

CHAPTER IV

FINDINGS AND DISCUSSION

4.1 Research Findings

In this chapter, the researcher presents and discusses the findings of the study. These results are based on data gathered from pre-tests and post-tests conducted to assess the impact of the POWER strategy on students' ability to write descriptive texts at SMP Negeri 1 Rantauprapat.

The researcher employed a quantitative approach with a pre-test and post-test research design. In the study, the experimental group received the treatment, while the control group did not receive any intervention. Data scores from both groups were collected, organized into tables, and analyzed as outlined below:

4.1.1 Description of the Data

Table 4. 1 Description of Data

Descriptive Statistics						
	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pre-test Experiment	30	20	55	75	64.87	4.967
Post-test Experiment	30	20	65	85	73.67	5.006
Pre-test Control	30	32	45	77	62.47	7.691
Post-test Control	30	27	53	80	67.13	6.791
Valid N (listwise)	30					

According to Table 4.1, the statistical analysis reveals that prior to implementing the POWER strategy, the writing score for the experimental group was 64.87. Following the implementation of the POWER Strategy, this score increased to 73.67. In contrast, the pre-test score for the control group was 62.47, and the post-test score was 67.13. These findings indicate that the POWER Strategy significantly enhances students' proficiency in writing descriptive texts.

4.2 Analysis and Research Result

4.2.1 Normality Test

To confirm the research hypothesis, it is crucial that the data display normal distribution and homogeneity. Hence, a normality test is conducted on the pre-test data using the Kolmogorov-Smirnov test. This test was executed using SPSS-23, with a significance level (α) set at 0.05, to determine the normality of the data distribution. Table 4.2 presents the outcomes of the normality test for both the experimental and control groups.

Table 4. 2 Normality Test

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Class	Statistic	df	Sig.	Statistic	df	Sig.
Hasil writing	pre-test Experiment class	.103	30	.200 [*]	.977	30	.731
	post-test experiment class	.128	30	.200 [*]	.974	30	.657
	pre-test control class	.108	30	.200 [*]	.974	30	.667
	post-test control class	.103	30	.200 [*]	.977	30	.754

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the data provided, a distribution is considered normal if the significance level exceeds 0.05. Results from the Kolmogorov-Smirnov normality test indicate that the pre-test yielded values of 0.103 for the experimental class and 0.108 for the control class. Similarly, the post-test values were 0.128 for the experimental class and 0.103 for the control class. With a significance value (Sig.) of 0.200, which is higher than the asymptotic significance (asymp. Sig.) threshold of >0.05, it suggests that the data can be regarded as normally distributed.

4.2.2 Homogeneity Test

Following the Normality test, the researcher conducted a homogeneity test to assess the variance consistency between the sample data of the experimental and control classes. Homogeneity would be established if the computed result surpasses 0.05. The table provided below shows the outcomes of the homogeneity test conducted for both the pre-test and post-test across both classes.

Table 4. 3 Homogeneity Test

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
result	Based on Mean	2.404	1	58	.126
	Based on Median	2.391	1	58	.127
	Based on Median and with adjusted df	2.391	1	53.242	.128
	Based on trimmed mean	2.403	1	58	.127

The data shows that the significance level for the post-test in both the experimental and control classes is 0.126. This value exceeds 0.05, indicating that both classes demonstrate comparable variances and are thus homogeneous.

4.2.3 Hypothesis Test

Following the normality and homogeneity tests, a t-test was conducted to ascertain the significance of the results. Presented below are the results of the t-test:

Table 4. 4 Hypothesis Test

Group Statistics					
kelas		N	Mean	Std. Deviation	Std. Error Mean
Writing with POWER Strategy	Post-test Experimental Class	30	73.67	5.006	.914
	Post-test Control Class	30	67.13	6.791	1.240

According to the table, the statistical analysis of the post-test scores for both the experimental and control groups showed a significant difference. Specifically, the average post-test score was 73.67 in the experimental group and 67.13 in the control group, indicating a statistically significant disparity between the two groups. Additionally, the subsequent table presents the outcomes of an independent sample T-test.

