THE CORRELATION BETWEEN EFL LEARNERS' COHESION AND THEIR READING COMPREHENSION

Linda Septiyana[1], Anas Safitri[2], Dyah Aminatun[3], Pipit Muliyah[4]

Institut Agama Islam Negeri Metro[1,2]
Universitas Teknokrat Indonesia[3]
STAI Sufyan Tsauri Majenang[4]

lindaseptiyana@metrouniv.ac.id[1]
anassafitri@gmail.com[2]
dyah_aminatun@teknokrat.ac.id[3]
pipitmuliyahoke@gmail.com[4]

Abstract

Reading simply can be defined as a process to understand and get information from a text. Cohesion is the meaning relation that appears within the text in order to build connection among the different parts of the text. Understanding the cohesion can bring the students to get good comprehension in reading. Therefore, in this research, the researchers want to prove that students' cohesion understanding can be correlated with student's reading comprehension. The purpose of this research is to investigate and to find out the correlation between EFL Learners' cohesion and their reading comprehension. The subjects of this research were the fourth semester students at English education department of State Islamic Institute of Metro in the Academic Year of 2019/2020. To investigate and calculate the correlation between those variables, the researchers applies Product-moment Pearson- correlation. The result of data analysis shows that "r observed" for correlation between cohesion understanding and reading comprehension is 0.728, after considering the Product Moment table by using df 30 it can be found that the critical value of r Product Moment for the 5% level is 0.361 and for the 1% level is 0.463. The data confirmed that "r observed" is higher than "r table". Therefore, it can be inferred that there is a positive and significant correlation between the students' cohesion understanding and reading comprehension among the fourth semester students at English education department of State Islamic Institute of Metro in the Academic Year of 2019/2020.
Keywords: *Cohesion, EFL, reading comprehension*

INTRODUCTION

Language has been a part of human life. The language is used to communicate one to another either in spoken or written language. Language is the system of arbitrary, symbol and meaning. Every language has its own arbitrary symbols or words to express the meaning of an object or an idea. The arbitrary symbols and the words are purposed to communicate, to speak, to understand each other, to hear, to respond, or react spoken words (Sulaiman, 2019).

English is an international language which is learned by many people to catch up with the development of the world, especially in education, science, and technology. Therefore, it is very important to master it in order to be able to perform smooth communication with other people from other countries. Realizing the importance of English, the government of Indonesia has declared English as the first foreign language which is taught in Indonesia, starting from elementary school until university levels (Septiyana, 2019). Therefore, in order to boost students in learning international language, teachers or lecturers use different types of media from simple to advanced technology to teach in every meeting (Aminatun & Oktaviani, 2019; Sinaga & Oktaviani, 2020; Oktaviani & Sari, 2020). Besides, some strategies are also needed to maximize students' mastery of language (Mandasari & Oktaviani, 2018; Simamora & Oktaviani, 2020).

In learning English, there are four basic skills that must be mastered by the students and one of them is reading (Lestari, 2018). Reading is a complex cognitive process of decoding symbols in order to build or to derive meaning from the text. Reading, in this term, is a means of language acquisition, of communication, and of sharing information and ideas (Kaganang, 2019). Reading is one of the language skills in English which

gives a huge input to the learners (Januarty & Nima, 2018). Reading comprehension is the interaction between the readers and the text in order to form a meaning from the text which is involved a complex process, word knowledge, and world knowledge (Ayu, Diem & Vianty, 2017). Furthermore, reading comprehension is the process of constructing meaning from text. The goal of all reading instruction is ultimately targeted helping a reader comprehend text (Melsandi, 2018). It means that the reader who has capability in knowing how to read words has a little value if they cannot construct the meaning from the text. In other hand, the goal of reading is able to construct meaning from a written text with comprehension.

It has been stated above that reading comprehension is a complex process that doesn't only involve the ability in reading words and sentences correctly but also involves word and world knowledge to form meaning from the text. Then, the text is the set of language that may be longer than a sentence. It means that in comprehending a text, the readers not only form a meaning from one sentence only but from the set of sentences that links and hold together in the different part of the text. According to Yuliansyah and Ayu (2021), by giving appropriate text for students to comprehend the materials will aid them to interpret and follow all activities given by teachers. Therefore, the cohesion understanding is necessary in order to support readers' comprehension in reading text. Reading demands readers to interpret and negotiate both design element and graphic image to comprehend written language (Tuzahra, 2021).

