

## **CHAPTER IV**

### **RESEARCH FINDING AND DISCUSSION**

This chapter of the thesis detailed with preparation of the analysis data collected from the research, the application of the one predictor regression formula, and analyzing the result of the research as well as discussing the data analysis of research finding.

#### **A. Research Finding**

##### **1. Introduction Analysis**

###### **a. Parents' Education Level Background**

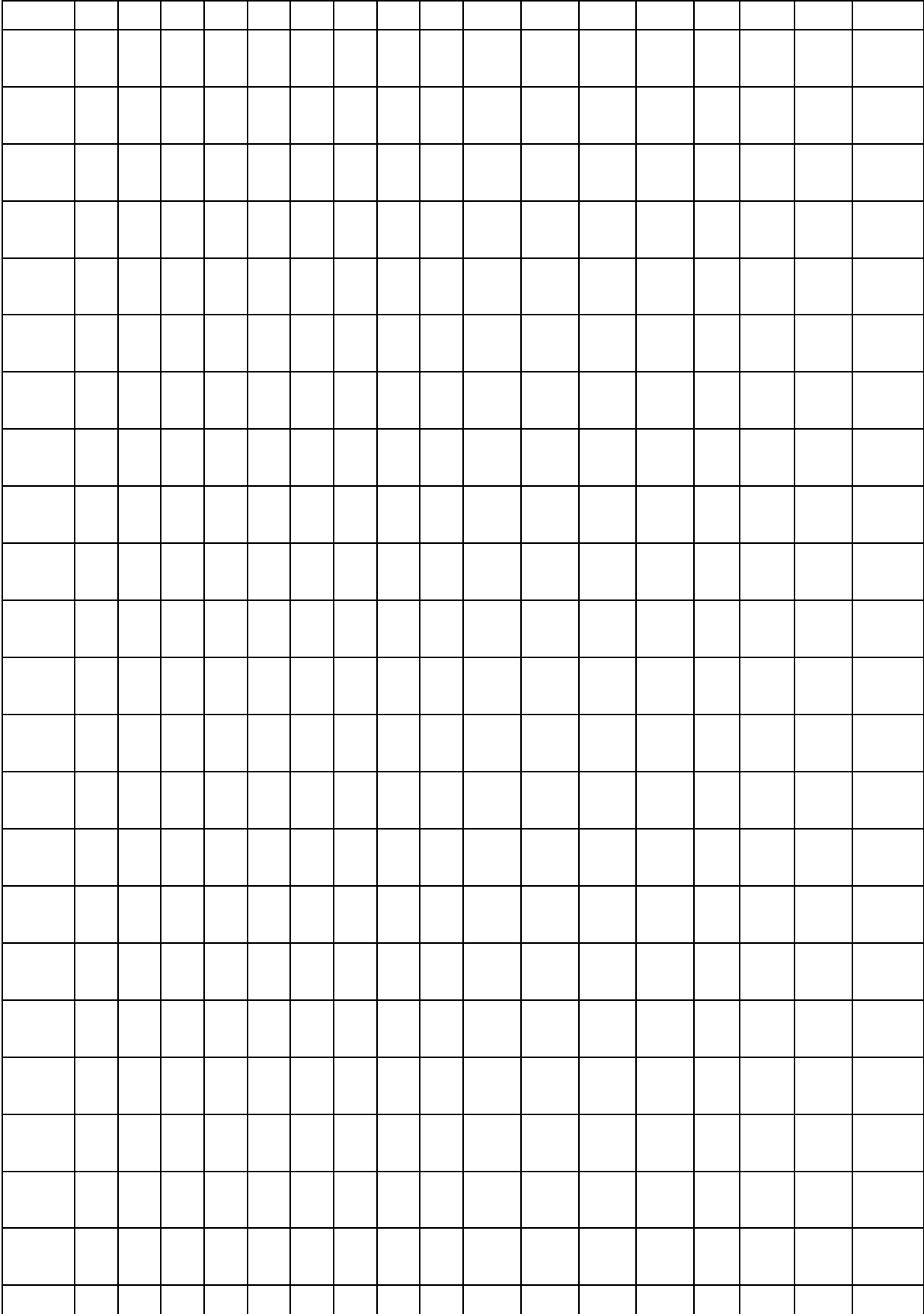
This study tried to describe the characteristic of parents' education level background. To gather data, the researcher used questionnaire given to the sample of the students in the seventh grade of MTs Darul Huda . The score of questionnaire were listed by summing up the scores of student's answer. To make easy in scoring the questionnaire, the researcher made measuring rod as followed:

Table II

Table of Parents' Education Level Background

NO	Father's Education Level Background	Mother's Education Level Background
1	SMP	SMA
2	SD	SD
3	SMA	SMP
4	SD	SD
5	SMA	SD
6	DIPLOMA	S1
7	SMA	S1
8	SD	SD
9	SMP	SD
10	S1	S2
11	SMA	S1
12	DIPLOMA	SMP
13	DIPLOMA	SMP
14	S1	DIPLOMA
15	S1	S1
16	SMA	SD
17	SD	SD
18	SMP	SMA
19	SMA	SD
20	SD	SD
21	SMA	SD
22	SD	SMA
23	S1	SD
24	SMP	SD
25	SD	SD
26	S1	SMA
27	SD	SD
28	SD	DIPLOMA
29	SMA	SMP
30	SD	SD
31	SMP	SD
32	SD	SMA
33	SD	SD
34	SMP	SD
35	SD	SMP
36	SD	SD
37	SMA	SMA
38	SD	SMA
39	SD	SD
40	SMP	SMP





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Based on the table above, the next step was looking for the mean and the quality of parents' education level background variable (X), there were as followed:

a. Find out the SUM of interval

$$\begin{aligned}
 K &= 1 + 3, 3 \log n \\
 &= 1 + 3, 3 \log 40 \\
 &= 1 + 3, 3 (1, 602059991) \\
 &= 1 + 5,286797971 \\
 &= 6,286797971 \\
 &= 6
 \end{aligned}$$

b. Find out the range

$$R = H - L$$

Where:

R = Range

H = Highest value

L = Lowest value

From that data, it was known that:

$$H = 84 \quad L = 43$$

$$\begin{aligned}
 R &= H - L \\
 &= 84 - 43 \\
 &= 41
 \end{aligned}$$

c. Determining class interval

$$\begin{aligned}
 I &= \frac{\text{range}}{\text{Sum of interval}} \\
 &= R/K \\
 &= 41/6 \\
 &= 6,83333333 \\
 &= 7
 \end{aligned}$$

So, class interval was 7 and the SUM of interval was 6

Table IV

Mean Score Frequency Distribution of Parents' Education Level Background

Interval	F	X	Fx	Mean
78 – 84	2	81	162	$  \begin{aligned}  M &= \frac{\sum fx}{N} \\  &= \frac{2281}{40} \\  &= 57,025  \end{aligned}  $
74 – 77	5	74	370	
64 – 70	1	67	67	
57 – 63	9	60	540	
50 – 56	12	53	636	
43 – 49	11	46	506	
Total	40		2281	

Based on the result of mean calculation above, the next step was making the category. There ere as followed:

Table V

The Quality of Parents' Education Level Background

Class Interval	Category	Quality
74 – 84	High	Medium
57 – 70	Medium	
43 – 49	Low	

Based on the table above, it was known that the mean from parents' education level background variable in MTs Darul Huda was 57. It meant that the category of parents' education level background was medium. It was on interval 57 –70.

### **b. Students' English Learning Achievement**

The data of this variable was taken from English teacher documentation in MTs Darul Huda. The students' English learning achievement of seventh grade student of MTs Darul Huda in the academic year of 2015/2016 was as followed:

Table VI  
The Score of Students' English Learning Achievement

	NAME		NAME		
	S-01		S-21		
	S-02		S-22		
	S-03		S-23		
	S-04		S-24		
	S-05		S-25		
	S-06		S-26		

	S-07		S-27		
	S-08		S-28		
	S-09		S-29		
	S-10		S-30		
	S-11		S-31		
	S-12		S-32		
	S-13		S-33		
	S-14		S-34		
	S-15		S-35		
	S-16		S-36		
	S-17		S-37		
	S-18		S-38		
	S-19		S-39		
	S-20		S-40		

Based on the table above, the next step was looking for the mean and the quality of students' English learning achievement variable (Y), they were as followed:

- a. Find out the SUM of interval

$$\begin{aligned}
 K &= 1 + 3,3 \log n \\
 &= 1 + 3,3 \log 40 \\
 &= 1 + 3,3 (1,602059991) \\
 &= 1 + 5,286797971
 \end{aligned}$$



$$= 6,286797971$$

$$= 6$$

b. Find out the range

$$R = H - L$$

Where:

$$R = \text{Range}$$

$$H = \text{Highest value}$$

$$L = \text{Lowest value}$$

From that data, it was known that:

$$H = 90 \quad L = 62$$

$$R = H - L$$

$$= 90 - 62$$

$$= 28$$

c. Determining class interval

$$\begin{aligned}
 I &= \frac{\text{range}}{\text{Sum of interval}} \\
 &= R/K \\
 &= 28/6 \\
 &= 4,666666667 \\
 &= 5
 \end{aligned}$$

So, class interval was 5 and the SUM of interval was 6

Table VII

Mean Score Frequency Distribution of Student's English Learning Achievement

Interval	F	X	Fx	Mean
87-91	3	89	267	$  \begin{aligned}  &M = \frac{\sum f}{N} \\  &= \frac{2728}{40} \\  &= 68,2  \end{aligned}  $
82 - 86	6	84	504	
77 - 81	7	79	553	
72 - 76	11	74	814	
67 - 77	5	69	345	
62 - 66	8	64	512	
Total	40		2728	

Based on the result of mean calculation above, the next step was making the category.

There were as followed:

Table VII

The Quality of Student s' English Learning Achievement

Class Interval	Category	Quality
82 – 91	High	Well
72 – 81	Well	
62 – 66	Fair	

Based on the table above, it was known that the mean from students' English learning achievement variable in MTs Darul Huda was 75. It meant that the category of students' English learning achievement was good. It was on interval 72 –81.

## 2. Hypothesis Analysis

This analysis was used to prove that the hypothesis was accepted or rejected. In this research, the hypothesis was there was positive influence between parent s' education level background and the students' English learning achievement in MTs Darul Huda in the academic year of 2015/2016.

To prove that hypothesis, the writer used one predictor regression formula with standard deviation as followed:

- a. Looking for the correlation between predictor (X) and the criterion (Y) could be found by the correlation product moment technique , with formula:

$$r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

$$\sum xy = \sum xy - \frac{(\sum X)^2}{N}$$

$$\sum X^2 = \sum X^2 - \frac{(\sum X)^2}{N} \text{ and}$$

$$\sum y^2 = \sum Y^2 - \frac{(\sum Y)^2}{N}$$



Table IX The Coefficient Correlation between Variable X (Parents' Education Level Background) and Variable Y (Students' English Learning Achievement)

N	X	Y	X <sup>2</sup>	Y <sup>2</sup>	XY
	57	80	3249	6400	4560
2	45	80	2025	6400	3600
3	60	62	3600	3844	3720
4	56	62	3136	3844	3472
5	54	76	2916	5776	4104
6	72	86	5184	7396	6192
7	57	68	3249	4624	3876
8	49	84	2401	7056	4116
9	43	66	1849	4356	2838
1	84	90	7056	8100	7560
1	54	78	2916	6084	4212
1	50	84	2500	7056	4200
1	50	74	2500	5476	3700
1	71	84	5041	7056	5964
1	77	88	5929	7744	6776
1	56	76	3136	5776	4256
1	44	72	1936	5184	3168
1	44	64	1936	4096	2816
1	60	68	3600	4624	4080
2	51	62	2601	3844	3162
2	60	78	3600	6084	4680
2	49	66	2401	4356	3234
2	76	84	5776	7056	6384
2	43	76	1849	5776	3268
2	79	88	6241	7744	6952

2	53	66	2809	4356	3498
2	61	74	3721	5476	4514
2	51	68	2601	4624	3468
2	50	84	2500	7056	4200
3	43	72	1849	5184	3096
3	66	78	4356	6084	5148
3	59	70	3481	4900	4130
3	44	68	1936	4624	2992
3	76	78	5776	6084	5928
3	63	72	3969	5184	4536
3	47	74	2209	5476	3478
3	51	76	2601	5776	3876
3	53	76	2809	5776	4028
3	44	62	1936	3844	2728
4	60	80	3600	6400	4800
	$\sum$	$\sum$	$\sum X^2$	$\sum Y^2$	$\sum X$
	<b>2262</b>	<b>2994</b>	<b>132780</b>	<b>22656</b>	<b>171310</b>

Based on the table above, it was known that the result of coefficient correlation value was:

N : 40

$\sum X$  : 2262

$$\sum Y : 2994$$

$$\sum X^2 : 132780$$

$$\sum Y^2 : 226596$$

$$\sum XY : 171310$$

To examine the hypothesis, the steps were as followed:

- 1) Looking for the value of correlation between variable (X); parents' education level background and variable (Y); students' English learning achievement in MTs Darul Huda in the academic year of 2015/2016, with using the formula:

$$\begin{aligned} r_{xy} &= \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \\ \sum xy &= \sum xy - \frac{(\sum X)(\sum Y)}{N} \\ &= 171310 - \frac{(2262)(2994)}{40} \\ &= 171310 - \frac{6772428}{40} \\ &= 171310 - 169310,7 \\ &= 1999,3 \\ \sum X^2 &= \sum X^2 - \frac{(\sum X)^2}{N} \\ &= 132780 - \frac{(2262)^2}{40} \\ &= 132780 - \frac{5116644}{40} \\ &= 132780 - 127916,1 \\ &= 4863,9 \\ \sum y^2 &= \sum y^2 - \frac{(\sum y)^2}{N} \\ &= 226596 - (2994)^2 \end{aligned}$$

$$\begin{aligned}
& \frac{\quad}{40} \\
& = 226596 - \frac{8964036}{40} \\
& = 226596 - 22100,9 \\
& = 2495,1
\end{aligned}$$

From the calculation above, it was known that the values were as followed:

$$\sum xy = 1999,3$$

$$\sum x^2 = 4863,9$$

$$\sum y^2 = 2495,1$$

Data above was then included in the product moment formula as followed:

$$\begin{aligned}
r_{xy} &= \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \\
&= \frac{1999,3}{\sqrt{(4864 \times 2495)}} \\
&= \frac{1999,3}{\sqrt{12135680}} \\
&= \frac{1999,3}{3483,63} \\
&= 0,5739128438 \\
&= 0,574
\end{aligned}$$

Based on the calculation above, it was known that the coefficient correlation between variable X and variable Y was 0,574

2) Examining whether there was significant correlation or not by consulting the result of  $r_{xy}$

on  $r_{table}$ .



After doing the correlation test with product moment correlation formula, the result was consulted with  $r_t$  (table) on the significant level 5%.

- i. It was significant if  $r_{xy} > r_t$  (0,05), hypothesis was accepted
- ii. It was not significant if  $r_{xy} < r_t$  (0,05), hypothesis was rejected

From the result of calculation above, it was known that  $r_{xy} = 0,574 > 0,312 r_{table}$  (0,05). It meant that hypothesis was not accepted. So, there was positive correlation between parents' education level background and students' English learning achievement.

From the result above, the researcher will interpret that category of coefficient correlation based on the following:

0,90 – 1,00 means very high correlation

0,70 – 0,90 means high correlation

0,40 – 0,70 means enough correlation

0,20 – 0,40 means low correlation

Based on the calculation above, the researcher concluded that the correlation between variable X and variable Y had the positive correlation with the score correlation 0,574 (it was categorized “enough correlation”).

b. Looking for the regression similarity

$$Y = ax + K$$

Where:

Y = Criterion

X = Predictor

A = the numeral of predictor coefficient

K = the numeral of constant

To look for the value of a and K, the writer used deviation score method. The formula was as followed:

$$y = ax \text{ or } Y - \bar{Y} = a(X - \bar{X})$$

Where  $y = Y - \bar{Y}$ ,  $x = X - \bar{X}$  and  $a = \frac{\sum xy}{\sum x^2}$

From that data, it was known that:

$$\sum xy = 1999,3$$

$$\sum x^2 = 4863,9$$

$$\sum y^2 = 2495,1$$

$$a = \frac{\sum xy}{\sum x^2} = \frac{1999,3}{4863,9}$$

$$= 0,4110487469$$

$$Y = 0,4110487469 x$$

From the data which was collected, it could be looked for:

$$Y = \frac{\sum Y}{N} = \frac{2994}{40} = 74,85$$

$$X = \frac{\sum X}{N} = \frac{2262}{40} = 56,55$$

So, the regression similarity was:

$$Y - \bar{Y} = a(X - \bar{X})$$

It could be done as followed:

$$Y - 74,85 = 0,4110487469 (X - 56,55)$$

$$Y - 74,85 = 0,4110487469 - 23,2448066372$$

$$Y = 0,4110487469 (-23,2448066372) + 74,85$$

$$Y = 0,4110487469 + 51,6051933628$$

From the calculation above, the regression similarity was:

$$Y = 0,4110487469 + 51,6051933628$$

### c. Variant analysis of regression line

This analysis was used to looking for the correlation between criterion and predictor using one predictor regression with deviation score formula.

