

CHAPTER IV
FINDINGS AND DISCUSSION

A. Findings

1. Students' Multiple Intelligences

To know the students' multiple intelligences, the researches gave to the students a test on 27th May, 2015. Students answer the test. The test consists of 8 items, for each item it consists of 10 questions. It can be seen at table as follow:

Table 4.1 The Scores of Each Multiple Intelligence Test

Students Number	Multiple Intelligences							
	VL	LM	VS	BK	MR	INTERP	INTRAP	NAT
1	50	50	40	50	50	60	60	50
2	70	60	70	60	60	70	80	60
3	50	70	60	70	50	70	90	50
4	70	70	70	60	60	80	60	40
5	70	70	70	70	70	70	80	70
6	90	70	70	70	80	60	70	60
7	70	80	70	60	70	80	60	70
8	70	60	50	60	50	70	60	60
9	70	50	60	50	40	50	60	60

10	60	90	70	70	80	80	80	70
11	60	70	70	70	70	70	60	40

Table 4.1 (continued) The Scores of Each Multiple Intelligence Test

12	60	60	60	50	70	70	60	60
13	70	60	70	70	80	70	70	80
14	70	80	70	70	70	80	60	100
15	60	70	50	60	50	80	50	70
16	70	60	60	80	90	80	70	60
17	60	70	60	60	60	70	50	60
18	60	60	70	70	60	70	60	80
19	70	80	40	70	50	80	70	70
20	80	80	80	70	90	90	90	80
21	70	70	60	70	60	90	80	70
22	60	60	80	80	90	90	80	70
Total	1460	1490	1400	1440	1450	1630	1500	1430

Note :

VL = Verbal/Linguistic

LM = Logical/Mathematical

VS = Visual/Spatial

BK = Bodily/Kinesthetic

MR = Musical/Rhythmic

INTERP = Interpersonal

INTRAP = Intrapersonal

NAT = Natural

Based on the result of each multiple intelligences test, it is found the data that the highest score for VL is 90 and the lowest score is 50. The accumulated score is 1460. The highest score for LM is 90 and the lowest score is 50. The accumulated score is 1490. The highest score for VS is 80 and the lowest score is 40. The accumulated score is 1400. The highest score for BK is 80 and the lowest score is 50. The accumulated score is 1440. The highest score for MR is 90 and the lowest score is 40. The accumulated score is 1450. The highest score for INTERP is 90 and the lowest score is 50. The accumulated score is 1630. The highest score for INTRAP is 90 and the lowest score is 50. The accumulated score is 1500. The highest score for NAT is 100 and the lowest score is 50. The accumulated score is 1430.

The students' Multiple Intelligences profiles were identified and the intelligences mean and standard deviation were calculated to decide which is the strongest and which the weakest intelligence the students possess.

Table 4.2 Descriptive Statistics of Respondents Multiple Intelligences

Intelligences	N	Minimum	Maximum	Mean	Std. Deviation
VL	22	50.00	90.00	66.3636	9.02138
LM	22	50.00	90.00	67.7273	10.20356
VS	22	40.00	80.00	63.6364	10.93071

BK	22	50.00	80.00	65.4545	8.57864
MR	22	40.00	90.00	65.9091	14.69016
INTERP	22	50.00	90.00	74.0909	10.07547
INTRAP	22	50.00	90.00	68.1818	11.80652
NAT	22	50.00	100.00	65.0000	13.71478

According to Table 4.2 results, the students show strength with the interpersonal intelligence (Mean= 74.09). The students' second highest intelligence is the intrapersonal intelligence (Mean= 68.18) followed by logical/mathematical intelligence (Mean= 67.73). The weakest intelligence the students possess is the visual/spatial intelligence (Mean= 63.64). Other intelligences include verbal/linguistic intelligence (Mean= 66.36), musical/rhythmic intelligence (Mean= 65.91), naturalistic intelligence (Mean= 65.00) and bodily kinesthetic intelligence (Mean= 65.45).

