CHAPTER III

PRESENTATION AND ANALYSIS OF THE DATA

A. Presentation of the Data

The reading test was given during the students English class and took 30 minutes' time. The test consists of 20 questions which is divided into two parts; they are multiple-choice test and true-false test. In each part there are 10 questions. The score for each number of both multiplechoice part and true-false part is worth 5 points, so the total score is 100. The materials of the test are English reading which the writer took from the students compulsory English book.

The results of reading test are divided into two groups, which are the data that belong to male students and the data that belong to female students. The data contain the reading test scores of both groups. Here, the result of the test is arranged according to their sexes and it is presented in tables :

Table 3.1

The Test Score of Male Students

No	Respondents	Test Score
1	M – 1	85
2	M-2	70
3	M – 3	60
4	M - 4	60
5	M – 5	75
6	M-6	60
7	M-7	40
8	M – 8	75
9	M – 9	65
10	M – 10	85
11	M – 11	60
12	M – 12	65
13	M – 13	50
14	M – 14	70
15	M –15	70
16	M – 16	55
17	M – 17	50
18	M – 18	70
19	M - 19	80

From the table above we can see that, for male students, the lowest score is 40, while the highest score is 85. The score between 40-59 are 4 students (21,05%); the distributions are 2 students get 50, 1 student obtain 40 and 1 student obtain 55.

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Twelve (12) students obtain the score between 60-79, and the distributions are 4 students (21,05%) obtain 60, 2 students (10,52%) obtain 65, 4 students (21,05%) obtain 70, and 2 students (10,52%) obtain 75.

Three (3) students (15,78%) obtain score between 80-100; the distributions are 2 students obtain 85 and 1 student obtain 80. It means they could answer the tasks better than others male students and they also understand the idea of the reading.

Table 3.2

The Test Score of Female Students

No	Respondents	Test Score
1	F – 1	70
2	F – 2	75
3	F – 3	90
4	F – 4	70
5	F-5	75
6	F – 6	85
7	F – 7	55
8	F – 8	70
9	F – 9	75
10	F – 10	70
11	F – 11	80
12	F – 12.	85
13	F – 13	45
14	F – 14	50
15	F – 15	85

16	F – 16	80
17	F – 17	90
18	F – 18	85
19	F – 19	75

From the table above, we can see that female students who obtain the score between 40-59 are 3 students (15,7%); the distributions are 1 student obtain 45, 1 student obtain 55 and 1 student 50. For the student who obtains 45 it means that from 20 questions, she can only answer 9 out of 20. So, only three students could not answer the question better. They do not understand well the reading about.

Eight (8) students obtain score between 60-79, and the distributions are 5 students (26,31%) obtain 70, 3 students (15,78%) obtain 75. According of the scoring data, no female students obtain score 6.

The last, 8 students obtain score between 80-100 and the distributions are 2 students (10,52%) obtain 80, 4 students (21,05%) obtain 85, 2 students (10,52%) obtain 90. In the table, the lowest score is 45 and the highest score is 90. From the result of the scoring most female students have good score. They understand about English reading.

Table 3.3

The test score of male and female students

No	Respondents	Test Score	Respondents	Test Score
1	M – 1	85	F –1	70
2	M – 2	70	F –2	75
3	M – 3	60	F – 3	90
4	M – 4	60	F – 4	70
5	M – 5	75	F – 5	75
6	M – 6	60	F – 6	85
7	M – 7	40	F – 7	55
8	M – 8	75	F – 8	70
9	M – 9	65	F-9	75
10	M – 10	85	F – 10	70
11	M – 11	60	F – 11	80
12	M – 12	65	F – 12	85
13	M – 13	50	F – 13	45
14	M – 14	70	F – 14	50
15	M – 15	70	F – 15	85
16	M – 16	55	F – 16	80
17	M – 17	50	F – 17	90
18	M –18	70	F – 18	85
19	M – 19	80	F – 19	70

From the table above we can see the difference of reading test scores between male students and female students. For male students the scors are range from 40 to 85, and for the female students from 45 to 90. From the result of the test can be seen clearly that the female students' test result is better than males' ones.

B. Analysis of the Data

In analysing the data, the writer uses quantitative analysis. Since, quantitative analysis method is a method of analysing data which is emphasized on using and collecting information statistically (Aslam; 35). The data which have been collected are extended in the form of formula in order to find the answer of the question from the study.

