## CHAPTER IV

RESEARCH FINDING AND DISCUSSION

## A. Research Finding

In this chapter, the researcher presents the data obtained from the research conducted with seventh-grade students at SMPN 10 Kota Serang. The sample was divided into two groups: the control class, comprising 30 students from class 7 A , and the experimental class, consisting of 30 students from class 7B.

To assess the impact of the TPRC strategy on reading descriptive text, the researcher examined several key results, including the students' scores before treatment, their scores after treatment, and the differences in pre-test and post-test scores between students taught using the TPRC strategy.

Data was collected by administering tests to both the experimental and control classes after implementing different teaching treatments. Initially, students exhibited challenges in reading comprehension in various tests before the introduction of the TPCR Strategy. They faced difficulties in comprehending the content of the text, resulting in poor reading comprehension. However, following the implementation of TPRC Teaching Strategies, students demonstrated improved achievements, as evidenced by the results of the pre-test and post-test assessments.

After finished the field research, the researcher describes the result of pre-test and of the students in experimental class in the table below:

Table 4.1
Students' score of Pre-test on Experimental class

| NO | NAME | SCORE MP | $\begin{aligned} & \text { SCORE } \\ & \text { ESSAY } \end{aligned}$ | TOTAL SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 1 | AZS | 28 | 27 | 55 |
| 2 | AF | 26 | 25 | 51 |
| 3 | AS | 34 | 20 | 54 |
| 4 | AC | 30 | 15 | 45 |
| 5 | AM | 12 | 30 | 42 |
| 6 | ANP | 24 | 40 | 64 |
| 7 | ANF | 18 | 30 | 48 |
| 8 | BAL | 26 | 55 | 81 |
| 9 | D | 26 | 39 | 65 |
| 10 | ENR | 30 | 25 | 55 |
| 11 | FRH | 20 | 40 | 60 |
| 12 | FS | 34 | 45 | 79 |
| 13 | HM | 30 | 49 | 79 |
| 14 | JSF | 34 | 40 | 74 |
| 15 | KR | 14 | 34 | 48 |
| 16 | MWS | 30 | 24 | 54 |
| 17 | MA | 34 | 45 | 79 |
| 18 | MK | 28 | 47 | 75 |


| NO | NAME | SCORE MP | SCORE ESSAY | TOTAL SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 19 | MAR | 22 | 25 | 47 |
| 20 | MFM | 20 | 20 | 40 |
| 21 | MTPA | 22 | 25 | 47 |
| 22 | NF | 16 | 52 | 68 |
| 23 | NN | 32 | 44 | 76 |
| 24 | NR | 26 | 36 | 62 |
| 25 | PNA | 32 | 33 | 65 |
| 26 | RA | 20 | 30 | 50 |
| 27 | RM | 28 | 29 | 57 |
| 28 | R | 16 | 20 | 36 |
| 29 | SKPK | 14 | 40 | 54 |
| 30 | SA | 20 | 33 | 53 |
| $\Sigma \mathbf{X}$ |  |  |  | 1763 |
| Mx |  |  |  | 58,8 |

Determine mean score pre-test and post-test of Experimental class. The researcher follows the formula:

$$
\begin{aligned}
M x & =\frac{\Sigma x}{N x} \\
M x & =\frac{\Sigma 1763}{30} \\
& =\mathbf{5 8 , 8}
\end{aligned}
$$

Notes:
$\Sigma \mathrm{x}=$ Sum of deviation score in experimental class
Mx = Mean score of Pre-test the experimental class
$\mathrm{Nx} \quad=$ Number of students of experimental class

The table above illustrates the pre-test and post-test scores in the experimental class for reading comprehension on descriptive text. In the pre-test, scores ranged from a minimum of 36 to a maximum of 81 , with an average score of 58.8.

Table 4.2
Students' score of Post-test on Experimental class

| NO | NAME | SCORE MP | SCORE ESSAY | TOTAL SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 1 | AZS | 14 | 58 | 72 |
| 2 | AF | 26 | 50 | 76 |
| 3 | AS | 18 | 60 | 78 |
| 4 | AC | 26 | 49 | 75 |
| 5 | AM | 22 | 60 | 82 |
| 6 | ANP | 24 | 55 | 79 |
| 7 | ANF | 22 | 59 | 81 |
| 8 | BAL | 34 | 59 | 93 |
| 9 | D | 24 | 55 | 79 |


