

CHAPTER 4

RESULTS

To test the readers in both the control group and the experimental group, the scores of the pre-test were compared by using a *t* test to determine if there was a significant difference between the two groups in terms of vocabulary, grammar and writing, and comprehension. The results are shown below.

Part I Results of the Quantitative Analysis

Table 4

The results of the control groups on the t test in terms of vocabulary

Tests	<i>N</i>	Full Scores	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Pre-test	60	30	3.93	1.625	2.116	.039
Post-test	60	30	3.42	1.406		

Table 4 shows the average pre-test and post-test score of the control group with regard to vocabulary. The mean pre-test score of the control group was 3.93, with the difference being .51. The *p*-value of the vocabulary scores on the pre-test and post-test was .039 (< .05), thus showing that there was a statistically significant difference at the level of .05 in terms of vocabulary.



The control group students' vocabulary skill is not developed.

Table 5

The results of the t test for the control groups in terms of grammar and writing

Tests	<i>N</i>	Full Scores	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Pre-test	60	30	3.03	1.529	.138	0.891
Post-test	60	30	3.00	1.717		

Table 5 shows the average pre-test and post-test score of the control group with regard to grammar and writing. The mean pre-test score of the control group was 3.03, with the difference being .03. The *p*-value of grammar and writing scores on the pre-test and post-test was 0.891 ($> .05$), thereby showing that there was no significant difference between the pre-test and post-test scores of the control group students with regard to grammar and writing. The vocabulary skills of students in the control group had not improved.

Table 6

The results of the t test for the control groups in terms of comprehension

Tests	<i>N</i>	Full Scores	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Pre-test	60	30	4.13	2.303	.802	.426
Post-test	60	30	3.85	2.692		

Table 6 shows the average pre-test and post-test score of the control group with regard to comprehension. The mean pre-test score of the control group was 4.13, with the difference being .28. The p -value of the comprehension scores on the pre-test and post-test was .426 ($> .05$); this shows that there was no significant difference between the pre-test and post-test scores of students in the control group with regard to comprehension. Thus, the comprehension skills of students in the control group had not improved.

Table 7

The results of the t test for the control groups in terms of the three English skills

Tests	N	Full Scores	\bar{X}	SD	t	p -value
Pre-test	60	30	11.10	3.418	1.539	.129
Post-test	60	30	10.27	4.885		

Table 7 shows the average pre-test and post-test score of the control group with regard to vocabulary, grammar and writing, and comprehension. The mean pre-test score of the control group was 11.10, with the difference being .83. The p -value of the scores on the three skills from the pre-test and post-test was .129 ($> .05$), thereby showing that there was no significant difference between the pre-test and post-test scores of students in the control group in terms of their ability in all three skills.

Table 8*The results of the t test for the experimental group in vocabulary*

Tests	<i>N</i>	Full Scores	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Pre-test	60	30	3.50	1.578	-8.175	.000
Post-test	60	30	5.42	1.994		

Table 8 shows the average pre-test and post-test score of the experimental group with regard to vocabulary. The mean pre-test score of the experimental group was 3.50, with the difference being 1.92. The *p*-value of the vocabulary scores on the pre-test and post-test was .000 ($< .01$), thereby showing that there was a significant difference in terms of vocabulary. The difference in the experimental group students was statistically significant at the level of .01. Thus, by using free voluntary reading, the students in the experimental group were able to develop their ability with regard to vocabulary.

Table 9*The results of the t test for the experimental group in terms of grammar and writing*

Tests	<i>N</i>	Full Scores	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Pre-test	60	30	2.73	1.506	-5.085	.000
Post-test	60	30	3.70	1.369		

Table 9 shows the average pre-test and post-test score of the experimental group with regard to grammar and writing. The mean pre-test score of the

experimental group was 2.73, with the difference being .97. The p -value of the scores for grammar and writing on the pre-test and post-test was .000 ($< .01$). It shows that there was a different significance of their ability in grammar and writing was at the level .01. Thus, students in the experimental group were able to develop their ability in terms of grammar and writing.

