

An Analysis of the use of Grammatical and Lexical Cohesion in Theses Written by Undergraduate Students Majoring in English of Islamic University of Riau

Al Malikul Ikhwanda Putra
(wanda18.w1@gmail.com)

AMIK Dumai

Abstract: The purposes of this research were to find out (a) the occurrence and the percentages of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, (b) the errors found in the use of grammatical and lexical cohesion, (c) why students made errors in the use of grammatical and lexical cohesion. A content analysis design was used in this research. Content analysis is commonly used to analyze texts including interview transcripts, diaries, or document. The samples were 25 theses of undergraduate students majoring in English of Islamic University of Riau written between 2012 and 2016. The data were based on (1) document, in terms of first and fourth chapter of 20 theses written by undergraduate students majoring in English of Islamic University of Riau, (2) questionnaire to find out the causes of the errors in the use of grammatical and lexical cohesion. The results showed that (a) the highest occurrence and percentage of the use of grammatical and lexical cohesion was 47.50% on conjunction and the lowest was 0.07% on substitution, (b) The errors that students made in the use of grammatical and lexical cohesion are mostly in terms of collocation and repetition, (c) The reasons why students made errors in the use of cohesive devices in writing their theses were (1) the students still lack of grammar knowledge, and (2) the students also paid less attention to the use of cohesive devices in writing their theses.

Keywords: grammatical cohesion, lexical cohesion, writing thesis

INTRODUCTION

Writing is one of the four language skills that must be learned by the students. Haycraft (1978, p.8) states that there are various skills in a language; receptive skills-listening and reading, and productive skills-speaking and writing. Writing is one of the productive skills by which people express ideas and provide some information in written language by constructing words into meaningful sentences and sentences into a paragraph.

The ability of writing a text is important for students of English in Indonesia since it is one of the requirements to graduate from the university by submitting their final project reports written in English. It is important not only to fulfill the requirement for the graduation but also to get the ability to write well for their further studies. In graduate

program, for example, students are always assigned to write papers to be presented in the classroom to help them develop their knowledge. Therefore, as a preparation for their advanced research, the ability to write a text coherently is very much needed.

Some language experts admit that it is not easy to write well even though writing in their own native language. Brown (2004) states that only very few learners who can express themselves clearly with logical, well-developed organization that accomplishes an intended purpose. Yet, it is expected that EFL students have the ability to write a thesis with correct grammar and vocabulary. Richard and Renandya (2002, p.303) state that writing is the most difficult skill for second language and foreign language learners. Furthermore, they claim that writing is not only generating and organizing ideas but also translating these ideas into a readable text. According to Richards (1990), "Learning to write well is a difficult lengthy process because it produces anxiety and frustration in many learners."

In preliminary study, the researcher found that there were many students who still had many problems in writing skill such as control of content, form, grammar, vocabulary, punctuation, and spelling. The phenomena of writing skill which the researcher found in the field that the students worried about grammar and lexical cohesion, in their mind setting that (1) they did not write until they had mastered grammar, (2) they cannot develop their ideas when writing because of lacking of vocabulary, and (3) most of them made mistakes in inscriptive punctuation, apostrophes, and capitalization. Other problems the students had were that they had low motivation and they were not interested in doing the task since the writing activities were not interesting.

In line with general phenomenon of writing, many students were required to learn spelling and grammar. Students think that writing is nothing without lexicon and grammar. Good writing is something they believe that they will never be able to achieve. One thing that usually makes it difficult to learn a foreign language correctly and acceptably is that one language has a different system from another. The researcher knows that the system of English is different from Indonesian that may cause problems for EFL students in learning English.

The aim of cohesion is to help the reader understand the items referred to, the ones replaced and even the items omitted (Harmer, 2004). Furthermore, the combinations of sentences using cohesive devices which have semantic relation need a shared linguistic environment to interpret items. A sentence such as "he said so" is semantically correct as it is grammatical in that it means what it means though we do not know who is meant by "he" and what is meant by "so". To analyze a sentence, we have to seek in the surrounding environment what "he" and "so" refer to many other examples on the various cohesive situations. Text grammar does appeal to discourse analysis which is constantly concerned with how sentences stick together. Grammatical cohesion refers to the various grammatical devices that can be used to make relations among sentences more explicitly. Cohesive devices are used to tie pieces of text together in a specific way.