| NO | NAME | SCORE MP | SCORE ESSAY | TOTAL SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 10 | ENR | 30 | 45 | 75 |
| 11 | FRH | 30 | 47 | 77 |
| 12 | FS | 36 | 58 | 94 |
| 13 | HM | 32 | 60 | 92 |
| 14 | JSF | 32 | 55 | 87 |
| 15 | KR | 28 | 55 | 83 |
| 16 | MWS | 20 | 55 | 75 |
| 17 | MA | 30 | 55 | 85 |
| 18 | MK | 28 | 59 | 87 |
| 19 | MAR | 14 | 59 | 73 |
| 20 | MFM | 24 | 60 | 84 |
| 21 | MTPA | 28 | 60 | 88 |
| 22 | NF | 22 | 60 | 82 |
| 23 | NN | 24 | 60 | 84 |
| 24 | NR | 24 | 55 | 79 |
| 25 | PNA | 28 | 50 | 78 |
| 26 | RA | 26 | 50 | 76 |
| 27 | RM | 22 | 60 | 82 |
| 28 | R | 16 | 60 | 76 |
| 29 | SKPK | 28 | 36 | 64 |


| NO | NAME | SCORE MP | SCORE ESSAY | TOTAL SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 30 | SA | 18 | 42 | 60 |
| $\mathbf{\Sigma X}$ |  |  | $\mathbf{2 3 9 6}$ |  |
| $\mathbf{M x}$ |  |  |  | $\mathbf{7 9 , 9}$ |

Determine mean score pre-test and post-test of Experimental class. The researcher follows the formula:

Post-test

$$
\begin{aligned}
M x & =\frac{\Sigma x}{N x} \\
M x & =\frac{\Sigma 2396}{30} \\
& =79,9
\end{aligned}
$$

Notes:
$\Sigma \mathrm{x}=$ Sum of deviation score in experimental class
Mx $\quad=$ Mean score of Post-test the experimental class
$\mathrm{Nx} \quad=$ Number of students of experimental class

In the post-test, the scores ranged from a minimum of 60 to a maximum of 94 , with an average score of 79.9. The test results indicate that the post-test scores were higher after implementing the Think, Predict, Read, Connect (TPRC) strategies for reading comprehension.

Upon calculating the pre-test and post-test scores from the assessment in the experimental class, it is evident that the experimental group exhibited significant improvement after receiving the treatment. The average score in the post-test (79.9) surpassed the pre-test average (58.8). These results indicate that the application of the TPRC strategy was successful in enhancing students' reading comprehension in descriptive text.

The researcher illustrates the improvement in students' scores from the pre-test to the post-test in the experimental class through the following graph:

## Graphic 4.1

The score of pre-test and post-test in Experimental Class


After calculating the score from the Experimental class, then the researcher created assistant table to calculate mean score and standard deviation in the table as follows:

Table 4.3

## Assistants Table to Find out Standard Deviation of

Experimental class

| Responden | $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F X}$ | $\mathbf{x}$ | $\mathbf{x}^{2}$ | $\mathbf{F x} 2$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 60 | 1 | 60 | $-19,9$ | 396,01 | 396,01 |
| 2 | 64 | 1 | 64 | $-15,9$ | 252,81 | 252,81 |
| 3 | 72 | 1 | 72 | $-7,9$ | 62,41 | 62,41 |
| 4 | 73 | 1 | 73 | $-6,9$ | 47,61 | 47,61 |
| 5 | 75 | 3 | 225 | $-4,9$ | 24,01 | 72,03 |
| 6 | 76 | 3 | 228 | $-3,9$ | 15,21 | 45,63 |
| 7 | 77 | 1 | 77 | $-2,9$ | 8,41 | 8,41 |
| 8 | 78 | 2 | 156 | $-1,9$ | 3,61 | 7,22 |
| 9 | 79 | 3 | 237 | $-0,9$ | 0,81 | 2,43 |
| 10 | 81 | 1 | 81 | 1,1 | 1,21 | 1,21 |
| 11 | 82 | 3 | 246 | 2,1 | 4,41 | 13,23 |
| 12 | 83 | 1 | 83 | 3,1 | 9,61 | 9,61 |
| 13 | 84 | 2 | 168 | 4,1 | 16,81 | 33,62 |
| 14 | 85 | 1 | 85 | 5,1 | 26,01 | 26,01 |


| Responden | $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F X}$ | $\mathbf{x}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{F x} 2$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | 87 | 2 | 174 | 7,1 | 50,41 | 100,82 |
| 16 | 88 | 1 | 88 | 8,1 | 65,61 | 65,61 |
| 17 | 92 | 1 | 92 | 12,1 | 146,41 | 146,41 |
| 18 | 93 | 1 | 93 | 13,1 | 171,61 | 171,61 |
| 19 | 94 | 1 | 94 | 14,1 | 198,81 | 198,81 |
|  | $\mathbf{\Sigma}$ | $\underline{\mathbf{3 0}}$ | $\underline{\mathbf{2 3 9 6}}$ |  | $\mathbf{1 6 6 1 , 5}$ |  |
|  | $\underline{\text { Mean }}$ | $\underline{\mathbf{7 9} \mathbf{9}}$ |  |  |  |  |