In order to know the score of students' multiple intelligences test, the researcher accumulated the total score of each multiple intelligence, then divided the total score to find the mean score of students' multiple intelligences.

Table 4.3 The Scores of Multiple Intelligences Test

Number	Students Code Number	Score
1	01	51,25
2	02	66,25

3	03	63,75
4	04	63,75

Table 4.3 (continued) The Scores of Multiple Intelligences Test

5	05	71,25
6	06	71,25
7	07	70
8	08	60
9	09	55
10	010	75
11	011	63,75
12	012	61,25
13	013	71,25
14	014	75
15	015	61,25
16	016	71,25
17	017	61,25
18	018	66,25
19	019	66,25
20	020	82,5
21	021	71,25
22	022	76,25

	N = 22	$\Sigma X = 1475$
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Based on the result of test of multiple intelligences, it is found the data that the highest score is 82.5 and the lowest score is 51.25. The accumulated score is 1475. Then, the researcher used the accounting of mean for each group as follow:

$$M = \frac{\Sigma}{n}$$

$$M = \frac{1475}{22}$$

$$= 67.05$$

Based on the result of the applied formula above, the total score of multiple intelligences test is 1475 of 22 students, and the mean score is 67.05. The mean score showed that students' multiple intelligences are in fair category.

To clarify the result and to find the multiple intelligences, the researcher classified the data into six categories namely excellent, good, fair, low, very low, and poor as the standard score of the test. The clarification of multiple intelligences can be seen in the table as below:

Table 4.4 Standard Score of Multiple Intelligences

Score	Category
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80 – 100	Excellent
70 - < 80	Good
60 - < 70	Fair
50 - < 60	Low
40 - < 50	Very Low
0 - < 40	Poor

The table above resulted that mean score of multiple intelligences are in interval 60- < 70. So that, the researcher concluded that students' multiple intelligences at the eleventh grade of State Islamic Senior High School 1 Banjarbaru academic year 2014/2015 is in fair category.

2. Students' Reading Comprehension

To better understand about students' reading comprehension, the researcher conducted a test of reading text at 28th May, 2015 in the classroom. The score can be seen in the following table:

Table 4.5 The Scores of Reading Comprehension Achievement Test

Number	Students Code Number	Score
1	01	45
2	02	40
3	03	65
4	04	70

5	05	40
6	06	60
7	07	45
8	08	65
9	09	40
10	010	90
11	011	75
12	012	40

Table 4.5 (continued) The Result of Reading Comprehension Achievement Test

13	013	40
14	014	95
15	015	50
16	016	40
17	017	55
18	018	40
19	019	50
20	020	55
21	021	40
22	022	45
	N = 22	$\Sigma Y = 1185$

Based on the result of test of reading comprehension, it is found the data that the highest score is 95 and the lowest score is 40. The accumulated score is 1185.

Then, the researcher uses the accounting of mean for each group as follow:

$$M = \frac{\Sigma}{n}$$

$$= \frac{1185}{22}$$

$$= 53.86$$

Based on the result of the applied formula above, the total score of reading comprehension is 1185 of 22 students, and the mean score is 53.86. The mean score showed that students' reading comprehension are in bad category.

To clarify the result and to find the reading comprehension, the researcher classified the data into six categories namely excellent, good, fair, low, very low, and poor as the standard score of the test. The clarification of multiple intelligences can be seen in the table as below:

Table 4.6 Standard Score of Reading Comprehension

Score	Category
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80 – 100	Excellent
70 - < 80	Good
60 - < 70	Fair
50 - < 60	Low
40 - < 50	Very Low
0 - < 40	Poor

The table above resulted that mean score of reading comprehension are in interval 50 - < 60. So that, the researcher concluded that students' reading comprehension at the eleventh grade of State Islamic Senior High School 1 Banjarbaru academic year 2014/2015 is in low category.

