

CHAPTER IV

RESEARCH FINDING

In this chapter, the researcher presented some findings dealing with the collected data of students' Self Efficacy, Language Awareness and their Speaking Achievement. This chapter covered the description of data, data interpretation and hypothesis testing.

A. Research Finding

1. The Description of Data

The description of the data were described by providing numbers and tables. The researcher distributed Self Efficacy (X_1), Language Awareness (X_2) Questionnaires and also conducted speaking test (Y) to 40 students of 11th grade of MA AT-THOHIRIYAH Ngantru. It was done in order obtain the necessary data related those three variables. The data was presented using statistical computation SPSS 22.0 as the mean raw score in order to avoid the slightest mistakes so that the result could be closer to the truth and the description of the data as following result:

a. Students' Academic Self Efficacy through questionnaire scores

The data obtained from the students' self-efficacy questionnaire, modified from self-efficacy questionnaire made by Alavi, Sadighi & Samani (2004) and a self-confidence questionnaire (SCQ) which was developed by Akin (2007) and used in some studies (Gurler, 2013; Ucar and Duy, 2013). The questionnaire has twenty questions for the learners to indicate their beliefs regarding their

speaking abilities, which may be divided into five sub skills: pronunciation, comprehension, fluency, grammar, and vocabulary. With the form of statement, students were asked to fulfill the questionnaire by choosing and the answer related to their agreement. The researcher provided 5 options for each statement.

Table 4.1 Data of Students' Self Efficacy (X1), Language Awareness (X2) and Speaking Achievement (Y) of 11th grade Students of MA At-Thohiriyah

No.	Respondents	Total score of Self Efficacy (X1)	Total score of Language Awareness (X2)	Total score of Speaking Achievement (Y)
1.	AR	82	51	83
2.	AKN	86	88	83
3.	AP	87	88	79
4.	AL	80	86	90
5.	BA	85	76	80
6.	EW	87	80	84
7.	IWB	78	91	88
8.	JL	95	94	91
9.	KH	77	67	77
10.	KW	80	99	77
11.	BT	96	89	90
12.	HR	90	52	82
13.	HS	83	72	85
14.	IM	80	81	79
15.	SF	81	85	86
16.	TH	85	97	85
17.	NV	73	80	79
18.	RS	94	79	86
19.	ST	79	71	85
20.	WL	99	84	81
21.	FQ	73	82	90
22.	AMR	79	80	86
23.	APR	71	84	85
24.	AR	89	70	90
25.	DN	74	67	78
26.	EM	91	79	92
27.	FSK	70	78	78
28.	IK	71	70	79
29.	ILM	74	73	79
30.	IRZ	80	70	78
31.	AR	76	63	80

32.	FM	72	72	79
33.	ZF	72	79	81
34.	FT	76	62	80
35.	RZQ	81	89	78
36.	NK	82	61	84
37.	NA	81	89	85
38.	PN	82	78	88
39.	SF	54	61	79
40.	WA	72	59	88

The researcher calculated the score of data to find out how far the students' academic self-efficacy. Then, the researcher showed the formulas to calculate the academic self-efficacy questionnaire that classified into quantitative score as follows:

- 1) Score 5, for item really very agree
- 2) Score 4, for item really agree
- 3) Score 3, for item kind of moderate
- 4) Score 2, for item kind of disagree
- 5) Score 1, for item really disagree

The data of academic self efficacy score in table 4.1 were computed using SPSS 22.0 and the result were presented in the table of frequency students' academic self efficacy questionnaires table 4.2:

Table 4.2 Percentage Frequency of Students' Self Efficacy

Statistics of Self efficacy

N	Valid	40
	Missing	0

self efficacy scores

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	54.00	1	2.5	2.5

61.00	1	2.5	2.5	5.0
70.00	1	2.5	2.5	7.5
71.00	1	2.5	2.5	10.0
72.00	3	7.5	7.5	17.5
73.00	2	5.0	5.0	22.5
74.00	3	7.5	7.5	30.0
76.00	2	5.0	5.0	35.0
77.00	1	2.5	2.5	37.5
78.00	1	2.5	2.5	40.0
79.00	2	5.0	5.0	45.0
80.00	5	12.5	12.5	57.5
81.00	2	5.0	5.0	62.5
82.00	2	5.0	5.0	67.5
83.00	1	2.5	2.5	70.0
85.00	2	5.0	5.0	75.0
86.00	1	2.5	2.5	77.5
87.00	2	5.0	5.0	82.5
89.00	1	2.5	2.5	85.0
90.00	1	2.5	2.5	87.5
91.00	1	2.5	2.5	90.0
94.00	1	2.5	2.5	92.5
95.00	1	2.5	2.5	95.0
96.00	1	2.5	2.5	97.5
99.00	1	2.5	2.5	100.0
Total	40	100.0	100.0	

