

CHAPTER IV

RESULT OF THE STUDY

In this chapter the writer explains about the student's simple past tense, translating past narrative text, linear regression and the correlation student's mastery in simple past tense and translating past narrative text at the eleventh graders of SMA Muhammadiyah – 1 Palangka Raya and discussion.

A. Analysis of the Student's Simple Past Tense Test Scores

1. The Student's Simple Past Tense Test Scores

After the writer has had the result of the simple past tense test, the writer gave the scores of the student's answer. The following table shows about the simple past tense test scores.

Table 4.1
The Student's Simple Past Tense Test Scores

No	Codes	Scores	
		X	X ²
1	A01	60	3600
2	A02	80	6400
3	A03	76	5776
4	A04	76	5776
5	A05	96	9216
6	A06	96	9216
7	A07	84	7056
8	A08	60	3600
9	A09	80	6400
10	A10	60	3600
11	A11	64	4096

12	A12	80	6400
13	A13	84	7056
14	A14	84	7056
15	A15	96	9216
16	A16	64	4096
17	A17	100	10000
18	A18	76	5776
19	A19	80	6400
20	A20	60	3600
21	A21	96	9216
22	A22	60	3600
23	A23	72	5184
24	A24	60	3600
TOTAL		1844	145936

Based on the calculation of variable X was found $\sum x = 1844$ and $\sum x^2 = 145936$. Based on the data above, it is known that the higher score was 100 and the lower score was 60. The classification of the students' scores can be seen on the table below :

Table 4.2
Distribution of Student's Simple Past Tense Test Scores

No.	Category	Frequency
1	Score 80 - <100	12
2	Score 70 - < 80	4
3	Score 60- <70	6
4	Score 50 - < 60	2
TOTAL		24

Based on the data above, can be seen that there were variation scores. Based on the calculation there were twelve students who got score 80- 100, four students who got score 70 - 80, six students who got score 60 – 70, two students who got score 50 – 60.

After scoring process, it made several groups of the data in some level based on predicate of score then made percentage b using the formula:

$$S = \frac{n}{N} \times 100$$

Where:

S = The score

n = The number of correct answer

N = The number of students

So, the calculation of level score especially for level score 80 – 100 (it was known that N = 24, n = 5) as follow:

$$S = \frac{n}{N} \times 100$$

$$S = \frac{12}{24} \times 100$$

$$S = 50 \%$$

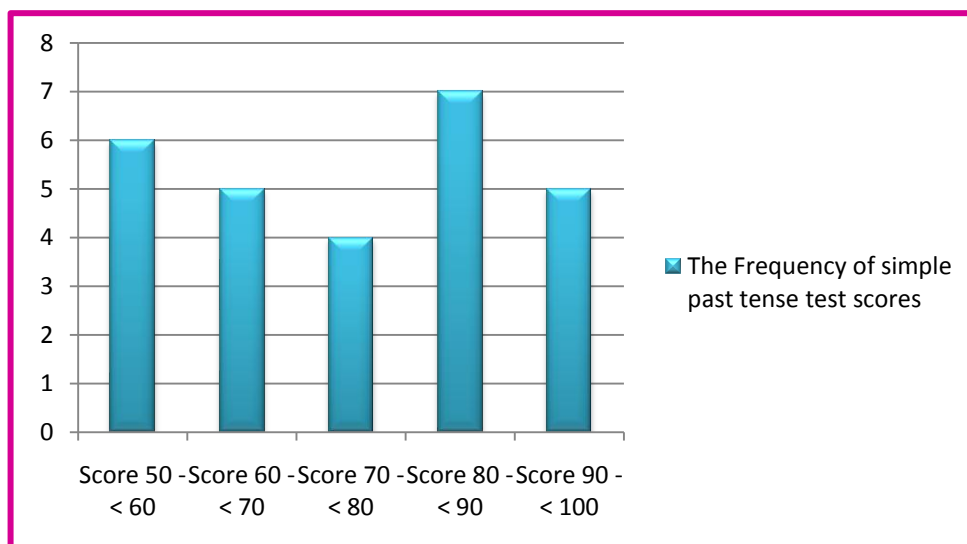
The result of the score frequency student's simple past tense as follow:

Table 4.3
Distribution Frequency and Percentag Scores of Student's Simple Past Tense Test

No	Mark Value	Predicate	Letter Value	F	P (%)
1	80 - < 100	Excellent	A	12	50%
2	70 - < 80	Good	B	4	17%
3	60-< 70	Fair	C	6	25%
4	50 - <60	Poor	D	2	8%
TOTAL				24	100 %

Based on the data above, it can be explained that there were 50% students who acquired scores 80 – 100, 17% students who acquired scores 70 – 80, 25% students who acquired scores 60 – 70, and there were 8 % students who acquired scores 50 – 60. The following is the chart about the frequency students' simple past tense test scores.

Figure 4.1
The Frequency Simple Past Tense Test Scores



Based on the calculation of simple past tense was known that there twelve students got score in very good criteria, four students got score in good criteria, six students got score fair criteria, two students got score in poor criteria.

2. The Average of Students' simple past tense test scores

To find the average of the students' simple past tense score, the write used the formula:

$$M = \frac{\sum X}{N}$$

Were:

M = Mean

X = The sum of scores

N = Number of the students

It is known that:

M = Mean

$\sum X = 1844$

N = 24

So, it can be counted as follow:

$$M = \frac{\sum X}{N}$$

$$= \frac{1844}{24}$$

$$= 76.8$$

As the calculation above, the average score the students' in simple past tense was 76.8. Based on the valuation scale used in SMA Muhammadiyah- 1

Palangka Raya, the average of the students' simple past tense was in good criteria (70 - < 80).

B. Analysis of the Student's Translating Past Narrative Text Test Scores

1. The Student's Translating Past Narrative Text Test Scores

After the writer has had the result of the translating past narrative text test, the writer gave the scores of the student's answer. The following table shows about the simple past tense test scores.

Table 4.4

The Student's Translating Past Narrative Text Test Scores

No	Codes	Scores	
		Y	Y ²
1	A01	64	4096
2	A02	76	5776
3	A03	68	4624
4	A04	60	3600
5	A05	76	5776
6	A06	88	7744
7	A07	96	9216
8	A08	68	4624
9	A09	92	8464
10	A10	64	4096
11	A11	68	4624
12	A12	92	8464
13	A13	92	8464
14	A14	76	5776
15	A15	84	7056
16	A16	80	6400

17	A17	96	9216
18	A18	60	3600
19	A19	72	5184
20	A20	78	6084
21	A21	84	7056
22	A22	72	5184
23	A23	92	8464
24	A24	64	4096
TOTAL		1862	147684

Based on the calculation of variable Y was found $\sum Y = 1862$ and $\sum Y^2 = 147684$. Based on the data above, it is known that the higher score was 96 and the lower score was 60. The classification of the students' scores can be seen on the table below :

Table 4.5

Distribution of Student's Translating Past Narrative Text Test Scores

No.	Category	Frequency
1	Score 80 - <100	10
2	Score 70 - < 80	6
3	Score 60 - <70	6
4	Score 50 - < 60	2
TOTAL		24

Based on the data above, can be seen that there were variation scores. Based on the calculation there were ten students who got score 80- 100, six students who got score 70 - 80, six students who got score 60 – 70, two students who got score 50 – 60.

