CHAPTER IV

DATA FINDINGS AND DISCUSSION

This chapter discusses about the students achievement in descriptive text, parametric test of significant, hypothesis testing, and discussion.

A. The students achievement in reading comprehension

Descriptive statistic is to set the frequency distribution of the data set then we must know the performance of each group. to determine the performance of each group will be explained in a central tendency and variability. In this chapter, we will discuss the exact quantitative measure of this nature.

a. Central tendency

Statistics

		experiment	control
N	Valid	35	35
	Missing	0	0
Mean		88.4286	79.1714
Median		91.0000	81.0000
Mode		96.00	89.00

After treatment, it must calculate the results of tests using SPSS. Based on the findings, the mean of the post-test control group was 79.1 and the mean of the

post test experimental group was 88.4. After the students received treatment, the average value of both groups increased gradually. scores showed that after treatment, the experimental group achieve better results than the control group. The author assumes that there is a significant difference in student achievement between the experimental group and the control group. In addition, the authors also assume that an effective strategy for teaching reading descriptive text TPRC.

In addition to finding the mean, it should also look for value mode by using SPSS. The median is the middle number in a group of numbers. so that half of the numbers have a greater value than the media, and half of these have a smaller value than the media. and the results of the average value for the control group was 81 and the median of the experimental group was 91. indicates that the median value of the experimental group were higher than the control group.

Next to search mode value which is the number most often appear in a bunch of numbers. mode value of experimental group was 96 and the value of the mode of the control group was 89. This shows that the experimental group mode value is higher than the control group.

b. Variability

Report

nilai

kelompok	Mean	N	Std. Deviation
kelompok A	88.4286	35	9.58640
kelompok B	79.1714	35	11.50827
Total	83.8000	70	11.50123

The standard deviation of the difference in value against the average sample. It is the values of a small sample of the total number of the object being observed. Indirectly, the standard deviation is also to note the diversity of the sample you get. The larger the standard deviation value that you get a bigger diversity of the sample, and conversely that if you get a small sample standard deviation increasingly diverse. In this study the standard deviation obtained for the control group was 11.5 and the standard deviation obtained for the experimental group was 9.5. It shows that the standard deviation over low experimental group than in the control group standard deviation.

B. Parametric test of significantce

In general statistics can be interpreted as a way to get information from the data. In more detail, the meaning of statistics can be grouped into three namely: Statistics are defined as reporting a set of data, such as football statistics, population statistics and so on. Statistics are quantities calculated from a set of data, for example: proportion, averages and so on. Statistics are also interpreted as a discipline of science and art in making the inferences of a specific unit for something general.

Talking statistics means talking sample. The sample is the member part of the population that is used as the object of research. Population is a collection of objects complete and clear who want to learn its properties. Activities to examine all objects (population) are called census activities, eg population census, agricultural census, etc. The activity of researching some of the population that

become the selected object is called survey. The descriptive size of a population is a parameter, while the descriptive size of a sample is statistic. So the population has parameters while the sample has statistics. Census data can be analyzed by descriptive method. Survey data can be analyzed by descriptive and inferential. Inferential is a form of decision-making which includes statements, explanations, comparisons, estimates, projections, etc.

Statistical methods can be grouped into two, namely parametric statistics and nonparametric statistics. Parametric testing is a way of testing hypotheses based on several assumptions: Sample observation should be selected from the population considered to have a normal distribution.

In the case of different tests of 2 or more parameters, these populations are not only considered to have a normal distribution but also have the same variance/homoscedasticity assumption.

The validity of the assumption determines the extent to which the parametric test results mean or not. While nonparametric methods never formulate assumptions about the population from which the sample is selected. Statistical methods used in nonparametric statistics are those that relate to rankings or qualitative data (nominal or ordinal scale) or quantitative data that are not normally distributed. Therefore, nonparametric statistics are often called free distribution statistics. In nonparametric statistics, we will examine population characteristics without using specific parameters. Therefore, this test statistic is

called nonparametric statistics that will test whether the location of the population is different from testing whether the population averages are different.

