

CHAPTER IV

RESULT OF THE STUDY

In this chapter, the writer presents the data which had been from the research in the field of the study which consists of a description of the data, the result of data analysis, and discussion.

A. Description of the Data

1. The Result of the Score Students' Vocabulary Mastery without Lexical Simplification and without Lexical Simplification

The Vocabulary test had been conducted in class XI IPA with the number of participants is 29 students. This test is held in two times. First on Friday, 22th October 2016. Second, on Tuesday, 27th October 2016. In the first test, participants do vocabulary test without lexical simplification, while in the second test, participants do vocabulary test with lexical simplification. The vocabulary score of students (participants) were presented in table 4.1 below:

Table 4.1
The Result of the Score Students' Vocabulary Mastery

No.	Vocabulary Test Without Lexical Simplification			Vocabulary Test With Lexical Simplification		
	Students' Code Name	Score	Predicate	Students' Code Name	Score	Predicate
1	C2	73	Good	B1	80	Very good
2	C3	70	Good	B2	83	Very good
3	C4	66	Fair	B3	70	Good
4	C5	70	Good	B4	66	Fair
5	C6	60	Fair	B5	73	Good
6	C7	73	Good	B6	60	Fair
7	C8	60	Fair	B7	60	Fair

8	C9	76	Good	B8	50	Poor
9	C10	63	Fair	B9	63	Fair
10	C11	50	Poor	B10	70	Good
11	C12	63	Fair	B11	83	Very good
12	C13	80	Very good	B12	80	Very good
13	C14	60	Fair	B13	70	Good
14	C15	66	Fair	B14	73	Good
15	C16	76	Good	B15	70	Good
16	C17	50	Poor	B16	73	Good
17	C18	66	Fair	B17	66	Fair
18	C19	70	Good	B17	50	Poor
19	C20	73	Good	B19	73	Good
20	C21	63	Fair	B20	56	Poor
21	C22	76	Good	B21	80	Very good
22	C23	70	Good	B22	73	Good
23	C24	63	Fair	B23	66	Fair
24	C25	56	Poor	B24	70	Good
25	C26	63	Fair	B25	73	Good
26	C27	66	Fair	B26	76	Good
27	C28	56	Poor	B27	76	Good
28	C29	73	Good	B28	66	Fair
29	C2	66	Fair	B29	70	Good
Sum		1917			2019	
Hight Score		80			83	
Lowest Score		50			50	
Mean		66,10			69,62	
Standard Deviation		7,608			8,596	

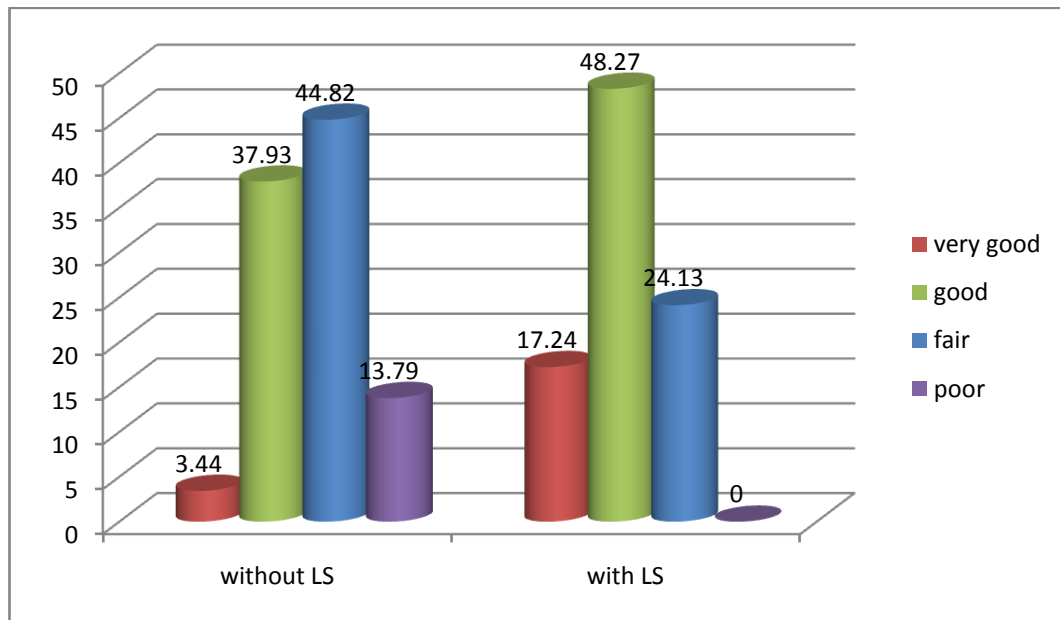
It can be seen in table 4.1 above, based on the result of research in class XI IPA that had been given vocabulary test without lexical simplification text, the highest score of students in control class was 80 and the lowest score was 50 with sum of the score was 1917, mean was 66,10, and standard deviation was 7,608. Then the result of research in class XI IPA that had been given vocabulary test with lexical simplification text, the high test score of students in experiment