After scoring process, it made several groups of the data in some level based on predicate of score then made percentage by using the formula:

$$S = \frac{n}{N} \times 100$$

So, the calculation of level score especially for level score 80 – 100 (it was known that $N = 24$, $n = 10$) as follow:

$$S = \frac{n}{N} \times 100$$

$$S = \frac{10}{24} \times 100$$

$$S = 42 \%$$

The result of the score frequency student's translating past narrative testas follow:

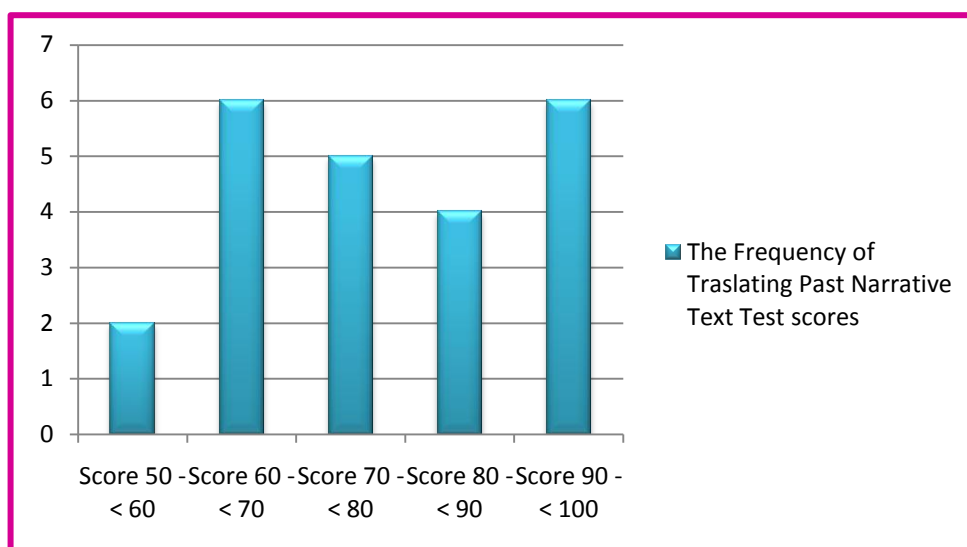
Table 4.6
Distribution Frequency and Percentation Scores of Student's Translating
Past Narrative Text Test

No	Mark Value	Predicate	Letter Value	F	P (%)
1	80 - < 100	Excellent	A	10	42%
2	70 - < 80	Good	B	6	25%
3	60-< 70	Fair	C	6	25%
4	50 - <60	Poor	D	2	8%
TOTAL				24	100 %

Based on the data above, it can be explained that there were 42% students who acquired scores 80 –< 100, 25% students who acquired scores 70 –< 80, 25% students who acquired scores 60 –< 70, and there were 8 %

students who acquired scores 50 –< 60. The following is the chart about the frequency students' translating past narrative text test scores.

Figure 4.2
The Frequency Translating Past Narrative Text Test Scores



Based on the calculation of translating past narrative text was known that there ten students got score in very good criteria, six students got score in good criteria, six students got score fair criteria, two students got score in poor criteria.

3. The Average of Students' translating past narrative text test scores

To find the average of the students' translating past narrative text score, the write used the formula:

$$M = \frac{\sum X}{N}$$

Were:

M = Mean

X = The sum of scores

N = Number of the students

It is known that:

M = Mean

ΣX = 1862

N = 24

So, it can be counted as follow:

$$\begin{aligned} M &= \frac{\Sigma X}{N} \\ &= \frac{1862}{24} \\ &= 77.5 \end{aligned}$$

As the calculation above, the average score the students' in translating past narrative text was 77.5. Based on the valuation scale used in SMA Muhammadiyah -1 Palangka Raya, the average of the students' simple past tense was in good criteria (70 - < 80).

C. Linear Regression

To describe the linear association between quantitative variables, a statistical procedure called regression often used to construct a model. The following is the data simple past tense and translating past narrative text test scores in the present study.