In addition, to know the mean score of students' academic self-efficacy data, the researcher used SPSS 22.0 and the result were presented in the descriptive of Self Efficacy score as table 4.3:

Table 4.3 Descriptive Analysis of Academic Self Efficacy Score

	N	Minimum	Maximum	Mean	Std. Deviation
ScoreX1	40	54.00	99.00	79.9500	9.06656
Valid N (listwise)	40				

The table 4.3 showed that, from 40 students administered the questionnaire of academic self-efficacy is obtained minimum score was 54.00, the maximum score was 99.00, the mean score was 79.95. The score was in the level 54-100. The standard deviation was 9.06656. The standard deviation is to measure how

much the variance of the sample.

Moreover, the researcher showed the standard of criteria the students' academic self-efficacy through questionnaire. The aim of the criteria was to know how far the students' self-efficacy of MA AT-THOHIRIYAH Ngantru especially for 11th grade which differ in low, medium or high academic self-efficacy.

Table 4.4 Result of Frequency Distribution of Self Efficacy

No	Category	Range of scores	Frequency	Percentage
1	Very high	85 - 100	12	30%
2	High	69 - 84	26	65%
3	Medium	53 - 68	2	5%
4	Low	37 - 52	0	0%
5	Very low	20 - 36	0	0%
Total			40	100%

Based on the criteria of students' Self Efficacy in table 4.4, the score 20-36, 37-52 indicated a low and very low level for the students' self-efficacy. In this case, none of the 40 students who have a low level of self-efficacy. Then, the score 53-68 indicated a medium level of self-efficacy. There are 2 students in the medium level of self-efficacy. It can be concluded that there are 5% of students have a medium level of self-efficacy. In the level of score 69-84 indicated a high level of self-efficacy there are 26 students, it can be concluded that 65% of students have a high self-efficacy. Next level is the high level that indicated by score 85-100. In this case, there are 12 students who have a high level of self-efficacy. It can be conclude that there are 30% of students have a high level of self-efficacy.

b. Students' Language Awareness through questionnaire scores

Table 4.5 Percentage Frequency of Students' Language Awareness

Statistics of Language Awareness

N	Valid	40
	Missing	0

Language awareness scores

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid51.00	1	2.5	2.5	2.5
52.00	1	2.5	2.5	5.0
57.00	1	2.5	2.5	7.5
59.00	1	2.5	2.5	10.0
61.00	1	2.5	2.5	12.5
62.00	1	2.5	2.5	15.0
63.00	1	2.5	2.5	17.5
67.00	1	2.5	2.5	20.0
70.00	3	7.5	7.5	27.5
71.00	1	2.5	2.5	30.0
72.00	2	5.0	5.0	35.0
73.00	1	2.5	2.5	37.5
76.00	1	2.5	2.5	40.0
78.00	2	5.0	5.0	45.0
79.00	4	10.0	10.0	55.0
80.00	4	10.0	10.0	65.0
81.00	1	2.5	2.5	67.5
82.00	1	2.5	2.5	70.0
84.00	2	5.0	5.0	75.0
85.00	1	2.5	2.5	77.5
86.00	1	2.5	2.5	80.0
88.00	2	5.0	5.0	85.0
89.00	2	5.0	5.0	90.0
91.00	1	2.5	2.5	92.5
94.00	1	2.5	2.5	95.0
97.00	1	2.5	2.5	97.5
99.00	1	2.5	2.5	100.0
Total	40	100.0	100.0	

Table 4.6 Descriptive Analysis of Language Awareness Score

	N	Minimum	Maximum	Mean	Std. Deviation
ScoreX2	40	51.00	99.00	76.8750	11.64471
Valid N (listwise)	40				

The table 4.6 showed that, from 40 students administered the questionnaire of language awareness is obtained minimum score was 51.00, the maximum score was 99.00, the mean score was 76.8750. The score was in the level 51-100. The standard deviation was 11.64471. The standard deviation is to measure how much the variance of the sample.