Table 10

The results of the t test for the experimental group in terms of comprehension

Tests	N	Full Scores	\bar{X}	SD	t	p -value
Pre-test	60	30	4.25	1.936	-7.843	.000
Post-test	60	30	6.28	2.148		

Table 10 shows the average pre-test and post-test score of the experimental group with regard to comprehension. The mean pre-test score of the experimental group was 4.25, with the difference being 2.03. The p -value of the scores for comprehension on the pre-test and post-test was .000 ($< .01$). This shows that there was a significant difference in the comprehension scores obtained by the experimental group on the pre-test and post-test, the difference being statistically significant at the level of .01. Thus, the comprehension skills of students in the experimental group improved.

Table 11

The results of the t test for the experimental group in terms of all three English skills

Tests	<i>N</i>	Full Scores	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Pre-test	60	30	10.48	3.629	-11.705	.000
Post-test	60	30	15.40	3.828		

Table 11 shows the average pre-test and post-test score of the experimental group with regard to vocabulary, grammar and writing and comprehension. The mean was 10.48, with the difference being 4.92. The *p*-value of the scores on the three skills on the pre-test and post-test was .000 (< .01). This shows that there was a significant difference in the pre-test and post-test scores for all three skills at the level of .01. By using free voluntary reading, the students of the experimental group were able to develop their ability in all three skills.

Table 12

Pre-test scores of the control and experimental group

Groups	<i>N</i>	Full Scores	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Control Group	60	30	11.10	3.418	1.329	.189
Experimental Group	60	30	10.48	3.629		

Table 12 shows the average pre-test scores of the control group and the experimental group with regard to vocabulary, grammar and writing, and

comprehension. The mean pre-test score of the control group was 11.10, while that of the experimental group was 10.48, with the difference being .62. The p -value on the pre-test for all three skills was at the level of .189 ($> .05$), thereby showing that there was no significant difference between the pre-test and post-test scores of students in both the control group and the experimental group.

Table 13

Post-test scores of both the control group and experimental group

Groups	Test	N	Full Scores	\bar{X}	SD	t	p -value
Control Group	Pre-test	60	30	10.27	4.885	-7.445	.000
Experimental Group	Post-test	60	30	15.40	3.828		

Table 13 shows the average post-test score of both the control group and the experimental group with regard to vocabulary, grammar and writing, and comprehension. The mean post-test score of the control group was 10.27, while that of the experimental group was 15.40, with the difference being 5.13. In terms of all three skills, the p -value of the post-test for the experimental group was at the level of .000 ($< .01$). This showed that there was a significant difference between the pre-test and post-test scores of the control group and the experimental group, the difference being statistically significant at the level of .01. Students in the experimental group were able to

improve their English skills more than their counterparts in the control group.

Table 14

The results of the t test for both the control and experimental group in terms of all three English skills

English Skills	Control Group				Experimental Group			
	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value	\bar{X}	<i>SD</i>	<i>t</i>	<i>p</i> -value
Vocabulary								
- Pre-test	3.93	1.625	2.116	.039	3.50	1.578	-8.175	.000
- Post-test	3.42	1.406			5.42	1.994		
Grammar & Writing								
- Pre-test	3.03	1.529	.138	0.891	2.73	1.506	-5.085	.000
- Post-test	3.00	1.717			3.70	1.369		
Comprehension								
- Pre-test	4.13	2.303	.802	.426	4.25	1.936	-7.843	.000
- Post-test	3.85	2.692			6.28	2.148		

Table 14 shows the average difference between students in the control group and their counterparts in the experimental group in their pre-test and post-test scores pertaining to the development of English skills relating to vocabulary, grammar and writing, and comprehension. The significance of this is that the ability in vocabulary, grammar and writing, and comprehension of control group students decreased by 0.51, 0.03 and 0.28 respectively, with on average the largest decrease being related to vocabulary. On the other

hand, the English skills of the experimental group in terms of vocabulary, grammar and writing, and comprehension increased by 1.92, .97 and 2.03 respectively.