Halliday and Hassan (1976) describe the basic categories of grammatical cohesion that students can systematize by classifying it into a small number of distinct categories: reference, substitution, ellipsis, and conjunction. These categories have a theoretical basis and specific types of grammatical cohesion.

Lexical cohesion comes about through the selection of items that are related in some ways to those that have gone before (Halliday, 1985, p.310). Types of lexical cohesion are repetition and collocation. Furthermore, Halliday and Hassan (1976, p.288) divide types of lexical cohesion into reiteration (repetition and synonym) and collocation.

There were some previous studies related to present study. First, Jabeen (2013) did a study about cohesive devices in "The Bear" by Chekov (1938). The objective of the study was to highlight substitution, ellipsis, and reference. The play was analyzed by stylistically and the three levels of cohesive devices were the basis of the analysis. The result showed that each of the elements had functions to contribute the effective meaning of the story. It can be concluded that these cohesive devices play important roles in making oral and written communication understandable.

Second, Afful and Nartey (2014) did a study about cohesion found in abstracts of undergraduate theses in University of Cape Coast (UCC), Ghana. The objective was to analyze grammatical cohesion in the language and literature abstracts. Qualitative analysis was used in this study. The result showed that there were three key findings. First, based on Halliday and Hassan's (1976), among the four grammatical cohesion (that is conjunction, reference, substitution, and ellipsis), reference and conjunction were mostly used in the abstract. Second, the use of these grammatical devices in the Language and Literature abstracts showed more similarities than differences. Third, although undergraduate students studying English at the University of Cape Coast did use a range of cohesive devices, they still lacked of understanding in the use of cohesive devices.

Third, Alarcon and Morales (2011) did a study about grammatical cohesion in students' argumentative essays in the Phillipines. The purposes was to analyze the cohesive devices used by undergraduate students in argumentative essay. The method used in the research was qualitative and quantitative. The result showed that reference had the highest frequency (90.67%) of the total cohesive devices with the mean score 53.37. Conjunction occurred 326 times in the essays (9.08%) with the mean score 5.34 while substitution was the least used type of cohesive devices (0.25%). The use of cohesive devices was not significantly correlated with the quality of the students' essays. It was also found that certain cohesive types assisted the students in the argumentation process. For instance, the use of adversative conjunctions helped the students establish counterclaims. However, "but" is the most frequently used of adversative conjunction by the students which signified that their knowledge on the use of cohesive devices was limited. Hence, qualitative analysis supported the concept of form and function of grammatical cohesion. In students' argumentative essays, certain forms were chosen over the others for a specific purpose that support the objective of an argumentative essay.

Based on the interview with some lecturers in Islamic University of Riau, the researcher found that there were still many errors in the use of grammatical and lexical cohesion found in the theses written by undergraduate students of Islamic University of

Riau. Since students still had many errors in writing their theses, the researcher was interested in analyzing the use of grammatical and lexical cohesion found in the first and the fourth chapters of their theses.

The objectives of the research were (1) to know what are the occurrence and the percentage of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, (2) to know what kinds of errors that students made in the use of grammatical and lexical cohesion, (3) to know why do the students made errors in the use of grammatical and lexical cohesion in their theses.

METHODOLOGY

Research Design

This study used qualitative research design or content analysis to be specific. In conducting content analysis of a text, there are some steps to follow. Cohen, Manion, and Marrison (2007, p. 476) mention that content analysis consists of four “C”s process, i.e. coding, categorizing, comparing and concluding. *Coding* is used to reduce or simplify the data while emphasizing their specific features in order to link them to broader concepts, e.g. categories, whereas “code” is simply a label attached to a chunk of text intended to make the particular piece of information manageable and malleable”. In addition, *categorizing* refers to developing meaningful categories into which words, phrases, sentences, etc. as the units of analysis can be grouped, while *comparing* means making connections between categories. The last, *concluding* stands for drawing theoretical considerations on the basis of the text and the results of the analysis.

Source of Data

The data were taken from the first and the fourth chapters of the 25 theses written by undergraduate students majoring in English of Islamic University of Riau written between 2012 and 2016. However, the researcher only took 20 theses taken as the samples for this research because only 20 person who wrote the theses that researcher got the contact.