class was 83 and the lowest score was 50 with sum of the score was 2019, mean was 69.62, and standard deviation was 8,596.

In vocabulary test without lexical simplification text, there were (1) 3,44% students who acquired score 80 – 100, there were (11) 37,93% students who acquired score 70 - < 80, there were (13) 44,82% students who acquired score 60- < 70, there were 4 (13,79%) students who acquired score 50 - < 50, and there were no one students who acquired score 0-< 50. Then invocabulary test with lexical simplification text, there were (5) 17,24% students who acquired score 80 – 100 and there were (14) 48,27 % students who acquired score 70 - < 80. Then, there were (7) 24, 13% students who acquired score 60- < 70 and there were (3) 10, 34% students who acquired score 50 - < 60. And the last, there was no one students who acquired score 0-< 50. It can be concluded that the students' vocabulary mastery with lexical simplification was increased.

The Comparison of narrative text without and with lexical simplification toward vocabulary mastery presented in figure 4.1 below:

Figure 4.1 Histogram of Narrative Text with and without Lexical Simplification toward Vocabulary Mastery



It could be seen from figure 4.1 above there were the difference between the students' score vocabulary mastery of narrative text without lexical simplification and with lexical simplification. The discussion was available in the description before.

2. The Result of the Score Students' Reading Comprehension Without Lexical Simplification And With Lexical Simplification

The reading test had been conducted in class XI IPA with the number of participants is 29 students. This test is held in two times. First on Friday, 22th October 2016. Second, on Tuesday, 27th October 2016. in the first test, participants do the reading test without lexical simplification, while in the second test,

participants do areading test with lexical simplification.The reading score of students in experiment and control class were presented in table 4.2 below:

Table 4.2
The Result of the Score Students' Reading Comprehension without lexical simplification and with lexical simplification

No	without lexical simplification			with lexical simplification		
	Students' Code Name	Score	Scale of Qualification	Students' Code Name	Score	Scale of Qualification
1	C2	56	Poor mastery level	B1	83	Good mastery level
2	C3	66	Fairy mastery level	B2	73	Fairy mastery level
3	C4	70	Fairy mastery level	B3	73	Fairy mastery level
4	C5	83	Good mastery level	B4	70	Fairy mastery level
5	C6	76	Good mastery level	B5	56	Poor mastery level
6	C7	60	Poor mastery level	B6	70	Fairy mastery level
7	C8	76	Good mastery level	B7	70	Fairy mastery level
8	C9	60	Poor mastery level	B8	80	Good mastery level
9	C10	53	Very poor mastery level	B9	90	Excellent mastery level
10	C11	76	Good mastery level	B10	83	Good mastery level
11	C12	66	Fairy mastery level	B11	66	Poor mastery level
12	C13	76	Good mastery level	B12	76	Good mastery level
13	C14	70	Fairy mastery level	B13	80	Good mastery level
14	C15	66	Fairy mastery level	B14	76	Good mastery level
15	C16	76	Good mastery level	B15	83	Good mastery level
16	C17	66	Poor mastery level	B16	73	Fairy mastery level
17	C18	70	Fairy mastery level	B17	63	Poor mastery level
18	C19	50	Very poor mastery level	B17	66	Fairy mastery level
19	C20	76	Good mastery level	B19	73	Fairy mastery level
20	C21	66	Fairy mastery level	B20	66	Fairy mastery level
21	C22	66	Fairy mastery level	B21	50	Poor mastery level
22	C23	70	Fairy mastery level	B22	70	Fairy mastery level