To determine the Standard deviation ( $\sigma$ ) score of Experimental class, the researcher use the following formula:

$$
\begin{aligned}
& \mathrm{SD}(\sigma)=\sqrt{\frac{\Sigma \mathrm{FX}}{\Sigma \mathrm{~F}}} \\
& \mathrm{SD}(\sigma)=\sqrt{\frac{\mathbf{1 6 6 1 , 5}}{\mathbf{3 0}}} \\
& \mathrm{SD}(\sigma)=\sqrt{55,38}=7,44
\end{aligned}
$$

Furthermore, the previous data were used to test it Normality by using Lilliefors formula as table follows:

Table 4.4
Normality Test of Experimental class

| NO | X | Z | F(Z) | S(Z) | F(Z)-S(Z) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 72 | -1,06 | 0,1446 | 0,03 | 0,1113 |
| 2 | 76 | -0,52 | 0,3015 | 0,07 | 0,2348 |
| 3 | 78 | -0,26 | 0,3974 | 0,1 | 0,2974 |
| 4 | 75 | -0,66 | 0,2546 | 0,13 | 0,1213 |
| 5 | 82 | 0,28 | 0,3897 | 0,17 | 0,2230 |
| 6 | 79 | -0,12 | 0,4522 | 0,2 | 0,2522 |
| 7 | 81 | 0,15 | 0,4404 | 0,23 | 0,2071 |
| 8 | 93 | 1,76 | 0,0392 | 0,27 | -0,2275 |
| 9 | 79 | -0,12 | 0,4522 | 0,3 | 0,1522 |
| 10 | 75 | -0,66 | 0,2546 | 0,33 | -0,0787 |
| 11 | 77 | -0,39 | 0,3483 | 0,37 | -0,0184 |
| 12 | 94 | 1,90 | 0,0287 | 0,4 | -0,3713 |
| 13 | 92 | 1,63 | 0,0516 | 0,43 | -0,3817 |
| 14 | 87 | 0,95 | 0,2 | 0,47 | -0,2956 |
| 15 | 83 | 0,42 | 0,3372 | 0,5 | -0,1628 |
| 16 | 75 | -0,66 | 0,2546 | 0,53 | -0,2787 |
| 17 | 85 | 0,69 | 0,2451 | 0,57 | -0,3216 |
| 18 | 87 | 0,95 | 0,2 | 0,6 | -0,4289 |
| 19 | 73 | -0,93 | 0,1762 | 0,63 | -0,4571 |


| $\mathbf{N O}$ | $\mathbf{X}$ | $\mathbf{Z}$ | $\mathbf{F}(\mathbf{Z})$ | $\mathbf{S}(\mathbf{Z})$ | $\mathbf{F}(\mathbf{Z}) \mathbf{- S}(\mathbf{Z})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 84 | 0,55 | 0,2912 | 0,67 | $-0,3755$ |
| 21 | 88 | 1,09 | 0,1379 | 0,7 | $-0,5621$ |
| 22 | 82 | 0,28 | 0,3897 | 0,73 | $-0,3436$ |
| 23 | 84 | 0,55 | 0,2912 | 0,77 | $-0,4755$ |
| 24 | 79 | $-0,12$ | 0,4522 | 0,8 | $-0,3478$ |
| 25 | 78 | $-0,26$ | 0,3974 | 0,83 | $-0,4359$ |
| 26 | 76 | $\mathbf{- 0 , 5 2}$ | 0,3015 | 0,87 | $-0,5652$ |
| 27 | 82 | 0,28 | 0,3897 | 0,9 | $-0,5103$ |
| 28 | 76 | $-0,52$ | 0,3015 | 0,93 | $-0,6318$ |
| 29 | 64 | $-2,14$ | 0,0162 | 0,97 | $-0,9505$ |
| 30 | 60 | $-2,67$ | 0,0038 | 1 | $-0,9962$ |

Then, to determine Z score, the researcher used the following formula as follows:

$$
\begin{aligned}
& \mathbf{Z}=\frac{X-\bar{x}}{S D} \\
& \mathbf{Z}=\frac{72-79,9}{7,44}=-1,06
\end{aligned}
$$

From the calculations above, it can be concluded that the average score of the experimental class was 79.9, the standard deviation was 7.44 , the L count was $-0,2787$ and L table was 0,161 (see Appendix: critical value L for Lilliefors test). Based on previous data, the researcher compares the value of $L$ count and $L$
table. The result shows that $\mathrm{L}_{0}$ score $(-0,2787)<\mathrm{L}_{\mathrm{t}}(0,161)$. T means that the data of experimental class has normal distribution and can be employed for research data.