The statistical test used in this analysis is t-test because the writer wants to see whether there is a significant difference between male students and female students in the reading proficiency.

To count the t-value, the test which appropriate with the hypothesis is called mean differential test. Before doing further analysis, the writer will state the hypothesis, which are:

Ho : male students and female students are equal in reading proficiency.

H₁ : male students and female students are different in reading proficiency.
Ho is referred to as the null hypothesis and the alternative is often symbolized by H₁.

The statistic formula of mean differential test could be drawn:

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\left(\frac{S_1}{n_1}\right)^2 + \left(\frac{S_2}{n_2}\right)}}$$

in which:

 \overline{X}_1 = mean chain length of first data (female students)

 \overline{X}_2 = mean chain length of second data (male students)

 n_1 = the number of the sample of first data

 n_2 = the number of the sample of second data

 S_{1^2} = the variance of first sample

 S_2^2 = the variance of second sample

First, the writer have to calculate the X_1 and X_2 . The following formula

can be

seen below :

$$\overline{\mathbf{X}}_i = \frac{\sum \mathbf{X}_i}{n}$$

$$X_{1} = \frac{70 + 75 + 90 + \dots + 70}{19}$$
$$= \frac{1410}{19}$$

$$\overline{X}_2 = \frac{85 + 70 + 60 + \dots + 80}{19}$$
$$= \frac{1245}{19}$$
$$= 65,52$$

After the writer got the mean of each group, then the writer calculate the variance by applying the formula below:

$$s_{i}^{2} = \frac{\left(\sum X_{i}^{2}\right) - \frac{\left(\sum X_{i}\right)^{2}}{n}}{n-1}$$

before the writer count the variance of each data, first of all the writer have to find the value of $\sum X_1$ and $\sum X_2$; $\sum X_1^2$ and $\sum X_2^2$; and $(\sum X_1)^2$ and $(\sum X_2)^2$

$$\sum X_{1} = nl_{1} + nl_{2} + nl_{3} + \dots + nl_{19}$$

$$= 70 + 75 + 90 + \dots + 70$$

$$= 1410$$

$$\sum X_{2} = n2_{1} + n2_{2} + n2_{3} + \dots + n2_{19}$$

$$= 85 + 70 + 60 + \dots + 80$$

$$= 1245$$

$$\sum X_{1}^{2} = nl_{1}^{2} + nl_{2}^{2} + nl_{3}^{2} + ... + nl_{19}^{2}$$

$$= 70^{2} + 75^{2} + 90^{2} + ... + 70^{2}$$

$$= 106825$$

$$\sum X_{2}^{2} = n2_{1}^{2} + n2_{2}^{2} + n2_{3}^{2} + ... + n2_{19}^{2}$$

$$= 85^{2} + 70^{2} + 60^{2} + ... + 80^{2}$$

$$= 84175$$

$$\left(\sum X_{1}\right)^{2} = (nl_{1} + nl_{2} + nl_{3} + ... + nl_{19})^{2}$$

$$= (70 + 75 + 90 + ... + 70)^{2}$$

$$= 1988100$$

$$\left(\sum X_{2}\right)^{2} = (n2_{1} + n2_{2} + n2_{3} + ... + n2_{19})^{2}$$

$$= (85 + 70 + 60 + ... + 80)^{2}$$

$$= 1550025$$

So, the variance of the data (Si²) can be calculated with each value of $\sum X_1$, $\sum X_2$, $\sum X_1^2$, $\sum X_2^2$, $(\sum X_1)^2$, and $(\sum X_2)^2$ is inserted into the formula, and the result is:

$$S_{1}^{2} = \frac{\left(\sum X_{1}^{2}\right) - \frac{\left(\sum X_{1}\right)^{2}}{n}}{n-1}$$
$$= \frac{\frac{106825 - \left(\frac{1988100}{19}\right)}{19-1}}{19-1}$$

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	=	<u>106825-104636.8421</u> 18
	=	<u>2188.1579</u> 18
	=	121.564
S ₂ ²		$\frac{(\sum X_{2}^{2}) - \frac{(\sum X_{2})^{2}}{n}}{n-1}$
	=	$\frac{84175 - \left(\frac{1550025}{19}\right)}{19 - 1}$
	=	<u>84175 - 81580.26316</u> 18
	-	<u>2594.73684</u> 18
	=	144.1520