Moreover, the researcher showed the standard of criteria the students' language awareness through questionnaire. The aim of the criteria was to know how far the students' language awareness of MA AT-THOHIRIYAH, Ngantru especially for 11th grade which differ in low, medium or high language awareness.

Table 4.7 Result of Frequency Distribution of Language Awareness

No	Category	Range of scores	Frequency	Percentage
1	Very high	85 - 100	10	25%
2	High	69 - 84	22	55%
3	Medium	53 - 68	6	15%
4	Low	37 - 52	2	5%
5	Very low	20 - 36	0	0.00
Total			40	100%

Based on the criteria of students' language awareness in table 4.6, the score 37-52 indicated low level for the students' language awareness. In this case, there are 2 students or 5% of students who have a low level of language awareness. Then, the score 53-68 indicated medium level for the language awareness. There are 6 students in the medium level of language awareness. It can be concluded that there are 15% of students have a medium level of language awareness. In the level of score 69-84 indicated a high level of

Language Awareness, there are 22 students, it can be concluded that 55% students have a high language awareness. Next level is the high level that indicated by score 85-100. In this case, there are 10 students who have high level of language awareness. It can be conclude that there are 25% of students have a high level of Language Awareness.

c. Students' speaking achievement through speaking test

Table 4.8 Statistics of Speaking Achievement

N	Valid	40
	Missing	0

Scores of Speaking test				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 77.00	2	5.0	5.0	5.0
78.00	4	10.0	10.0	15.0
79.00	8	20.0	20.0	35.0
80.00	4	10.0	10.0	45.0
81.00	2	5.0	5.0	50.0
82.00	1	2.5	2.5	52.5
83.00	2	5.0	5.0	57.5
84.00	2	5.0	5.0	62.5
85.00	4	10.0	10.0	72.5
86.00	2	5.0	5.0	77.5
88.00	3	7.5	7.5	85.0
90.00	3	7.5	7.5	92.5
91.00	1	2.5	2.5	95.0
92.00	1	2.5	2.5	97.5
93.00	1	2.5	2.5	100.0
Total	40	100.0	100.0	

Table 4.9 Descriptive Analysis of Speaking Achievement Score

	N	Minimum	Maximum	Mean	Std. Deviation
ScoreY	40	77.00	93.00	82.9500	4.66273
Valid N (listwise)	40				

The table 4.9 showed that, from 40 students administered the speaking test. The description of speaking achievement score is obtained minimum score

was 77, the maximum score was 93, the mean score was 82.9500. The score was in the level 70-100. The standard deviation was 4.66273. The standard deviation is to measure how much the variance of the sample.

Moreover, the researcher showed the standard of criteria the students' speaking achievement. The aim of the criteria was to know how far the students' language awareness of MA AT-THOHIRIYAH, Ngantru especially for 11th grade which differ in low, medium or high speaking achievement.

Table 4.10 Result of Frequency Distribution of Speaking Achievement

No	Category	Range of scores	Frequency	Percentage
1	Very high	85 - 100	17	25%
2	High	69 - 84	23	55%
3	Moderate	53 - 68	0	0.00
4	Low	37 - 52	0	0.00
5	Very low	20 - 36	0	0.00
Total			40	100%

Based on the criteria of students' speaking achievement in table 4.9, there are 23 students got level of score 69-84, it indicated that 55% of students who have a high level of speaking. Next level is the high level that indicated by score 85-100. In this case, there are 17 students who have a high level of speaking achievement or .about 25% of students who have high level of speaking achievement. It can be conclude that almost students have a high speaking achievement.

2. Test Prerequisite Analysis

This analysis prerequisite test serves to find out whether the data collected has met the requirements to continue testing the hypothesis by using a regression

model. The analysis pre-test consists of: (a) Normality Test; (b) Linear Test; (c) Heteroscedasticity Test; and (d) Multicollinearity Test;

a) Normality test

Table 4.11 Normality of Testing by One-Sample Kolmogorov-Smirnov Test

		X1	X2	Y
N		40	40	40
Normal Parameters ^{a,b}	Mean	80.2500	76.9750	84.4750
	Std. Deviation	8.67578	12.48484	6.22644
Most Extreme Differences	Absolute	.094	.194	.139
	Positive	.091	.089	.139
	Negative	-.094	-.194	-.115
Test Statistic		.094	.194	.139
Asymp. Sig. (2-tailed)		.200 ^{c,d}	.001 ^c	.050 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