3. The Correlation Between Students' Multiple Intelligences and Reading Comprehension Achievement

The data of score of the students' multiple intelligences and reading comprehension can be seen in table 4.2 and 4.5. After the average of data X and data Y are defined, the writer made working table which can be seen in the following table.

Table 4.7 Working Table of Data Analysis

Subject	X	Y	XY	X ²	Y ²
1	51,25	45	2306,25	2626,563	2025
2	66,25	40	2650	4389,063	1600
3	63,75	65	4143,75	4064,063	4225

4	63,75	70	4462,5	4064,063	4900
5	71,25	40	2850	5076,563	1600
6	71,25	60	4275	5076,563	3600
7	70	45	3150	4900	2025
8	60	65	3900	3600	4225
9	55	40	2200	3025	1600
10	75	90	6750	5625	8100
11	63,75	75	4781,25	4064,063	5625
12	61,25	40	2450	3751,563	1600
13	71,25	40	2850	5076,563	1600
14	75	95	7125	5625	9025
15	61,25	50	3062,5	3751,563	2500

Table 4.7 (continued) Working Table of Data Analysis

16	71,25	40	2850	5076,563	1600
17	61,25	55	3368,75	3751,563	3025
18	66,25	40	2650	4389,063	1600
19	66,25	50	3312,5	4389,063	2500
20	82,5	55	4537,5	6806,25	3025
21	71,25	40	2850	5076,563	1600
22	76,25	45	3431,25	5814,063	2025
N=22	$\Sigma X =$ 1475	$\Sigma Y =$ 1185	$\Sigma XY =$ 79956,25	$\Sigma X^2 =$ 100018,8	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\frac{(22.79956,25 - (1475)(1185))}{\sqrt{(22.100018,8 - (1475)^2) (22.69625 - (1185)^2)}}$$

$$= \frac{11162,5}{\sqrt{3161166215}}$$

$$= \frac{11162,5}{56224,2494}$$

$$= 0,19853533$$

$$= 0,199$$

After finding the result of the calculation by using correlation formula, the data by using Statistical Product and Service Solution (SPSS) 16.0 will be re-calculated in order to confirm the calculation result, and the result is 0.199. The result from SPSS 16.0 can be seen in the following table :

Table 4.8 SPSS 16.0 Correlation Between Multiple Intelligences and Reading Comprehension Result

		Multiple Intelligences	Reading Comprehension
Multiple Intelligences	Pearson Correlation	1	.199
	Sig. (2-tailed)		.376

	N	22	22
Reading	Pearson Correlation	.199	1
Comprehension	Sig. (2-tailed)	.376	
	N	22	22

4. The Correlation Between Students' Strengths in Each of Their Multiple Intelligence and Their Achievement in Reading Comprehension

The data of scores of the students in each of multiple intelligences and reading comprehension can be seen in table 4.2 and 4.5. After the average of data X and data Y are defined, the writer made working table which can be seen in the following table.

Table 4.9 Working Table of Data Analysis of Verbal Intelligence

Subject	X1	Y	XY	X ²	Y ²
1	50	45	2250	2500	2025
2	70	40	2800	4900	1600
3	50	65	3250	2500	4225
4	70	70	4900	4900	4900
5	70	40	2800	4900	1600
6	90	60	5400	8100	3600

7	70	45	3150	4900	2025
8	70	65	4550	4900	4225
9	70	40	2800	4900	1600
10	60	90	5400	3600	8100
11	60	75	4500	3600	5625
12	60	40	2400	3600	1600
13	70	40	2800	4900	1600
14	70	95	6650	4900	9025