Table 4.7
Simple Past Tense and Translating Past Narrative Text Test Scores

Students' Codes	X	X²	Y	Y²	XY
A01	60	3600	64	4096	3840
A02	80	6400	76	5776	6080
A03	76	5776	68	4624	5168
A04	76	5776	60	3600	4560
A05	96	9216	76	5776	7296
A06	96	9216	88	7744	8448
A07	84	7056	96	9216	8064
A08	60	3600	68	4624	4080
A09	80	6400	92	8464	7360
A10	60	3600	64	4096	3840
A11	64	4096	68	4624	4352
A12	80	6400	92	8464	7360
A13	84	7056	92	8464	7728
A14	84	7056	76	5776	6384
A15	96	9216	84	7056	8064
A16	64	4096	80	6400	5120
A17	100	10000	96	9216	9600
A18	76	5776	60	3600	4560
A19	80	6400	72	5184	5760
A20	60	3600	78	6084	4680
A21	96	9216	84	7056	8064
A22	60	3600	72	5184	4320
A23	72	5184	92	8464	6624
A24	60	3600	64	4096	3840
TOTAL	1844	145936	1862	147684	145192

The fine the linear regression of the data above, the writer used the following formula:

$$\hat{Y} = a + bX$$

The following is calculation process to find linier regression of the data in the table above:

The first, calculating coefficient a and b as follow:

$$\begin{aligned} a &= \frac{(\sum Y) (\sum X^2) - (\sum X) (\sum XY)}{n \sum X^2 - (\sum X)^2} \\ &= \frac{(1862) (145639) - (1844) (145192)}{24 \times 145639 - (1844)^2} \\ &= \frac{(271732832) - (267734048)}{3502464 - 3400336} \\ &= \frac{3998784}{102128} \end{aligned}$$

$$a = 39.15462948$$

$$\begin{aligned} b &= \frac{N\sum XY - (\sum X) (\sum Y)}{N\sum X^2 - (\sum X)^2} \\ &= \frac{(24 \times 145192) - (1844)(1862)}{24 \times 145936 - (1844)^2} \\ &= \frac{3484608 - 3433528}{3502464 - 3400336} \\ &= \frac{51080}{102128} \end{aligned}$$

$$b = 0.500156666$$

From the calculation of linier, the sample with code A01 has score X= 60, and Y= 64. So, the calculation as follow:

$$\begin{aligned}\hat{Y} &= \mathbf{a + bX} \\ 64 &= 39.15462948 + 0.500156666 X \\ 0.500156666 X &= 64 - 39.15462948 \\ X &= \frac{20.84537052}{0.500156666} \\ X &= \mathbf{41.67768207} \\ \hat{Y} &= \mathbf{a + bX} \\ &= 39.15462948 + (0.500156666 \times 60) \\ &= 39.15462948 + 30.00939997 \\ \hat{Y} &= \mathbf{69.16402945}\end{aligned}$$

From the calculation above, the data with code A01 was known that x = 41.67768207, and y = 69.16402945. The following table showed the linierof x (simple past tense) and y (translating past narrative text).

