CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

This chapter explains the data got by the researcher in several days and discusses the findings. It is described systematically from the presentation of data, data test scores, and documentation which is continued by explaining the validity and reliability of instruments used in collecting of research findings

A. Research Findings

Before the researcher answer the research problem, the researcher must present the data have been collected during the research process at the 8th grades of A class and B class of Mts. Ziyadatut Taqwa Tlanakan to know the result of this research. The research collects the data on Tuesday, 9th July 2024. The data related to independent and dependent variable. The presentation of data includes the data presentation of test and documentation.

The presentation of data will be started with data presentation of test because test is as main instrument of this research to measure student vocabulary mastery by using Google translate and without using Google translate. The test is multiple choices test and the data will be analysed by using t-test independent formula. Then it will be continued by determining the validity and reliability of test.

1. **Data Presentation of Test**

   The researcher ask permission to head master on Monday, 8th July 2024. After that on Tuesday, 9th July 2024, the researcher gave the test as pre-test for 8th grades of A class and B class at 10.00-11.30 AM, and on Thursday, 11th July 2024 , the researcher gave treatment of using Google translate to both class it is 8th grades A and B class. After that, on Monday, 15th July 2024 the researcher gave the test as post-test at 8.00-9.30 AM. The test is multiple choices which consists of twenty question items about vocabulary. The researcher give 5 score if answer is corrected and get 0 score if answer is wrong. If the students can answer the questions correctly they get a score of 100. The researcher gave ninety minutes. The test is given to measure students vocabulary mastery by Google translate application from the score of the test.

   a. **Data Presentation of Pre-Test**

      Below are the score pre-test of 8th graders of A class and B class of MTS. Ziyadatut-taqwa Tlanakan as follows:

Table 4.1 Score Pre-test of A Class

No	Nama	Nilai
1	Abelatus Solehah	95
2	Ainul Mustaqillah	80
3	Amelinda	90
4	Asfiatul Karomah	85
5	Aulia Nafis Syakirah	100

6	Diana Amanda	80
7	Farida Ayu Wulandari	95
8	Firda Lailatul Fitriyah	90
9	Gilang Wahyudi	85
10	Ifki Fauzi	90
11	Kholifatul Lailiyah	100
12	Mahbubah Subairi	85
13	Maulidia	80
14	Moh. Hasan Basri	90
15	Moh. Noer Arief	90
16	Nailatur Rohmah	90
17	Nur Indah Laili	80
18	St. Fatimatus Zahrah	100
19	Suhaimah	90
20	Zainuri	95
Total of Scores		**1790**

Based on the table above, the total t-test student vocabulary mastery on 8th graders of A class is 1790 scores without giving the treatment. From the table above, there are many various score. In the test, the highest score of the item are 100 and the lowest score is 80.

Table 4.2 Score Pre-test of B Class

No	Name	Score
1	Ahmad Fariz Arkan	50
2	Adelia Novita	55
3	Agustin Ramdani	60
4	Atin Sakinah	65
5	Febri	40
6	Dika Hendra Saputra	50
7	Imroatul Hasanah	70
8	Irfan Syaris Akbar	50
9	Kurrainita Istifara	60
10	Maulidya Alfaturrohmah	55
11	Masruroh	50
12	Meylina Putri	60
13	Moh. Arifin Ari Wiksa	45
14	Moh. Sabilillah	30
15	Nurul Fadilah	40
16	Qodir	20
17	Riko Agustin	35
18	Ra'ie	35
19	Yudiawan	40
20	Zahrotul Nihayah	60
	Total of Scores	**970**

Based on the table above, the total t-test student vocabulary mastery on 8th graders of B class is 970 scores without giving the

treatment. From the table above, there are many various score. In the test, the highest score of the item are 65 and the lowest score is 20.

b. **Data Presentation of Treatment**

In this section, the researcher provides treatment after the pre-test. However, before carrying out the treatment, the researcher had decided which class would be given treatment after carrying out data collection instruments between the experimental class, namely 8th of A class and the control class, namely 8th of B class. Where, the experimental class (8th graders of A class) treated with vocabulary teaching techniques using the Google Translate application and the control class (8th graders of B class) used normal treatment or without using the Google Translate application.