Table 4.9 (continued) Working Table of Data Analysis of Verbal Intelligence

15	60	50	3000	3600	2500
16	70	40	2800	4900	1600
17	60	55	3300	3600	3025
18	60	40	2400	3600	1600
19	70	50	3500	4900	2500
20	80	55	4400	6400	3025
21	70	40	2800	4900	1600
22	60	45	2700	3600	2025
N=22	$\Sigma X =$ 1460	$\Sigma Y =$ 1185	$\Sigma XY =$ 78550	$\Sigma X^2 =$ 98600	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\begin{aligned}
 &= \frac{(n \sum XY - (\sum X)(\sum Y)) / \sqrt{(n \sum X^2 - (\sum X)^2)(n \sum Y^2 - (\sum Y)^2)}}{\sqrt{\frac{(n \sum XY - (\sum X)(\sum Y))^2}{(n \sum X^2 - (\sum X)^2)(n \sum Y^2 - (\sum Y)^2)}}} \\
 &= \frac{22.78550 - (1460)(1185)}{\sqrt{(22.98600 - (1460)^2)(22.69625 - (1185)^2)}} \\
 &= \frac{-2000}{\sqrt{37600(127525)}} \\
 &= \frac{-2000}{\sqrt{4794940000}} \\
 &= \frac{-2000}{69245.505} \\
 &= -0.029
 \end{aligned}$$

Table 4.10 Working Table of Data Analysis of Logical Intelligence

Subject	X ²	Y	XY	X ²	Y ²
1	50	45	2250	2500	2025
2	60	40	2400	3600	1600
3	70	65	4550	4900	4225
4	70	70	4900	4900	4900
5	70	40	2800	4900	1600
6	70	60	4200	4900	3600
7	80	45	3600	6400	2025
8	60	65	3900	3600	4225
9	50	40	2000	2500	1600
10	90	90	8100	8100	8100
11	70	75	5250	4900	5625
12	60	40	2400	3600	1600
13	60	40	2400	3600	1600

14	80	95	7600	6400	9025
15	70	50	3500	4900	2500
16	60	40	2400	3600	1600
17	70	55	3850	4900	3025
18	60	40	2400	3600	1600

Table 4.10 (continued) Working Table of Data Analysis of Logical Intelligence

19	80	50	4000	6400	2500
20	80	55	4400	6400	3025
21	70	40	2800	4900	1600
22	60	45	2700	3600	2025
N=22	$\Sigma X^2 =$ 1490	$\Sigma Y =$ 1185	$\Sigma XY =$ 82400	$\Sigma X^2 =$ 103100	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\begin{aligned}
 &= \frac{\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{(\Sigma X^2 - (\Sigma X)^2)(\Sigma Y^2 - (\Sigma Y)^2)}} \\
 &= \frac{22.82400 - (1490)(1185)}{\sqrt{(22.103100 - (1490)^2)(22.69625 - (1185)^2)}} \\
 &= \frac{47150}{\sqrt{6133952500}} \\
 &= \frac{47150}{78319.5538}
 \end{aligned}$$

$$= 0.602$$

Table 4.11 Working Table of Data Analysis of Visual Intelligence

Subject	X3	Y	XY	X ²	Y ²
1	40	45	1800	1600	2025
2	70	40	2800	4900	1600
3	60	65	3900	3600	4225
4	70	70	4900	4900	4900
5	70	40	2800	4900	1600
6	70	60	4200	4900	3600
7	70	45	3150	4900	2025
8	50	65	3250	2500	4225
9	60	40	2400	3600	1600
10	70	90	6300	4900	8100
11	70	75	5250	4900	5625
12	60	40	2400	3600	1600
13	70	40	2800	4900	1600
14	70	95	6650	4900	9025
15	50	50	2500	2500	2500
16	60	40	2400	3600	1600
17	60	55	3300	3600	3025
18	70	40	2800	4900	1600

