CHAPTER IV

RESULTS AND DISCUSSION

4.1   Research Results

4.1.1   Descriptive analysis results

Descriptive statistical analysis was used to analyze the data on students' narrative essay writing skills. Descriptive statistical analysis aimed to describe the research data in the form of the average score, maximum score, minimum score, and standard deviation of each treatment group.

a.   The Students' Pre-Test And Post-Test Score For Grade VII - 2 (Control Class)

Students an overview of the scores of students' narrative essay writing skills before and after being taught using the conventional model found from the pretest and posttest file.

Table 4.1
The Students' Pre-Test And Post-Test Score In Class VII-2 (Control Class)

Statistics Sample	Control Class	
	Statistical Value	
	Pretest	*Posttest*
Sample Size	25	25
Maximum Value	73	95
Minimum Value	70	40
Average value	41,56	67,20
Standard Deviation	3,34	15,28
Variance	280,17	231,853
Range	52	28

Based on Table 4.1, of the 25 students of class VII-2 who were sampled in the study showed the results of students' narrative essay writing skills before being taught

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using the conventional model in the pretest it was known that the highest score obtained

by students was 73, the mean value was 41.56, the standard deviation was 3, 34, and

the value of variance is 280.17 with a value range of 52, while in the posttest it is known

that the maximum value is 95, the minimum value is 40, the mean value is 67.20, the

standard deviation is 15.28, and the variance is 231.853 with a range of 28.

Table 4.2

Frequency Distribution of Pretest and Post-test Results for Class VII-2 students (Control Class)

Statistics	Category	Pretest		Posttest	
		Frekuensi	Persentase (%)	Frekuensi	Persentase (%)
0-54	Very low	19	76	2	8
55-64	Low	2	8	10	40
65-79	Currently	4	16	11	44
80-89	Tall	0	0	2	8
90-100	very high	0	0	0	0
Total		25	100	25	100

Student learning outcomes in the student pretest according to the table above

show that the score is very low 19 students (76%), low 2 students (8%), moderate 4

students (16%), and no students are categorized as high with very high . student

learning outcomes after studying with the conventional learning model (posttest)

showed that of the 25 students of class VII-2 MTs Swasta Miftahul Husna who were

sampled in the study, students were categorized as very low 2 students (8%), low 10

students (40%), while 11 students (44%), high 2 students (8%), and 0 students (0%)

were categorized as very high.

Diagram 4.1
The graph of the frequency distribution of the results of the pretest and posttest narrative writing skills in the control class.
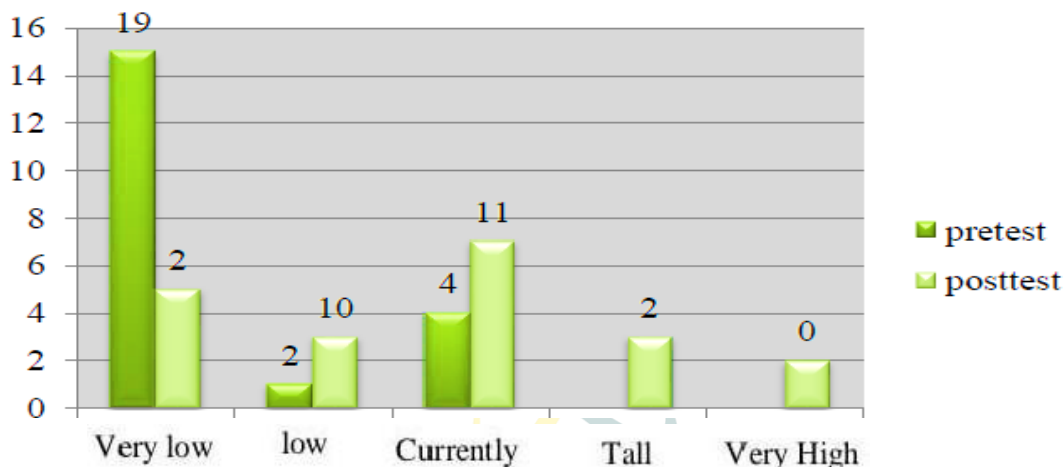
In accordance with the data analysis, it is confirmed into the minimum completeness criteria (KKM) to be achieved, which is a value of 70, then the level of mastery achievement of narrative essay writing skills before and after being taught using conventional learning models can be seen in the following table.