Table 1. The Titles of Twenty Theses

No	Title
1	An analysis of phonology of simawang dialect used by simawang people at tanah datar regency West Sumatera.
2	An analysis of English pronunciation errors of the first year students at English department of FKIP UIR Pekanbaru.
3	An analysis of writing ability in recount text of the second year students at SMPN 14 Pekanbaru.
4	An analysis of speaking ability on role play of the first semester students' of FKIP UIR Pekanbaru.
5	An analysis of mispronounced suffix-ed by the fourth semester students at FKIP Islamic University of Riau.

6	The effect of video toward students speaking skill of procedure text of the third year at SMP YLPI marpoyan Pekanbaru.
7	The effect of small group discussion towards students' speaking ability of the first year of SMAN 1 hulu kuantan.
8	The effect of communicative drilling technique towards students' pronunciation of the first year students of FKIP UIR.
9	The effect of face to face interaction technique towards students' speaking ability of the second year of SMAN 1 kampar kiri tengah.
10	The effect of crousel brainstorming feedback towards students' speaking ability of the second year semester students of FKIP UIR Pekanbaru.
11	Improving students' speaking skill by using four corners technique of the second year students' at SMAN 3 Pekanbaru.
12	Improving students' speaking ability through STAD towards the second year students at SMAN 1 rumbio jaya.
13	The application of two stay two stray to improve students' speaking ability at the eight grade of MTs Al Muttaqin Pekanbaru.
14	The application of inside-outside circle to improve students' speaking skill of second grade of SMPN 4 tandun.
15	Using audio lingual method in mastering segmental and supra-segmental features to improve intelligibility of the second year students of SMA Negeri 2.
16	The correlation between the second year students' problems in writing and their writing personal recount text at SMP tri bhakti Pekanbaru.
17	The correlation between self assesment and the students' writing English paragraph of the second grade at SMA YLPI marpoyan Pekanbaru.
18	The correlation between students' reading comprehension and vocabulary knowledge of fifth semester students at English study program of FKIP UIR.
19	The correlation between the fifth semester students' level of reading and their reading comprehension at English Department of FKIP UIR Pekanbaru.
20	A study on Inquiry Based Learning (IBL) in teaching and learning English process of the second year students at SMP Negeri 1 rengat barat.

Technique of Collecting Data

To collect the data for this research, the researcher did the following steps. First, the researcher went to the university to consult with the head of study program. Second, the researcher took 25 theses as the sources to analyze the use of grammatical and lexical cohesion based on suggestions from the head of study program. Third, the researcher contacted former students who wrote the theses selected. Fourth, the researcher used only 20 theses taken as the sample because the five former students were not available. Finally, the researcher distributed the questionnaire to the 20 former students who wrote the theses.

Creswell (2012) states that there are five instruments that can be used on qualitative research: observation, interview, questionnaire, documents, and audiovisual materials.

In this research, the researcher only used two instruments to collect the data. There are documents and questionnaire. Lincoln and Guba (1985) define a document as “any written or recorded material”. The researcher used document review as technique in collecting the data to answer (1) what are the occurrence and the percentage of the use of grammatical and lexical cohesion in theses, and (2) what kinds of errors that students made in the use of grammatical and lexical cohesion in theses.

However, the questionnaire was used to answer why do the students made errors in the use of grammatical and lexical cohesion. According to McMillan and Schumacher (2001), a questionnaire is a common technique for collecting data and it is used to elicit reaction, attitudes or belief. Moreover, a questionnaire is an instrument commonly used to elicit information about variety of different issues (Richards, 2001). Therefore, the researcher decided to apply questionnaire as an instrument to collect the data on the errors of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau. The questionnaire was adapted from Do Minh Hung (2014) who conducted the research entitled, “Vietnamese Learners’ Attention and use of Cohesive Devices in English Essay Writing at Dong Thap University”.

Technique of Analyzing Data

The researcher used 20 theses written by undergraduate students majoring in English of Islamic University of Riau. The researcher analyzed the use of grammatical and lexical cohesion. In analyzing the data, there were several steps that researcher followed. First, the content of the theses were divided into clauses or sentences. Second, each thesis was numbered to identify the types of cohesive devices especially in the first and the fourth chapters were identified in each thesis. Third, all types of cohesive devices were categorized based on the grammatical and lexical cohesion. Fourth, the number of cohesive devices was counted in the form of percentage. Fifth, the researcher analyzed the errors made by students. Sixth, the researcher re-checked the errors written by students and re-write the correct expressions. Seventh, the researcher analyzed some possible causes of the errors made by students. Finally, the researcher offered possible ways to eliminate the errors written by the students.