During the treatment in the experimental class, the researcher asked students to form several groups, then the researcher gave them a short text containing news. The researcher asked students to read carefully for 15 minutes the contents of the news. After that, the researcher asked students to write down words that were foreign to them. In the treatment, researchers also explained to students how to use or find the meaning of vocabulary they were not familiar with, and examples of word usage and word spelling using the Google Translate application. The experimental class used the Google Translate application when carrying out treatment and conducting post-tests. Meanwhile, the control class, when doing the pre-test, used a manual

dictionary and when doing the treatment and post-test, they used the Google Translate application. Researchers provided treatment in 2 meetings.

c. **Data Presentation of Post-Test**

Below are the scores post-test of 8th graders of A class and B class of MTS. Ziyadatut-taqwa Tlanakan as follows:

Table 4.3 Score Post-test of A Class

No	Nama	Nilai
1	Abelatus Solehah	100
2	Ainul Mustaqillah	90
3	Amelinda	90
4	Asfiatul Karomah	90
5	Aulia Nafis Syakirah	100
6	Diana Amanda	100
7	Farida Ayu Wulandari	90
8	Firda Lailatul Fitriyah	90
9	Gilang Wahyudi	100
10	Ifki Fauzi	95
11	Kholifatul Lailiyah	100
12	Mahbubah Subairi	85
13	Maulidia	90
14	Moh. Hasan Basri	95
15	Moh. Noer Arief	100
16	Nailatur Rohmah	90

17	Nur Indah Laili	90
18	St. Fatimatus Zahrah	100
19	Suhaimah	95
20	Zainuri	100
Total of Scores		**1890**

Based on the table above, the total t-test student vocabulary mastery on 8th graders of A class is 1890 scores after giving the treatment. From the table above, there are many various score. In the test, the highest score of the item are 100 and the lowest score is 85.

Table 4.4 Score Post-test of B Class

No	Name	Score
1	Ahmad Fariz Arkan	85
2	Adelia Novita	90
3	Agustin Ramdani	100
4	Atin Sakinah	90
5	Febri	90
6	Dika Hendra Saputra	80
7	Imroatul Hasanah	100
8	Irfan Syaris Akbar	85
9	Kurrainita Istifara	100
10	Maulidya Alfaturrohmah	90
11	Masruroh	90
12	Meylina Putri	80

13	Moh. Arifin Ari Wiksa	90
14	Moh. Sabilillah	100
15	Nurul Fadilah	80
16	Qodir	90
17	Riko Agustin	95
18	Ra'ie	80
19	Yudiawan	80
20	Zahrotul Nihayah	100
Total of Scores		**1795**

Based on the table above, the total t-test student vocabulary mastery is 1795 scores after giving the treatment. From the table above, there are many various score. In the test, the highest score of the item are 80 and the lowest score is 100.

d. **Validity of Test**

Validity test is used to test the extent the accuracy of the tool measure whether or not a questionnaire is valid, for a questionnaire can be said to be valid if a statement or the items on the questionnaire are able to reveal something to be measured to the questionnaire. To test validity test, the researcher used SPSS 20. In the validity test is calculated by compared t_{value} with t_{table}. If $t_{value} > t_{table}$ with a significance level of 0,05 or 5%, the indicator of the variable the research can be said valid. Furthermore, if $t_{value} < t_{table}$, then the indicator of the variable can be said invalid.

The researcher will present the coefficient value of correlation "r" product moment, that is:

Table 4.5 Table of Coefficient Value of Correlation "r" Product Moment

	The distribution value r_{table}
Significance	5%
N	38
r-table	0,312

The following is a table of validity test result by using SPSS 20 application:

Table 4.6 Results of Validity Test of Pre-test with SPSS

Question Items	Validity
Question 1	0,659
Question 2	0,550
Question 3	0,564
Question 4	0,560
Question 5	0,422
Question 6	0,498

Question 7	0,715
Question 8	0,529
Question 9	0,468
Question 10	0,511
Question 11	0,394
Question 12	0,476
Question 13	0,591
Question 14	0,354
Question 15	0,452
Question 16	0,468
Question 17	0,352
Question 18	0,599
Question 19	0,399
Question 20	0,379

Based on the table above showed that all t_{value} for questionnaire question items on the research variable used to produce t_{value} is higher then t_{table}. Its mean that, the test of pre-test in this research is valid.