23	C24	66	Fairy mastery level	B23	80	Good mastery level
24	C25	73	Fairy mastery level	B24	70	Fairy mastery level
25	C26	56	Poor mastery level	B25	73	Fairy mastery level
26	C27	70	Fairy mastery level	B26	60	Poor mastery level
27	C28	76	Good mastery level	B27	73	Fairy mastery level
28	C29	50	Very poor mastery level	B28	80	Good mastery level
29	C2	60	Poor mastery level	B29	76	Good mastery level
Sum		1945			2102	
Hight Score		76			90	
Lowest Score		50			50	
Mean		66,83			72,48	
Standard Deviation		8,234			8,626	

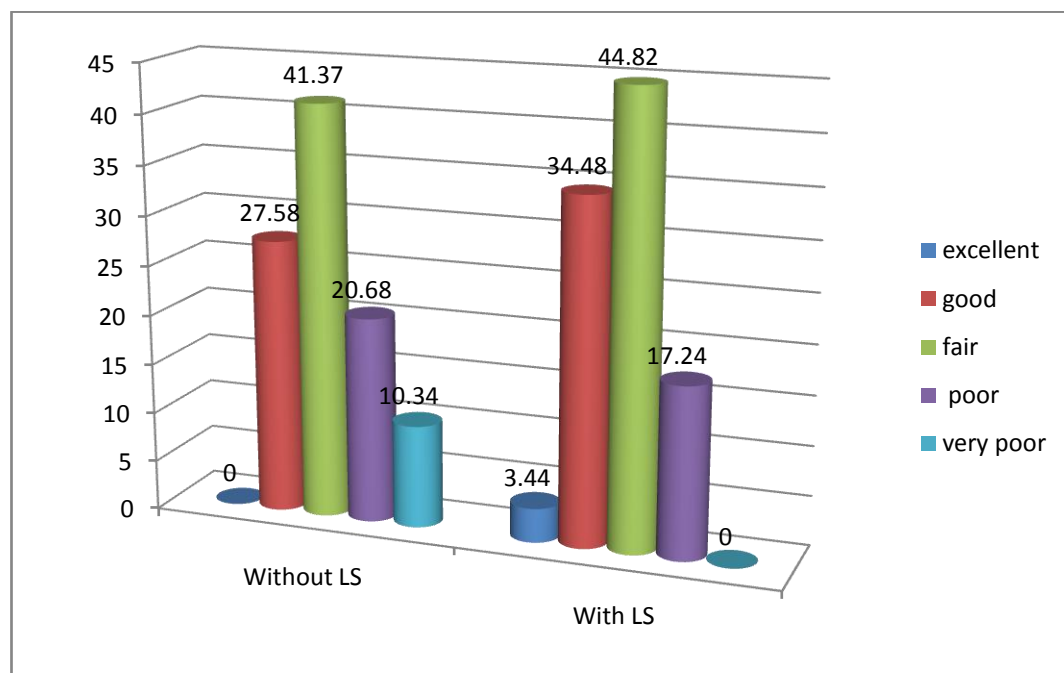
It can be seen in table 4.2 above, based on the result of research in class XI IPA that had been given reading test without lexical simplification text, the highest score of students in control class was 76 and the lowest score was 50 with sum of the score was 1945, mean was 66,83, and standard deviation was 8,234. Then the result of research in class XI IPA that had been given reading test with lexical simplification text, the highest score of students in experiment class was 90 and the lowest score was 50 with sum of the score was 2102, mean was 72,48, and standard deviation was 8,626.

In the test without lexical simplification text there was no one got excellent mastery level, 8 students got good mastery level with percentage 27,24%, 12 students got fairy mastery level with percentage 41,37%, 6 students got poor mastery level with percentage 20,68%, and 3 students got very poor

mastery level with percentage 10,34%. Then In the test with lexical simplification text, there were 1 student got excellent mastery level with percentage 3,44%, 10 students got good mastery level with percentage 34,48%, 13 students got fairly mastery level with percentage 44,82%, 5 students got poor mastery level with percentage 17,24%, and no one student got very poor mastery level. It can be concluded the students' got better score when they were given reading test with lexical simplification text than the students who were given thereading test without lexical simplification text.

The comparison of narrative text with and without lexical simplification toward reading comprehension presented in figure 4.2 below:

Figure 4.2 Histogram of Narrative Text with and without Lexical Simplification toward Reading Comprehension



It could be seen from figure 4.2 above there were the differences between the students' score reading comprehension of narrative text without lexical simplification and with lexical simplification. The discussion was available in the description before.