After obtaining data from the experimental class, now researcher process data from the control class, as follow table:

Table 4.5
Students' score of Pre-test on Control class

| NO | NAME | SCORE MP | SCORE <br> ESSAY | TOTAL <br> SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 1 | AM | 6 | 30 | 36 |
| 2 | AHR | 20 | 30 | 50 |
| 3 | AMH | 20 | 35 | 55 |
| 4 | AN | 20 | 33 | 53 |
| 5 | APR | 22 | 37 | 59 |
| 6 | ANS | 20 | 25 | 45 |
| 7 | BBH | 20 | 40 | 60 |
| 8 | DNP | 24 | 27 | 51 |
| 9 | D | 30 | 35 | 65 |
| 10 | FAR | 22 | 30 | 52 |
| 11 | FA | 12 | 30 | 42 |
| 12 | GA | 24 | 30 | 54 |
| 13 | H | 18 | 33 | 51 |


| NO | NAME | SCORE MP | $\begin{aligned} & \text { SCORE } \\ & \text { ESSAY } \end{aligned}$ | TOTAL SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 14 | JP | 8 | 33 | 41 |
| 15 | KA | 30 | 40 | 70 |
| 16 | MAZ | 10 | 25 | 35 |
| 17 | MR | 14 | 32 | 46 |
| 18 | MAG | 20 | 30 | 50 |
| 19 | MF | 14 | 36 | 50 |
| 20 | MS | 12 | 40 | 52 |
| 21 | NA | 34 | 40 | 74 |
| 22 | N | 22 | 40 | 62 |
| 23 | RKH | 10 | 38 | 48 |
| 24 | RBA | 28 | 40 | 68 |
| 25 | RSR | 28 | 44 | 72 |
| 26 | RI | 20 | 25 | 45 |
| 27 | R | 20 | 35 | 55 |
| 28 | SPS | 20 | 25 | 45 |
| 29 | SG | 20 | 30 | 50 |
| 30 | SM | 18 | 30 | 48 |
| $\Sigma \mathbf{X}$ |  |  |  | 1584 |
| Mx |  |  |  | 52,8 |

Determine mean score pre-test and post-test of Control class. The researcher follows the formula:

Pre-test

$$
\begin{aligned}
M x & =\frac{\Sigma x}{N x} \\
M x & =\frac{\Sigma 1793}{30} \\
& =52,8
\end{aligned}
$$

The table above presents the pre-test and post-test scores in the control class for reading comprehension on descriptive text. In the pre-test, scores ranged from a minimum of 35 to a maximum of 74 , with an average score of 52.8 .

Table 4.6
Students' score of Post-test on Control class

| NO | NAME | SCORE MP | SCORE <br> ESSAY | TOTAL <br> SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 1 | AM | 20 | 18 | 38 |
| 2 | AHR | 24 | 30 | 54 |
| 3 | AMH | 18 | 38 | 56 |
| 4 | AN | 24 | 30 | 54 |
| 5 | APR | 18 | 38 | 56 |
| 6 | ANS | 22 | 30 | 52 |
| 7 | BBH | 28 | 35 | 63 |


| NO | NAME | SCORE MP | $\begin{aligned} & \text { SCORE } \\ & \text { ESSAY } \end{aligned}$ | TOTAL SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 8 | DNP | 26 | 25 | 51 |
| 9 | D | 32 | 35 | 67 |
| 10 | FAR | 24 | 34 | 58 |
| 11 | FA | 12 | 30 | 42 |
| 12 | GA | 24 | 25 | 49 |
| 13 | H | 30 | 15 | 45 |
| 14 | JP | 30 | 15 | 45 |
| 15 | KA | 32 | 49 | 81 |
| 16 | MAZ | 16 | 25 | 41 |
| 17 | MR | 20 | 32 | 52 |
| 18 | MAG | 28 | 25 | 53 |
| 19 | MF | 32 | 20 | 52 |
| 20 | MS | 30 | 33 | 63 |
| 21 | NA | 34 | 45 | 79 |
| 22 | N | 28 | 54 | 82 |
| 23 | RKH | 28 | 20 | 48 |
| 24 | RBA | 28 | 49 | 77 |
| 25 | RSR | 26 | 48 | 74 |
| 26 | RI | 22 | 24 | 46 |


| NO | NAME | SCORE MP | SCORE <br> ESSAY | TOTAL <br> SCORE |
| :---: | :---: | :---: | :---: | :---: |
| 27 | R | 26 | 30 | 56 |
| 28 | SPS | 28 | 21 | 49 |
| 29 | SG | 24 | 18 | 42 |
| 30 | SM | 24 | 20 | 44 |
| $\mathbf{\Sigma X}$ |  |  | $\mathbf{1 6 6 9}$ |  |
| $\mathbf{~ M x ~}$ |  |  |  |  |

Determine mean score pre-test and post-test of Control class. The researcher follows the formula:

Post-test

$$
\begin{aligned}
M x & =\frac{\Sigma x}{N x} \\
M x & =\frac{\Sigma 1895}{30} \\
& =\mathbf{5 5 , 6}
\end{aligned}
$$

In the post-test, scores in the control class ranged from a minimum of 38 to a maximum of 82 , with an average score of 55.6.