19	40	50	2000	1600	2500
20	80	55	4400	6400	3025

Table 4.11 (continued) Working Table of Data Analysis of Visual Intelligence

21	60	40	2400	3600	1600
22	80	45	3600	6400	2025
N=22	$\Sigma X =$ 1400	$\Sigma Y =$ 1185	$\Sigma XY =$ 76000	$\Sigma X^2 =$ 91600	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\begin{aligned}
 &= \frac{(\Sigma XY - (\Sigma X)(\Sigma Y) / N)}{\sqrt{(\Sigma X^2 - (\Sigma X)^2 / N)(\Sigma Y^2 - (\Sigma Y)^2 / N)}} \\
 &= \frac{22.76000 - (1400)(1185)}{\sqrt{(22.91600 - (1400)^2 / 22)(22.69625 - (1185)^2 / 22)}} \\
 &= \frac{13000}{\sqrt{55200 (127525)}} \\
 &= \frac{13000}{\sqrt{7039380000}} \\
 &= \frac{13000}{83901.0131} \\
 &= 0.155
 \end{aligned}$$

Table 4.12 Working Table of Data Analysis of Bodily Intelligence

Subject	X	Y	XY	X²	Y²
1	50	45	2250	2500	2025
2	60	40	2400	3600	1600
3	70	65	4550	4900	4225
4	60	70	4200	3600	4900
5	70	40	2800	4900	1600
6	70	60	4200	4900	3600
7	60	45	2700	3600	2025
8	60	65	3900	3600	4225
9	50	40	2000	2500	1600
10	70	90	6300	4900	8100
11	70	75	5250	4900	5625
12	50	40	2000	2500	1600
13	70	40	2800	4900	1600
14	70	95	6650	4900	9025
15	60	50	3000	3600	2500
16	80	40	3200	6400	1600
17	60	55	3300	3600	3025
18	70	40	2800	4900	1600
19	70	50	3500	4900	2500
20	70	55	3850	4900	3025

Table 4.12 (continued) Working Table of Data Analysis of Bodily Intelligence

21	70	40	2800	4900	1600
22	80	45	3600	6400	2025
N=22	$\Sigma X =$ 1440	$\Sigma Y =$ 1185	$\Sigma XY =$ 78050	$\Sigma X^2 =$ 95800	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\begin{aligned}
 &= \frac{(\Sigma XY - (\Sigma X)(\Sigma Y) / N)}{\sqrt{(\Sigma X^2 - (\Sigma X)^2 / N)(\Sigma Y^2 - (\Sigma Y)^2 / N)}} \\
 &= \frac{22.78050 - (1440)(1185) / 22}{\sqrt{(22.95800 - (1440)^2 / 22)(22.69625 - (1185)^2 / 22)}} \\
 &= \frac{10700}{\sqrt{34000 (127525)}} \\
 &= \frac{10700}{\sqrt{4335850000}} \\
 &= \frac{10700}{65847.1715} \\
 &= 0.162
 \end{aligned}$$

Table 4.13 Working Table of Data Analysis of Musical Intelligence

Subject	X5	Y	XY	X ²	Y ²
1	50	45	2250	2500	2025

2	60	40	2400	3600	1600
3	50	65	3250	2500	4225
4	60	70	4200	3600	4900
5	70	40	2800	4900	1600
6	80	60	4800	6400	3600
7	70	45	3150	4900	2025
8	50	65	3250	2500	4225
9	40	40	1600	1600	1600
10	80	90	7200	6400	8100
11	70	75	5250	4900	5625
12	70	40	2800	4900	1600
13	80	40	3200	6400	1600
14	70	95	6650	4900	9025
15	50	50	2500	2500	2500
16	90	40	3600	8100	1600
17	60	55	3300	3600	3025
18	60	40	2400	3600	1600
19	50	50	2500	2500	2500
20	90	55	4950	8100	3025