FINDINGS AND DISCUSSION

FINDINGS

There are three findings of this research (1) the occurrence and percentage of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, (2) the errors made by students in the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, and (3) the reasons why students made errors in the

use of grammatical and lexical cohesion in writing their theses. The findings of the research are presented as follows.

The occurrence and percentage of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau

The table below presents the occurrence of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau.

Table 2. The Occurrence of Cohesion in 20 theses

Thesis Number	Grammatical cohesion			Lexical cohesion		Total	
	Reference	Ellipsis	Conjunction	Substitution	Repetition Collocation		
Thesis 1	80	25	111	2	5	44	267
Thesis 2	65	30	205	0	14	89	403
Thesis 3	72	32	168	0	10	67	349
Thesis 4	68	35	218	0	8	52	381
Thesis 5	78	42	189	0	5	120	434
Thesis 6	74	37	155	0	9	66	341
Thesis 7	64	25	144	2	4	33	272
Thesis 8	65	33	140	0	6	52	296
Thesis 9	78	34	116	0	14	31	273
Thesis 10	67	15	125	0	20	42	269
Thesis 11	88	108	375	0	15	104	690
Thesis 12	79	35	192	0	13	92	411
Thesis 13	95	28	160	0	13	80	376
Thesis 14	97	43	169	0	18	79	406

Thesis 15	80	57	157	0	14	82	390
Thesis 16	126	27	238	0	23	98	512
Thesis 17	146	34	247	0	18	83	528
Thesis 18	124	32	174	0	8	37	375
Thesis 19	112	25	170	1	23	59	392
Thesis 20	69	108	375	1	15	104	672
Total	1727	805	3801	6	255	1414	8002

From the table above, the researcher calculated the percentage of grammatical and lexical cohesion by dividing the total of every cohesion with the total of all cohesion and times 100%. It is general form that used in mathematic.

- **Grammatical Cohesion**

$$\frac{1727}{8002} \times 100\% = 21.58\% \text{ of reference}$$

$$\frac{805}{8002} \times 100\% = 10.05\% \text{ of ellipsis}$$

$$\frac{3801}{8002} \times 100\% = 47.50\% \text{ of conjunction}$$

$$\frac{6}{8002} \times 100\% = 0.07\% \text{ of substitution}$$

- **Lexical Cohesion**

$$\frac{255}{8002} \times 100\% = 3.18\% \text{ of repetition}$$

$$\frac{1414}{8002} \times 100\% = 17.67\% \text{ of collocation}$$

Table 3. The Percentage of Cohesion in 25 Theses

Reference	Grammatical Cohesion			Lexical Cohesion	
	Ellipsis	Conjunction	Substitution	Repetition	Collocation
21.58%	10.05%	47.50%	0.07%	3.18%	17.67%

Based on percentage above, it can be seen that the highest percentage was 47.50% on conjunction and the lowest percentage was 0.07% on substitution. In conclusion, the most widely used of cohesive devices in students' theses were conjunction. It serves to bind parts of a text and to mark the difference between the stage. In line with Scott and thompson (2001, p.4) state that conjunction refers to links between clauses or the ways in which the different parts of a text fit together. So, it was unsurprisingly that conjunction was the most widely used in theses written by undergraduate students majoring in English of Islamic University of Riau. In addition, there were 4357 sentences in 25 theses written by undergraduate students majoring in English of Islamic University of Riau. The errors that students made from 4357 sentences were 217 sentences or 4.98%. The explanation below present about grammatical and lexical cohesion.

Grammatical Cohesion

Reference concerns with the relation between a discourse or text element and the preceding or following element. There are four types of reference, namely endhoporic, personal, demonstrative and comparative reference. For example: I, you, she, he it, we, they, them, their, those, mine, themselves, her, him, yours, and etc. In the sentence like, "Edward is my friend, *he* is from palembang." The pronoun *he* is called personal reference.

Ellipsis is the omission of an item in order to avoid repetition. There are three types of ellipsis, namely nominal, verbal, and clausal ellipsis. Nominal ellipsis means ellipsis with the nominal group, for example: Take these *pills* three times daily. And you had better have some more of *those* too (Halliday & Hassan, 1976). *Pills* functioning as head is ommited and replaced by demonstrative modifier *those*.