The comparison of assessment scores between the control class and the experimental class indicates that the control class did not perform as well as the experimental class. This is evident from the lower average post-test score in the control class
compared to the experimental class ( $55.6<79.9$ ). The difference can be attributed to the fact that the control class did not implement the TPRC strategy, which proved effective in enhancing students' reading comprehension in descriptive text in the experimental class.

## Graphic 4.2

The score of pre-test and post-test in Control Class


Based on the graph above, it can be seen that the learning outcomes of the control class did not experience a significant increase after receiving treatment. This can be seen from the average pre-test and post-test scores of $52,8<55,6$. This class also experienced an increase but was lower than the experimental class.

After calculating the score from the Control class, then the researcher created assistant table to calculate mean score and standard deviation in the table as follows:

Table 4.7

## Assistants Table to Find out Standard Deviation of Control

 class| Responden | $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F X}$ | $\mathbf{x}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{F x 2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 38 | 1 | 38 | $-17,6$ | 309,76 | 309,76 |
| 2 | 41 | 1 | 41 | $-14,6$ | 213,16 | 213,16 |
| 3 | 42 | 2 | 84 | $-13,6$ | 184,96 | 369,92 |
| 4 | 44 | 1 | 44 | $-11,6$ | 134,56 | 134,56 |
| 5 | 45 | 2 | 90 | $-10,6$ | 112,36 | 224,72 |
| 6 | 46 | 1 | 46 | $-9,6$ | 92,16 | 92,16 |
| 7 | 48 | 1 | 48 | $-7,6$ | 57,76 | 57,76 |
| 8 | 49 | 2 | 98 | $-6,6$ | 43,56 | 87,12 |
| 9 | 51 | 1 | 51 | $-4,6$ | 21,16 | 21,16 |
| 10 | 52 | 3 | 156 | $-3,6$ | 12,96 | 38,88 |
| 11 | 53 | 1 | 53 | $-2,6$ | 6,76 | 6,76 |
| 12 | 54 | 2 | 108 | $-1,6$ | 2,56 | 5,12 |
| 13 | 56 | 3 | 168 | 0,4 | 0,16 | 0,48 |
| 14 | 58 | 1 | 58 | 2,4 | 5,76 | 5,76 |
| 15 | 63 | 2 | 126 | 7,4 | 54,76 | 109,52 |


| Responden | $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F X}$ | $\mathbf{x}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{F x 2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | 67 | 1 | 67 | 11,4 | 129,96 | 129,96 |
| 17 | 74 | 1 | 74 | 18,4 | 338,56 | 338,56 |
| 18 | 77 | 1 | 77 | 21,4 | 457,96 | 457,96 |
| 19 | 79 | 1 | 79 | 23,4 | 547,56 | 547,56 |
| 20 | 81 | 1 | 81 | 25,4 | 645,16 | 645,16 |
| 21 | 82 | 1 | 82 | 26,4 | 696,96 | 696,96 |
|  | $\mathbf{\Sigma}$ | $\underline{\mathbf{3 0}}$ | $\underline{\mathbf{1 6 6 9}}$ |  |  | $\underline{\mathbf{4 4 9 3}}$ |
|  | $\underline{\text { Mean }}$ | $\underline{\mathbf{5 5}, 6}$ |  |  |  |  |

To determine the Standard deviation ( $\sigma$ ) score of Control Class, the researcher use the following formula:

$$
\begin{aligned}
& \mathrm{SD}(\sigma)=\sqrt{\frac{\Sigma \mathrm{FX}}{\mathrm{\Sigma F}}} \\
& \mathrm{SD}(\sigma)=\sqrt{\frac{4493}{30}} \\
& \mathrm{SD}(\sigma)=\sqrt{149,77}=\mathbf{1 2 , 2 4}
\end{aligned}
$$

Furthermore, the previous data were used to test it Normality by using Lilliefors formula as table follow.

Table 4.8

## Normality Test of Control class

| NO | X | Z | F(Z) | S(Z) | F(Z)-S(Z) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 38 | -1,44 | 0,07 | 0,03 | 0,0416 |
| 2 | 54 | -0,13 | 0,4483 | 0,07 | 0,3816 |
| 3 | 56 | 0,03 | 0,488 | 0,1 | 0,3880 |
| 4 | 54 | -0,13 | 0,4483 | 0,13 | 0,3150 |
| 5 | 56 | 0,03 | 0,488 | 0,17 | 0,3213 |
| 6 | 52 | -0,29 | 0,3859 | 0,2 | 0,1859 |
| 7 | 63 | 0,60 | 0,2742 | 0,23 | 0,0409 |
| 8 | 51 | -0,38 | 0,352 | 0,27 | 0,0853 |
| 9 | 67 | 0,93 | 0,1762 | 0,3 | -0,1238 |
| 10 | 58 | 0,20 | 0,4207 | 0,33 | 0,0874 |
| 11 | 42 | -1,11 | 0,1335 | 0,37 | -0,2332 |
| 12 | 49 | -0,54 | 0,2946 | 0,4 | -0,1054 |
| 13 | 45 | -0,87 | 0,1922 | 0,43 | -0,2411 |
| 14 | 45 | -0,87 | 0,1922 | 0,47 | -0,2745 |
| 15 | 81 | 2,08 | 0,0188 | 0,5 | -0,4812 |
| 16 | 41 | -1,19 | 0,117 | 0,53 | -0,4163 |
| 17 | 52 | -0,29 | 0,3859 | 0,57 | -0,1808 |
| 18 | 53 | -0,21 | 0,4168 | 0,6 | -0,1832 |