$$\begin{aligned}
 JK_{reg} &= \frac{(\sum xy)^2}{\sum x^2} \\
 &= \frac{(1999,3)^2}{4863,9} \\
 &= \frac{3997200,49}{4863,9} \\
 &= 821,8097596579 \\
 &= 821,810 \\
 JK_{res} &= \sum y^2 - \frac{(\sum xy)^2}{\sum x^2} \\
 &= 2495,1 - 821,8097596579 \\
 &= 1673,2902403421 \\
 &= 1673,290 \\
 db_{reg} &= 1 \\
 db_{res} &= N-2
 \end{aligned}$$

$$= 40-2$$

$$= 38$$

$$RK_{reg} = \frac{JK_{reg}}{db_{reg}}$$

$$= \frac{821,8097596579}{1}$$

$$= 821,8097596579$$

$$= 821,810$$

$$RK_{res} = \frac{JK_{res}}{db_{res}}$$

$$= \frac{1673,2902403421}{38}$$

$$= 44,0339536932$$

$$= 44,034$$

$$JK_{total} = \sum y^2$$

$$= 2495,1$$

$$F_{reg} = \frac{RK_{reg}}{RK_{res}}$$

$$= \frac{821,8097596579}{44,0339536932}$$

$$= 18,6630926985$$

$$= 18,663$$

To know the result of the regression analysis computation above, it could be seen on the summary of regression analysis table as followed:

Table X

The Summary of Regression Analysis

Variant Recourse	D	JK	RK	F <sub>reg</sub>	F <sub>ta</sub>
					0,0
Regression	1	821,810	821,810	18,663	4,1

Residual	3	1673,2 90	44,03 4		
Total	3	2495,1			

## 2. Final Analysis

After knowing the regression analysis, the next step was consulting the result with F table, on the significant level 5%. From the hypothesis test above, it was known that  $F_{reg} = 18,663 > 4,10 F_{table} (0, 05)$ , it meant the hypothesis was accepted. So there was positive influence between parents' education level background and students' English learning achievement.

### B. Discussion

According to the hypothesis above, it could be proved that the influence of parents' education level background to the students' English learning achievement in MTs Darul Huda showed it is significant or there is positive influence of parent's education level background to the student's English learning achievement result in 5% significance. Thus, hypothesis was accepted.

From the coefficient test above, could be known that  $r_{xy} = 0,574$ . Because  $r_{xy} = 0,574 > r (5\%) = 0,312$ , it means significant. From the result of the correlation between parents' education level background and students' English learning achievement, it was known that  $F_{reg} = 18,663 > F_{table} (5\%) = 4,10$ . It meant significant. So, there was significant influence between parents' education background toward students' English learning achievement. Thus, higher education level background, the higher students' English learning achievement.

According Hornby, A.S. (2004:479) There were some reasons why parents' education level background could influence students' English learning achievement.

1. Parents with high education level background usually had a lot of experience and wide discourse. It was needed to make good leadership in family, higher levels of education may be access to resources, such as income, time, energy, and community contacts, that allow for greater parental involvement in a child's education especially in educating their children.
2. Higher level of education might be access to resources, such as income, time, energy, and community contacts, that allowed for greater parental involvement in a child's education.
3. Level of education also influenced parents' knowledge, beliefs, values, and goals about childrearing, so that a variety of parental behaviors were indirectly related to children's school performance.

Although parents' education level background had positive influence to the students' English learning achievement, in fact the result of the analysis showed that Parent's high education level background cannot reach maximum level that is 1, 000 and the effective contribution of parent's education level background to the student's English achievement is 10% cannot reach maximum level that is 100%. Thus the influence of parent's education level background to the student's English learning achievement was low. It means that student's English learning achievement in MTs Darul Huda was still being affected by other factors which were not studied now.

Those factors were as follow:

1. The perception that English was difficult lesson in school.
2. A poor motivation from students to learn English seriously.

3. The difficulties in memorizing the new words influenced by culture, pronunciation and grammar.
4. There was no big willingness to learn English.