Thus, it may be concluded that free voluntary reading enhances the development of English skills with regard to comprehension, vocabulary and grammar and writing respectively.

Part 1 Results of the Qualitative Data Analysis

This section aims to present another qualitative data analysis, this time regarding the students' attitudes towards reading by using a five-point, Likert-type rating scale consisting of 5 choices.

General Attitude towards Reading

Table 15

Results from the Questionnaire

Attitude towards Reading	Level of Attitude					\bar{X}	SD	Rating of Attitude
	5	4	3	2	1			
1. Reading is a good way to spend one's spare time.	36 (60.0)	24 (4.0)	-	-	-	4.6000	.49403	Highest
2. Most books are too long and dull.	-	14 (23.3)	38 (63.3)	8 (13.3)	-	3.1000	.60226	Medium
3. There should be more free reading in school.	56 (93.3)	4 (6.7)	-	-	-	3.9333	.25155	High

Table 15 (continued)

Attitude towards Reading	Level of Attitude					\bar{X}	SD	Rating of Attitude
	5	4	3	2	1			
4. Reading is as important as watching television.	-	18 (30.0)	28 (46.7)	14 (23.3)	-	3.0667	.73338	Medium
5. Reading is boring.	10 (16.7)	14 (23.3)	8 (13.3)	28 (46.7)	-	3.1000	1.1745 9	Medium
6. Reading is rewarding for me.	26 (43.3)	30 (50.0)	4 (6.7)	-	-	4.3667	.60971	Highest
7. I think reading is fun.	-	18 (30.0)	28 (46.7)	14 (23.3)	-	3.0667	.73338	Medium
8. Teachers ask me to read books that are too hard.	-	2 (3.3)	44 (73.3)	14 (23.3)	-	2.8000	.48011	Medium
9. I am not a very good reader.	-	10 (16.7)	2 (3.3)	48 (80.0)	-	2.3667	.75838	Low
10. My parents spend quite a bit of time reading.	-	14 (60.0)	24 (40.0)	12 (20.0)	10 (16.7)	2.7000	1.0134 7	Medium

Note: 1 = Strongly disagree 2 = Disagree
3 = Neutral 4 = Agree
5 = Strongly agree

Table 15 shows the results regarding students' attitude toward reading by using rating scale:

1.0 -1.8	means lowest
1.81-2.6	means low
2.61-3.4	means medium
3.41-4.2	means high
4.21-5.0	means highest

According to the summary of the results from the questionnaires, the students were scored on four levels: highest, high, medium and low. The notion that reading is a good way to spend one's spare time, that reading is rewarding, and that there should be more free reading in school were rated at a high level. The following attitudes (most books are too long and dull, reading is boring, I think reading is fun, teachers ask me to read books that are too hard, and my parents spend quite a bit of time reading) were rated at a medium level. The topic as to why they are not very good readers was rated at a low level.

Analysis of Structured Interview

This discussion is drawn from the information provided by the ten oral guided questions for individual interviews, together with the researcher's observation and interaction between the three groups of students: High, Average and Low Group and the researcher. In responses in interviews, all of the 15 students answered the questions about the attitudes toward reading. The percentage of their attitudes was shown in the table below.

Part 2 The Results of the Qualitative Data Analysis of Students

in the Three Reading Ability Groups (5 from Each Group):

High, Average. and Low

Regarding the qualitative analysis, the data obtained by the structured interviews in the second part covered the following 10 topics: (1) Reading is a good way to spend one's spare time. (2) Most books are too long and dull. (3) There should be more free reading in school. (4) Reading is as important as watching television. (5) Reading is boring. (6) Reading is rewarding for me. (7) I think reading is fun. (8) Teachers ask me to read books that are so hard. (9) I am not a very good reader. (10) My parents spend quite a bit of time reading.

Accordingly, the ten questions contained in the questionnaire can be summarized into six main topics, as follows: The value of reading (questions 1, 4, 6, 7); the students' general attitude toward reading (questions 5, 9); types of books (question 2); time allocated for reading (question 3); the teacher's involvement (question 8), and parents' involvement (question 10).

