Chapter Four

Findings and Discussion

This chapter will discuss about the answer of the research question which is "How effective are skimming and scanning techniques to improve the reading comprehension ability of students in SMP Muhammadiyah Kasihan?"

The result and discussion of the research are also presented in this chapter. The result are divided into some parts including the analysis of the data including range of pre-test and post-test for experimental and control group, the homogenity, the skewness of the data and the t-test of data. Besides, the discussion explains the relation between the data which has been gotten from the research and the expert argumentation in literature review.

Findings

The researcher used quasi-experimental research to conduct this experiment which was involving two groups. They were experimental group and control group. The experimental group was class 8 A and they got treatment of skimming and scanning techniques and got a lot of text to practice using skimming and scanning techniques. On the other hand, the control group was class 8 E and they were taught by conventional teaching method or more like normal teaching method by gave the students question sheet. The procedures during the experiment are explained as following.

Experimental group condition. The total of the students in class 8 A were 33 students. However, when the researcher gave the pre-test for class A only 31students who did the pre-test. Same as post-test the students who did the post-test only 31, because there were two students who were absent. So, the researcher decided not to put that two people to make the data not bias.

After giving the students pre-test, the researcher gave a treatment for this class. The treatment was held for four times meetings. In here the experimental students were getting input or information about skimming and scanning. Then, the last step was post-test. Post-test were done after pre-test and treatment done. In here the students who took the post-test were not complete; there are only 31 students who did the test but the total of the students were 33.

Finally as the results, there were only 31 students who were joined both pre-test and post-test. The reason there were only 31 students who joined the activities because there are one student who were not joined the pre-test and there was other one person who were not joined the post-test. So, the researcher decided to did not to put those two students in data.

Control group condition. In control group, the researcher used class 8 E. The control group was given pre-test, conventional teaching or normal way of teaching and post-test. The students who attended the pre-test were 30 students out of 30. In here the students got the same questions of pre-test as the experimental.

After giving pre-test, the researcher gave the students sheets of question for them to do. Basically it was only easy questions based on the reading passage. The researcher did these activities with the students for four times of meetings. In here the researcher did not give and input or information about skimming and scanning because this class is using conventional

teaching method.

Post-test was given after four times practiced of reading the passage and answered all of the questions. The post-test that was given were the same as the one for experimental group. The students who participated in this class were 28 students out of 30.The reason of the researcher made the post-test the same as experimental group was because the researcher wanted to compare the results of pre-test and post-test of experimental group and control group.

As the results there were only 31 students who were join the proper test of pre-test and post-test and in experimental group, because the other two people were absent. Then there were only 28 students who joined the proper test.

The analysis of data distribution. In here the researcher used SPSS version 16.0 to find out if there is difference between control group and experimental group. The way to find the results is by finding the range of each group,normality or skweness ,homoginity,t-test and checking the hypothesis.

Mean of pre-test and post-test. In here the researcher find the range of pre-test for experimental group and control group, the researcher also find the mean for post-test for both experimental and control group. The researcher only uses Microsoft excel to find the mean. The reason why the researcher find the mean of pre-test and post-test is to find out what the result for each group.

Table 4.1 in appendix shows the results of every the students in experimental group and control group who join the pre-test in this research. The results that are highlighted are the results of the students who were absent and not joining the pre-test. The mean for experimental group is 8.59375 and the mean for control group is 111.53333333

Table 4.2 in appendix shows the results of every the students in experimental group and control group who join the post-test in this research. The results that are highlighted are the results of the students who were absent and not joining the post-test. The mean for experimental group is 9.21875and the mean for control group is 7.3.

Skewenesses. The skewness of the data was needed to be checked because the samples should be checked if the distribution of every variable in the data was normally distributed. Therefore, the normality of the data could be checked by using skewenesses in SPSS. Thus, the table below showed the result of the normality of the data. For the rest of the table it can be seen in appendix.

Table 4.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Pre Experimental Group	32	0	14	8.59	3.546	-.466	.414	-.124	.809
Valid N (listwise)	32								

For skewness if the data is < -1.96 it means that the data is valid. On the other hand if the data is > -1.96 it means that the data is not valid. Where the table above shows if the results of skeweness is -.466 it means that the data is valid.

Homogeneity. In this research the research use ANOVA to calculate the normality test and linearity test were done. The researcher also calculated using parametric statistics which required homogeneity of the research. Homogeneity means the samples of the research come from the same variance or have same characteristics. Thus, on the table below showed the homogeneity of variances that was analyzed by using ANOVA. The entire table is attaching in appendix.

Table 4.2ANOVA

Pre Experimental Group

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	231.852	11	21.077	2.670	.027
Within Groups	157.867	20	7.893		
Total	389.719	31			

On the table 4.2 above, the data showed that F value 2.670 withdf 31 and significant was 0.027. As stated by Sugiyono (2015), if the significant above got score > 0, 05 then, the data was homogeny. It means that the data was significant because 0,027> 0, 05. It could be assumed that the data of the research was homogeny.