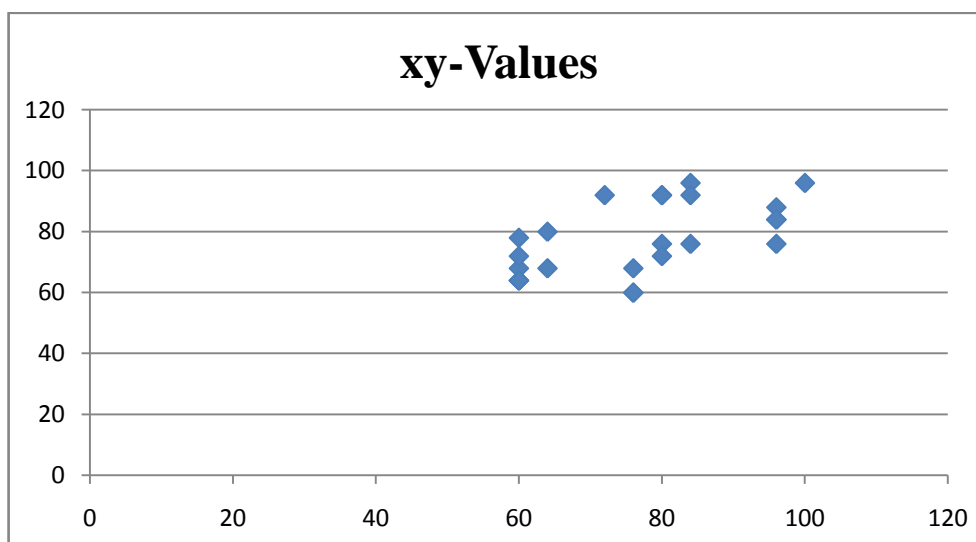
Table 4.8
The Result of Linear Test

Codes	X	y
A01	41.67768207	69.16402945
A02	81.6651527	79.16716278
A03	73.66765857	77.16653611
A04	73.66765857	77.16653611
A05	113.6551292	87.16966943
A06	113.6551292	87.16966943
A07	89.66264683	81.16778944

A08	41.67768207	69.16402945
A09	81.6651527	79.16716278
A10	41.67768207	69.16402945
A11	49.67517619	71.16465612
A12	49.67517619	79.16716278
A13	89.66264683	81.16778944
A14	89.66264683	81.16778944
A15	113.6551292	87.16966943
A16	49.67517619	71.16465612
A17	121.6526233	89.1702961
A18	73.66765857	77.16653611
A19	81.6651527	79.16716278
A20	41.67768207	69.16402945
A21	113.6551292	87.16966943
A22	41.67768207	69.16402945
A23	65.67016445	75.16590945
A24	41.67768207	69.16402945
TOTAL	1776.0213	1862

The following is scatterplot about the data linear test in the present study:

Figure 4.3
The Linear of Simple Past Tense and Translating Past Narrative Text



Hartono in *Statistik untuk Penelitian* stated the data are named by linear if the data points spread closely and draw a straight line. On the other hand, if the data points spread disorderly and do not draw a straight line, the data do not have linear or not-linear. From the scatter above, the data point have shown a straight line from the left bottom to the right up corner. It means the data in the present study has linear association between variable X (simple past tense) and variable Y (translating past narrative text). As the result, the data in the present study can be analyzed by using product moment correlation because it has linear association between variables.

D. The Correlation between Students Simple Past Tense and Translating Past Narrative Text of SMA Muhammadiyah – 1 Palangka Raya.

To find the correlation between students simple past tense and translating past narrative text of SMA Muhammadiyah – 1 Palangka Raya, the writer used the product moment formula as follow:

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}}$$

Table 4.9
Distribution Scores of Simple Past Tense and Translating Past Narrative Text

Students' Codes	X	X ²	Y	Y ²	XY
A01	60	3600	64	4096	3840
A02	80	6400	76	5776	6080
A03	76	5776	68	4624	5168
A04	76	5776	60	3600	4560
A05	96	9216	76	5776	7296
A06	96	9216	88	7744	8448
A07	84	7056	96	9216	8064
A08	60	3600	68	4624	4080
A09	80	6400	92	8464	7360
A10	60	3600	64	4096	3840
A11	64	4096	68	4624	4352
A12	80	6400	92	8464	7360
A13	84	7056	92	8464	7728
A14	84	7056	76	5776	6384
A15	96	9216	84	7056	8064

A16	64	4096	80	6400	5120
A17	100	10000	96	9216	9600
A18	76	5776	60	3600	4560
A19	80	6400	72	5184	5760
A20	60	3600	78	6084	4680
A21	96	9216	84	7056	8064
A22	60	3600	72	5184	4320
A23	72	5184	92	8464	6624
A24	60	3600	64	4096	3840
TOTAL	1844	145936	1862	147684	145192