Conjunction expresses certain meaning which presupposed the presence of other component and the discourse itself. Conjunction deal with different types of semantic relation, one which is no longer any kind of search instruction, but a specification of the way in which to flow is systematically connected to what has gone before. There are four types of conjunction, namely additive, adversative, causal, and temporal conjunction. For example: in other words, on the other hand, because, but, therefore, however, and, but, in addition, and etc.

Substitution is the replacement of one item by another. A substitution was relation between linguistic items like words or phrases. There were three types of substitution, such as nominal, verbal, and clausal substitution. For example: (1) the substitution "one/ones" always function as a head of nominal group and can be substituted only for an

item, which is it, head of nominal group, (2) the verbal substitution was “do” which operate as a head of verbal group (3) *the children work very hard in the garden. They must do so*. The word “so” substituted the preceding clause “work very hard in the garden”. It belongs to the clausal substitution.

Lexical Cohesion

Repetition is an act of stating and rewriting an item in the preceding element in an exactly the same form and meaning in the following element. For example: What we lack in a *newspaper* is what we should get. In a word, a popular *newspaper* may be the winning ticket. In this example, the word “newspaper” is repeated exactly in the second sentence. Newspaper refers back to newspaper.

Collocation is another kind of lexical cohesion. It is achieved through the association of lexical items that regularly co-occur. In other words, it deals with the relationship between words on the basis of the fact that these often occur in the same surrounding. For example: the use of, interested in, take a bath, break a leg, pay attention, keep calm, keep quiet, and etc.

The Errors Found in the Use of Grammatical and Lexical Cohesion in 25 Theses Written by Undergraduate Students Majoring in English of Islamic University of Riau

The errors that the researcher found in the use of grammatical and lexical cohesion written by undergraduate students majoring in English of Islamic University of Riau are as follows:

Reference

- 1) The students do not motivate their self to produce correct pronunciation.(thesis 5, p.3)

➤ The students do not motivate **themselves** to articulate the correct pronunciation.

The sentences has a problem in terms of grammatical cohesion in the possessive pronoun (personal reference) their self is incorrect as the reference referring to the students. Instead, it should have been themselves.

- 2) These languages are very important as the foundation of the national language and we must maintain them extinction.(thesis 1, p.4)

➤ These languages are very important as the foundation of the national language and we must maintain **their** extinction.

The sentences has a problem in terms of grammatical cohesion in the possessive adjectives (personal reference) them is incorrect as the reference referring to these languages. Instead, it should have been their.

Ellipsis

- 3) Based on the table of writing components of students' writing ability on scientific class above, it can be seen that students' writing ability in each component was various proven by each component.(thesis , p.)
- Based on the table of writing components of students' writing ability, it can be seen that students' writing ability in each component was various.

The sentences has a problem in terms of grammatical cohesion. It is not necessary to write a long sentence if we have already understood, so we just ommitted the word proven by each component.

Conjunction

- 4) In the curriculum of vocational high school provincial integrated agricultural Riau no study on agriculture. But because English teachers have the initiative in teaching agriculture to students.(thesis 22, p.3)
- In the curriculum of agriculture vocational high school in Riau, there is no study on agriculture in English. **However**, English teachers have the initiative in teaching agriculture to students.

The sentences has a problem in terms of grammatical cohesion in the use of adversative conjunction but because is incorrect as connector between sentences. Instead, it should have been however.

- 5) The writer analyzed the data qualitatively. In the words the writer took one teacher and one class second year students at SMP Negeri 1 Rengat Barat as sample.(thesis 21, p.37)
- The writer analyzed the data qualitatively. **In other words**, the writer chose one teacher and one sample class of the second year students of SMP Negeri 1 Rengat Barat.

The sentences has a problem in terms of grammatical cohesion in the use of additive conjunction in the words is incorrect as connector between sentences. Instead, it should have been in other words.

- 6) Everybody wants to be able to speak English like native speaker, but English pronunciation is to be problem to learners, bad pronunciation may make people confused. On the other word, good English pronunciation will make people easily to understand. (thesis 2, p.3)
- Everybody wants to be able to speak English like native speaker, but learners have bad pronunciation that make people confused. **On the other hand**, good English pronunciation will make people easily to understand.

The sentences has a problem in terms of grammatical cohesion in the use of additive conjunction on the other word is incorrect as connector between sentences. Instead, it should have been on the other hand.