In addition, a text is best regarded as a semantic unit; a unit not of form but of meaning. In analyzing text, there are still some problems found, for example, it is hard for us to understand the meaning of a text if we do not have the ability to understand various words and their uses in the text (Halliday & Hasan, 1976). Cohesive in the text can be achieved grammatically and lexically. Based on the book of Cohesion in English by Halliday and Hassan, grammatical cohesion is a kind of cohesion that expresses relations on grammar and can be divided into four parts; references, ellipsis, conjunction, and substitution. Moreover, the lexical cohesion is the cohesion that is expressed through relation on vocabulary which can be divide into two parts; reiteration and collocation (Supini & Savitri, 2017). Thus, the researcherss did a pre-survey on September 14th 2019 to fourth semester students of English Education Program of State Islamic Institute of Metro. Based on the data of pre-survey, the researcherss found that 4 students or 2% overall have bad comprehension in reading, 21 students or 10% overall have poor comprehension in reading, 98 students or 48% overall have fair comprehension in reading, 79 students or 37% overall have good comprehension in reading, and 7 students or 3% overall have excellent comprehension in reading. It means that most of students among the fourth semester have problem in comprehending reading text.

According to the condition above, the researchers interested to investigate the correlation between EFL learners' cohesion understanding and their reading comprehension.

RESEARCH METHOD

The population of this research was the fourth semester students of English Education Department of IAIN Metro, which consists of six classes. The total of population was 206 students. Based on this condition, the researchers used 15% of the population as the sample of the research. Therefore, the sample of this research was 31 students.

In this research, the researchers used documentations to collect the data about the correlation of EFL learners' cohesion understanding and their reading comprehension. Documentation as the method that used to get more data about the level of students' cohesion understanding was the document of students' test score about the cohesion in the subject of Discourse Analysis from Mrs. Syahreni Siregar, M.Hum. Besides, for the data about the level of students' reading comprehension was the document of student's final test score in the subject of Reading 4 from Mrs. Dra. Umi Yawisah, M.Hum.

To investigate whether there was positive and significant correlation between cohesion understanding and reading comprehension the researchers applied Product Moment Pearson correlation in which there were one predictor variables and one criterion variable.

FINDINGS AND DISCUSSION
1. Reading Comprehension Data

Reading comprehension in this research was the dependent variable (Y). It refers to the level of the students' reading comprehension. In the process of reading comprehension, the students must be able to process the text start from processing every single sentence into a clause and phrase, processing the entailment of the sentences within the text, determining the main idea and the important information, and making inference and prediction. In measuring the students' reading comprehension, the researchers documented the data of students' final test score in the subject of Reading IV from Mrs. Dra. Umi Yawisah, M.Hum. as the lecturer. Based on the data, it can be described that the total score of Reading IV final test from 31 students as the sample using simple sampling technique is 2318, where the highest score is 80, the average score is 74.8, and the lowest score is 63. Thus, the measured of the class interval as follows:

$$R \quad = \textit{The Highest score – The lowest score}$$
$$= 80 – 63$$
$$= 17$$

$$K \quad = 1 + (3.3 \log n)$$
$$= 1 + (3.3 \log 31)$$
$$= 1 + (3.3 \times 1.49)$$
$$= 1 + 4.91$$
$$= 5.91 \approx 6$$

$$P = \frac{R}{K} = \frac{17}{6} = 2.83 \approx 3$$

After knowing the class interval, the researchers put the data on the table of frequency as follows.

Table 4. Frequency of Reading IV Final Test Scores

No	Class interval	Frequency	Percentage	Explanation
1.	78 – 80	10	32%	Good
2.	75 – 77	11	36%	Good
3.	72 – 74	3	10%	Good
4.	69 – 71	1	3%	Fair
5.	66 – 68	5	16%	Fair
6.	63 – 65	1	3%	Fair

The table of frequency above shows that there are 1 student or 3% who got score 63-65, 5 students or 16% who got score 66-68, 1 student or 3% who got score 69-71, 3 students or 10% who got score 72-74, 11 students or 36% who got score 75-77, and 10 students or 32% who got score 78-80. In short, it can be inferred that the students Reading IV Final Test score is good.