The table 4.11 showed the probability number/Asym. Sig. (2- Tailed) for Self Efficacy score is 0.200, bigger than 0.05. Therefore, the data distribution is normal. While the probability number/Asym. Sig. (2-Tailed) for Language Awareness is 0.001, smaller than 0.05. Therefore, the data distribution is not normally. And, the probability number/Asym. Sig. (2- Tailed) for speaking score is 0.050, it is similar than 0.05. Therefore, the data distribution is normal.

b) Linearity test

Table 4.12 Result of Linearity Test by ANOVA

			Sum of Squares	df	Mean Square	F	Sig.
speaking_achievement * self_efficacy	Between Groups	(Combined)	531.900	24	22.162	1.052	.472
		Linearity	238.217	1	238.217	11.308	.004
		Deviation from Linearity	293.683	23	12.769	.606	.864
	Within Groups		316.000	15	21.067		
	Total		847.900	39			

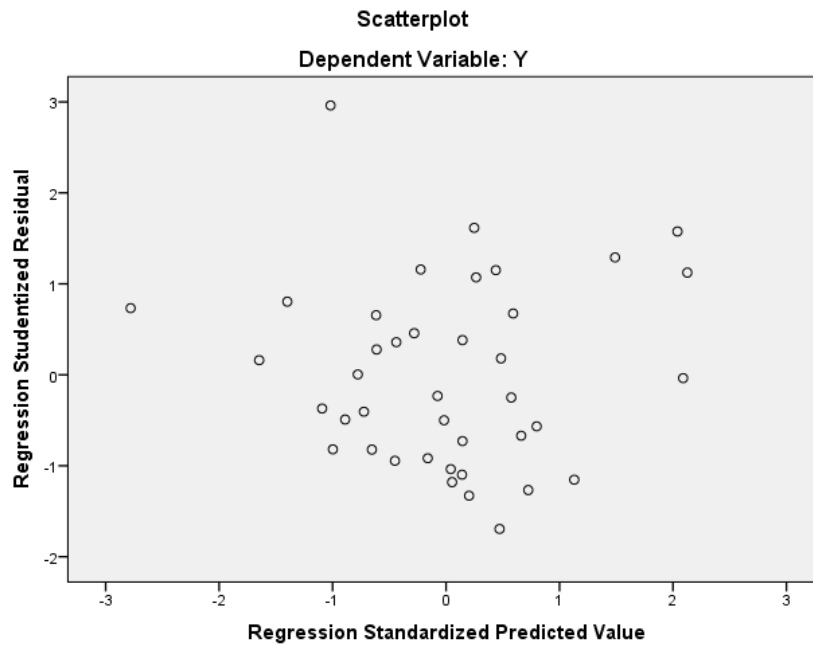
ANOVA Table (language awareness and speaking achievement)

			Sum of Squares	df	Mean Square	F	Sig.
speaking_achievement * language_awareness	Between Groups	(Combined)	446.983	26	17.192	.557	.901
		Linearity	43.160	1	43.160	1.399	.258
		Deviation from Linearity	403.824	25	16.153	.524	.920
	Within Groups		400.917	13	30.840		
	Total		847.900	39			

From the table 4.12, the researcher obtained deviation value from linearity sig. is 0.864 greater than 0.05. It can be concluded that there is a linearity between self efficacy (X_1) and speaking achievement (Y). And the researcher obtained deviation value from linearity sig. is 0.920 greater than 0.05. It can be concluded that there is a linearity between language awareness (X_2) and speaking achievement (Y). From thus results, the researcher concluded that the relationship between the variables are linear.

c) Heteroscedasticity test

Picture 4.1 Result of Scatterplot Diagram



Based on the picture in table 4.13, shows in the scatter plot there are no clear patterns and points spread above and below the number 0 on the X axis and Y. So in this study heteroscedasticity did not occur and passed the heteroscedasticity test.

d) Multicollinearity Test

Table 4.13 Result of Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-8.277	4.531		1.827	.076		
self efficacy	.108	.046	.349	2.317	.026	.976	1.024
language awareness	.056	.043	.195	1.296	.203	.976	1.024

a. Dependent Variable: Abs_RES

From the table 4.14, it can be seen that the test results of VIF <10 and tolerance values above 0.10 with a value of 1.024 <10 and tolerance values of 0.976 > 0.10 do not occur in the case of multicollinearity symptoms, the above data is declared passed the multicollinearity test

The results have shown that, all pre-requisite tests can be fulfilled except the normality test, because one of the variables is not normally distributed. Therefore, in hypothesis testing, non-parametric testing formula is used.