Repetition

- 7) English is one of the most important languages in the world. In this globalization era, English becomes an international language and it uses in almost all aspect of life.(thesis 25, p.1)

➤ **English** is one of the most important languages in the world. In this globalization era, **it** becomes an international language and it is used in almost all aspects of life.

The sentences has a problem in terms of lexical cohesion in the use of repetition. Instead, it should have been used reference to make it various.

- 8) Morly (1991) in Abbas (2012) stated that one of the primary goals of teaching pronunciation in any course is intelligible pronunciation, not perfect pronunciation.(thesis 15, p.1)

➤ Morly (1991) in Abbas (2012) states one of the primary goals of teaching **pronunciation** in any course is intelligible, **not perfect one**.

The sentences has a problem in terms of lexical cohesion in the use of repetition. Instead, it should have been used substitution to make it various.

- 9) Communication is an important part of human civilization and it is a means of cultural transformation. Communication using languages can be conducted in two ways: orally and in a written form. (thesis 4, p.1)

➤ **Communication** is an important part of human civilization and it is a means of cultural transformation. **It** uses languages can be conducted in two ways: orally and in a written form.

The sentences has a problem in terms of lexical cohesion in the use of repetition. Instead, it should have been used reference to make it various.

Collocation

- 10) The writer interest to carrying out a research with the title : A study on children's memory of English words at Santa Angela Pekanbaru.(thesis 24, p.4)

➤ The writer **is interested in carrying** out a research entitled "A study on children's memory of English words at Santa Angela Pekanbaru."

The sentences has a problem in terms of lexical cohesion in the use of collocation interest to carrying is incorrect. Instead, it should have been interested in carrying.

- 11) Based on the problems above, the researcher is interested to analyze the students' pronunciation and conducting a research entitle "An analysis of Mispronounced Suffix-ed by the Fourth Semester Students at FKIP UIR". (thesis 5, p.2)

- Based on the problems above, the researcher is *interested in analyzing* the students' pronunciation and conducting a research entitled "An analysis of Mispronounced Suffix-ed by the Fourth Semester Students at FKIP UIR".

The sentences has a problem in terms of lexical cohesion in the use of collocation interested to analyze is incorrect. Instead, it should have been interested in analyzing.

The Reasons Why Students Made Errors in the Use of Grammatical and Lexical Cohesion

The responses of the questionnaire below showed some reasons why students made errors in the use of grammatical and lexical cohesion in writing their theses.

Table 4. The questionnaire for students who wrote the theses

(a) Never; (b) Seldom; (c) Sometimes; (d) Usually; (e) Always

Statements	(a)	(b)	(c)	(d)	(e)
1. Lecturers pay attention in explaining personal pronoun use (he, she, it, they, etc), possessive adjectives (his, her, my), possessive pronouns (mine, theirs, ours) when referring item(s), person/people or thing(s) mentioned.	0	9	9	2	0
2. You pay attention to the comparative forms of adjectives and adverbs to discuss difference, similarity, or identity between elements.	2	9	7	2	0
3. Lecturers pay attention in explaining linking adverbs to express addition such as <i>in addition, moreover, furthermore, besides, also, additionally, etc.</i>	6	7	3	4	0
4. You pay attention to adverbs/adverbials to express comparison and contrast such as <i>likewise, similarly, meanwhile, in the same way, by contrast, yet, however, conversely, nevertheless, nonetheless, etc.</i>	1	9	6	4	0
5. You pay attention to adverb/adverbials to express time sequence, or sequences of events such as <i>first(ly), second(ly), next, then, at first, finally, later, initially, last, etc.</i>	3	7	5	4	1
6. Lecturers pay attention in explaining adverb/adverbials to express cause-effect such as <i>therefore, consequently, for that reason, thus, as a result, hence, accordingly, etc.</i>	7	4	6	3	0
7. You pay attention to the definite article "the"	2	6	6	3	3