Table 4.3
Distribution Of Mastery Learning Outcomes Pretest And Posttest Control Class

KKM Value	Pretest		Posttest		Complete Category
	Frekuensi	Persentase (%)	Frekuensi	Persentase (%)	
≤ 70	3	12	8	32	Not Complete
≥ 70	22	88	17	68	Complete
Amount	20	100	20	100	
Classical Completeness of Students					

Table 4.3 of the 25 students who were the sample of the research on the presentation of completeness in the pretest before being taught using the conventional learning model with narrative writing material showed 12% of students who scored 70

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and 88% of students who scored 70. In the posttest, the presentation of students' mastery after being taught using the conventional learning model with narrative writing material showed 32% of students who scored ≥ 70 and 68% of students who scored ≤ 70.

Diagram 4.2.

Completeness Category Diagram Of The Control Class Pretest And Posttest Scores

Narrative writing skills for class VII-1 students (Experimental Class) An overview of the scores of students' narrative essay writing skills before and after being taught using the Mind Mapping obtained from pretest and posttest file.

Narrative writing skills for class VII-1 students (Experimental Class) An overview of the scores of students' narrative essay writing skills before and after being taught using the Mind Mapping model obtained from pretest and posttest file.

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Tabel 4.4
**Descriptive Statistics on The Results Of Students' Narrative Essay Writing Skills
In Class VII-1 (Experimental Class)**

Statistics Sample	Hard Control	
	Statistical Value	
	Pretest	*Posttest*
Sample Size	25	25
Maximum Value	74	90
Minimum Value	23	70
Average value	52,12	81,52
Standard Deviation	14,62	7,27
Variance	213,94	52,92
Range	51	20

Based on the table above, 25 students of class VII-1 MTs Swasta Miftahul

Husna were sampled in the research on student writing skills learning outcomes before

being taught using the Mind Mapping method in the pretest, it is known that the

maximum score obtained by students is 74, the minimum value is 23, the mean value

is 52, 12 , the standard deviation is 14.62, and the variance value is 213.94 with a range

of 51 while in the posttest it is known that the maximum value is 90, the minimum

value is 70, the mean value is 81.52 standard deviation is 7.27, and the variance value

is 52.92 with a range of values. 20.

Table 4.5
**Frequency Distribution of The Results of The Pretest and Posttest of Class VII-1
students (Experiment Class)**

Statistik	Category	*Pretest*		*Posttest*	
		Frekuensi	Persentase (%)	Frekuensi	Persentase (%)
0-54	Very low	13	52	0	0
55-64	Low	6	24	0	0
65-79	Currently	6	24	10	40
80-89	Tall	0	0	11	44
90-100	very high	0	0	4	16
Total	**Category**	**25**	**100**	**20**	**100**

Table 4.5 shows that of the 25 students of class VII-1 who were sampled in the study of student learning outcomes before studying with the Mind Mapping (pretest) method, students who were categorized as very low were 13 students (52%), low 6 students (24%), moderate 6 students (24%), and no students were categorized as high or very high. While student learning outcomes after studying with the Mind Mapping method (posttest) showed that of the 25 students of class VII-1 who were sampled in the study, students were categorized as very low 0 students (0%), low 0 students (0%), moderate 10 students (40%), 11 students (44%), and 4 students (16%) were categorized as very high.