Now, the writer will uses the formula by which the writer can find the tvalue, that is:

$$t = \frac{\overline{X_{1} - \overline{X_{2}}}}{\sqrt{\left(\frac{s_{1}^{2}}{n_{1}}\right) + \left(\frac{s_{2}^{2}}{n_{2}}\right)}}$$

$$= \frac{74.21 - 65.52}{\sqrt{\left(\frac{121.564}{19}\right) + \left(\frac{144.1520}{19}\right)}}$$

$$= \frac{8.69}{3.73} = 2.329$$

After that, to find whether there is a significant difference between male and female students toward reading proficiency, the writer needs to compare tvalue with t-table, and also to decide if there enough evidence to reject the null hypothesis.

Reject Ho if $|t| > t_{\alpha/2;df} = n_{1+} n_2 - 2$

The diagram is as follows:



t-table gives a critical t of 2.0281 for $\alpha/2 = 0.025$ and degree of freedom (df) = 28. From the calculation, t-value is 2.329, the null hypothesis is rejected with $\alpha = 5$ %. From the curve above we can see that t-value is inside the region of rejection or outside the accepted region. It means that the Ho is rejected and H₁ is accepted.

From the statistic test, it is briefly explains that the Ho which is stated male and female students are equal toward reading proficiency is rejected while the H_1 which is stated male and female students are different toward reading proficiency is accepted.

C. Interpretation of the Result

From the result of the test, we can see that male students and female students of SDK. ST. Mikael Surabaya are different in reading proficiency. The result is suitable with the writer's assumption. So, the result of the statistic test is fit with the theory as it mentioned previously.

Referring back at the result of the reading test, we can see that female students scores is higher than male students scores. The mean value of female students score (74.21) is higher than the mean value of male students score (64.52). The theory is appropriate for the students of SDK. St. Mikael Surabaya.

Children's mastery of reading is influenced by their sex. Many more boys than girls have trouble learning to read during the elementary school years. If we look in almost any classroom of students with reading disabilities, we will find that boys outnumber girls by a wide majority. Therefore, many researchers have opinion that girls are better in verbal abilities than boys. It is supported by Gage and Berliner's statement (200) that on measures on verbal fluency, girls usually do better than boys. Girls learn to talk, to use sentences and to use greater variety of words a little earlier than boys. They also speak more clearly, read earlier, and do consistently better than boys in tests of spelling and grammar.

The difference in verbal ability is first to appear developmentally on females age 1-5 were more proficient at language skills than males of the same age. In six years girls consistently scored higher on spelling, punctuations, language use, reading comprehension. So, in the area of verbal performance girls are more superior than the of boys are. We can see from the scores of the students that female students' score is higher than male's. The data result supports the theory about the difference between male and female students toward reading proficiency. So, the evidence shows that sex plays an important role upon children's reading proficiency.

However, the difference that occurs between male and female students toward reading proficiency is influenced by several factors: internal and external factors. Those factors are self-motivation, interest, parents, and teachers.

1. The internal factors influencing students toward reading proficiency

> Self-motivation

The difference between male and female students toward reading may depend on their self-motivation to learn it. Crystal (371) stated that to be successful in learning a language, motivation is the central factor. Motivation to read books may help the student in reading proficiency. Reading books more often training the brain to comprehend a reading easily. From the interview with the students, the writer founds that interesting in English most female students (89.47%). They want to make improve their English especially in understanding a reading with join the English course, do not shy asking the teacher, go to the library and when at home they asking to their brother or sister. On the other hand, only few male students (36.84%) like reading. Male students who like English they usually choose to join the English courses. Therefore, the writer concludes that female students have higher motivation in learning English.