instead of using personal pronoun (she, he, it) to refer the person, thing, or item mentioned earlier.					
8. Lecturers pay attention in explaining demonstratives <i>this, that, these, those</i> when referring to the participants mentioned earlier.	4	6	6	4	0
9. You pay attention to the use of synonym, near synonym, antonym, in context to avoid repeating the same words several times.	2	10	6	2	0
10. Lecturers pay attention in explaining what word can be used together. For example, which verb can collocate with which noun, or which preposition can be used with which verb.	3	6	8	2	1
11. You pay attention to repeating key words appropriately to achieve cohesion in writing.	5	7	3	5	0
12. When writing an essay, you pay attention to the semantic connectedness within a sentence, between sentences in a paragraph and across paragraphs in an essay to achieve cohesion.	4	8	7	1	0
13. Lecturers pay attention in explaining the effectiveness of cohesive devices because it is one of the most significant elements to demonstrate the quality of an essay.	3	8	9	0	0
14. You revise correctness and appropriateness of cohesive devices in writing an essay.	5	8	4	3	0
15. In general, Lecturers pay attention in explaining the using a variety of cohesive devices to achieve cohesion in writing English essays.	5	4	5	5	1

Adapted from: Do Minh Hung (2014)

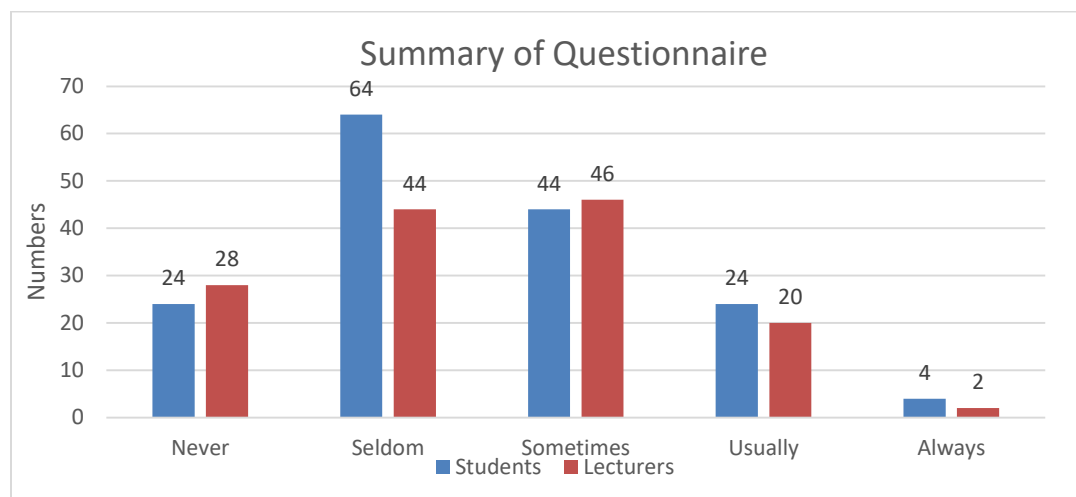


Figure 1. The Result of Questionnaire

Based on the result of the questionnaire on the use of grammatical and lexical cohesion in English writing, it showed that most of lecturers sometimes explain about grammatical and lexical cohesion. However, the students still had errors in the use of cohesive devices. One of the factors that students had in the use of grammatical and lexical cohesion in writing their theses, it is because not the students still had problems in learning grammatical and lexical cohesion. It mean, good students have to know and comprehend deeply the three dimensions of teaching and learning grammar and ten indicators of teaching and learning vocabulary. On the other hand, only few students who paid attention on the use of cohesive devices in writing their theses. Therefore, many students made errors in the use of grammatical and lexical cohesion. Besides, most of students seldom and sometimes paid attention on the use of grammatical and lexical cohesion.

DISCUSSION

The aims of this research were to find out (1) the occurrence and percentage of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, (2) the errors made by students in the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, and (3) the reasons why students made errors in the use of grammatical and lexical cohesion in writing their theses.

The Occurrence and Percentage of the use of Grammatical and Lexical Cohesion in Theses

The results of the occurrence of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, the highest occurrence was conjunction and the lowest occurrence was substitution. The percentage of the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau, the highest percentages was 46.79% on conjunction and the lowest percentages was 0.06% on

substitution. It showed that conjunction was the most cohesive devices used. It also showed that substitution was the less cohesive devices used.

Based on the findings, it is noticed that in every type of grammatical and lexical cohesion used, there is a predominance of a specific device at different times. The students' use of grammatical and lexical cohesion is characterized by the highest occurrence and the highest percentage was conjunction and the lowest was substitution. This occurrence and percentage can refer to the students mastery of such grammatical and lexical cohesion and their knowledge about what they can serve as. However, some little use of grammatical and lexical cohesion and the absence of others are due to the students' little experience in using them before.