| $\mathbf{N O}$ | $\mathbf{X}$ | $\mathbf{Z}$ | $\mathbf{F}(\mathbf{Z})$ | $\mathbf{S}(\mathbf{Z})$ | $\mathbf{F}(\mathbf{Z}) \mathbf{- S}(\mathbf{Z})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | 52 | $-0,29$ | 0,3859 | 0,63 | $-0,2474$ |
| 20 | 63 | 0,60 | 0,2742 | 0,67 | $-0,3925$ |
| 21 | 79 | 1,91 | 0,0281 | 0,7 | $-0,6719$ |
| 22 | 82 | 2,16 | 0,0154 | 0,73 | $-0,7179$ |
| 23 | 48 | $-0,62$ | 0,2676 | 0,77 | $-0,4991$ |
| 24 | 77 | 1,75 | 0,0401 | 0,8 | $-0,7599$ |
| 25 | 74 | 1,50 | 0,07 | 0,83 | $-0,7665$ |
| 26 | 46 | $-0,78$ | 0,2177 | 0,87 | $-0,6490$ |
| 27 | 56 | 0,03 | 0,488 | 0,9 | $-0,4120$ |
| 28 | 49 | $-0,54$ | 0,2946 | 0,93 | $-0,6387$ |
| 29 | 42 | $-1,11$ | 0,1335 | 0,97 | $-0,8332$ |
| 30 | 44 | $-0,95$ | 0,1711 | 1 | $-0,8289$ |

Then, to determine Z score, the researcher used the following formula as follows:
$\mathbf{Z}=\frac{\boldsymbol{X}-\overline{\mathrm{x}}}{\boldsymbol{S D}}$
$\mathrm{Z}=\frac{38-55,6}{12,24}=\mathbf{- 1 , 4 4}$

From the calculations above, it can be concluded that the average score of the experimental class was 55,6 , the standard deviation was 12,24 , the L count was $-0,4163$ and L table was 0,161 (see Appendix: critical value L for Lilliefors test). Based on
previous data, the researcher compares the value of $L$ count and $L$ table. The result shows that $\mathrm{L}_{0}$ score $(-0,4163)<\mathrm{L}_{\mathrm{t}}(0,161)$. T means that the data of control group also has normal distribution and can be employed for research data.

1. Determine t-test

Following the collection of data from both pre-test and post-test assessments in the two classes, the researcher proceeded to analyze the data using the t -test formula, as outlined in the accompanying table:

Table 4.9

## Score Distribution Frequency of Experimental class and

## Control Class

| NO | SCORE |  | $\mathbf{x}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}} \mathbf{2}^{2}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{X}_{\mathbf{1}}$ | $\mathbf{X}_{\mathbf{2}}$ | (X1-M2) | (X2-M2) |  |  |
| 1 | 72 | 38 | $-7,9$ | $-17,6$ | 62,4 | 309,8 |
| 2 | 76 | 54 | $-3,9$ | $-1,6$ | 15,2 | 2,6 |
| 3 | 78 | 56 | $-1,9$ | 0,4 | 3,6 | 0,2 |
| 4 | 75 | 54 | $-4,9$ | $-1,6$ | 24,0 | 2,6 |
| 5 | 82 | 56 | 2,1 | 0,4 | 4,4 | 0,2 |
| 6 | 79 | 52 | $-0,9$ | $-3,6$ | 0,8 | 13,0 |
| 7 | 81 | 63 | 1,1 | 7,4 | 1,2 | 54,8 |
| 8 | 93 | 51 | 13,1 | $-4,6$ | 171,6 | 21,2 |
| 9 | 79 | 67 | $-0,9$ | 11,4 | 0,8 | 130,0 |


