CHAPTER IV

RESULT OF STUDY

In this chapter the writer explains about the result of the study that consist of result of the questionnaire, result of spelling ability test, and the correlation between voluntary reading and spelling ability of fifth semester English Department students STAIN Palangka Raya and discussion.

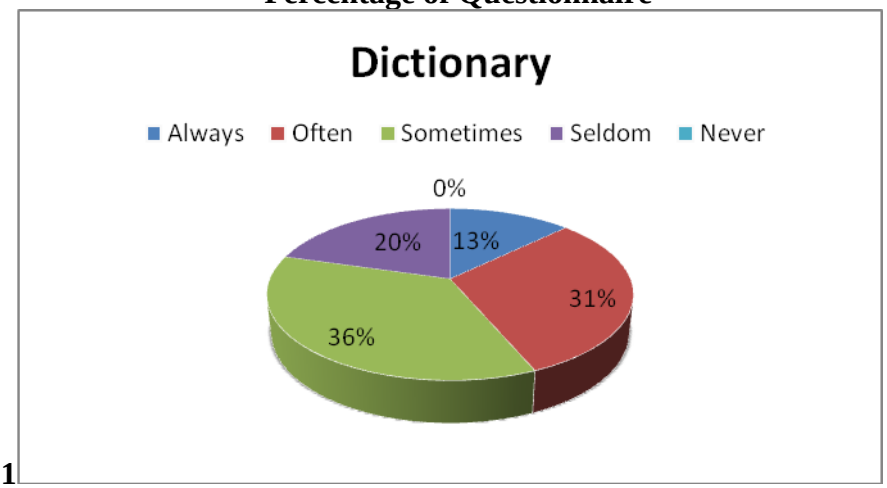
A. Result of the Questionnaire

The Questionnaire data was taken on December 2013 at English department STAIN Palangka Raya. The sample used in this study was 39 students of English department STAIN Palangka Raya. The sample was given questionnaire containing 10 simple questions which its result is summarized as follows:

1. Question 1

Question no.1 was stating: "How often do you read English word/sentence from dictionary". Based on the data for questionnaire no. 1, it can be seen that there was 5 respondents who chose **always**, 12 respondents chose **often**, 14 respondents chose **sometimes**, 8 respondents chose **seldom**, and no one chose **never**. The percentage of each choice was described as below:

Figure 4.1
Percentage of Questionnaire

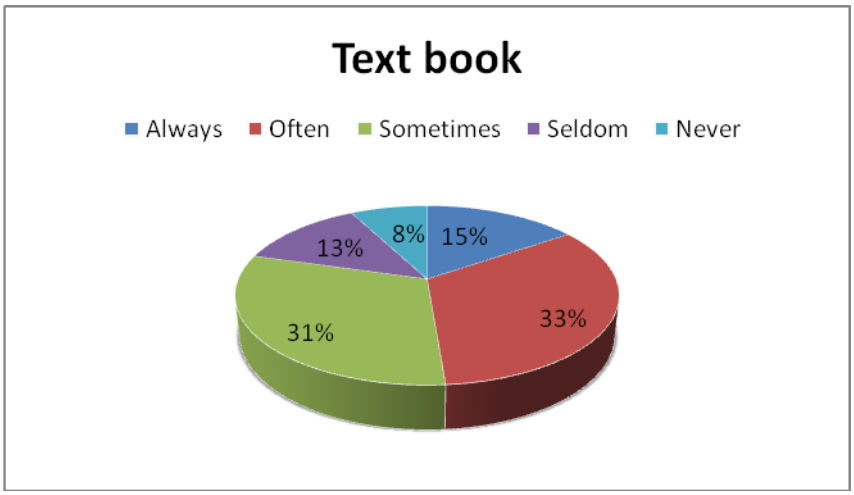


no.1

2. Question 2

Question no.2 was stating: "How often do you read English word/sentence from Textbook". Based on the data for questionnaire no. 2, it can be seen that there was 6 respondents who chose **always**, 13 respondents chose **often**, 12 respondents chose **sometimes**, 5 respondents chose **seldom**, and 3 respondents chose **never**. The percentage of each choice was described as below:

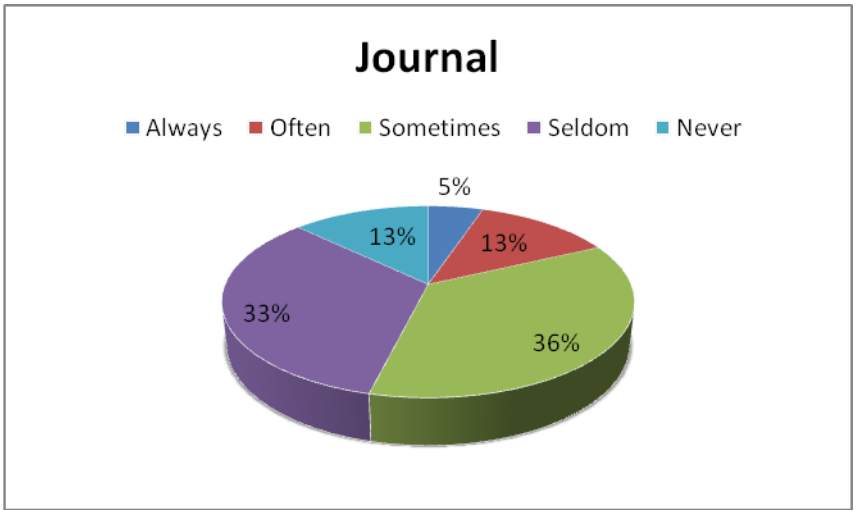
Figure 4.2
Percentage of Questionnaire no.2



3. Question 3

Question no.3 was stating: “How often do you read English word/sentence from journal”. Based on the data for questionnaire no. 3, it can be seen that there was 2 respondents who chose **always**, 5 respondents chose **often**, 14 respondents chose **sometimes**, 13 respondents chose **seldom**, and 5 respondents chose **never**. The percentage of each choice was described as below:

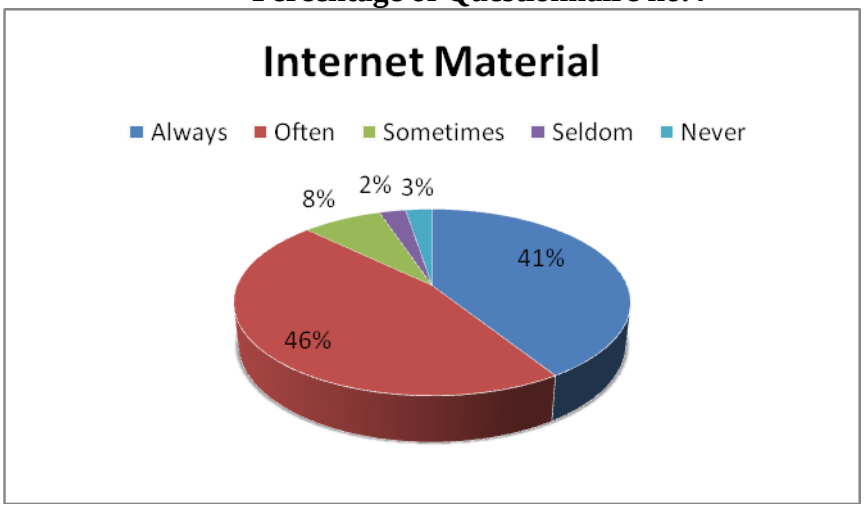
Figure 4.3
Percentage of Questionnaire no.3



4. Question 4

Question no.4 was stating: “How often do you read English word/sentence from internet material”. Based on the data for questionnaire no. 4, it can be seen that there was 16 respondents who chose **always**, 18 respondents chose **often**, 3 respondents chose **sometimes**, 1 respondent chose **seldom**, and 1 respondent chose **never**. The percentage of each choice was described as below:

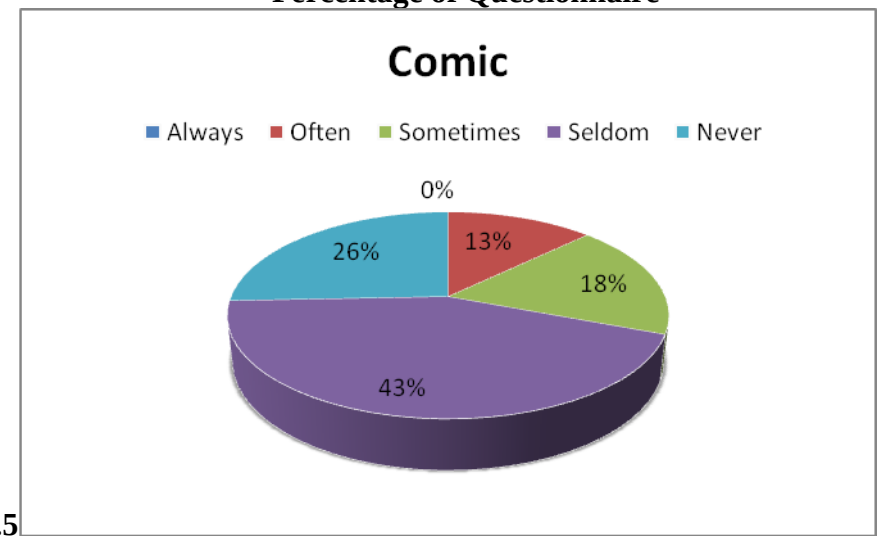
Figure 4.4
Percentage of Questionnaire no.4



5. Question 5

Question no.5 was stating: "How often do you read English word/sentence from comic". Based on the data for questionnaire no. 5, it can be seen that there was no one who chose **always**, 5 respondents chose **often**, 7 respondents chose **sometimes**, 17 respondents chose **seldom**, and 10 respondents chose **never**. The percentage of each choice was described as below:

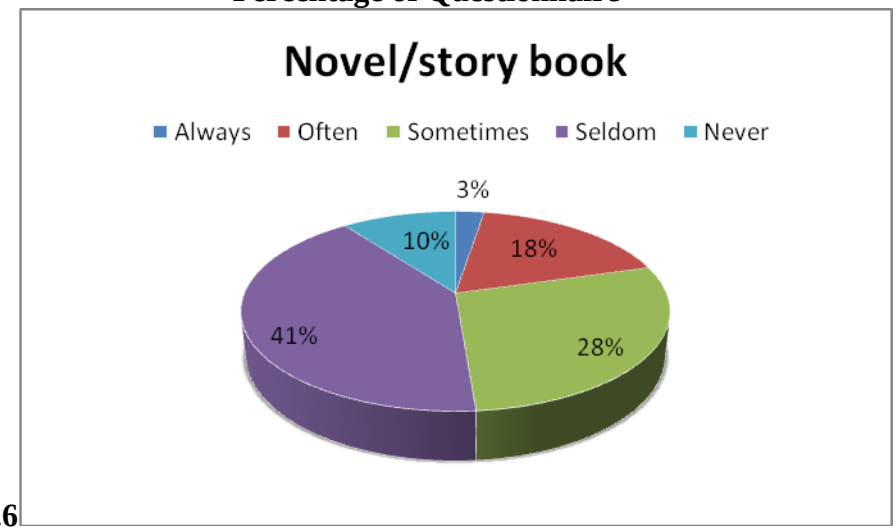
Figure 4.5
Percentage of Questionnaire no.5



6. Question 6

Question no.6 was stating: “How often do you read English word/sentence from novel/storybook”. Based on the data for questionnaire no. 6, it can be seen that there was 1 respondent who chose **always**, 7 respondents chose **often**, 11 respondents chose **sometimes**, 16 respondents chose **seldom**, and 4 respondents chose **never**. The percentage of each choice was described as below:

Figure 4.6
Percentage of Questionnaire

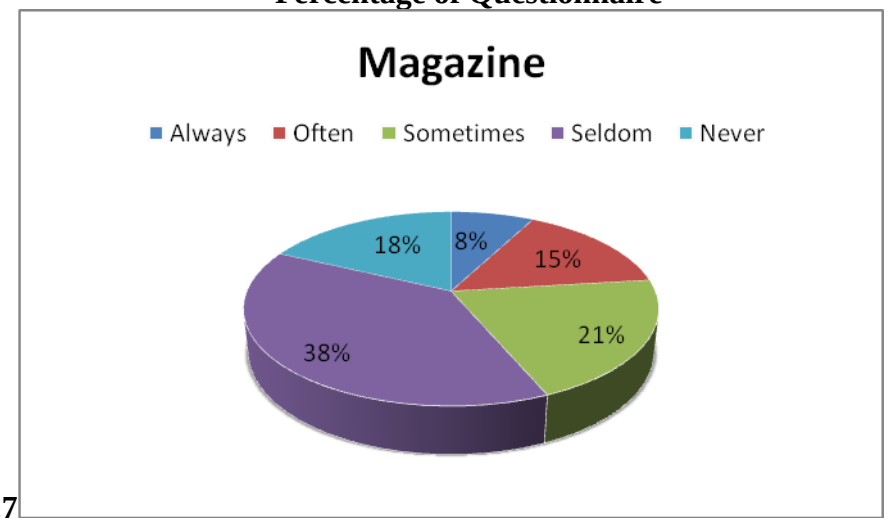


no.6

7. Question 7

Question no.7 was stating: “How often do you read English word/sentence from magazine”. Based on the data for questionnaire no. 7, it can be seen that there was 3 respondents who chose **always**, 6 respondents chose **often**, 8 respondents chose **sometimes**, 15 respondents chose **seldom**, and 7 respondents chose **never**. The percentage of each choice was described as below:

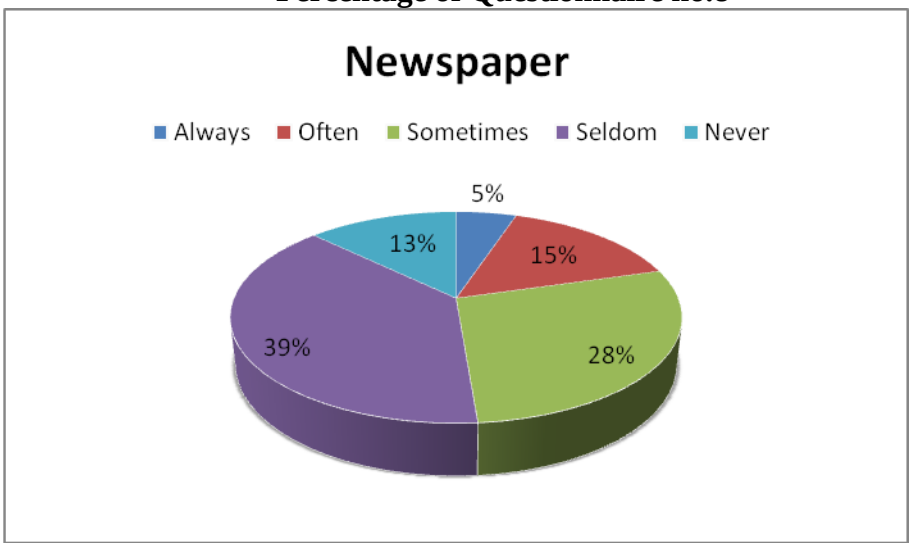
Figure 4.7
Percentage of Questionnaire no.7



8. Question 8

Question no.8 was stating: "How often do you read English word/sentence from newspaper". Based on the data for questionnaire no. 8, it can be seen that there was 2 respondents who chose **always**, 6 respondents chose **often**, 11 respondents chose **sometimes**, 15 respondents chose **seldom**, and 5 respondents chose **never**. The percentage of each choice was described as below:

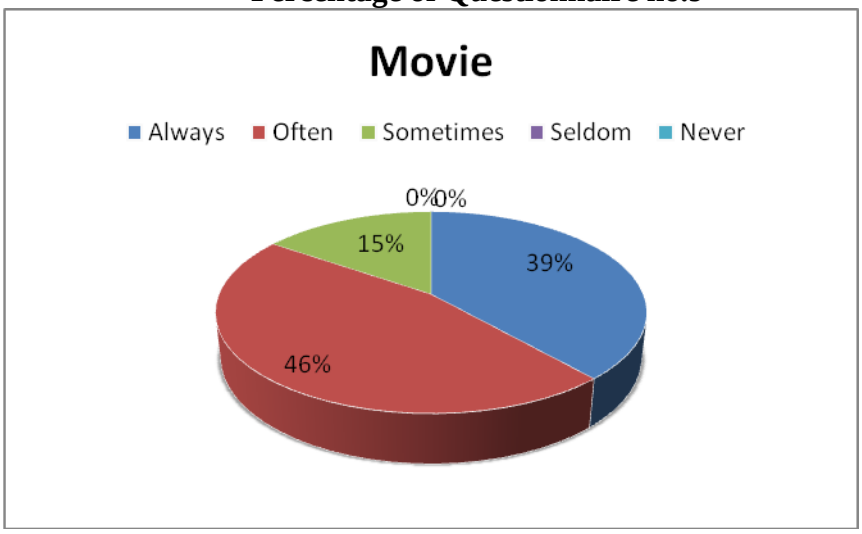
Figure 4.8
Percentage of Questionnaire no.8



9. Question 9

Question no.9 was stating: “How often do you read English word/sentence from movie”. Based on the data for questionnaire no. 9, it can be seen that there was 15 respondents who chose **always**, 18 respondents chose **often**, 6 respondents chose **sometimes**, and no one chose **seldom** and **never**. The percentage of each choice was described as below:

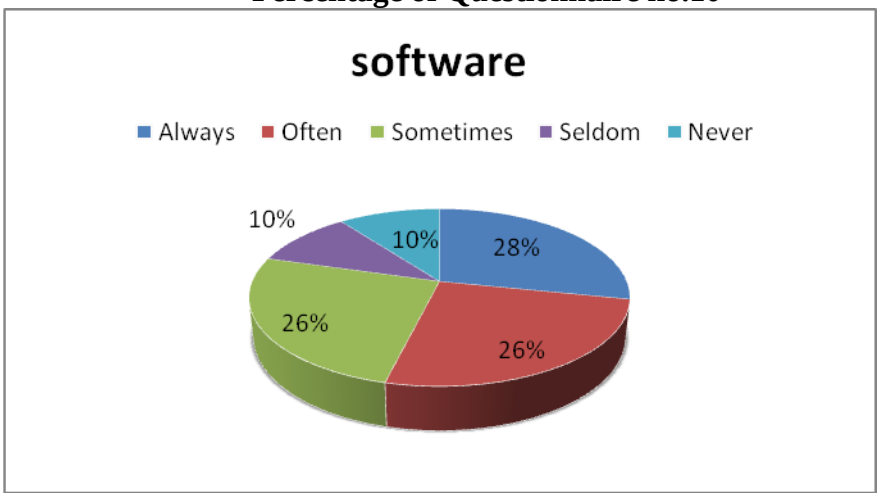
Figure 4.9
Percentage of Questionnaire no.9



10. Question 10

Question no.10 was stating: “How often do you read English word/sentence from software”. Based on the data for questionnaire no. 10, it can be seen that there was 11 respondents who chose **always**, 10 respondents chose **often**, 10 respondents chose **sometimes**, 4 respondents chose **seldom**, and 4 respondents chose **never**. The percentage of each choice was described as below:

Figure 4.10
Percentage of Questionnaire no.10



In grouping the respondents the writer classify into five groups based on the criteria in the questionnaire, they are always which the score was from 41 – 50, often which the score was 31 – 40, sometime which the score was 21 – 30, seldom which the score was 11-20 and never which the score was 1 – 10. Based on the result of the questionnaire it was found that there are 3 persons categorized in always group, 19 persons categorized in often group, 15 persons categorized in sometime group, 2 persons categorized in seldom group, and no one categorized in never group.