It is important to realize that nonparametric tests should not be used if the parametric test is applicable, since the efficacy level of the nonparametric test is lower than that of the parametric test. However you as a decision maker or researcher should not misinterpret that the degree of usefulness of nonparametric statistical methods under parametric statistical methods. Of course not so, each method is made with special specifications according to the kind of data used. Increased efficacy of nonparametric tests should be by enlarging the sample. But as we know enlarging the sample means it will add cost, time, etc

Parametric test to determine the appropriate measurement tool to see significant between experiment group and the control group. parametric test includes homogenity, linierity, and normality.

a. Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	kelompok	Statistic	df	Sig.	Statistic	df	Sig.
nilai	kelompok A	.196	35	.001	.817	35	.000
	kelompok B	.152	35	.040	.934	35	.037

a. Lilliefors Significance Correction

Before using t-test or non-parametric test for the next calculation, analysis to determine normality, homogeneity and linearity of the two samples was done. Therefore, the researcher calculate normality, homogeneity and linearity two groups of "post-test". Sig normality value of Kolmogorov-Smirnova and post-test control group was 0.040, while the experimental group was sig at 0.001. That means that the test group were not normally distributed both as a value lower than 0.05.

b. Homogeneity

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
nilai	Based on Mean	4.260	1	68	.043
	Based on Median	4.035	1	68	.049
	Based on Median and with adjusted df	4.035	1	65.706	.049
	Based on trimmed mean	4.535	1	68	.037

Data homogeneity authors examined post-test using the test homogeneity of variance by measuring the coefficient is significant in statistical Levene. Sig value is 0,037 lower than significant level (0.05). It can be concluded that the population between the experimental and control groups were not homogeneous. By knowing the results of the homogeneity of the posttest, the authors conclude that the population of the two groups are not homogenous, so that it can be calculated using Non-Parametric Tests.

c. Linierity

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
control experiment	* Between Groups	(Combined)	2778.105	18	154.339	1.432	.238
		Linearity	71.776	1	71.776	.666	.427
		Deviation from Linearity	2706.329	17	159.196	1.477	.220
	Within Groups		1724.867	16	107.804		
	Total		4502.971	34			

In addition to counting using the normality and homogeneity, the authors also perform calculations using SPSS to determine the significance of linearity obtained. the significance value obtained was 0,427 lower than a predetermined level of significance is 0.05. which proves that the results obtained are not significant.

C. Hypothesis testing

	control - experiment
Z	-3.386[a]
Asymp. Sig. (2-tailed)	.001

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Because the post test scores between the experimental and control groups were found to be abnormal, not homogeneous and nonlinear, the authors performed statistical analyzes using Non-Parametric Tests. Non-Parametric Testing in use is 2 independent samples because in this study using 2 samples as a comparison. Non-Parametric is applied to determine whether there is a significant difference in the experimental and control groups. According to Non-Parametric Test significant value obtained is 0.001. This indicates that there is a significant difference between the control group and the experimental group in achieving post-test results. The null hypothesis (Ho) is rejected and the alternative hypothesis (H1) is accepted. In conclusion, there is a significant difference in students' reading comprehension of descriptive text after being taught using the TPRC strategy.

Ho: There is no significant difference in reading skills understanding between students who take learning to read understanding using strategies TPRC with students who take learning reading comprehension without using TPRC strategy in MTsN Karangrejo rejected.

H1: There is a significant difference in reading comprehension skills Among the students who follow the teaching reading comprehension using strategies TPRC with students who take the learning reading comprehension without using TPRC strategy in MTsN Karangrejo, accepted.

D. Discussion

Of the various calculation can be concluded that there is a difference between a class experiment that taught using TPRC strategy and control classes are taught without using TPRC strategy. A significant result or in other words effective TPRC strategies used in teaching reading comprehension at descriptive text. This is commensurate with the opinions Ruddel (2005: 75-76) states that TPRC strategy had various ease of use. Learning to read by using the strategy will TPRC cultivate students who are enthusiastic, because it is a step predicts. Predicting step will make the race of students to be able to predict the content of reading correctly. TPRC strategy also has a move that will link the concept to build a complete understanding of the content of reading. Students will connect prior knowledge before reading, predictions and predictions about the suitability of the content of reading, and knowledge after reading. Thus, students will have a thorough understanding of the form of activity they do learn. TPRC strategy has steps that can help students in understanding the content of reading, so effectively used in reading comprehension.

Rudell's opinion is also supported by Rajendra (2010: 10) which explains that learning is a productive activity, meaningful, achieving results if students are

actively involved in the material. The art of learning is linking new information with existing knowledge. So the active process of connecting is the involvement of all the initial knowledge in constructing new information representations.

The practice of reading descriptive reading in junior high school using the TPRC strategy. At first many students are confused and difficulty in using this method because it is not so understand let alone in the lesson descriptive text. But when I have explained the procedures and objectives of this TPRC strategy students begin to understand and try to follow the steps on the TPRC strategy. Finally with 3x meetings the students have been able to use the TPRC strategy properly and correctly, the opinion can be proved by their ability to answer the exercise questions that have been given by researchers.