From the calculation of variable X and Y it is known that:

$$N = 24$$

$$\Sigma X = 1844$$

$$\Sigma Y = 1862$$

$$\Sigma X^2 = 145936$$

$$\Sigma Y^2 = 147684$$

$$\Sigma XY = 145192$$

Next, the writer calculate the index of calculation by using product moment formula as follow:

$$\begin{aligned}
 r_{xy} &= \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[N\Sigma X^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}} \\
 &= \frac{24 \times 145192 - (1844)(1862)}{\sqrt{[24 \times 145936 - (1844)^2][24 \times 147684 - (1862)^2]}} \\
 &= \frac{3484608 - 3433528}{\sqrt{[3502464 - 3400336][3544416 - 3467044]}}
 \end{aligned}$$

$$\begin{aligned}
&= \frac{51080}{\sqrt{102128} \times 77372} \\
&= \frac{51080}{\sqrt{7901847616}} \\
&= \frac{51080}{88892.34} \\
&= 0.57462769 \\
&= 0.575
\end{aligned}$$

The calculation above has shown index correlation of variable X and Y was 0.57462769 (0.575). It is mean simple past tense has association with translating past narrative text. The following t_{table} is the result of product moment correlation based on SPSS 16:

Table 4.10
The Correlation Index based on SPSS 16

		Simple Past Tense	Translating Past Narrative Text
Simple Past Tense	Pearson Correlation	1	.575**
	Sig. (2-tailed)		.003
	N	24	24
Translating Past Narrative Text	Pearson Correlation	.575**	1
	Sig. (2-tailed)	.003	
	N	24	24

** . Correlation is significant at the 0.01 level (2-tailed).

From the table 4.5 above can be seen that index of product moment correlation was 0.575 for 0.01 significant level. There is significant different with manual calculation.

The result of the calculation that was counted by product moment above showed that the index of correlation was 0.575. Based on the interpretation orientation in Sudijono's book, if the value r_{xy} is 0.40-0.70. So, between variable X and variable Y there was average/moderately correlation. To prove the value of "r" based on the calculation degree of freedom was known that $df = N - nr$, $N = 24$, $nr = 2$, so:

$$Df = 24 - 2 = 22$$

Based on significant level was illustrated as follow:

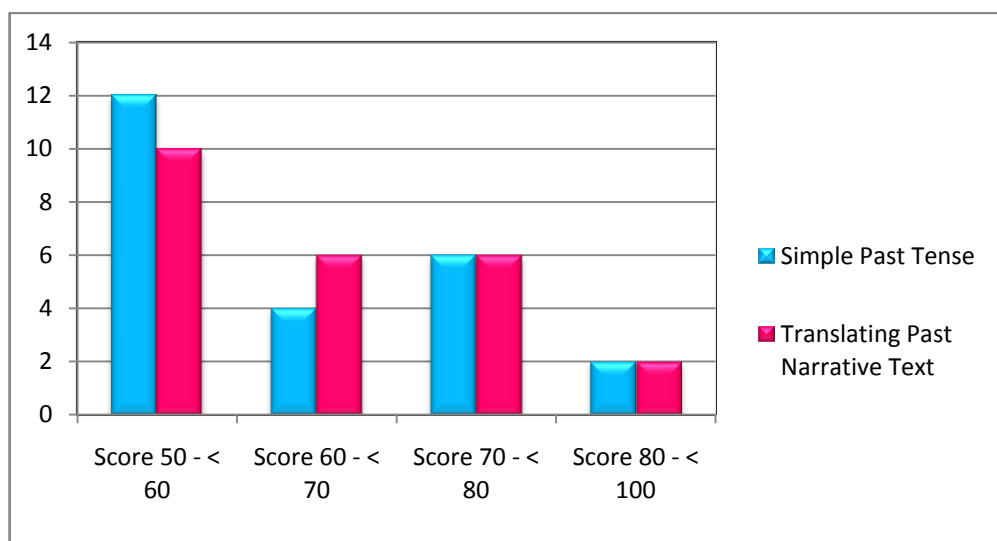
Table 4.11
Critical Value of the Product Moment Correlation Coefficient

Df (Degree of Freedom)	The number of correlation variable	
	2	
	Value "r" on significant level	
	5%	1%
22	0.404	0.515

Even so, was known the result of " r " = 0.404 <0.575> 0.515. It can be explained that the value of " r " (0.575) was higher at significance level 5% (0.404) and it was it higher as at significance level 1% (0.515). as the result, the value of " r " showed positive correlation between simple past tense and translating past narrative text in significant level 5% and 1%. The following

graph informed about combination of simple past tense and translating past narrative text scores.