B. Result of Data Analysis

1. Normality Test

In this study, the writer used One-Sample Kolmogorov-Smirnov Test to test the normality.

a. Testing of Normality Students' Vocabulary Mastery with Lexical Simplification and without Lexical Simplification

One-Sample Kolmogorov-Smirnov Test			
		with lexical simplification	without lexical simplification
N		29	29
Normal Parameters ^{a,b}	Mean	69,62	66,10
	Std. Deviation	8,596	7,608
Most Extreme Differences	Absolute	,173	,110
	Positive	,106	,092
	Negative	-,173	-,110
Kolmogorov-Smirnov Z		,930	,590
Asymp. Sig. (2-tailed)		,352	,877

a. Test distribution is Normal.

b. Calculated from data.

Based on the calculation used SPSS program, the asymptotic significance normality of test with lexical simplification was 0.352 and test without lexical simplification 0.877. Then the normality both of test was consulted with atable of

Kolmogorov-Sminorv with the level of significance 5% ($\alpha=0.05$). Because asymptotic significance of test with lexical simplification= $0.352 \geq \alpha = 0.05$, and asymptotic significance of test without lexical simplification= $0.877 \geq \alpha = 0.05$. It could be concluded that the data was anormal distribution.

b. Testing of Normality Students' Reading Comprehension with Lexical Simplificationand without Lexical Simplification

One-Sample Kolmogorov-Smirnov Test		
		with lexical simplification
		without lexical simplification
N		29
Normal Parameters ^{a,b}	Mean	72,48
	Std. Deviation	8,626
Most Extreme Differences	Absolute	,145
	Positive	,097
	Negative	-,145
Kolmogorov-Smirnov Z		,783
Asymp. Sig. (2-tailed)		,572

a. Test distribution is Normal.

b. Calculated from data.

Based on the calculation used SPSS program, the asymptotic significance normality of test with lexical simplification was 0.572 and test with lexical simplification0.931. Then the normality both of class was consulted with atable of Kolmogorov-Sminorv with the level of significance 5% ($\alpha= 0.05$). Because asymptotic significance of test with lexical simplification= $0.572 \geq \alpha= 0.05$, and asymptotic significance of test without lexical simplification= $0.339 \geq \alpha= 0.05$. It could be concluded that the data was anormal distribution.

2. Homogeneity Test

In this study, the writer used Levene Test Statistic to test the homogeneity of variance.

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Vocabulary Mastery	,111	1	56	,741
Reading Comprehension	,093	1	56	,761

Based on the calculating used SPSS 18.0 program, the data showed the significance of vocabulary mastery was 0.741. It meant that 0.741 was higher than 0.05. The score was violated the homogeneity. The significance of reading comprehension was 0.761. It meant that 0.761 was higher than 0.05. The score was violated the homogeneity.

3. Testing Hypothesis

The writer used One-Way Anova to test the hypothesis with significance level $\alpha = 0.05$. The researcher used manual calculation and SPSS 18.0 program to test the hypothesis using One-Way Anova. The criteria of H_0 is accepted when $F_{\text{value}} \leq F_{\text{table}}$, and the H_0 is refused when $F_{\text{value}} \geq F_{\text{table}}$. Then the criteria H_a is accepted when $F_{\text{value}} \geq F_{\text{table}}$, and H_a is refused when $F_{\text{value}} \leq F_{\text{table}}$. Or the criteria of H_0 was accepted when the significant value ≥ 0.05 , and H_0 was refused when the significant value ≤ 0.05 .

ANOVA						
Lexical Simplification		Sum of Squares	df	Mean Square	F	Sig.
Vocabulary Mastery	Between Groups	179,379	1	179,379	2,723	,105
	Within Groups	3689,517	56	65,884		
	Total	3868,897	57			
Reading Comprehension	Between Groups	424,983	1	424,983	5,725	,020
	Within Groups	4157,103	56	74,234		
	Total	4582,086	57			

From the table above, the F_{value} of vocabulary mastery was 2.723. Meanwhile, the F_{value} of reading comprehension was 5.725. F_{table} at level significance 5% was 2.71. F_{table} at level significance 1% was 4.35.