Table 4.13 (continued) Working Table of Data Analysis of Musical Intelligence

21	60	40	2400	3600	1600
22	90	45	4050	8100	2025
N=22	$\Sigma X =$ 1450	$\Sigma Y =$ 1185	$\Sigma XY =$ 78500	$\Sigma X^2 =$ 100100	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\begin{aligned}
 &= \frac{(N \Sigma XY - (\Sigma X)(\Sigma Y)) / \sqrt{(N \Sigma X^2 - (\Sigma X)^2)(N \Sigma Y^2 - (\Sigma Y)^2)}}{=} \\
 &= \frac{22(78500) - (1450)(1185)}{\sqrt{(22(100100) - (1450)^2)(22(69625) - (1185)^2)}} \\
 &= \frac{8750}{\sqrt{99700(1275250)}} \\
 &= \frac{8750}{\sqrt{12714242500}} \\
 &= \frac{8750}{112757.45} \\
 &= 0.078
 \end{aligned}$$

Table 4.14 Working Table of Data Analysis of Interpersonal Intelligence

Subject	X	Y	XY	X ²	Y ²
1	60	45	2700	3600	2025
2	70	40	2800	4900	1600
3	70	65	4550	4900	4225

4	80	70	5600	6400	4900
5	70	40	2800	4900	1600
6	60	60	3600	3600	3600
7	80	45	3600	6400	2025
8	70	65	4550	4900	4225
9	50	40	2000	2500	1600
10	80	90	7200	6400	8100
11	70	75	5250	4900	5625
12	70	40	2800	4900	1600
13	70	40	2800	4900	1600
14	80	95	7600	6400	9025
15	80	50	4000	6400	2500
16	80	40	3200	6400	1600
17	70	55	3850	4900	3025
18	70	40	2800	4900	1600
19	80	50	4000	6400	2500

Table 4.14 (continued) Working Table of Data Analysis of Interpersonal Intelligence

20	90	55	4950	8100	3025
21	90	40	3600	8100	1600
22	90	45	4050	8100	2025

N=22	$\Sigma X =$ 1630	$\Sigma Y =$ 1185	$\Sigma XY =$ 88300	$\Sigma X^2 =$ 122900	$\Sigma Y^2 =$ 69625
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After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\begin{aligned}
 &= \frac{\Sigma XY - (\Sigma X)(\Sigma Y) / N}{\sqrt{(\Sigma X^2 - (\Sigma X)^2 / N)(\Sigma Y^2 - (\Sigma Y)^2 / N)}} \\
 &= \frac{22.88300 - (1630)(1185)}{\sqrt{(22.122900 - (1630)^2 / 22)(22.69625 - (1185)^2 / 22)}} \\
 &= \frac{11050}{\sqrt{46900 (127525)}} \\
 &= \frac{11050}{\sqrt{5980922500}} \\
 &= \frac{11050}{77336.4245} \\
 &= 0.143
 \end{aligned}$$

Table 4.15 Working Table of Data Analysis of Intrapersonal Intelligence

Subject	X	Y	XY	X ²	Y ²
1	60	45	2700	3600	2025
2	80	40	3200	6400	1600
3	90	65	5850	8100	4225
4	60	70	4200	3600	4900
5	80	40	3200	6400	1600

6	70	60	4200	4900	3600
7	60	45	2700	3600	2025
8	60	65	3900	3600	4225
9	60	40	2400	3600	1600
10	80	90	7200	6400	8100
11	60	75	4500	3600	5625
12	60	40	2400	3600	1600
13	70	40	2800	4900	1600
14	60	95	5700	3600	9025
15	50	50	2500	2500	2500
16	70	40	2800	4900	1600
17	50	55	2750	2500	3025
18	60	40	2400	3600	1600
19	70	50	3500	4900	2500

Table 4.15 (continued) Working Table of Data Analysis of Interpersonal Intelligence