2. Cohesion Understanding Data

Cohesion understanding is the independent variable (X) of this research. Cohesion understanding related to students' knowledge about grammatical cohesion and lexical cohesion. Students' knowledge in grammatical cohesion consists of reference, ellipsis, and substitution. Meanwhile, students' lexical cohesion knowledge consists of repetition, synonym, antonym, hyponym, and meronym. Therefore, this variable was focused on lexical and grammatical cohesion. To measure the students' cohesion understanding, the data of students' test score about cohesion in the subject of Discourse Analysis was obtained from Mrs. Syahreni Siregar, M.Hum. as the lecturer. Based on the data, it can be described that the total score of Cohesion test from 31 students as the sample using simple sampling technique is 2245, where the highest score is 85, the average score is 72.4, and the lowest score is 60. Thus, the measurement of the class interval are as follows:

$$R \quad = \textit{The Highest score – The lowest score}$$
$$= 85 – 60$$
$$= 25$$

$$K \quad = 1 + (3.3 \log n)$$
$$= 1 + (3.3 \log 31)$$
$$= 1 + (3.3 \times 1.49)$$
$$= 1 + 4.91$$
$$= 5.91 \approx 6$$

$$P \quad = \frac{R}{K} = \frac{25}{6} = 4.17 \approx 4$$

After knowing the class interval, the researcherss put the data on the table of frequency as follows:

Table 4. Frequency of Cohesion Test Scores

No	Class interval	Frequency	Percentage	Explanation
1.	80 – 85	7	23%	Good
2.	76 – 79	0	0%	Good
3.	72 – 75	9	29%	Good
4.	68 – 71	10	32%	Fair
5.	64 – 67	1	3%	Fair
6.	60 – 63	4	13%	Poor

The table of frequency above shows that there are 4 students or 13% who got score 60-63, 1 student or 3% who got score 64-67, 10 students or 32% who got score 68-71, 9 students or 29% who got score 72-75, and 7 students or 23% who got score 80-85. In short, it can be inferred that the students CohesionTest score is good.

3. Data Distribution of the Variables

After applying the documentation methods, the researchers analyzed the data by using analysis of product moment Pearson-correlation in order to prove whether there is a positive and significant correlation between cohesion understanding and reading comprehension.

Table. 7 Distribution Table of the Correlation between Cohesion Understanding (X) and Reading Comprehension (Y)

No.	X	Y	X^2	Y^2	XY
1	80	76	6400	5776	6080
2	70	66	4900	4356	4620
3	75	80	5625	6400	6000
4	75	80	5625	6400	6000
5	75	80	5625	6400	6000
6	60	63	3600	3969	3780
7	75	80	5625	6400	6000
8	70	76	4900	5776	5320
9	80	73	6400	5329	5840
10	70	73	4900	5329	5110
11	80	76	6400	5776	6080
12	75	80	5625	6400	6000
13	65	70	4225	4900	4550
14	75	80	5625	6400	6000
15	70	76	4900	5776	5320
16	80	76	6400	5776	6080
17	80	76	6400	5776	6080
18	70	66	4900	4356	4620
19	75	80	5625	6400	6000
20	75	80	5625	6400	6000
21	70	73	4900	5329	5110
22	80	76	6400	5776	6080
23	75	80	5625	6400	6000
24	85	80	7225	6400	6800
25	60	66	3600	4356	3960
26	70	76	4900	5776	5320
27	60	66	3600	4356	3960
28	60	66	3600	4356	3960
29	70	76	4900	5776	5320
30	70	76	4900	5776	5320
31	70	76	4900	5776	5320
	$\sum X = 2.245$	$\sum Y = 2.318$	$\sum X2 = 163.875$	$\sum Y2 = 174.172$	$\sum XY = 168.630$

4. *Correlation between EFL Learners' Cohesion Understanding and Reading Comprehension*

Based on the distribution table above, the correlation between cohesion understanding and reading comprehension can be calculated as follows:

$$N = 31$$

$$\sum X = 2.245$$

$$\sum Y = 2.462$$

$$\sum X^2 = 161.275$$

$$\sum Y^2 = 190.244$$

$$\sum XY = 173.275$$

$$r_{xy} = \frac{31(168.630) - (2.245)(2.318)}{\sqrt{[31(163.875) - (2.245)^2][31(174.172) - (2.318)^2]}}$$

$$r_{xy} = \frac{5.227.530 - 5.203.910}{\sqrt{(5.080.125 - 5.040.025)(5.399.332 - 5.373.124)}}$$

$$r_{xy} = \frac{23.620}{\sqrt{(40.100)(26.208)}}$$

$$r_{xy} = 0.728$$

Based on the calculation above, it was known that "*r observed*" was 0.728. It is a correlation coefficient (r) as the result of the counting by using Product Moment Pearson-correlation above.

