. The Difference between Students' Reading Comprehension

Taught Without Using and by Using Visualization Strategy at

## Junior High School 1 Tembilahan Hulu

The students' pre-test and post-test of control and experiment classes are presented in the following table :

Table IV. 11
Students' Pre-Test and Post-Test of Experimental and Control Class

| No | Experimental Class |  | Control Class |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Gained Score | No | Control Class |  | Gained Score |
|  | Pre- | Post- |  |  | Pre- | Post- |  |
|  | Test | Test |  |  | Test | Test |  |
| 1 | 49 | 84 | 42 | , | 63 | 77 | 14 |
| 2 | 63 | 91 | 28 | 2 | 56 | 63 | 7 |
| 3 | 49 | 84 | 35 | 3 | 42 | 63 | 21 |
| 4 | 42 | 77 | 42 | 4 | 49 | 70 | 14 |
| 5 | 77 | 84 | 21 | 5 | 70 | 70 | 0 |
| 6 | 70 | 91 | 21 | 6 | 63 | 77 | 14 |
| 7 | 84 | 91 | 16 | 7 | 35 | 56 | 21 |
| 8 | 35 | 77 | 49 | 8 | 56 | 70 | 14 |
| 9 | 42 | 84 | 42 | 9 | 56 | 70 | 14 |
| 10 | 14 | 70 | 63 | 10 | 42 | 63 | 7 |
| 11 | 56 | 77 | 21 | 11 | 49 | 63 | 14 |
| 12 | 49 | 84 | 35 | 12 | 63 | 77 | 14 |
| 13 | 56 | 91 | 42 | 13 | 63 | 84 | 14 |
| 14 | 49 | 70 | 49 | 14 | 84 | 84 | 0 |
| 15 | 42 | 84 | 42 | 15 | 49 | 70 | 21 |
| 16 | 56 | 77 | 28 | 16 | 77 | 77 | 0 |
| 17 | 56 | 84 | 28 | 17 | 49 | 63 | 14 |
| 18 | 35 | 77 | 42 | 18 | 63 | 77 | 14 |
| 19 | 42 | 84 | 42 | 19 | 42 | 56 | 14 |
| 20 | 35 | 84 | 49 | 20 | 56 | 63 | 7 |
| 21 | 84 | 91 | 16 | 21 | 28 | 42 | 14 |
| 22 | 77 | 98 | 23 | 22 | 56 | 70 | 14 |
| 23 | 21 | 63 | 49 | 23 | 42 | 56 | 14 |
| 24 | 77 | 100 | 23 | 24 | 56 | 77 | 21 |
| 25 | 77 | 84 | 23 | 25 | 84 | 100 | 16 |
| 26 | 77 | 91 | 23 | 26 | 42 | 56 | 14 |
| 27 | 77 | 100 | 23 | 27 | 56 | 70 | 14 |
| Total | 1.491 | 2.272 | 924 |  | 1.491 | 1.853 | 345 |
| mean | 55,22 | 84,15 | 34 |  | 55,22 | 69,04 | 13 |

Refering to the table IV. 13 showed that, the mean score of pre-test and post in experiment class were 55,22
and 84,15 with the gain 34 . Then in the control class, the mean score of pre-test and post-test were 55,22 and 69,04 with the gain 13. The result from thetable above, there was significant difference for both pre-test and post-test in control class dan experiment class.

Before analyzing the data using the independent sample t- test, the researcher first tested the normality of the data. In analyzing the normality of data, the researcher used the Kolmogorov Smirnov formula calculated by using SPSS. The results of the normality data are as follows:

Table IV. 12
Test of Normality

|  | Kolmogorov-Smirnov $^{\text {a }}$ |  |  |  |  |  |  | Shapiro-Wilk |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| CLASS | Statistic | Df | Sig. | Statistic |  | Df |  |  |  |  |  |
| PRE- | , 166 | 27 | , 054 | , 940 | 27 | , 119 |  |  |  |  |  |
| EXPERIMENT | , 197 | 27 | , 009 | , 940 | 27 | , 123 |  |  |  |  |  |
| POST-EXPERIMENT | , 144 | 27 | , 159 | , 954 | 27 | , 274 |  |  |  |  |  |
| PRE-CONTROL | , 144 | 27 | , $200^{*}$ | , 949 | 27 | , 208 |  |  |  |  |  |
| POST-CONTROL | , 133 | 27 |  |  |  |  |  |  |  |  |  |

Based on the table above, for all data from the experimentalclass and control class as well as the pre-test and post-test, it showsthat the Kolmogorov Smirnov and Shapiro Wilk sig values are $>0.05$. So, the conclusion of this distribution is that it is normal. because the research data is normally distributed, the research is continued by using parametric independent sample t test.