20	90	55	4950	8100	3025
21	80	40	3200	6400	1600
22	80	45	2700	6400	2025
N=22	$\Sigma X =$ 1500	$\Sigma Y =$ 1185	$\Sigma XY =$ 80650	$\Sigma X^2 =$ 105200	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

$$\begin{aligned}
 &= \frac{\sum(XY) - (\sum X)(\sum Y)}{\sqrt{(\sum X^2 - (\sum X)^2)(\sum Y^2 - (\sum Y)^2)}} \\
 &= \frac{22.80650 - (1500)(1185)}{\sqrt{(22.105200 - (1500)^2)(22.69625 - (1185)^2)}} \\
 &= \frac{-3200}{\sqrt{64400(127525)}} \\
 &= \frac{-3200}{\sqrt{8212610000}} \\
 &= \frac{-3200}{90623.4517} \\
 &= -0.035
 \end{aligned}$$

Table 4.16 Working Table of Data Analysis of Natural Intelligence

Subject	X8	Y	XY	X ²	Y ²
1	50	45	2250	2500	2025
2	60	40	2400	3600	1600
3	50	65	3250	2500	4225
4	40	70	2800	1600	4900
5	70	40	2800	4900	1600
6	60	60	3600	3600	3600
7	70	45	3150	4900	2025
8	60	65	3900	3600	4225
9	60	40	2400	3600	1600

10	70	90	6300	4900	8100
11	40	75	3000	1600	5625
12	60	40	2400	3600	1600
13	80	40	3200	6400	1600
14	100	95	9500	10000	9025
15	70	50	3500	4900	2500
16	60	40	2400	3600	1600
17	60	55	3300	3600	3025
18	80	40	3200	6400	1600
19	70	50	3500	4900	2500
20	80	55	4400	6400	3025

Table 4.15 (continued) Working Table of Data Analysis of Natural Intelligence

21	70	40	2800	4900	1600
22	70	45	3150	4900	2025
N=22	$\Sigma X =$ 1430	$\Sigma Y =$ 1185	$\Sigma XY =$ 77200	$\Sigma X^2 =$ 96900	$\Sigma Y^2 =$ 69625

After the writer made a working table, the degree of r_{xy} will be determined by implementing formula as follow:

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

$$\begin{aligned}
&= \frac{22.77200 - (1430)(1185)}{\sqrt{(22.96900 - (1430)^2) (22.69625 - (1185)^2)}} \\
&\quad \sqrt{86900 (127525)} \\
&= \frac{3850}{\sqrt{11081922500}} \\
&= \frac{3850}{105270.7106} \\
&= 0.037
\end{aligned}$$

After finding the result of the calculation by using correlation formula, the data by using Statistical Product and Service Solution (SPSS) 16.0 will be re-calculated in order to confirm the calculation result. The result from SPSS 16.0 can be seen in the following table :

Table 4.17 SPSS 16.0 Correlation Between Each Multiple Intelligence and Reading Comprehension Result.

Intelligences	Pearson Correlation	Sig. (2 tailed)
Verbal/Linguistic	-.029	.898
Logical/Mathematical	.602**	.003
Visual/Spatial	.155	.491
Bodily/Kinesthetic	.162	.470
Musical/Rhythmic	.078	.731
Interpersonal	.143	.526
Intrapersonal	-.035	.876
Naturalistic	.037	.872

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

*. Correlation is significant at the 0.05 level (2-tailed).

Regarding the second research question, the strengths in the correlation between the students multiple intelligences and their reading comprehension achievement could be predicted more accurately by using the stepwise multiple regression analysis. The result can be seen in the following table.