The interest on learning something is also the internal factors that influence children. The interest on learning something make the children appreciate to the subject or area that she/he learned. According to Hurlock (179), achievements are always influenced by the kind and intensity of individual's interest. The child who is interested in mathematics, for example, will work hard to get good grades in that subject, while the child who lacks interest in math will likely become an underachiever in this area. We all know girls more interest in language, therefore make them good in it, whereas boys more interest in quantitative area. Nicholson (112) also has the same opinion about this phenomenon. He said that boys and girls have very different expectations of masculine and feminine subjects. Whereas boys tend to regard masculine subjects

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2. The external factors influencing students toward reading proficiency

>Parents

Parents can be the teacher when the children are at home. They also have an important role for the children in learning language. Parents have a duty to encourage the children to learn language. Parents are considered as the closest person for the children. Recently, English language becomes an important foreign language in Indonesia. Therefore, the parents must be realizing that their children must learn the English language. Nowadays, parents require their children to join English courses or asking a private teacher to teach the children at home. For some families, English can be considered as the language spoken at home. In this case, parents would like to communicate with their children in English. They want the children to be able to speak in English in early age.

We cannot deny that there are still many parents who treat their children differently. In this case, the treatment toward boys and girls. According to Matlin (cited in Santrock; 407), once the label girl or boy is assigned by the obstetrician, virtually everyone, from parents to siblings to strangers, begins treating the infant differently. The parents think that would be better for girls if their take courses relate with language learning such as English course, Mandarin course, etc. They may think that most of girls are good in language field. Whereas, boys are require to choose first the field of math, physics, computer, etc. The parents are consider those field for boys more useful in the future than language field and it also considered as the masculine subject. As stated by Santrock (431), parents work more with their sons on computers, and also more often provided them with computers, software and programs. Further, the parents said their sons had more talent in math and were better suited for careers in math, although they believed their daughters had more talent in English and were better suited for English related careers.

Smith (cited in Maltby, Gage and Berliner; 183) also has the same opinion about this phenomenon. He said that mothers encourage general activity in their boys, even when they are irritable, but encourage verbal behaviour and social interaction. Therefore, boys and girls getting such different treatment from parents, it comes as no surprise to find that girls and boys differ in interest and behaviour. As a matter of fact, by the time a child first becomes aware of itself as an individual, it will already have been influenced by its parents' reactions and expectations, and these are very different for boys and girls. Usually parents control so much of the children's world that they girls. Usually parents control so much of the children's world that they determine the sort of experiences their children will have. Parents shape and control their children's behaviour according to a set of standard. (Davis and Palladino, 415).

> Teacher

Teacher is the main factor for students' success in their study. The teachers play an important role in the studying process. Besides boys and girls have different treatment from parents, they also get different treatment from teachers. Teachers different treatment toward male and female students still exist until now. As stated by Hoffman, Paris and Hall (265), teacher's treatment of boys and girls differ in more than just separate style of criticism. As a matter of fact, the writer found out in the field that the English teachers at SDK. St. Mikael Surabaya, treat the male students different from females students. For example the teacher has more attention to the female students because almost female students understand the English material given. While the male students have less attention and less interact with the teacher. In this case, female students have more question than male students do. As McNeil said (cited in Sants and Butcher, 425), the differential development of reading ability in boys and girls is influenced by an interaction between female teachers and boys being less conducive to learning in recently. This attitude from the teachers can create an ability. Boys put in their mind that the language field, in this case English reading as a something difficult to learn and consider as uninteresting and unnecessary one.

The child who is lack interest in English language will likely become an underachiever in this area. Eccles and Hoffman (cited in Hoffman, Paris and Hall, 265) concluded that boys and girls have different experiences in the classroom.

Besides, the different treatment of the teacher toward male and female students, the teaching style or method of the material explain can bring an affect to the interest of the students to learn English language. Thus, the English teachers should have strategies to rouse students motivation to learn English. Crystal (371) said that teacher need to be technically competent, that is they are able to teach in foreign language by using certain strategies eventually, the students are expected to be able to learn and understand the lesson better.

Base on the observation in SDK. St. Mikael Surabaya, the writer found that the English teachers of SDK. St. Mikael Surabaya only use one book as their reference and they seldom ask the students to discuss a topic with their friends.

Children attitude are greatly influenced by how interesting the teachers make the material they are expected to learn and how they view this material in terms of future occupations. Teacher must select

39 A STUDY OF... materials primarily for their quality and for their ability to aid personal growth. The atmosphere of the classroom can bring out the study not effective. In addition, the school must have enough classroom to accommodate the increasing population. A teacher with an over crowed classroom cannot serve the individual need of children learning process.

Basically, it can be concluded in learning process especially in reading ability, parents and teachers have an important role to help and guide the children.

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CHAPTER IV

CONCLUSION AND SUGGESTION

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