CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter the researcher presents the finding of the research that consists of description of data, hypothesis testing, and discussion.

A. The Description of Data

As stated previously, all of the data about the correlation between intelligence quotient (IQ) and students' reading comprehension skill in MAN 1 Tulungagung at the first grade in academic year 2016/2017 were collected from administering reading test.

1. The Data of Students' Intelligence Quotient

The data related to the students' intelligence quotient were gotten from the schools' documentation of the result IQ test by Pusat Layanan Psikologi Universitas Negeri Malang. The results of students' IQ test were as follow:

Table 4.1. The Result of Students' IQ Test

No.	Subject	Students' IQ score
1	AD	131
2	AS	133
3	AN	138
4	AB	130
5	BM	130
6	EA	130
7	EY	130
8	FH	131
9	HR	130
10	HZ	134
11	IR	133
12	KN	130
13	KM	130
14	LM	130
15	LZ	131
16	MK	136
17	MR	132
18	ND	130
19	PH	132
20	RY	133
21	SN	131
22	UE	133
23	UL	131
24	WZ	134

The data were computed using SPSS 16.0 and the results were presented in the table of frequency of students' IQ score below:

Table 4.2. The Frequency of Students' IQ Score

Statistics

Students' IQ

N	Valid	24
	Missing	0

Students' IQ

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	130	9	37.5	37.5	37.5
	131	5	20.8	20.8	58.3
	132	2	8.3	8.3	66.7
	133	4	16.7	16.7	83.3
	134	2	8.3	8.3	91.7
	136	1	4.2	4.2	95.8
	138	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

The table above showed that there was 9 students (37.5%) have IQ 130, 5 students (20.8%) have IQ 131, 2 students (8.3%) have IQ 132, 4 students (16.7%) have IQ 133, 2 students (8.3%) have IQ score 134, 1 student (4.2%) has IQ score 136 and 1 student (4.2%) that has IQ between 138.

To know the mean score of the data students' IQ score, the researcher used SPSS 16.0 and the result were presented in the description of the students' IQ score below:

Table 4.3. Descriptive Analysis of Students' IQ Score

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IQ_Score	24	130	138	131.79	2.126
Valid N (listwise)	24				

The table above showed that from 24 students following the description students' IQ score is obtained the minimum IQ was 130, the maximum IQ was 138, the mean IQ was 131.79, and the standart deviation was 2.126.

2. The Data of Students' Reading Test

The data of students' reading comprehension skill was the result of administering test. The results were presented in the following table:

Table 4.4. The Result of Reading Test

No.	Subject	The score of students' reading test
1	AD	80
2	AS	76
3	AN	88
4	AB	80
5	BM	84
6	EA	80
7	EY	84
8	FH	84
9	HR	88
10	HZ	88
11	IR	84
12	KN	80
13	KM	84

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Continuation

14	LM	80
15	LZ	84
16	MK	76
17	MR	80
18	ND	76
19	PH	84
20	RY	84
21	SN	88
22	UE	92
23	UL	84
24	WZ	84

The data were computed using SPSS 16.0 and the results were presented in the frequency of reading test below:

Table 4.5. The Frequency of Administering Reading Test

Statistics

Students' ReadingComprehension

N	Valid	24
	Missing	0

Students' ReadingComprehension

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	76	3	12.5	12.5	12.5
	80	6	25.0	25.0	37.5
	84	10	41.7	41.7	79.2
	88	4	16.7	16.7	95.8
	92	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

The table 4.5 above, showed that from 24 students atending reading test there ware 3 students (12.5%) got score 76, 6 students (25.0%) got score 80, 10 students (41.7%) got score 84, 4 students (16.7%) got score 88, and 1 student (4.2%) got score 92.

To know the mean score of the data students' reading test, the researcher used SPSS 16.0 and the result were presented in the descriptive of the administering test below:

Table 4.6. Descriptive Analysis of Administering Test Result

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Reading_Comprehension	24	76	92	83.00	4.128
Valid N (listwise)	24				

The table above was showed that from 24 students following the reading test is obtained the minimum score was 76, the maximum score was 92, the mean score was 83.00, and the standard deviation was 4.128.

Table 4.7. Acccounting of The Correlation Coefficient of The Correlation Between IQ and Students' Reading Comprehension Skill in The First Grade At MAN 1 Tulungagung

No	X	Y	X^2	Y^2	XY
1	131	80	17161	7056	11004
2	133	76	17689	6400	10640
3	138	88	19044	7744	12144
4	130	80	16900	5776	9880
5	130	84	16900	5776	9880
6	130	80	16900	7056	10920
7	130	84	16900	6400	10400
8	131	84	17161	6400	10480
9	130	88	16900	7056	10920
10	134	88	17956	7056	11256
11	133	84	17689	7744	11704
12	130	80	16900	5776	9880
13	130	84	16900	6400	10400
14	130	80	16900	6400	10400
15	131	84	17161	7056	11004
16	136	76	18496	7056	11424
17	132	80	17424	7056	11088
18	130	76	16900	7056	10920

No	X	Y	X²	Y²	XY
19	132	84	17424	6400	10560
20	133	84	17689	7744	11704
21	131	88	17161	7744	11528
22	133	92	17689	8464	12236
23	131	84	17161	7056	11004
24	134	84	17956	7056	11256
N =24	ΣX =3163	ΣY =1992	ΣX²=416961	ΣY²=165728	ΣXY=262632

From the accounting result was known that N=24, $\Sigma X = 3163$, $\Sigma Y = 1992$, $\Sigma X^2 = 416961$, $\Sigma Y^2 = 165728$, and $\Sigma XY = 262632$.