Diagram 4.3

The Graph of The Frequency Distribution of The Results of The Experimental Class Writing Skills Pretest And Posttest.
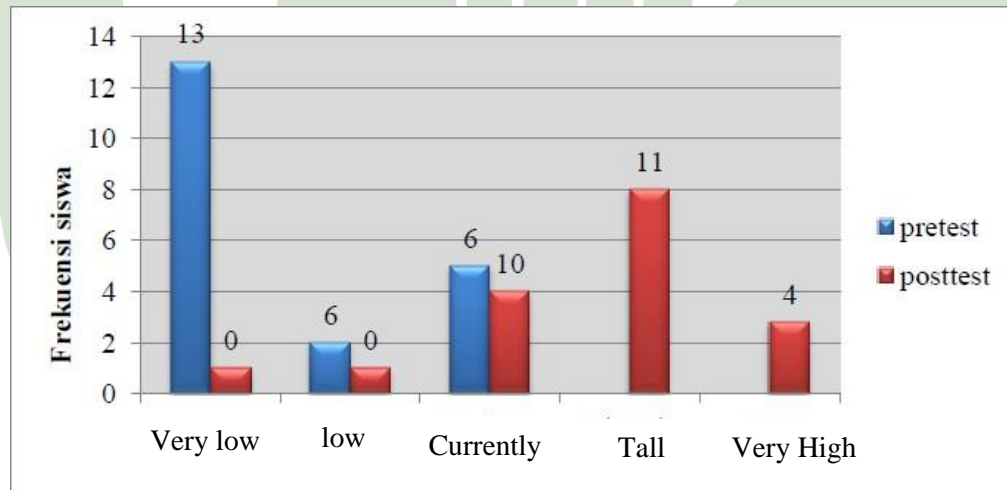
In accordance with the analysis of the data confirmed into the minimum completeness criteria to be achieved, namely the value of 70, the level of mastery achievement of students' narrative essay writing skills using the Mind Mapping model can be seen in the following table:

Table 4.6

Distribution of Writing Skills Mastery Pretest And Posttest Experimental Class

KKM Value	Pretest		Posttest		Complete Category
	Frekuensi	Persentase (%)	Frekuensi	Persentase (%)	
≤ 70	20	80	0	0	Not Complete
≥ 70	5	20	25	100	Complete
Amount	25	100	25	100	
Classical Completeness of Students					

Table 4.6 of the 25 students who were sampled for the research presentation of completeness in the pretest before being taught using the Mind Mapping method with the material of writing narrative essays 20% of students who scored ≥ 70 and 80% of students who scored ≤ 70. In the posttest, the students' mastery presentation after being taught using the Mind Mapping method showed 100% of students who scored ≤ 70 and 0% of students who scored ≤ 70.

Diagram 4.4

Completeness Category Diagram of The Experimental Class Pretest And

Posttest Scores
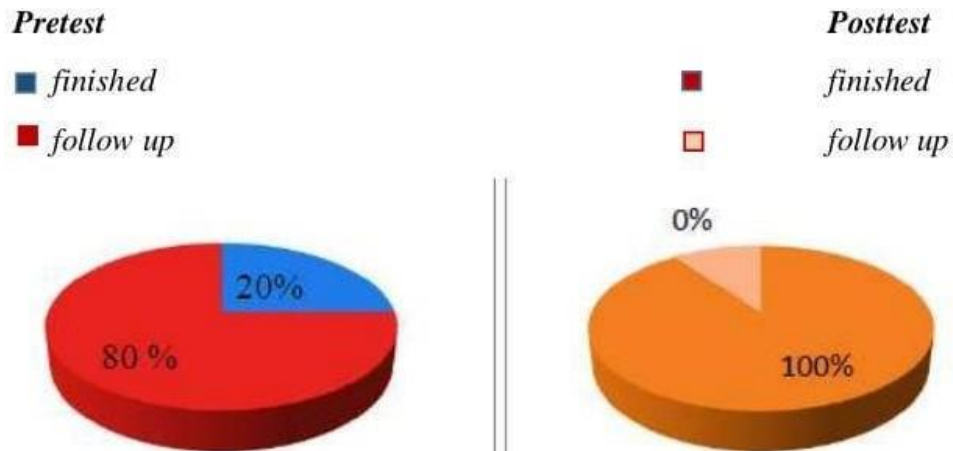
4.1.2 Results of Inferential Statistical Analysis

As a condition for testing the hypothesis, Validity, Reliability, the normality test and the homogeneity test of the data are first carried out.

a. **Validity Test**

In testing students' narrative text writing skills this was done using the SPSS For Windows application. The following are the results of the effectiveness test based on completeness:

Table 4.8

Validity Test Results

		Pretest	Post Test
	Pearson Correlation	.380	1
Pretest	*Sig. (2-tailed)*	.043	
	N	25	25
	Pearson Correlation	.567	.876
Post Test	*Sig. (2-tailed)*	.000	.000
	N	25	25

The basis for decision making in the validity test is testing the validity of the instrument technique by calculating using the Product Moment Correlation. If the results of rcount > rtable with a significant level of 5% will be declared valid. And in this study, the rtable of 0.374 means that in the aspect of writing narrative text skills it also shows the same thing, namely rcount > rtable, which is 0.380 and is said to be valid, and in the aspect of assessment of narrative text writing skills, which is equal to 0.491 > rtable, the data is said to be valid. the aspect to the data material looks valid, which is indicated by the value of rcount > rtable, which is 0.56 and the same thing is seen in the aspect of writing narrative text skills, which is 0.876.

b. Reliability Test

Reliability is a measure that shows how high an instrument can be trusted or relied upon to be used as a data collection tool because the instrument is already good.

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Table 4.9
Reliability Test Results

Reliability Statistics

Cronbach's Alpha	N of Items
.880	25

The results of the instrument data generated from calculations using the Cronbach Alpha formula using the SPSS program, if the reliability coefficient (r11) 0.7 is declared reliable. Based on the table above shows Cronbach's Alpha of 0.880 which means the data used is reliable.

c. Normality test

Testing the normality of the data in this study aims to determine whether the data studied came from a normally distributed population or not. If the value of sig.> 0.05, then the data is said to be normally distributed, whereas if the value of sig <0.05, then the data is said to be not normally distributed. The results of the decisions taken from the SPSS 24 output are significant values from the Test Of Normality table in the Kolmogorov-Smirnova column.

Table 4.10
The Results of The Normality Test Data Analysis For The Control Class

	Test of Normality					
	Kolmogrov-Smirnov[a]			*Shapiro-Wilk*		
	Statistik	Df	Sig.	Statistik	Df	Sig.
Pretest	,159	25	,104	,901	25	,019
Posttest	,107	25	,200	,962	25	,466

The normality of the pretest results can be seen in the sig. Kolmogorov-Smirnova column. From table 4.10 it is known that the Sig. pretest value is 104 > 0.05 with a df of 25, then the pretest data in the control class is normally distributed. Likewise, the value of sig. posttest is 200 < 0.05 with a df of 20 which means the data being tested is normal.

Table 4.11
The Results of The Normality Test Data Analysis Experiment Class Tests 0f Normality

	Test of Normality					
	Kolmogrov-Smirnov[a]			*Shapiro-Wilk*		
	Statistik	Df	Sig.	Statistik	Df	Sig.
Pretest	,105	25	,200	,956	25	,349
Posttest	,174	25	,048	,878	25	,006

Source: primary data after processing (2022)

Based on the table above, the normality of the pretest results can be seen in the sig column. Kolmogorov-Smirnova. From Table 4.8 it is known that the value of Sig. The pretest was 200 > 0.05 with a df of 25, so the pretest data in the experimental class were normally distributed. Likewise with the value of sig. posttest is 048 <0.05 with a df of 25 which means the data is also normally distributed.

d. Homogeneity test

The homogeneity test was used to determine the level of similarity of the experimental class group variance, and the normality, SPSS 24. The homogeneity test was intended to determine whether the data studied had homogeneous variance. In the homogeneity test, a significance value will appear in the Test of Homogeneity of Variances table. If the value of sig.> 0.05, then the data is said to be homogeneous,

whereas if the value of sig. <0.05, then the data is said to be inhomogeneous. The following are the results of the homogeneity test of the pretest and posttest of the experimental class and the control class.

Table 4.12
The Results of The Analysis of The Homogeneity Test of The Pretest Experimental Class And Control Class

Test of Homogeneity of Variances			
		Pretest	
Levene Statistik	DfI	Df2	Sig
.0140	1	48	.710

Source: Primary Data after processing (2022)

Based on the level of sig. The pretest is 0.710, meaning the value of sig. (Sig count $\geq$ 0.05). So it can be concluded that the control class pretest data and the experimental class pretest data studied have the same variance and can be said to be homogeneous.