Table IV. 13
Group Statistic
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

Based on the table above, the number of students for the experimental class consisted of 27 students and the control class consisted of 27 students. The average value of the experimental classis 84.15 and the average value of the control class is 69.04 , and the standard deviation of the experimental class is 8,943 , while the standard deviation of the control class is 11,474 , std. the average error of the experimental class is 1,721 , while the std. the control class mean error is 2,208 . The second table determines the results ofthe independent sample test analysis, as follows:

Table IV. 14
Independent Sample T-Test
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.


Based on the output SPSS above, independent-sample T-
Test shows Levene's Test to know the same variance.
$\mathrm{H}_{0}$ : Variance Population identical
$\mathrm{H}_{\mathrm{a}}$ : Variance Population not identical

If Probabilities $>0.05, \mathrm{H}_{0}$ is accepted

If Probabilities $<0.05, \mathrm{H}_{\mathrm{a}}$ is accepted

It can be seen that the sig. value of Levene's Test is 0.256 . Itcan be stated that $0.256>0.05$. It means that $\mathrm{H}_{\mathrm{o}}$ is accepted, so the variance of the population is identical. Then, to know whether there is or not the statistically difference, independent sample T-

Test shows the $t$-test for Equality of means. The testing criteria
and hypotheses are below:
If Probabilities $>0.05, \mathrm{H}_{0}$ is accepted

If Probabilities $<0.05, \mathrm{H}_{\mathrm{a}}$ is accepted
$\mathrm{H}_{0}$ : There is not statistically difference
$H_{a}$ : There is statistically difference

From the output above, it was found that the sig. value was 0.000 . It can be stated that $0.000<0.05$. It means that null hypothesis $\left(\mathrm{H}_{0}\right)$ is rejected, while the alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ is accepted. This means that there is a significant difference in reading comprehension of students who are taught by using Visualizayion Strategy with students who are taught without using Visualization Strategy at Junior high school 1 Tembilahan Hulu.

To identify the level of the effect of using Visualization Strategy on reading comprehension at Junior High School 1 Tembilahan Hulu, it was calculated by using eta squared formula:

$$
\begin{aligned}
& n 2=\frac{t^{2}}{t^{2}+(n 1+n 2-2)} \\
& n 2 \frac{5.397^{2}}{5.397^{2}+(27+27-2)} \\
& n 2=\frac{29.12}{29.12+52} \\
& n 2=\frac{29.12}{81.2}=0,35
\end{aligned}
$$

Based on the result above, it was clear that the effect size was


#### Abstract

0.35. The guidelines proposed by Cohen (1988) in Pallant (2005) for interpreting this value are: 0.01 is small effect, 0.06 is moderate effect, and 0.14 is large effect. It means that the use of Visualization strategy has large effect on students' reading comprehension.


In conclusion, teaching reading by using Visualization Strategy at Junior High School 1 Tembilahan Hulu is better than without using Visualization Strategy. Thus, there is a significant difference of using Visualization Strategy to improve students’ reading comprehensionat Junior High School 1 Tembilahan Hulu.

## B. Discussion

In this study the researcher took 2 classes as research participant, Experimental class and Control Class. Experimental class was given by using Visualization Strategy while Control class without using Visualization Strategy.

The result of data findings showed that there is significant difference of students reading comprehension using Visualization Strategy.

In line with M. Musdizal (2019) the finding of this study that therewas significant effect of using visualization strategy in the students' reading comprehension achievement of recount text. The study from Mariyanti, Hayatul muna and Nyak Mutia Ismail (2019) do the research about the Visualization and Comprehension. The findings of this study that visualization

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while reading can help students a lot in terms ofinferring, details, and main idea. The study from Adenan Damiri, Tommy Hustomo, and Yeti Aprita Sari (2022) indicates Visualization Strategy had a beneficial impact on reading comprehension, so the students can improve their reading skills using this learning strategy. Next, Melia Santi, Reflinda (2022) found that visualization strategies can improve students' reading comprehension, especially in understanding detailed information. According to Putri Restu Damayanti, Siti Sarah Fitriani, Saiful Marhaban (2020). In conclusion, this research has demonstrated that the treatment activities have improved the students' reading comprehension as they enjoy competition and fun in learning English.