For vocabulary mastery $2.71 < 2.723 < 4.35$. The criteria of H_0 is accepted when $F_{\text{value}} \leq F_{\text{table}}$, and the H_0 is refused when $F_{\text{value}} \geq F_{\text{table}}$. H_a is accepted when $F_{\text{value}} \geq F_{\text{table}}$, and H_a is refused when $F_{\text{value}} \leq F_{\text{table}}$. Or the criteria of H_0 was accepted when the significant value ≥ 0.05 , and H_0 was refused when the significant value ≤ 0.05 . It meant that H_a (there is the effect of lexical simplification toward vocabulary mastery of the eleventh grade IPA students at SMA Muhammadiyah 1 Palangka Raya) was accepted when $F_{\text{value}} \geq F_{\text{table}}$, at level significance 5%.

For reading comprehension $2.71 < 5.725 > 4.35$. The criteria of H_0 is accepted when $F_{\text{value}} \leq F_{\text{table}}$, and the H_0 is refused when $F_{\text{value}} \geq F_{\text{table}}$. H_a is accepted when $F_{\text{value}} \geq F_{\text{table}}$, and H_a is refused when $F_{\text{value}} \leq F_{\text{table}}$. Or the criteria of H_0 was accepted when the significant value ≥ 0.05 , and H_0 was refused when the significant value ≤ 0.05 . It meant that H_a (there is the effect of lexical simplification toward reading comprehension of the eleventh grade IPA students at SMA Muhammadiyah 1 Palangka Raya) was accepted when $F_{\text{value}} \geq F_{\text{table}}$, at level significance 5% and 1%.

Knowing that there was a significant difference among groups after doing the treatment, the writer needed to test the hypotheses. Because ANOVA was only to know that there was a significant difference among groups, not to know where the differences among groups are, to answer problems of the study and test the hypotheses, the writer applied **Post Hoc Test**.

Multiple Comparisons

(I) Lexical Simplification		(J) Lexical Simplification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Interval	
						Lower Bound	Upper Bound
Lexical Simplification	Vocabulary LS	Vocabulary WLS	3,517	2,193	,001	-,83	7,86
		ReadingLS	-2,526	2,111	,000	-6,71	1,66
		ReadingWLS	3,204	2,304	,167	-1,36	7,77
	VocabularyWLS	VocabularyLS	-3,517	2,193	,112	-7,86	,83
		ReadingLS	-6,044*	2,111	,005	-10,23	-1,86
		ReadingWLS	-,313	2,304	,892	-4,88	4,25
	Reading LS	VocabularyLS	2,526	2,111	,000	-1,66	6,71
		VocabularyWLS	6,044*	2,111	,005	1,86	10,23
		ReadingWLS	5,730*	2,226	,011	1,32	10,14
	Reading WLS	VocabularyLS	-3,204	2,304	,167	-7,77	1,36
		VocabularyWLS	,313	2,304	,892	-4,25	4,88
		ReadingWLS	-5,730*	2,226	,011	-10,14	-1,32

*. The mean difference is significant at the 0.05 level.

The criteria of H_0 is accepted when the significant value is higher than alpha (α) (0.05), and H_0 is refused when the significant value is lower than alpha (α) (0.05).

First, based on the calculation above used SPSS program of Post Hoc Test, vocabulary mastery with lexical simplification showed the significant value was higher than the alpha ($0.01 < 0.05$). It meant that there was a significant effect of lexical simplification toward students' vocabulary with lexical simplification and vocabulary without lexical simplification. Thus, H_a that states there is the effect of lexical simplification toward vocabulary mastery of the eleventh grade IPA

students at SMA Muhammadiyah 1 Palangka Raya was accepted and H_0 that states there is no significant effect of lexical simplification toward vocabulary mastery of the eleventh grade IPA students at SMA Muhammadiyah 1 Palangka Raya.

Second, based on the calculation above used SPSS program of Post Hoc Test, reading comprehension with lexical simplification showed the significant value was higher than alpha ($0.00 < 0.05$). It meant that there was asignificant effect of lexical simplification toward students' reading comprehension with lexical simplification and reading comprehension without lexical simplification. Therefore, H_a that state there is asignificant effect of lexical simplification toward reading comprehension of the eleventh grade IPA students at SMA Muhammadiyah 1 Palangka Raya was accepted and H_0 that state there is no significant effect of lexical simplification on reading comprehension of the eleventh grade IPA students at SMA Muhammadiyah 1 Palangka Raya was accepted.