Table 4.13

The Results of The Analysis Of The Homogeneity Test of The Posttest Experimental Class And Control Class

Test of Homogeneity of Variances			
		Pretest	
Levene Statistik	DfI	Df2	Sig
.099	1	48	.754

Based on the data in Table 16, it is known that the significant value of the pretest data is 0.754 (Sig count $\geq$0.05). It can be concluded that the control class pretest data and the experimental class pretest data studied have the same variance and can be said to be homogeneous.

Table 4.14

The Average Posttest Value of Student Learning Outcomes In The Experimental Class And The Control Class

Group Statistik					
	Learning model	N	Mean	Std. Deviation	Std.Error Mean
Narrative Writing Skill Results	Mid Mapping Model	25	81.52	7.275	1.455
	Conventional Model	25	84.96	7.711	1.542

Table 4.14 the average value of the results of writing skills in the experimental class after being taught using the Mind Mapping learning model is 81.52 and the average value of learning outcomes for the control class after being taught using conventional learning is 64.96.

Table 4.15
The Results of The Hypothesis Test Data Analysis Using The Independent Samples Test Independent Samples Test

					t-test for Equality of Means				
Levene's Test for Equality of Variances	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.140	.710	7.811	48	.000	16.560	2.120	12.297	20.823
Equal variances not assumed			7.811	47.838	.000	16.560	2.120	12.297	20.823

The criteria for drawing conclusions from this t-test with the significance level used (α) is 0.05 or 5% are as follows:

a. H_0 is accepted and Ha is rejected if t hits t (1-α).

b. H_0 is rejected and Ha is accepted if t hit > t (1-α).

Meanwhile, the hypothesis of this research is as follows:

a. H_0 : There is no effect of the application of the Mind Mapping model on the skills of writing narrative essays for grade VII private MTs students Miftahul Husna

b. H_a: There is an effect of applying the Mind Mapping model on skills writing narrative essays for class VII students of MTs Swasta Miftahul Husna

Based on the table above, there are results of T test analysis to determine whether there is an effect, two ways can be used, the first is to look at the Sig (2-tailed) value if the Sig (2-tailed) value is below 0.05 then there is an effect or there is a difference. From the table above, it is known that there is a difference between the posttest results of the control class and the experimental class because the result of Sig (2-tailed) obtained is .000 <0.05. While the second way is to compare tcount with ttable. If the value of tcount > ttable, then H^i is accepted and H_0 is rejected, whereas if tcount < table, then H_0 is accepted and H^i is rejected. The tcount value in table 13 is 7.811 and the ttable value with df = 48 at the 5% significance level is 0.00, so 7.811 > 0.00. 1

From these results, it is known that 0 is rejected and 1 is accepted, so it can be concluded that there is an influence of the Mind Mapping learning model on narrative essay writing skills in seventh grade students of MTs Swasta Miftahul Husna.

4.2   Discussion

From the explanation above, the Mind Mapping learning model has an effect on students' writing skills because this learning model makes students more active and enthusiastic in learning than using conventional learning models. The statement above is supported by research Anwar (2011) about An Analysis the students' ability in writing narrative text. This research was aimed at describing the ability of the grade IX of students at SMPN 2 Gunung Talang in writing narrative text dealing with generic structure of narrative text, vocabulary, and mechanics.

Buzan's (2012:6) view that the Mind Mapping model can help students communicate, be more creative, be able to solve problems, focus attention, learn faster and more efficiently, remember better, and use the brain as a whole.

The enthusiasm of students in this learning makes students more focused in receiving the lessons given by the teacher so that it influences and distinguishes learning outcomes (affective, cognitive, and psychomotor) between students in the control class and the experimental class. Thus, the Mind Mapping learning model can improve students' writing skills in particular. in Indonesian language learning materials for writing narrative text is $7,811 > 0,00$ with the degree of freedom $= 48$ and it's significance is 5% which is bigger than 0,00, therefore H_1 is accapted dan H_0 is rejected.