| NO | SCORE |  | $\mathrm{x}_{1}$ | $\mathrm{x}_{2}$ | $\mathrm{x}_{1}{ }^{2}$ | $\mathrm{x}_{2}{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 75 | 58 | -4,9 | 2,4 | 24,0 | 5,8 |
| 11 | 77 | 42 | -2,9 | -13,6 | 8,4 | 185,0 |
| 12 | 94 | 49 | 14,1 | -6,6 | 198,8 | 43,6 |
| 13 | 92 | 45 | 12,1 | -10,6 | 146,4 | 112,4 |
| 14 | 87 | 45 | 7,1 | -10,6 | 50,4 | 112,4 |
| 15 | 83 | 81 | 3,1 | 25,4 | 9,6 | 645,2 |
| 16 | 75 | 41 | -4,9 | -14,6 | 24,0 | 213,2 |
| 17 | 85 | 52 | 5,1 | -3,6 | 26,0 | 13,0 |
| 18 | 87 | 53 | 7,1 | -2,6 | 50,4 | 6,8 |
| 19 | 73 | 52 | -6,9 | -3,6 | 47,6 | 13,0 |
| 20 | 84 | 63 | 4,1 | 7,4 | 16,8 | 54,8 |
| 21 | 88 | 79 | 8,1 | 23,4 | 65,6 | 547,6 |
| 22 | 82 | 82 | 2,1 | 26,4 | 4,4 | 697,0 |
| 23 | 84 | 48 | 4,1 | -7,6 | 16,8 | 57,8 |
| 24 | 79 | 77 | -0,9 | 21,4 | 0,8 | 458,0 |
| 25 | 78 | 74 | -1,9 | 18,4 | 3,6 | 338,6 |
| 26 | 76 | 46 | -3,9 | -9,6 | 15,2 | 92,2 |
| 27 | 82 | 56 | 2,1 | 0,4 | 4,4 | 0,2 |
| 28 | 76 | 49 | -3,9 | -6,6 | 15,2 | 43,6 |
| 29 | 64 | 42 | -15,9 | -13,6 | 252,8 | 185,0 |


| NO | SCORE |  | $\mathbf{x}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | 60 | 44 | $-19,9$ | $-11,6$ | 396,0 | 134,6 |
| $\underline{\boldsymbol{\Sigma}}$ | $\underline{\mathbf{2 3 9 6}}$ | $\underline{\mathbf{1 6 6 9}}$ | $\underline{\mathbf{- 1 , 0 0}}$ | $\underline{\mathbf{1 , 0 0}}$ | $\underline{\mathbf{1 6 6 1 , 5}}$ | $\underline{\mathbf{4 4 9 3 , 0}}$ |

Using the data from the preceding table, the researcher gathered values such as $\Sigma \mathrm{X}_{1}=2396, \Sigma \mathrm{X}_{2}=1669, \Sigma \mathrm{x}_{1}{ }^{2}$ $=1661.5$, and $\Sigma x_{2}^{2}=4493.0$. Additionally, a comparison of post-test results from both classes was conducted by applying the t-test formula as outlined below:
$t=\frac{M_{1}-M_{2}}{\sqrt{\left\{\frac{\sum \mathrm{x}_{1}{ }^{2}+\mathrm{Nx}_{2}{ }^{2}}{\mathrm{~N}_{1}+\mathrm{N}_{2}-2}\right\}\left\{\frac{\mathrm{N}_{1}+\mathrm{N}_{2}}{\mathrm{~N}^{1} . \mathrm{N}_{2}}\right\}}}$
$t=\frac{79,9-55,6}{\sqrt{\left\{\frac{1661,5+4493,0}{30+30-2}\right\}\left\{\frac{30+30}{900}\right\}}}$
$t=\frac{24,3}{\sqrt{\left\{\frac{6154,5}{58}\right\}\left\{\frac{60}{900}\right\}}}$
$t=\frac{24,3}{\sqrt{\{106,11\}\{0,66\}}}$
$t=\frac{24,3}{\sqrt{70,03}}$
$t=\frac{24,3}{8,37}$
$t=2,90$
2. Degree of Freedom

$$
\begin{aligned}
\mathrm{Df} & =\mathrm{N}+\mathrm{N}-2 \\
& =30+30-2
\end{aligned}
$$

## $=58$

Following the t -test analysis, the researcher compared the obtained $t$-value with the critical $t$-value at a significance level of $5 \%$, which was 1.61 . The result of the $t$-test indicated that $t_{0}(2.90)$ $>t_{t}(1.61)$. In summary, the t -test demonstrated the acceptance of the alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$, while rejecting the null hypothesis $\left(\mathrm{H}_{0}\right)$. This signifies a significant influence of utilizing the Think, Predict, Read, Connect strategy on students' reading comprehension in descriptive text among seventh-grade students at SMPN 10 Kota Serang.

Based on the formula t-test above, it can be seen that the value of was 2,90 and for the degree of freedom was 58.