5. *Interpretation*

a. Interpretation of *"r observed"*

Table 8. Interpretation to the Grade of "$r_{observed}$"

Values of "$r_{observed}$"	Interpretation
0.800 - 1.000	High
0.600 - 0.800	Fair
0.400 - 0.600	Quite Low
0.200 - 0.400	Low
0.000 - 0.200	Very Low

Based on the calculation of the test result data using Product Moment Pearson-correlation above, the result of calculation can be interpreted as follows: "The critical value of "*r observed*" between the students' text analysis performance and reading comprehension was 0.728. Therefore, it can be inferred that there is fair correlation between students' cohesion understanding and reading comprehension.

b. Statistical Significance

After H_a above was formulated, the researchers consulted "*r* observed' to "*r* table", as follows:

1. If "*r* observed" is higher than "*r* table", Alternative Hypothesis (H_a) is accepted

2. If "*r* observed" is lower than "*r* table", Alternative Hypothesis (H_a) is rejected and Null Hypothesis (H_0) is accepted.

To know the critical value of *r* Product Moment (*r* table), the researchers firstly counted *df*. *df* is degree of freedom. Below is the formula:

$$df = N\text{-}1$$

Note:

    N is the numbers of sample.

Therefore,

$$df = N\text{-}1$$
$$= 31\text{-}1$$
$$= 30$$

Table 9. Table of *r* Product Moment

N	Significant Level		N	Significant Level		N	Significant Level	
	5%	1%		5%	1%		5%	1%
3	0.997	0.999	26	0.388	0.496	55	0.266	0.345
4	0.950	0.990	27	0.381	0.487	60	0.254	0.330
5	0.878	0.959	28	0.374	0.478	65	0.244	0.317
			29	0.367	0.470	70	0.235	0.306
6	0.811	0.917	30	0.361	0.463	75	0.227	0.296
7	0.754	0.874						
8	0.707	0.834	31	0.355	0.456	80	0.220	0.286
9	0.666	0.798	32	0.349	0.449	85	0.213	0.278
10	0.632	0.765	33	0.344	0.442	90	0.207	0.270
			34	0.339	0.436	95	0.202	0.263
11	0.602	0.735	35	0.334	0.430	100	0.195	0.256
12	0.576	0.708						
13	0.553	0.684	36	0.329	0.424	125	0.176	0.230
14	0.532	0.661	37	0.325	0.418	150	0.156	0.210
15	0.514	0.641	38	0.320	0.413	175	0.148	0.194
			39	0.316	0.408	200	0.138	0.181
16	0.497	0.623	40	0.12	0.403	300	0.113	0.148
17	0.482	0.606						
18	0.468	0.590	41	0.308	0.398	400	0.098	0.128
19	0.456	0.575	42	0.304	0.393	500	0.088	0.115
20	0.444	0.561	43	0.301	0.389			
			44	0.297	0.384	600	0.080	0.105
21	0.433	0.549	45	0.294	0.380	700	0.074	0.097
22	0.423	0.537						
23	0.413	0.526	46	0.291	0.376	800	0.070	0.091
24	0.404	0.515	47	0.288	0.372	900	0.065	0.086
25	0.396	0.505	48	0.284	0.368			
			49	0.281	0.364	1000	0.062	0.081
			50	0.279	0.361			

After considering the product moment table by using df 30, it can be found that:

    a. The critical value of *r* Product Moment (*r* table) for the 5% level is 0.361.

    b. The critical value of *r* Product Moment (*r* table) for the 1% level is 0.463.

From all of data analysis above, it can be found that:

    a. "*r*observed" of cohesion understanding and reading comprehension correlationwas 0.728

    b. "*r* table" in the significant level of 5% = 0.361 and 1% = 0.463.

    Finally, the data confirmed that "*r* observed" is higher than "*r* table". Therefore, it can be inferred that H_a is accepted and H_0 is rejected. Therefore the statistical correlation significance can be interpreted as follows:

    "There is positive and significant correlation between EFL Learners' cohesion understanding and reading comprehension among the fourth semester students of English Education Department of IAIN Metro".

CONCLUSION

    Based on the analysis of the research data, it showed that this correlation can be shown by the calculation of *"r observed"* of 0.728 using Product Moment Pearson-correlation formula is higher than "r *table"* in the significant level of 1% 0.463 and in the significant level of 5 % 0,361. Therefore, it can be

concluded that H_a is accepted and H_0 is rejected. It means that there was positive and significant correlation between EFL learners' cohesion understanding and their reading comprehension at the fourth semester students of English Education Department of IAIN Metro.