Table 4. 5 Independent Samples Test

Independent Samples Test	
Levene's Test for Equality of Variances	t-test for Equality of Means

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
result	Equal variances assumed	2.404	.126	4.242	58	.000	6.533	1.540	3.450	9.617
	Equal variances not assumed			4.242	53.330	.000	6.533	1.540	3.444	9.622

The table labeled "Independent Samples Test" under the section "Equal Variances Assumed" displays a significance value (Sig. 2-tailed) of 0.000, which is less than 0.05. This suggests that the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted in the decision-making process of the independent sample t-test. Therefore, it can be concluded that there is a notable difference between the average student learning outcomes in the experimental class and the control class.

The hypothesis is to be tested is as follows:

H_0 : There is no significant effect of POWER Strategy on Students' Writing Ability of Writing Descriptive Text.

H_a : There is a significant effect of POWER Strategy on Students' Writing Ability of Writing Descriptive Text.

The basis for making the decision is as follows:

- 1) If the Sig. (2-tailed) > 0.05, then H_a is rejected
- 2) If the Sig. (2-tailed) < 0.05, then H_a is accepted.

The t-test results for the post-test scores in the experimental and control classes revealed that the t-value (4.242) exceeded the critical t-value (t-table = 2.001), and the significance value (Sig. 2-tailed) was 0.000, which is below 0.05. In summary, these results indicate that the t-value surpasses the critical t-value, and the significance level is less than 0.05. Therefore, the alternative hypothesis (H_a) is accepted, suggesting that the POWER Strategy effectively improves students'

writing ability in descriptive text.

4.1 Discussion

This study aimed to assess the effectiveness of the POWER Strategy in improving the descriptive writing skills of ninth-grade students at SMP Negeri 1 Rantau Utara. The research involved conducting pre-tests and post-tests for both the experimental and control groups. Class IX-1 comprised 30 students selected as participants for the experimental group. The POWER Strategy was implemented to enhance their ability to write descriptive texts. Initially, students in the experimental group completed a pre-test by composing a descriptive text of at least five sentences, achieving an average score of 64.87. Following the intervention, the experimental group underwent a post-test, achieving a score of 73.67. These results indicate that the POWER Strategy effectively improves students' writing skills.

Additionally, the control class consisted of 30 students from IX-4. Similar to the experimental group, these students completed a pre-test by writing a descriptive text of five sentences or more, achieving a mean score of 62.47. In contrast to the experimental group, the control class did not receive the POWER Strategy intervention. After the pre-test, the control class took a post-test and achieved an average score of 67.13. Comparing the mean scores of the pre-test and post-test in the control class reveals that there was no enhancement in their writing skills.

After gathering data from both the pre-test and post-test in the experimental and control classes, the subsequent step was to analyze the research hypothesis using an independent sample T-test. This test aimed to ascertain whether there existed a significant disparity in students' writing proficiency after implementing the POWER Strategy with the experimental group compared to the control group at SMP 1 Rantau Utara. The average score on the post-test in the experimental class was 73.67, whereas in the control class it was 67.13, highlighting a discernible distinction in the post-test outcomes between the two groups.

The independent T-test resulted in a Sig. (2-tailed) value of 0.000. As per the criteria, if Sig. (2-tailed) > 0.05, H_a is rejected; if Sig. (2-tailed) < 0.05, H_a is accepted. Since the obtained Sig. (2-tailed) value was 0.000, which is less than 0.05,

H₀ was rejected, and H_a was accepted. Therefore, the hypothesis that the POWER strategy enhances students' writing ability in descriptive text was supported. Based on these results, it can be concluded that the POWER strategy effectively improves the writing skills of ninth-grade students at SMP 1 Rantau Utara.

Additionally, the researcher's classroom observations revealed noticeable differences in motivation and engagement between the experimental and control groups. Specifically, students in the experimental group showed higher levels of motivation and engagement, displaying greater interest and enthusiasm during classroom activities and discussions. Following the implementation of the treatment, students in the experimental group also showed more initiative in asking questions related to writing, descriptive text, and English. In contrast, students in the control group displayed less interest in the learning activities. While some were moderately active, a majority exhibited passive behavior during class sessions.

Based on the detailed explanation provided, the researcher concludes that the implementation of the POWER Strategy had a notable effect on students' writing proficiency. The study suggests that students in the experimental class became more adept at employing the POWER strategy in their writing, allowing them to explore and enhance their writing skills more effectively. In contrast, students in the control class demonstrated lower motivation to improve their writing abilities. Drawing from these research findings and observations, it is affirmed that the POWER Strategy effectively enhances students' proficiency in writing descriptive texts.