Table 4.3 Paired Samples Test

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pai r 1 Pre Experimental Group - Post Experimental Group	-.625	3.087	.546	-1.738	.488	-1.14 5	31	.261

The hypothesis testing, it could be calculated by two ways which are first by reviewing the Sig. (2-tailed) value which required the significant of the data and second by reviewing the t-value which required the hypothesis in this research is accepted or rejected. Thus, the detail is described as followings.

Firstly, the hypothesis could be checked by analyzing the p value of Sig. (2-tailed). The requirements are if Sig. (2-tailed) is lower than 0, 05 (Sig. < 0, 05), then the data were significant. The result showed that the Sig. value is 0,261. It showed that Sig. (2-tailed) was 0,261 and 0,261 which was higher than 0, 05. It means that this research was not significant. Therefore, the Null Hypothesis (H0) is accepted and the Alternative Hypothesis (H1) is rejected.

Secondly, the table of Independent Sample T-test could show that the hypothesis of the research is accepted or rejected. It could be analyzed by observing the t-value. The requirements are if t-value is higher that t-table (t-value >t-table), then the Alternative Hypothesis (H1) is accepted and Null Hypothesis (H0) is rejected. Based on the table 4.6above, the result of t-value was -1.145. Whereas t-table for df was 31 with (2-tailed) test is 1.697. It means that t-value is lower than t-table (-1.145 < 1.697). Because of t-value was higher than t-table, so it could be calculated that there is no significant different between experimental group and control group. Thus, the decision of Alternative

Hypothesis (H1) is rejected and Null Hypothesis is accepted. The research question is then answered that is reading techniques of skimming and scanning there no significant difference for the students at SMP Muhammadiyah Kasihan.

Table 4.5Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre Control Group - Post Control Group	3.741	3.986	.705	2.304	5.178	5.309	31	.000

Moreover, for the hypothesis testing, it could be calculated by two ways which are first by reviewing the Sig. (2-tailed) value which required the significant of the data and second by reviewing the *t*-value which required the hypothesis in this research is accepted or rejected. Thus, the detail is described as followings.

Firstly, the hypothesis could be checked by analyzing the p value of Sig. (2-tailed). The requirements are if Sig. (2-tailed) is lower than 0,05 (Sig. < 0,05),then the data were significant. The result showed that the Sig. value is 0,000. It showed that Sig. (2-tailed) was 0,000 and 0,000 which was less than 0,05. It means that this research was significant. Therefore, the Null Hypothesis (H0) is rejected and the Alternative Hypothesis (H1) is accepted which indicated that using skimming and scanning as media in reading ability.

Secondly, the table of Independent Sample T-test could show that the hypothesis of the

research is accepted or rejected. It could be analyzed by observing the *t*-value 1.697. The requirements are if *t*-value is higher that *t*-table (*t*-value >*t*-table), then the Alternative Hypothesis (H1) is accepted and Null Hypothesis (H0) is rejected. Based on the table 4.6 above, the result of *t*-value was 5.309. Whereas *t*-table for df was 31 with (2-tailed) test is 1.697. It means that *t*-value is higher than *t*-table (4,994 > 2,042). Because of *t*-value was higher than *t*-table, so it could be calculated that there is a significant different between experimental group and control group. Thus, the decision of Alternative Hypothesis (H1) is accepted and Null Hypothesis is rejected. The research question is then not answer the research question of this research.

Discussion

   The effect of skimming and scanning. The answer of from the research question was there is no effect of reading techniques to develop reading ability in SMP Muhammadiyah Kasihan. It means that alternative hypothesis (H1) was rejected;it means reading techniques are not effective to improve the reading comprehension ability of students in SMP Muhammadiyah Kasihan. On the other hand, where null hypothesis (H0) was accepted, which is there is effective of reading techniques are effective to improve the reading comprehension ability of students in SMP Muhammadiyah Kasihan.

      According to Cohen,Manion, Morrison (2007) "the researcher has to decide what an appropriate length of time is; too short a time and respondents may remember what they said or did in the first tests situation, too long a time and there may be extraneous effects operating to

distort the data (for example, maturation in students, outside influences on the students)" (p.117).The meaning of the statement above is time and other factors also effect the results of the research. In this research the results is the hypothesis null (H0) was accepted rather than hypothesis alternative (H1) because the time of treatment that was given by the researcher was too short for the students. If the treatment was given more than four times it might be the hypothesis alternative (H1) is accepted. In addition, the results of this research might be significant if the experiment holds in difference setting such as do this researcher by doing questionnaire, do it in senior high school rather than junior high school and do more treatment time.