



Chapter IV

RESEARCH FINDINGS AND DISCUSSIONS

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

4.1. Data

The population in this research was ninth grade junior high school students with the determination of the sample of this research in two groups consisting of 18 students. Data was taken from the results of the listening test. For the research design of this thesis is quasi experimental which is divided into two classes, namely the control class and the experimental class. Both control and experimental classes were instructed to answer the same test on listening. The test given totalled 10 questions, the type of test was multiple choice. The total pre-test and post-test scores are shown in table 4.1 below:

4.1.1 Data of Control Class

The control class students of SMP HKBP Pardamean. The ninth grade students consisted of 18 students who were taught using conventional methods. This data can be seen in the table below:

Table 4.1 Students' Score of Control Class

No.	Students	Pre-test	Post-test	Gained score
1	RDN	40	80	40
2	GRS	30	70	40
3	OVN	20	60	40
4	AGN	50	80	30
5	NVA	60	90	30
6	MTS	50	80	30

7	SYO	60	70	10
8	RMA	50	70	20
9	EJL	50	90	40
10	GIO	40	70	30
11	JRI	50	70	20
12	SMN	60	80	20
13	HSN	60	80	20
14	LOS	60	90	30
15	FNO	50	80	30
16	VNN	50	70	20
17	JNI	40	80	40
18	DSL	40	70	30
	Total	860	1.380	520
	Mean	47.77	76.66	28.88

The data show the scores of 18 students class IX-B. With an average in the pre-test of 47.77 where the lowest score was 20 and the highest score was 60. In the post-test the average score was 76.66 where the lowest score was 60 and the highest was 90. Finally, the average score in the gain score was 28.88 with the lowest difference in score being 10 and the highest difference being 40. This means that the pre-test and post-test scores in the control class are different.

4.1.2 Data of Experimental Class.

The experimental class was class IX-A students from SMP HKBP Pardamean. Class IX-A students consist of 18 students who are taught using the listening test. Data collected from students through pre-test and pot-test. Data can be seen in the table below:

Table 4.1.2 Students' Score of Experimental Class

No.	Students	Pre-test	Post-test	Gained score
1	JNA	50	80	30
2	DVI	70	90	20
3	LDA	70	100	30
4	ANI	70	90	20
5	ARA	60	90	30
6	BIO	50	80	30
7	SML	50	90	40
8	SUL	50	90	40
9	RSA	80	100	20
10	IDR	70	80	10
11	BYN	70	90	20
12	CLS	60	90	30
13	ONL	40	70	20
14	CTA	70	80	10
15	TTY	50	80	30
16	DDA	70	100	30

17	ANS	70	90	20
18	AMG	50	90	40
	Total	1.110	1.580	470
	Mean	61.66	87.77	26.11

The data shows the scores of 18 students in class IX-A. The average pre-test score is 61.66 with the lowest score on the pre-test being 40 and the highest score being 80. The post-test score with the average being 87.77 with the lowest score 70 and the highest score is 100. On the Gain score the average value is 26.11 with the difference in the lowest score being 10 and the difference in the highest score being 40. It can be seen that there is a difference between the pre-test and post-test in the experimental class.

4.2 Score Analysis

The data were analyzed by calculating the mean of students score and deviation, to find out whether the use of tiktok application affects student's listening skill. The data were obtained and gave them listening test to the students in order to know their listening skill. It was calculated by using scores of listening test in both of control and experimental class. The analysis was intended to get the significance difference between teaching by using tiktok application and conventional method to affect student's listening skill here the research had already done the research for both classes and found the result of pre-test and post-test. In experimental class, so do for the control class from the data above, the research got the mean score of control class in pre-test was 47.77 and the mean score of post-test was 76.66. While the mean score of experimental class in pre-test was 61.66 and post test was 87.77.

4.3 The Fulfillment of Statistical Assumptions

The fulfillment of statistical assumptions consisted of the test of reliability, validity, normality and homogeneity of the students' scores.

4.3.1 Result of Validity and Reliability

The validity and reliability of the test were calculated using SPSS Alpha Cronbach. If the Alpha result is > 0.497 then it is declared valid, whereas if < 0.497 it is said to be invalid. In terms of reliability, if the reliability value is > 0.60 , it is said to be reliable, but if the results obtained are < 0.60 , it is said to be invalid. The researcher uses SPSS 25 to determine whether the data is valid or reliable. Validity uses item – total correlation formulation.