Third, based on the calculation above used SPSS program of Post Hoc Test, the result showed significant value was higher than alpha ($0.005 < 0.05$). It meant that there was no significant effect of lexical simplification toward students' reading comprehension with lexical simplification and vocabulary mastery without lexical simplification.

Fourth, based on the calculation above used SPSS program of Post Hoc Test, the result showed significant value was higher than alpha ($0.167 > 0.05$). It meant that there was asignificant effect of lexical simplification toward students'

reading comprehension without lexical simplification and vocabulary mastery with lexical simplification.

C. Discussion

The result of the analysis showed that from 6 hypotheses which wrote in chapter 1, consists of 3 H_a and 3 H_o , 2 H_a was accepted and 1 H_o was accepted. Those are: First, there was a significant effect of lexical simplification toward students' vocabulary. This result was explained and proved by the data that showed with lexical simplification there were (5) 17,24% students who acquired score 80 – 100 and there were (14) 48,27 % students who acquired score 70 - < 80. Then, there were (17) 24, 13% students who acquired score 60- < 70 and there were (3) 10, 34% students who acquired score 50 - < 60. And the last, there was no one students who acquired score 0-< 50. While without lexical simplification, there were (1) 3,44% students who acquired score 80 – 100, there were (11) 37,93% students who acquired score 70 - < 80, there were (13) 44,82% students who acquired score 60- < 70, there were (5) students who acquired score 50 - < 50, and there were no one students who acquired score 0-< 50.

Second, there was a significant effect of lexical simplification toward students' reading comprehension. Writer got this result from data which showed that with lexical simplification there were 1 student got excellent mastery level with percentage 3,44%, 10 students got good mastery level with percentage 34,48%, 13 students got fairly mastery level with percentage 44,82%, 5 students got poor mastery level with percentage 17,24%, and no one student got very poor

mastery level. While without lexical simplification, there was no one got excellent mastery level, 8 students got good mastery level with percentage 27,24%, 12 students got fair mastery level with percentage 41,37%, 6 students got poor mastery level with percentage 20,68%, and 3 students got very poor mastery level with percentage 10,34%.

And the last, there was no significant interaction effect of lexical simplification toward students' reading comprehension and vocabulary mastery of the eleventh grade IPA students at SMA Muhammadiyah 1 Palangka Raya. This last result is gotten by comparing between data of effect lexical simplification toward students' vocabulary and data of effect lexical simplification toward students' reading comprehension.

Those result showed that using lexical simplification was gave significant effect toward the students' vocabulary mastery and reading comprehension. Meanwhile, without lexical simplification was no significant effect toward the students' vocabulary mastery and reading comprehension. Nevertheless, significant effect toward the students' vocabulary mastery and reading comprehension did not give interaction effect to both of them.

Based on the fact, it can be explained that narrative text with lexical simplification was easier than narrative text without lexical simplification. Thus, the students who received a text with lexical simplification were easier to understand the text than the students who received explanation text without lexical simplification. This result is in line with theory about lexical simplification in chapter 2 page 31, there was statement that "... Lexical simplification helps

children, illiterate, foreign, and disabled people to read texts, by replacing difficult words with words that are easier to understand.”⁶⁴

In addition, theory said that lexical simplification conducive to incidental vocabulary acquisition from reading. In lexical simplified condition on two vocabulary measures showed any meaningful acquisition of vocabulary, but lexical simplification did not help learning new lexical items. The finding was suitable with Chung's and Urano's probably due to the fact that when difficult lexical items are substituted for easier ones acquisition of new lexical items can be expected.⁶⁵ Then, by using lexical simplification reduce the perceived difficulty of texts.⁶⁶

In conclusion, the use of lexical simplification made students easier to comprehending text and their score of vocabulary mastery and reading comprehension is more better than without lexical simplification.

⁶⁴Robin Keski-arkk, *Automatic Text Simplification via Synonym Replacement*, p. 9.

⁶⁵Mahdieh Rouhi, *Effects of Lexical Modification on Incidental Vocabulary Acquisition of Iranian EFL Students*. Vol. 5. p.100.

⁶⁶Gondy Leroy, David Kauchak, and Obay Mouradi, *A user-study measuring the effects of lexical simplification and coherence enhancement on perceived and actual text difficulty*. p 125.