3. Correlational Testing

As the researcher said before, all of the analysis in this research mainly employed the computation by using SPSS 16.0 program. The correlation analysis was finding out by using *Pearson Product Moment Correlation*.

Table 4.8. Analysis The Result of Pearson Product Moment Correlation

Correlations

		IQ	Reading_Comprehension
IQ	Pearson Correlation	1	.510*
	Sig. (2-tailed)		.011
	N	24	24
Reading_Comprehension	Pearson Correlation	.510*	1
	Sig. (2-tailed)	.011	
	N	24	24

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

From the table above was showed that the correlation coefficient equal r = 0.510, which indicate that there is correlation between two variables. This research is positive correlation because the variables have same moderate score, if their IQ score is high so their reading comprehension is good, but if their IQ score is bad so their reading comprehension is bad also.

To know the strength of the correlation between two variables, the researcher uses the r number (0.510) (see on table3.4). The number of 0.510 indicates that the correlation between the two variables is moderate correlation. Concerning the hypothesis, this study reveals that the null hypothesis is rejected because the SPSS calculating shows that the Sign. is 0.011. As already known, the null hypothesis is rejected if the Sign. is less than 0.05.

B. Hypothesis Testing

There were two hypotheses testing in this research, namely:

1. Null hypothesis (H_0)

    There is no correlation between IQ and students' reading comprehension skill.

2. Alternate hypothesis (H_a)

    There is correlation between IQ and students' reading comprehension skill.

    The researcher used SPSS hypothesis based on the N. Sig. (Number of Significant) to know the answer. As the result of correlation on table 4.8,

the researcher get r = 0.510, N. Sig. = 0.011. On the basis of presentation above, it could be concluded that null hypothesis (H_0)saying that there is no correlation between IQ and students' reading comprehension skill, was rejected and alternate hypothesis (Ha) saying that there is correlation between IQ and students' reading comprehension skill, was accepted.

From the table 4.8, it revealed that the correlation coefficient is 0.510 (the correlation coefficient is not far and is not close to 1). It can be conclude that the correlation between X and Y variables is moderate. So, it means that there is correlation between IQ and students' reading comprehension skill.

C. Discussion

As the researcher said before in chapter 1, the purpose of this research is to find out the correlation between intelligence quotient (IQ) and students' reading comprehension skill in the first grade at MAN 1 Tulungagung. Intelligence is one internal factor that influences the learning process (Purwanto, 1996:107). Reading activity in learning process requires the students' thinking to achieve the goal of study. The thinking process can be seen from the students' intelligence whenface the problem of reading text. So, the process of reading comprehension involved human intelligence to get the right information of the text.

In this research, the researcher collected the data by using test as the instrument. The test used to know the students' reading comprehension skill.

The number of the test was 25 items in form of multiple choices. The number of participants or subjects used was 24 students.

Based on the result of the test, the researcher showed the relation of the aspect of reading and students' answer of the test. As the researcher discussed before, there are five aspects of reading according to Smith (1988:115), they are; main idea, specific information, vocabulary, inference, and reference. Other aspect is making prediction. This test dominantly use specific information there are 11 questions, there are 5 items of main idea, 2 items of vocabulary, and 4 items of reference and 1 item for making prediction. From the score can be seen, almost the students can answer well in main idea, vocabulary, reference and prediction, but for specific information they almost not aware yet about distractor, so that they put the wrong answer.

In this research, the researcher presented the result of the finding analysis. The result of this research is proved by the result of computation that there is moderate score between IQ score and students' reading comprehension score using *product moment formula* that is 0.510. If the coefficient correlation is closed to 1 or -1, it means that the correlation among two variables is strong. Meanwhile, if the coefficient correlation is closed to 0, it is weak correlation among variables. Thus, from the result of accounting above the researcher can take the conclusion that the correlation between two variables is moderate correlation and there was positive correlation among the variables because N. Sig. is 0.011 and it means the Number of Significant is less than the level of N. Sig.(0.05).

From the finding, it can be stated that the students' intelligence give contribution to their learning process especially in reading comprehension skill. This statement was supported by Salovey and Mayer (1990:67) that state "the result of IQ tests were used as the predictor of students' success in an academic setting". Linguistic intelligence is kinds of intelligence that includes of reading test, language test, the verbal sections of intelligence and achievement test (Amstrong, 2009:40). So, in the process of reading comprehension involvedthe human intelligence to get the right information of the text.

If we back to the previous study, there was different result of the research. One research showed that the total score of the research is 0.778, it means that there is significant correlation between IQ and English achievement, but other research said there is no correlation among the same variables because the result of the research just 0.213. From the different result, theresearcher determined to change the variable Y became specific one to correlate with students' intelligence quotient (IQ). The researcher took reading comprehension as Y variable to get the clear result by specific skill. So, the real score of students' reading ability can be seen clearly to correlate with X variable (IQ). The result of this study is moderate correlation between IQ and students' reading comprehension skill.From this result, it was support one of previous study that said there was any correlation between those variables.