Table 4.7 Results of Validity Test of Post-test with SPSS

Question Items	Validity
Question 1	0,456
Question 2	0,384
Question 3	0,435
Question 4	0,930
Question 5	0,598
Question 6	0,498
Question 7	0,493
Question 8	0,618
Question 9	0,341
Question 10	0,314
Question 11	0,466
Question 12	0,516
Question 13	0,395
Question 14	0,382
Question 15	0,493

Question 16	0,394
Question 17	0,383
Question 18	0,314
Question 19	0,490
Question 20	0,366

Based on the table above showed that all t_{value} for questionnaire question items on the research variable used to produced t_{value} is higher the t_{table}. Its mean that, the test of post-test in this research is valid.

e. **Reliability of Test**

Reliability is also needed in this researcher to measure whether the tests are reliable or not. A good test must be both valid and reliable. So after checking the validity, the researcher should measure the reliability. In this research, the researcher uses Kuder-Richardson 21 (K-R 21) formula by using SPSS 20 application. The researcher consulted the value of K-R 21 reliability in category of coefficient by Cronbach's Alpha. According Cronbach's Alpha, the basis for making decisions in the reliability test are as follows: first, if Cronbach's Alpha value > 0.60 then the test is declared reliable, and second, if Cronbach's

Alpha value < 0.60 then the test is declared unreliable.[52] The result of

computing of reliability by using SPSS 20 follow:

Table 4.8 Result of Reliability Test of Pre-test

Reliability Statistics	
Cronbach's Alpha	N of Items
,826	20

Based on the table above showed that $t_{value} > t_{table}$ it is 0,826

> 0,60. Its mean that, all items the test of pre-test is reliable.

Table 4.9 Result of Reliability Test of Post-test

Reliability Statistics	
Cronbach's Alpha	N of Items
,723	20

Based on the table above showed that $t_{value} > t_{table}$ it is 0,723>

0,60. Its mean that, all items the test of pre-test is reliable.

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[52] Dr. Marjoni Rachman and ahmad Jubaedi, "Analisis Faktor-Faktor Yang Mempengaruhi Kinerja Karyawan," n.d.

f. Normality of Test

Normality test is important because to assess the distribution of data in a group of data or variables, whether the distribution of the data is normally distributed or not. There are two types of normality test, first is Kolmogrov, which is for large samples > 50, and second is Shapiro-Wilk, which is for small samples < 50. In normality test for normal decision making, there is a test, if the probably value or significance > 0,05, it means that the data is normally distributed, but if the probably value or significance < 0,05, it means that the data is not normally distributed.[53] Below is a table of normality test:

		Tests of Normality					
	Kelas	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Kosa Kata	Pre-test Experiment (Using GT)	.180	20	.089	.906	20	.154
	Post-test (Using GT)	.261	20	.001	.802	20	.231
	Pre-test Control (Not using GT)	.147	20	.200*	.967	20	.700
	Post-test Control (Not Using GT)	.187	20	.066	.861	20	.118
*. This is a lower bound of the true significance.							
a. Lilliefors Significance Correction							

[53] "Memahami Uji Normalitas Dalam Model Regresi," accounting.binus.ac.id, *Https://Accounting.Binus.Ac.Id/2021/08/06/Memahami-Uji-Normalitas-Dalam-Model-Regresi/* (blog), June 8, 2021.

The researcher used the basis for making the decision on the normality test from Shapiro-Wilk because the sample was < 50, and probably value $> 0,05$. The result of Pre-test experiment using Google Translate is 0,154. Post-test experiment using Google translate is 0,231. Pre-test control not using Google translate is 0,700, and post-test control not using Google translate is 0,118. From the table above the sig value in Shapiro-Wilk is higher than sig table is 0,05. Its means that the test is normal.

g. **Homogeneity of Test**

In quantitative research, the homogeneity test is only used in parametric tests that test the differences between the two groups or groups with different subjects or data sources, where the homogeneity test is used to find out whether the variance of several populations is the same or not. In this research, there are two groups, namely the 8th graders of A class and 8th graders of B class. The basis for making decisions on the homogeneity test are, if the significance value is $< 0,05$, it is said that the variance of two or more data population groups is not the same. But, if the significance value is $> 0,05$, then it is said that the variance of two or more data population groups is the same.