3. Hypothesis Testing

After all scores were classified, then the next step is accounting of the correlation coefficient. To test the hypothesis, the researcher used Spearman correlation technique and multiple regression analysis. The result of correlation of the students' self-efficacy, language awareness and their speaking achievement can be seen as follows:

a. Analysis of Rank Spearman Correlations

Table 4.14 Analysis of Rank Spearman Correlations

			self efficacy	language awareness	speaking achievement
Spearman's rho	self efficacy	Correlation Coefficient	1.000	.686**	.602**
		Sig. (2-tailed)	.	.000	.000
		N	40	40	40
	language awareness	Correlation Coefficient	.686**	1.000	.467**
		Sig. (2-tailed)	.000	.	.002
		N	40	40	40
	speaking achievement	Correlation Coefficient	.602**	.467**	1.000
		Sig. (2-tailed)			
		N			

	Sig. (2-tailed)	.000	.002	.
	N	40	40	40

Based on the interpretation output of rank Spearman correlation in table 4.15, the researcher interprets the output of analysis into three interpretation:

1. Level of strength between variables

Based on the table 4.15, the correlation coefficient figure is 0.602 for self-efficacy and 0.467 for language awareness. Then the researcher looked at correlation interpretation table by Arikunto (see table 3.5 in the previous chapter) to describe the strength of the correlation. From the table 4.15, it can be stated that there is high level of strength (0,600-0,800) between self-efficacy and speaking achievement, and moderate level of strength (0,400-0,600) between language awareness and speaking achievement.

2. Direction of the variable relationship

Based on the table 4.15, the correlation coefficient 0.602 on self-efficacy and correlation coefficient 0.467 on language awareness, this shows a positive value. So that the relationship between the three variables was in the same direction, thus it can be interpreted that the increased level of students' self-efficacy and students' language awareness, then students' speaking achievement will also increase.

3. The significance of variables

Based on the table 4.15, a significant value or sig. (2-tailed) was 0,000 for self-efficacy and 0.002 for language awareness. It means that, sig. (2-tailed) of the two variables smaller than 0.05. It can be interpreted that there is a significant

relationship between self-efficacy and language awareness through students' speaking achievement.

It can be seen from the table above that the correlation between students' self-efficacy score and their speaking achievement score was 0.602. This coefficient was positive in a high level. The data showed on the first null hypothesis of this research, there is no positive correlation between self-efficacy and speaking achievement of 11th grade students' at MA At-Thohiriyah Ngantru was rejected since it was significant at 0.01 level.

The second null hypothesis dealing with the correlation between students' language awareness and their speaking achievement. It was obtained the correlation coefficient 0.467. So, the null hypothesis was rejected and, thus, the alternative hypothesis was accepted. There was correlation between students' language awareness and their speaking achievement.

b. Multiple Regressions Analysis

Table 4.15 Multiple Regressions Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.528 ^a	.279	.240	4.06562	.279	7.148	2	37	.002

Based on table 4.16, it is known that the magnitude of the relationship between self-efficacy, language awareness and speaking achievement simultaneously which is calculated with a correlation coefficient of 0.528, this shows a moderate effect. Then to determine the level of significance of the multiple correlation coefficient tested as a whole. The probability value data (sig.

F change) = 0.002. Because of the value of sig. F change $0.002 < 0.05$, then the decision is H_0 is rejected and H_a is accepted. That is, self-efficacy and language awareness are simultaneously and significantly related to students' speaking achievement.

Finally, the third null hypothesis stated that there is no positive correlation between self-efficacy, language awareness and speaking achievement of 11th grade students' at MA At-Thohiriyah, Ngantru. The researcher got number Sig. F = $0.002 < 0.05$ which means H_0 is rejected. If H_0 is rejected then the alternative hypothesis (H_a) is accepted. In other word, it can be concluded that there is significant relationship between students' self-efficacy, language awareness and students' speaking achievement. Therefore, it can be interpreted that if the level of self-efficacy and language awareness increase, so, students' speaking achievement are expected to increase too.