Effect size:

$$
\begin{aligned}
\mathrm{r}^{2} & =\frac{\mathrm{t}^{2}}{\mathrm{t}^{2}+d f} \\
\mathrm{r}^{2} & =\frac{(2,90)^{2}}{(2,90)^{2}+58} \\
\mathrm{r}^{2} & =\frac{8,41}{8,41+58} \\
\mathrm{r}^{2} & =\frac{8,41}{66,41} \\
\mathrm{r}^{2} & =\mathbf{0 , 1 3}
\end{aligned}
$$

`The result above show that the effect of using TPRC on reading descriptive text is $13 \%$, it means it is categorized as moderate effects according to Gravetter's criteria:
$\begin{array}{ll}\mathrm{r}^{2}<0,25 & =\text { large effect } \\ 0,09<\mathrm{r}^{2}<0,25 & =\text { Moderate Effect } \\ 0,01<\mathrm{r}^{2}<0,09 & =\text { Small Effect }\end{array}$

## B. Discussion

Based on observations in the experimental class, students had a good atmosphere and were more enthusiastic when researchers used the TPRC method by creating small groups. This makes students more eager to learn. Students also easily exchange ideas with their groupmates, thus making their knowledge of the reading text more and more. The impact of the TPRC (Think, Predict, Read, Connect) strategy on students' reading comprehension in a descriptive text. The observations in the experimental class indicate a positive atmosphere and increased enthusiasm among students when the TPRC method is employed through the formation of small groups. ${ }^{1}$ This collaborative approach based on Gokhale encourages students to exchange ideas, fostering a deeper understanding of the reading material. ${ }^{2}$

[^0]The results of the pre-test and post-test scores in the experimental class indicate that the lowest score in the pre-test was 36 , with the highest score being 81 . The average pre-test score was 58.8 . In the post-test, the lowest score was 60 , the highest score was 94 , and the average post-test score was 79.9. The calculations regarding the pre-test and post-test scores in the experimental class reveal significant improvement after the implementation of treatment, specifically, learning through the use of the TPRC strategy. This outcome aligns with the findings of a similar study conducted by Solikhah. ${ }^{3}$ This can be seen from the average value in the post-test which is higher than the pre-test, 79.9> 58.8.

In the experimental class, the average pre-test score was 58.8, and the average post-test score was 79.9, reflecting a substantial increase of 21.1 points. Conversely, in the control class, the average pre-test score was 52.8 , and the average posttest score was 55.6 , indicating a marginal increase of 2.8 points. These results highlight the success of implementing the TPRC strategy in enhancing students' reading comprehension of descriptive text. The effectiveness of Think, Predict, Read, Connect (TPRC) surpassed conventional strategies, as TPRC actively engages students in the process of constructing meaning.

[^1]The researcher sets up two hypotheses to interpret the results: the alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ suggests a significant influence of the TPRC strategy on students' reading comprehension. This result similar with the research conducted by Rahmah. ${ }^{4}$ while the null hypothesis ( $\mathrm{H}_{0}$ ) posits no significant influence. The statistical analysis supports the alternative hypothesis, as the calculated value ( $\mathrm{t}_{\mathrm{o}}$ ) is higher than the critical value $\left(t_{t}\right)$, leading to the rejection of the null hypothesis. This implies that the TPRC strategy has a meaningful impact on improving students' reading comprehension in descriptive text.

Based on the data, the value of $t_{0}(2.90)$ exceeds $t_{t}(1.61)$, indicating that the alternative hypothesis is accepted, and the null hypothesis is rejected. These results affirm that the implementation of the TPRC strategy has successfully contributed to the improvement of students' reading comprehension in descriptive text.

Think, predict, read, connect (TPRC) is more effective than other strategies because with TPRC, students are being actively engaged in meaning construction. Where with this strategy students will predict an event contained in the text and they also learn how to make a correction, verify the prediction and connect their prediction with the text. This means that students' predictions in the text make them active in reading.

[^2]In conclusion, the experimental results support the idea that the TPRC strategy is more effective than other strategies in improving students' reading comprehension. The engagement of students in the meaning-making process through thinking, predicting, reading, and connecting contributes to the observed positive outcomes. These findings suggest the potential benefits of incorporating TPRC strategies into teaching practices to enhance students' reading comprehension skills.


[^0]:    ${ }^{1}$ C. Yan-me, "Experimental Research on Changes of The Group Teaching In The Public Physical Education In University," Journal of Anyang Normal University. (2015).
    ${ }^{2}$ Anuradha A. Gokhale, "Collaborative Learning Enhances Critical Thinking," Journal of Technology Education 7, no. 1 (September 1, 1995): 579-589, http://scholar.lib.vt.edu/ejournals/JTE/v7n1/gokhale.jte-v7n1.html.

[^1]:    3 Hani Atus Sholikhah and Mar'atul Azizah, "Improving Reading Achievements in Descriptive Text by Using TPRC (Think, Predict, Read and Connect) Strategy," Southeast Asian Journal of Islamic Education 1, no. 2 (June 30, 2019): 165180, https://journal.iain-samarinda.ac.id/index.php/SAJIE/article/view/1481.

[^2]:    ${ }^{4}$ R. Rahmah, U., Loeneto, B., \& Inderawati, "Improving Reading Descriptive Text Achivement of the Tenth Grade Student of SMA Negeri 10 Palembang Through Think, Predict, Read, and Connect (TPRC) Strategy." 4 (2020): 1-11.