REFERENCES

Aminatun, D., & Oktaviani, L. (2019). Memrise: Promoting Students' Autonomous Learning Skill through Language Learning Application. *Metathesis: Journal of English Language, Literature, and Teaching*, *3*(2), 214–223. https://doi.org/10.31002/metathesis.v3i2.1982

Ayu, M., Diem, C. D., & Vianty, M. (2017). Secondary school students' English literacy: Use of interactive read aloud instructional strategy. *International Journal of Applied Linguistics & English Literature, 6*(7), 292-299

Halliday & Hasan. (1976). *Cohesion in English*. Neew York: Longman Group Ltd.

Januarty, R.-, & Nima, H. N. A. (2018). Energizing Students' Reading Comprehension through Multimodal Texts. *International Journal of Language Education*, *2*(2), 14–22. https://doi.org/10.26858/ijole.v2i2.4347

Kaganang, G. (2019). The Use of Problem-Based Learning to Improve Students' Reading Comprehension at the First Grade Students of Senior High School 1 of Middle Halmahera. *Journal of Linguistics*, *2*(1), 9.

Lestari, E. D. (2018). The Correlation between Students' Vocabulary Mastery and Reading Comprehension of the Eleventh Grade Students of SMAN 5 Palu. *E-Journal of ELTS (English Language Teaching Society)*, *6*(1), Article 1. http://jurnal.untad.ac.id/jurnal/index.php/ELTS/article/view/11495

Mandasari, B., & Oktaviani, L. (2018). English language learning strategies: an exploratory study of management and engineering students. *Premise Journal, 7*(2*),* 61-79.

Melsandi, M. (2018). Improving Reading Comprehension of the Grade Eight Students at SMP Negeri 1 Balano Lambunu through Comprehension Monitoring Stategy. *E-Journal of ELTS (English Language Teaching Society)*, *6*(3), Article 3. http://jurnal.untad.ac.id/jurnal/index.php/ELTS/article/view/11524

Oktaviani, L., & Sari, F.M. (2020). Reducing Sophomore Students'Dilema in Creating an Appealing Teaching Medium Through Slidesgo Usage. *Jurnal IKA PGSD (Ikatan Alumni PGSD) UNARS, 8*(2), 342-349.

Septiyana, L. (2019). Designing English Speaking Materials Using Task- Based Language Teaching (TBLT) for Islamic Economics Students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, *7*(2). https://doi.org/10.24256/ideas.v7i2.1031

Simamora, M. W. B., & Oktaviani, L. (2020). What is Your Favorite Movie?: a Strategy of English Education Students to Improve English Vocabulary. *Journal of English Language Teaching and Learning, 1*(2), 44-49. DOI: https://doi.org/10.33365/jeltl.vli2.604

Sinaga, R.R.F., & Oktaviani, L. (2020). The Implementation of Fun Fishing to Teach Speaking for Elementary School Students. *Journal of English Language Teaching and Learning*, *1*(1), 1-6. DOI: https://doi.org/10.33365/jeltl.v1i1.245

Sulaiman, S. (2019). Optimizing Students' Reading Comprehension Through Direct Reading Thinking Activity. *Journal of English Language Learning*, *3*(2). http://jurnal.unma.ac.id/index.php/JELL/article/view/1536

Supini, N. M. A., & Savitri, P. W. (2017). Lexical Cohesion and Semantic Relation With Reference To Saint Exupery, The Little Prince. *Humanis*, *19*(1). https://ojs.unud.ac.id/index.php/sastra/article/view/29718

Tuzahra, F. (2021). Reading Online: Evaluation of Online Sources Credibility. *Journal of Research on Language Education*, *2*(1), 32–36. https://doi.org/10.33365/jorle.v2i1.1007

Yuliansyah, A. & Ayu, M. (2021). The Implementation of Project-Based Assignment in Online Learning during Covid-19. *Journal of English Language Teaching and Learning, 2*(1), 29-34

BIOGRAPHIES OF AUTHORS

Linda Septiyana is a lecturer at English Education Department of IAIN Metro, Lampung. She spent her bachelor degree at University of Lampung and master at Universitas Sebelas Maret. Her research interests are ELT, Linguistics, Education, English for Spesific Purposes.

Anas Safitri is a student of English Education Department of IAIN Metro, Lampung. Her research interests are about English Language Teaching and education.

Dyah Aminatun is a lecturer at Universitas Teknokrat Indonesia. Besides teaching in English Education Department, she is also actively writing some researches related to teaching media, ICT in education, and English skills.

Pipit Muliyah is now teaching at STAI Sufyan Tsauri Majenang. She teaches English for specific purposes in some different departments. She is interested in conducting a research related to current trend in teaching English.