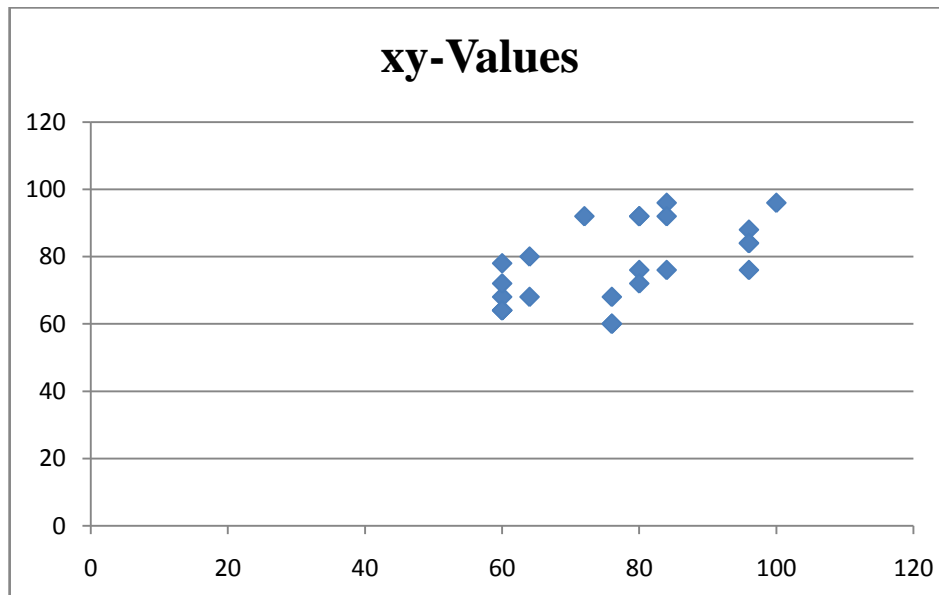
Figure 4.4
The Combination of Simple Past Tense and
Translating Past Narrative Text



The graph above showed the score of simple past tense and translating past narrative text in four categories. Categories 1 show the amount of students who got score 50 - > 60, Categories 2 show the amount of students who got score 60 - > 70, Categories 3 show the amount of students who got score 70 - > 80, Categories 4 show the amount of students who got score 80 - > 100. From the graph above, can be seen the changing of frequency. The increasing frequency of simple past tense scores was followed by increasing frequency of translating past narrative text test scores.

The correlation between variable X (simple past tense) and variable Y (translating past narrative text) can be illustrated by following scatterplot:

Figure 4.5
The Linear of variable X and variable Y



The scatterplot above illustrated the direction of the correlation between the variables. The dots going from lower left to upper right indicate positive correlation. Ary et al. stated that a scatterplot of also reveals the strength of the correlation between variables. If the dots in the scatterplot form a narrow band so that when a straight line is drawn through the band the dots will be near the line, there is a strong correlation between the variables. However, if the dots in the scatterplot scatter widely, the correlation between variables is relatively weak. The scatterplot above has shown the dots from a narrow band, made a straight line and spread closely. It means there is strong correlation between two variables, simple past tense and translating past narrative.

To know the contribution of the variable X and Y, the writer used the formula as follow:

$$\begin{aligned}
 \mathbf{KP} &= \mathbf{r^2 \times 100\%} \\
 &= (0.575)^2 \times 100\% \\
 &= 0.330196982 \times 100\% \\
 &= 33.0197\% \\
 &= 33.02\%
 \end{aligned}$$

It means that the simple past tense gave distribution to the students' translating past narrative text of SMA Muhammadiyah – 1 Palangka Raya was 33.02%.