4.3.2 Validity

The researcher used multiple choice to measure students' listening skill . The validity test uses SPSS 25. The validity test table can be seen below:

Table 4.3.2 The Result of Validity

No	r_{count}	r_{table}	Description
1	.421	0.497	Invalid
2	.692	0.497	Valid
3	.413	0.497	Invalid
4	.371	0.497	Invalid
5	.811	0.497	Valid
6	.441	0.497	Invalid
7	.597	0.497	Valid
8	.524	0.497	Valid

9	.592	0.497	Valid
10	.568	0.497	Valid

R table is one of the important references in statistical science that is used to conduct validity tests on research data. This is done to ensure the validity of the data you use in your research. R Table is a table of numbers used to test various possible results of research data validity. The majority of statistics text books use criteria for these tests at two levels, namely referring to ($df = n - 2$). N means the number of students, in class IX students there are 18 students which means ($N-2$ is $18-2 = 16$) then the r-table on this validity is 0.497 if the results obtained are > 0.497 then it is declared valid and vice versa, if the results obtained < 0.497 then declared invalid.

4.3.3 Reliability

The researcher also used SPSS 25 to find out whether the data that had been tested was reliable or not. The results of reliability using SPSS 25 can be seen in the table below:

Cronbach's Alpha ^a	N of Items
.742	10

From the result of reliability, if $r \text{ count} > r \text{ table}$ so the instrument of test was reliable. But, if $r \text{ count} < r \text{ table}$ the instrument of the test unreliable. So, from the result above, $r \text{ count } 0.742 > 0.497$ so the instrument was reliable

4.4. Result of Normality and Homogeneity Test

4.4.1 The Normality Test

Normality test is carried out before calculating the t-test. This was done to find out whether the data from the two classes, namely the pre-test and post-test, were normally distributed or not. In normality, the researcher also uses the SPSS application to find the data. The normality results can be seen in the table below:

Respondents	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test Experimental	.290	30	.125	.844	30	.131
Post-Test Experimental	.267	30	.069	.870	30	.060
Pre-Test Control Class	.169	30	.077	.949	30	.087
Post-Test Control Class	.184	30	.059	.915	30	.093

4.4.2 The Homogeneity Test

After carrying out the normality test, the next step is for the writer to test homogeneity. The researcher uses SPSS 25 with a statistical level table. The normality results can be seen in the table below:

Test of Homogeneity of Variances

x

Levene Statistic	df1	df2	Sig.
2.042	3	115	.112

4.5 Hypotheses Testing

After carrying out the normality and homogeneity tests, the researcher proceeded to test the hypothesis. The hypothesis is tested using the test scores on the control post-test and the experimental post-test which are then calculated using the SPSS 25 application. Next, we will look at the significant value or alpha of 5% or 0.05. The results of the hypothesis can be seen in the table below:

Table 4.5 T- Test Result of Post Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	post control	76.6667	18	8.40168	1.98030
	post experimental	87.7778	18	8.08452	1.90554

Paired Sample Test							
				t-test for Equality of Means			
		Mean	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)
Pair 1	Pre_testPost_test	-11.11111	13.23493	3.11950	-3.562	17	0.002

In the post-test the average score in the experimental class was 87.77, while in the control class the average score in the post-test was 76.66. From this table it can be seen that there is an influence on the average value in the control and experimental classes. In the paired sample test the results must be <0.05 . In the paired test table the results show $0.002 < 0.05$, which means that there is a significant effect of the TikTok Application On Students' Listening Skill

4.6 Research Finding

The researcher found results from class IX students where IX-B was the control class and IX-A was the experimental class. Students with IX A who use the tiktok application in listening skill are called the experimental class and ix B use the conventional method or what is called the control class. Between the two, there are significant differences, especially after the researcher applied the tiktok application to students. This can be seen from the scores obtained from the pre-test in the control and experimental classes and after applying the tiktok application which was compared with applying the conventional method.

The scores in the experimental class that effect the tiktok application were higher than those that didn't. It can also be seen from the control and experimental class tables, where the control data shows an average in the pre-test of 47.77 where the lowest score was 20 and the highest score was 60. In the post-test the average score was 76.66 where the lowest score was 60 and the highest was 90. In the experimental class the data shows an average pre-test score of 61.66 with the lowest score on the pre-test being 40 and the highest score being 80. The average score on the post-test is 87.77 with the lowest score being 70 and the highest score being 100. So you can it can be seen that there is a significant difference in the use of tiktok application.

4.7 Discussion

From the data that has been analyzed, the aim of this research is to find out the effect of tiktok application on students' listening skill of Grade IX students of SMP HKBP Pardamean. In this research the method, the researcher gave two tests to students. The first test was the pre-test and the second test was the post-test. In the control class during the pre-test students were not given any methods and during the post-test students were only taught to use conventional method while in the experimental class in the pre-test students were also not given any techniques and during the post-test students were given method in the form of tiktok application. Class IX students each consist of 18 students where the results of the pre-test and post-test controls and experiments would later be calculated using the SPSS 25 application.

The discussion of data confirmed that teaching and learning listening skill by using tiktok application has medium effect in students' listening skill. It was shown the tiktok application had the effect on students' listening skill it have been seen that is scored better than the students' who did not have the treatment of tiktok application. For addition, teaching listening by using tiktok application showed a positive effect to be implemented for students especially for the ninth-grade students' of SMP HKBP Pardamean.