Table 4.18 SPSS 16.0 Stepwise Multiple Regression Result

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.602 ^a	.362	.331	13.59363

a. Predictors: (Constant), LM

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2100.853	1	2100.853	11.369	.003 ^a
	Residual	3695.738	20	184.787		
	Total	5796.591	21			

a. Predictors: (Constant), LM

b. Dependent Variable: Reading

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12.526	19.902		-.629	.536
	LM	.980	.291	.602	3.372	.003

a. Dependent Variable: Reading

Excluded Variable^b

Model	Beta In	T	Sig.	Partial Correlation	Collinearity Statistics	
					Tolerance	
1	VL	-.167 ^a	-.909	.375	-.204	.953
	VS	.006 ^a	.030	.976	.007	.938
	BK	-.067 ^a	-.340	.737	-.078	.866
	MR	-.102 ^a	-.537	.597	-.122	.919
	INTERP	-.280 ^a	-1.327	.200	-.291	.689
	INTRAP	-.191 ^a	-1.042	.310	-.233	.942
	NAT	-.176 ^a	-.932	.363	-.209	.895

a. Predictors in the Model: (Constant), LM

b. Dependent Variable: Reading

According to the Table, there was one intelligence type that seem to function as predictor of the reading comprehension. The intelligence category is the logical/mathematical intelligence. The most significant predictor identified by the statistic regression program is the logical/mathematical; it has a multiple regression coefficient R of .602 and the coefficient determination R^2 of .362.

B. Discussion

Based on the result of the calculation in the findings, it is known that r_{xy} of Multiple Intelligences and Reading Comprehension is 0.199. To test the hypothesis of the research there are two steps that the writer have performed, it can be known wheter there is a significant correlation or not.

Firstly, the writer consulted to the table of product moment. More detail about table of product moment can be seen in the appendix. Then found out that the “ r ” value for $N = 22$ is 0.423 for 5% significance degree and 0.537 for 1% significance degree. It is clear that $r_{xy} < r_t$.

$$r_{xy} = 0.199$$

$$r_t = 0.423 \text{ \& } 0.537$$

$$r_{xy} < r_t$$

It means, that the hypothesis alternatif (H_a) is denied and hypothesis null (H_o) is accepted. It means there is no significance correlation between students’ multiple intelligences and their reading comprehension achievement.

Secondly, in order to confirm the first step, the writer consulted to table of standard classification of correlation degree below:

Table 4.19. Standard Categories of “r” Product Moment Value

The value of “r” Pearson Product Moment (r_{xy})	Interpretation	
0,00 – 0,199	Very low	There is a correlation between variable X and variable Y, but the correlation is so very low that the correlation is disregarded, or, in other words, there is no correlation between variable X and variable Y.
0,200 – 0,399	Low	There is a low correlation between variable X and variable Y.
0,400 – 0,599	Moderate	There is a fair or moderate correlation between variable X and variable Y.
0,600 – 0,799	High	There is a strong correlation between variable X and variable Y.
0,800 – 1,00	Very high	There is a very strong correlation between variable X and variable Y.

From the table above, it is seen that the r_{xy} of multiple intelligences and reading comprehension 0.199. It means that the correlation between variable X and variable Y in this research is Very Low level. It means there is a correlation between variable X and variable Y, but the correlation is so very low that the correlation is disregarded, or, in other words, there is no significant correlation between variable X and variable Y.

The correlation between each type of intelligences and reading comprehension showed that logical/mathematical intelligence has a strong correlation with r_{xy} 0.602. A stepwise multiple regression analysis was conducted using the reading comprehension scores as a dependent or criterion variable and the eight types of intelligence scores as an independent or predictor variables. Regression is used to determine the extent to which it is possible to predict one variable based on what is known about another variable.

Table 4.20 Stepwise Multiple Regression for Multiple Intelligences and Reading Comprehension Scores of the Students

Model	Standardized Coefficient <hr/> Beta	T	P	R	R ²	Adjusted R ²	Std. Error of the Estimate	F	Sig.
Logical	.602	3.372	.003	.602 ^a	.362	.331	13.59363	11.369	.003 ^a

Dependent Variable: Reading Comprehension

The research result shows that there was logical/mathematical intelligence type that seem to function as predictor of the reading comprehension. it has a multiple regression coefficient R of .602 and the coefficient determination R^2 of .362 meaning that the naturalistic intelligence contributed 36.2% of the variance in reading comprehension.