B. Result of Spelling Ability Test

The Spelling Ability data was taken on December 2013 at English department STAIN Palangka Raya. In order to know score of each student, the writer calculated score of spelling test by using following the formula:

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

Where:

S = students' score

n = number of true answer

N = number of test items

Based on the data, the result calculated can be seen in the following table:

Table 4.1

Presentation of the Students' Achievement in Spelling Ability

No	Res	Spelling Test Score
1	R-1	20
2	R-2	68
3	R-3	54
4	R-4	40
5	R-5	16
6	R-6	16
7	R-7	42
8	R-8	42
9	R-9	46
10	R-10	58
11	R-11	30
12	R-12	30
13	R-13	36
14	R-14	50
15	R-15	40
16	R-16	20

17	R-17	38
18	R-18	30
19	R-19	28
20	R-20	26
21	R-21	62
22	R-22	58
23	R-23	48
24	R-24	34
25	R-25	30
26	R-26	60
27	R-27	58
28	R-28	56
29	R-29	30
30	R-30	56
31	R-31	28
32	R-32	28
33	R-33	44
34	R-34	44
35	R-35	24
36	R-36	52
37	R-37	26
38	R-38	42
39	R-39	44
		1554

The descriptive statistics of the students' spelling ability score (appendix 5) shows the number of sample (*n*) 39. From 39 students, it is known that the lowest or minimum score is 16 and the highest or maximum score is 68. The range score between minimum and maximum score that is equal to 52 and sum of the total score of 39 samples that is equal to 1554.

To find out the mean score of the students' spelling ability, the writer used the formula as follow:

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

Where:

M = mean

$\sum X$ = the sum of score

N = number of the students

It is known that:

$\sum X = 1554$

N = 39

So, it can be counted as follow:

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

$$= \frac{1554}{39} = 39.846$$

So, the mean score of the students' spelling was 39.846.

C. The correlation between voluntary reading and spelling ability of fifth semester English department students of STAIN Palangka Raya

To find out the correlation between voluntary reading and spelling ability of fifth semester English department students of STAIN Palangka Raya the writer used the correlation serial formula as follow:

$$r_{ser} = \frac{\sum\{(o_r - o_t)(M)\}}{SD_{tot}\sum\left\{\frac{(o_r - o_t)^2}{p}\right\}}$$

Where :

r_{ser} : coeficient correlation serial

O_r : the lower ordinate

O_t : the higher ordinate

M : mean

SD_{tot} : total standard deviation

There were several steps done before using formula above. They were:

1. Making calculation table of serial correlation:

Table 4.2

Calculation Table of Serial Correlation

No.	Spelling Score				
	Voluntary Reading				
	Always	Often	Sometimes	Seldom	Never
1	20	16	68	40	
2	62	42	54	40	
3	42	42	28		
4		30	46		
5		50	58		
6		20	30		
7		28	36		
8		26	38		

9		30	30		
10		60	58		
11		56	34		
12		56	58		
13		28	30		
14		44	28		
15		44	44		
16		24			
17		52			
18		26			
19		48			
20					
Total Score	124	722	640	80	0
Total Student	3	19	15	2	0
Proportion	0.077	0.487	0.385	0.051	0
Mean	41.333	38	42.666	40	0

Explanation:

a) Proportion was got by dividing total students of each category with total whole students (N) for example, total student of **always** category is 4 people and total whole students (N) is 39. The proportion of **always** category is $\frac{3}{39} = 0.077$ and so on.

b) Mean was got by dividing total score of each category with total students in that category for example, total score of **always** category is 172 and total students in that category (N) is 4. The mean of **always** category is $\frac{124}{3} = 41.333$ and so on.