The reject or accept hypothesis, the writer calculated t_{observed} as follow:

$$\begin{aligned}
 t_{\text{observed}} &= \frac{r \sqrt{n-2}}{\sqrt{1-r^2}} \\
 &= \frac{0.575 \sqrt{24-2}}{\sqrt{1-0.575^2}} \\
 &= \frac{0.575 \sqrt{22}}{\sqrt{1-0.330196982}} \\
 &= \frac{0.575 \cdot 4.690}{\sqrt{0.669803018}} \\
 &= \frac{2.695003866}{0.818414942} \\
 &= 3.292955356 \\
 &= 3.293
 \end{aligned}$$

The criteria of the test: $t_{\text{observed}} \geq t_{\text{table}}$, so received H_a it means there is significant correlation. If $t_{\text{observed}} \leq t_{\text{table}}$, refused H_o it means there is no

significant correlation between variables. Based on the calculation above $t_{\text{observed}} = 3.292955356$. next, to look t_{table} used the formula $nr - 2$, $N = 24$. So, $df = N - 2 = 24 - 2 = 22$ and $t_{\text{table}, 5\%} = 0.4$ at significance level 5% and 0.5 and significance level 1% in other word $0.4 < 3.292955356 > 0.5$. It is mean $t_{\text{value}} > t_{\text{table}}$, as the result, H_a (there is significant correlation between simple past tense and translating past narrative text of SMA Muhammadiyah – 1 Palangka Raya) was accepted and H_o (there is no significant correlation between simple past tense and translating past narrative text of SMA Muhammadiyah – 1 Palangka Raya) was rejected. In this case, students' simple past tense influenced the students' translating past narrative text. The increasing of simple past tense would be followed by increasing translating past narrative text. So, simple past tense is important part in translating past narrative text.

E. Discussion

After finding out the correlation coefficient between simple past tense and translating past narrative text, with index correlation $r_{xy} = 0.575$. Based on the interpretation orientation in Sudijono's book, if the value r_{xy} is 0.40-0.70. So, between variable X and variable Y there was average/moderately correlation.

Based on the result of linear, it showed that data points spread closely and draw a straight line from the left bottom to the right up corner. It means that the data of simple past tense and translating past narrative text in the present study has good linear association. As the result, the data in the present

study can be analyzed by using parametric statistic especially product moment correlation.

Based on data analyses, simple past tense gave contribution 33.02% to translating past narrative text. The result of product moment correlation has shown that the value of r_{xy} was greater than the value of t_{table} at 5% and 1% significant levels ($0.404 < 0.575 > 0.515$). It means that null hypothesis was rejected and the alternative hypothesis was accepted.

Next, the dots in scatterplot of variable X and variable Y go from lower left to upper right. It means there was positive correlation between simple past tense and translating past narrative text. The dots in the scatterplot also formed a narrow band. When a straight line was drawn through the band the dots would be near the line. It illustrated that there was strong relationship between the variables. So this way, alternative hypothesis was accepted and null hypothesis was rejected. In summary, there was positive correlation between simple past tense and translating past narrative text at the eleventh graders of SMA Muhammadiyah - 1 Palangka Raya.

The result of calculation showed that average score of students' simple past tense was 76.8 and the average score of students' translating past narrative text was 77.5. Then, based on the evaluation scale used in SMA Muhammadiyah - 1 Palangka Raya, the average of students' simple past tense and translating past narrative text belong to good criteria ($70 < 80$). In fact the average score of simple past tense lower than was translating past narrative text.

According to Djuhari (Chapter II, page 10), these facts indicate that the students' past tense mastery gives a useful contribution for their ability in translating narrative texts as tense is the use of verb variation as predicate based on timing rules. The tense is the most distinguishable transition from Indonesian grammar into English grammar because there is no timing rule in Indonesian language to express activities or events. The tenses frequently become a problem to be understood. In the present study, the result findings have proved that there was significant correlation between simple past tense and translating past narrative text with the correlation coefficient between two variables is 0.575. It means that the result of the present study supports the theory that simple past tense gives contribution to the language skills and language components.