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Hasil Kosa Kata	Based on Mean	1.298	1	38	.262
	Based on Median	1.167	1	38	.287
	Based on Median and with adjusted df	1.167	1	27.288	.289
	Based on trimmed mean	1.352	1	38	.252

The result of homogeneity test of variance of Experiment class and control class is higher than the concept of homogeneity is 0,05. Based on the table above showed that sig value > sig table. Its means that the variance of two or more data population groups is the same and homogeneous.

2. **Data Analysis**

After checking the validity and reliability test, the researcher analysed the vocabulary mastery using SPSS 20 application in the independent t-test formula to measure vocabulary mastery students who using Google translate and not using Google translate. Below is a table of independent t-test results:

Table 4.10 Analysis the Data of Independent t-test

Group Statistics					
Class		N	Mean	Std. Deviation	Std. Error Mean
Vocabulary	Post_Experiment	20	94,50	5,104	1,141
	Post_Control	20	89,75	7,518	1,681

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
								95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Vocabulary	Equal variances assumed	1,298	,262	2,338	38	,000	4,750	2,032	,637	8,863
	Equal variances not assumed			2,338	33,448	,000	4,750	2,032	,618	8,882

B. Hypothesis Testing

In quantitative research, hypothesis testing is important to know whether the alternative hypothesis (Ha) or null hypothesis (Ho) is accepted or rejected. To prove it the researcher need to consult the t value to t table. If the sig value < sig table, its mean that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. While the sig value > sig table, its means that the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected. Sig table is 0,05.

In the independent t-test show a sig value. (2-tailed) is 0.000, that is 000 < 0,05. Its mean that there is a significant different on vocabulary mastery of 8th graders students who using the Google Translate application and those who do not used. In other words, Ha is accepted and Ho is rejected. Finally the researcher concluded that there is significant different the effect Google translate application on the 8th graders vocabulary mastery in Mts. Ziyadatut-taqwa Tlanakan.

C. Discussion

This step presents the answer of the research problem. The research was to find out one research problem. It is to find out significant different in vocabulary mastery between the 8th graders who study vocabulary using Google Translate and 8th graders who study vocabulary not using Google Translate in Mts. Ziyadatut-taqwa Tlanakan. To answer this research problem, the researcher has to analyze the data applying the independent t-test formula that was determined to analyze the data.

The research results showed that sig value is 0,000 and sig table is 0,05 with degree of freedom (df) 38. Its mean that showed that sig value is smaller than sig table (0,000 < 0,05). Its mean that there is a significant different in vocabulary mastery between the 8th graders who study vocabulary using Google Translate and 8th graders who study vocabulary not using Google Translate in Mts. Ziyadatut-taqwa Tlanakan.

Google translate is used as a tool to translate vocabulary in material taught to students. Google translate is a solution for dealing with foreign languages

(English) such as in learning activities. In learning activities, its use can make it easier for students to master vocabulary better, correct small spelling errors, and use sentence structures better. Using Google Translate also helps students speed up vocabulary mastery, because it can be used directly and practically, without the need to use a manual dictionary, which shows that using Google Translate as a learning medium can improve vocabulary mastery. Apart from that, Google Translate also allows its users to learn the pronunciation of students' vocabulary.

This research is in line with research conducted by Lailatul Fadilah which states that there are differences between students who use Google Translate and those who do not use Google Translate in mastering vocabulary.[54] Another similar research was conducted by Milda Ningih Samir, Muhammad Basri and Andi Muliati which stated that the use of Google Translate had a positive influence on students in mastering English vocabulary.[55]

Based on data analysis using independent t-test formula that the researcher did, the researcher can find out that the students 8th who using Google translate have better than students 8th who not using Google translate on vocabulary mastery in Mts. Ziyadatut-taqwa Tlanakan. So the alternative hypothesis (Ha) is accepted, there is a significant difference between students 8th grades who

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[54] Fadilah, "The Effect of Google Translate Application on the 8th Graders Vocabulary Mastery in SMPN 2 Larangan."

[55] Ningsih Samir, Basri, and Muliati M, "The Effect of Google Translate Application English Vocabulary Mastery of High School Students."

study vocabulary using Google translate and students 8th grades who study

vocabulary not using Google translate in Mts. Ziyadatut-taqwa Tlanakan.