The following are some example of students' attitudes toward reading in light of each of the aforementioned topics.

It was concluded that most of the students in each group had a positive attitude towards reading. However, the students in the Less-Able Group thought that they were not good readers, but accepted the fact that their parents spent quite a bit of time reading.

The Value of Reading

The results of the interviews of the three groups of students: High Group (score+20), Average Group (score 11-19) and Low Group (score 1-10), revealed that their attitude with regard to reading was, overall, positive.

Most of them thought that reading was a good way to spend their spare time, was rewarding for them, and fun, as seen from the examples below:

... Reading is a good way to spend spare time.

... Reading is important because reading gives me a lot of things such as imagination, knowledge and wisdom.

...Reading makes me know news around the world and gain more strange vocabularies.

However, some of the students from the Low Group thought that reading was as important as watching television. In addition, some thought that watching television was in fact better than reading.

A regards the second topic: General Attitude toward Reading (questions 5, 9) students stated that they felt happy when they read books, especially non-fiction books. In contrast, those from the Low Group thought that reading was so boring and were of the opinion that they were not good readers. However, some students from the Average Groups thought that *sometimes* reading was boring.

The following are some examples of these attitudes in the students' own words.

... I feel happy when I read. (High Group)

... I was funning and could not put them down, (High Group)

... Reading books is sometimes boring. (Average Group)

... Reading was so boring. (Low Group)

With regard to the third topic: Time for Reading (question 3), every student in the three groups agreed that there should be more reading in school, an idea they expressed as follows:

... I will read books whenever I have free time. So there should have more free reading in school.

... There should more time reading.

As for the fourth topic: Type of books, (question 2), most students in the High Group and Average Group thought that some books were too large and dull, while the Low Group thought that most books are too long and dull. The fiction books they read were their favorite type of book, as can be seen from the following comment:

... My favorite type of book is fiction because it makes me relaxing

With regard to the teachers' involvement, most of students in the three groups expressed the idea that the books the teacher asked them to read were too hard. The students in the High Group, in contrast, noted that although the teacher had asked the students to read, he/she had read more books, so they suggested that any teacher who possessed knowledge and wisdom should teach, but not teach only by using books. This can be seen from the following suggestion they made, namely that...

... A teacher who reads a lot of books, I think he or she should teach students with knowledge from the brain but not from books.

It appeared that, although books were important, the teacher was more important.

Finally, with regard to the last topic: Parents' involvement (question 10), it appears that parents own reading habits had an impact on their children's attitude towards reading. From the results of the interviews, it was possible to conclude that if the students were surrounded by good parents who were in the habit of reading, the children would love to read and thus become skilled at reading. This attitude can be seen from the following comments made by the students themselves:

... My parents do not read books or newspaper every day, but whenever they have time, they will do.

... My parents read newspaper everyday and always criticized it.

... My parents really like reading books and have success in it.

The above statements were made by students in the High Group.

On the other hand, students in Low Group, their parents spent little time reading books, as can be seen from the following comment:

... My parents read little books.

In summary, the results of the interviews regarding the students' attitudes toward reading and the number of books the students had read and recorded in their reading reports indicate the effects of their free voluntary reading. The students in the High Group who had read 10 books in 10 weeks had a positive attitude toward reading; their parents read a lot, so they had greater ability in terms of their English skills than any other group. The students in the Average Group had a good attitude toward reading, but were

more interested in watching television; consequently, they were able to read only five books, so they got an average score on the test. In other words, the students in the Low Group had a positive attitude toward reading, but thought that watching television was as important as reading. Furthermore, their parents spend little time reading, so the result was that they had less ability in terms of their English skills.

Summary

This chapter presented the results of the data analysis in response to the research questions. For the purpose of analysis, the data were divided into two parts: quantitative and qualitative data. In the first part, the researcher compared the difference between the students in the control group and the experimental group in terms of their English skills regarding vocabulary, grammar, writing, and comprehension by using the three types of tests (pre-test, interval test and post-tests). Then, in the qualitative part, data was collected and further analyzed by using questionnaires and structured interviews.