2. Making second calculation table of serial correlation:

Table 4.3

Calculation Table of Serial Correlation

Category	N	p	o	(o_r- o_t)	(o_r -o_t)^2	(or - ot)^2 / p	M	(or - ot).M
Always	3	0.077	0.14156	0.14156	0.020039	0.260248	41.333	5.851099
Often	19	0.487	0.39364	0.25208	0.063544	0.13048	38	9.57904
Sometime	15	0.385	0.10314	-0.2905	0.084391	0.219197	42.666	-12.394473
Seldom	2	0.051	-	-0.10314	0.010638	0.208588	40	-4.1256
Never	0	0	-	-	-	0	0	
Total	39	1.00	-	-	-	0.818513	-	-1.089934

Explanation:

a) Column no. 1, 2, and 3 was got from serial correlation table before.

b) Column no. 4 ordinate (o) was got from ordinate and z of normal curve table.

c) Column no. 5 (o_r- o_t) was got by reducing ordinate with another one decadently. For example, active category ordinate is 0.14156 – 0 = 0.14156, and so on.

d) Column no. 6 was got by squaring ordinate in column no. 5. For example, for the first line $(0.14156)^2$ = 0.14156 x 0.14156 = 0.020039, and so on.

e) Column no. 7 was got by dividing squared ordinate in column 6 with proportion in column 3. For example, for the first line, $\frac{0.020039}{0.077} =$ 0.260248, and so on.

f) Mean was got by dividing total score of each category with total students in that category for example, total score of **always** category is 124 and total students in that category (N) is 3. The mean of **always** category is $\frac{124}{3} = 41.333$, and so on.

g) Column no. 9 was got by multiplying column no. 4 with mean. For example, 0.14156 x 41.333 = 5.851099, and so on.

3. Finding out total standard deviation.

First step used in finding out total standard deviation was making standard deviation calculation table as follow:

Table 4.4

Standard Deviation Calculation Table

score (X)	F	f X	f X^2
68	1	68	4624
62	1	62	3844
60	1	60	3600
58	3	174	10092
56	2	112	6272
54	1	54	2916
52	1	52	2704
50	1	50	2500
48	1	48	2304
46	1	46	2116
44	3	132	5808
42	3	126	5292
40	2	80	3200

38	1	38	1444
36	1	36	1296
34	1	34	1156
30	5	150	4500
28	3	84	2352
26	2	52	1352
24	1	24	576
20	2	40	800
16	2	32	512
	39=N	1,554=∑fX	69,260=$\sum fX^2$

From the table above, it was known:

N = 39

∑fX = 1,554

$\sum fX^2$ = 69,260

So, it can be counted as follow:

$$SD_{tot} = \sqrt{\frac{\sum fX^2}{N} - \left(\frac{\sum fX}{N}\right)^2}$$

$$SD_{tot} = \sqrt{\frac{69{,}260}{39} - \left(\frac{1{,}554}{39}\right)^2}$$

$$SD_{tot} = \sqrt{1{,}775.894 - (39.846)^2}$$

$$SD_{tot} = \sqrt{1{,}775.894 - 1{,}587.704}$$

$$SD_{tot} = \sqrt{118.19}$$

$$SD_{tot} = 13.718$$

4. Calculating serial correlation.

From the calculation above it is known that:

$\sum\{(o_r - o_t)(M)\}$ = -1.089934

SD_{tot} = 13.718

$\sum\left\{\frac{(o_r - o_t)^2}{p}\right\}$ = 0.818513

$$r_{ser} = \frac{\sum\{(o_r - o_t)(M)\}}{SD_{tot}\sum\left\{\frac{(o_r - o_t)^2}{p}\right\}}$$

$$r_{ser} = \frac{-1.089934}{13.718 \text{ x } 0.818513}$$

$$r_{ser} = \frac{-1.089934}{11.228361}$$

$$r_{ser} = -0.097$$

Based on the calculation above, it was found that the total score for coeficient correlation serial was -0.097. After getting the score of coeficient correlation serial, the next step the writer did was to find the score of "r" chotomitation with formula as follow:

$$r_{ch} = r_{ser}\sqrt{\sum\left[\frac{(O_r - O_t)^2}{p}\right]}$$

From the calculation before, it is known that:

r_{ser} = -0.097

$\sum\left\{\frac{(o_r-o_t)^2}{p}\right\}$ = 0.818513

$$r_{ch} = r_{ser}\sqrt{\sum\left[\frac{(O_r - O_t)^2}{p}\right]}$$

$$r_{ch} = -0.097 \text{ x } \sqrt{0.818513}$$

$$r_{ch} = -0.097 \text{ x } 0.904717$$

$$r_{ch} = -0.088$$

The next step was done is to find a value of r_{ch} at factor of correlation table. Based on the calculation the value of r_{ch} was -0.088 the total category of voluntary reading was five, so the value factor correlation was 1.047. To make the coeficient r_{ch} equal with "r" product moment, r_{ch} is multiplied with the value of factor correlation -0.088 x 1.047 = -0.092. The result of r_{ch} -0.092 is compared to interpretation orientation table below that stated by Sugiyono[1] the value of "r" was "There is correlation between variable X and Y, yet is very low". So, that H_a is accepted and is H_o is rejected."

Table 4.5

Interpretation Orientation

Interval coefficient	Degree of Relationship
0,00-0,199	Very low
0,20-0,399	Low
0,40-0,599	Average
0,60-0,799	High

[1] Sugiyono, *Statistika untuk*, p: 231.

0,80-1,000	Very high

To know whether the value of "r_{ch}" is significant or not, the writer compared "r_{ch}" with r table at significant level 5 % based on the calculation degree of freedom was know that:

df = N – 2

N = 39

df = 39 – 2 = 37

So, based on the significant level was illustrated as follow:

Df (degree of freedom)	Value "r" on significant level 5 %
37	0.325

It means that "r_{ch}" = -0.092 is smaller than r table so it can be concluded that there is very low correlation between voluntary reading and spelling ability of fifth semester English department students of STAIN Palangka Raya, yet it is not significant. Then, the correlation is negative. It means that the more the students read voluntarily does not give an impact in increasing their spelling ability.

D. Discussion

Voluntary reading questionnaire result shows that the percentage of students choose always is 13% in dictionary, 14% in textbook, 5% in journal, 41% in internet material, 0% in comic, 3% in novel/story book, 8% in magazine, 5% in newspaper, 39% in movie, and 29% in software. The highest

percentage is in internet material. So it can be concluded that the students have a tendency in reading internet material.

The result of the study shows that the students' voluntary reading in this study has correlation with spelling ability of the students in STAIN Palangka Raya. However, correlation value in this study indicates the correlation between the variables found is very low and negative but the result cannot be generalized. This result has a slight different with the result of Krashen and Polak's previous study of ESL which their correlation value is higher than this result of EFL study. It is assumed that context factor has a part of improving someone's ability in learning.

Some factors, we assume, influenced why our correlation value becomes very low. One of factors is concerning with understanding the question and answer of questionnaire. In answering the questionnaire, the respondents may have different concept or meaning that they hold about the frequency (always, often, sometime, seldom, and never). Another factor is the spelling test is not wide enough in measuring words that our respondents have. Third factor is that auditory channel may have distracted their spelling test (even though dictation test is used commonly to measure spelling ability) as Harmer notes "Spelling becomes difficult for student of English. One of the reasons is the sound of word and the way it spelt is not always same."[2]

[2] Jeremy Harmer, *The Practice*, p. 256.

Considering the factors above, we agree with Polak and Krashen that voluntary reading will help in improving spelling ability.[3] This assumption is supported by some researches which suggest that instructional programs in reading should give strong consideration to the teaching of extensive reading. Krashen and Day and Bamford in Brown both made the case that voluntary reading is a key to student gains in reading ability, linguistic competence, vocabulary, spelling, and writing.[4]

[3] Jeanne Polak and Stephen Krashen, "Do We", p. 141-146.
[4] . Douglas Brown, *Teaching by Principles,* p.301.