The results show that the use of conjunction differs from one type to another. The frequencies obtained in conjunction (see table 2), reveal that the students' use of this type is larger than the use of other grammatical and lexical cohesion, and where the use of the additive conjunction "and" can represents the acquiring process of operation. Moreover, in all the conjunction used, it is noticed that, students are familiar with the use of a particular device in each type of conjunction (additive, adversative, causal, and temporal).

It serves to bind parts of a text and to mark the difference between the stages. In line with Scott and Thompson (2001, p.4) state that conjunction refers to links between clauses or the ways in which the different parts of a text fit together.

According to the results shown in table 2, students are not familiar with the use of substitution concerning to the use of other grammatical and lexical cohesion. This might refer to the learners' avoidance in using such types. Thus, students usually avoid using substitution because they might fear about their appropriateness. Also, what is seen is extremely different, because students seem to have difficulties in determining the clause to be substituted.

The Errors Made by Students in the use of Grammatical and Lexical Cohesion in Theses

The results reveal that students made errors in terms of repetition and collocation. They are the most problematic area concerning to the use of other grammatical and lexical cohesion. Moreover, repetition and collocation are used wrongly because of the students' little experience in manipulating such a type when writing a thesis.

Learners seem to use a quite amount of inappropriate references. The use of wrong collocation usually reveals when students write as in the sentence "The writer interest to carrying out a research with the title : A study on children's memory of English words at Santa Angela Pekanbaru". This difficulty in determining the collocation because the difficulty of acquiring the process of collocation are not fully mastered yet. Sometimes students' inappropriate the use of collocation is due to the over generalization or misanalysis the choice of words.

In writing activity, using grammatical and lexical cohesion could improve students' writing. It was in line with what Harmer (2004) states that the aim of cohesion is to help the reader understand the items referred to, the ones replaced and even the items omitted. The results also in line with Do Minh Hung (2014) about learners' attention and use of cohesive devices in English essay writing at Dong Thap University. However, the students still made errors in terms of *repetition* and *collocation*.

The Reasons Why Students Made Errors in the use of Grammatical and Lexical Cohesion in Theses

The students were given the questionnaire. The result showed that (1) the students still lack of grammar and word knowledge, and also (2) the students paid less attention in the use of cohesive devices in writing their theses. However, many students' theses still had errors in the use of grammatical and lexical cohesion. Students should have learn more about the use of grammatical and lexical cohesion. According to Celce-Murcia (2010, p.134), "There are three dimensions of grammar instructions, namely; morphology, semantic, and pragmatic." In line with Hudson (2010, p.213) states that there are ten indicators of words instructions, such as morphology, spelling, meaning, use, synonym, antonym, multiple word meaning, concept behind the words, collocation, and register. Those aspects can help students to improve their writing especially in the use of grammatical and lexical cohesion.

CONCLUSIONS AND SUGGESTIONS

This research examined the use of grammatical and lexical cohesion in theses written by undergraduate students majoring in English of Islamic University of Riau. It can be concluded that the use of grammatical and lexical cohesion mostly occurred in theses were conjunction. The highest percentage was 47.50% on conjunction and the lowest percentage was 0.07% on substitution. However, students still had errors in the use of grammatical and lexical cohesion especially in terms of collocation and repetition. Also, the students did not understand much on the use of grammatical and lexical cohesion in writing their theses because they paid less attention. Also, the students still lack of grammar knowledge especially in the use of grammatical and lexical cohesion. It is because in Indonesia, English writing still one of the difficult skills for students. Therefore, there is a need to understand the use of grammatical and lexical cohesion in writing theses.

Based on the conclusions, some suggestions can be delivered to English department lecturers, students, and other researchers who were interested in conducting similar research.

English department lecturers should have known and understood about the three dimensions of grammar and words instructions. According to Celce-Murcia (2010, p. 134) states that there are three dimensions of grammar instructions, namely; morphology,

semantic, and pragmatic. In line with the vocabulary instructions, there are ten indicators of words instructions, such as morphology, spelling, meaning, use, synonym, antonym, multiple word meaning, concept behind the words, collocation, and register (Hudson, 2010, p. 213). It is also suggested for the students who will write a thesis and former students who will continue their study to pay attention in the use of cohesive devices in writing because it makes our written more understood especially in English.

For further researchers who were interested in conducting similar research, it was suggested that they need to vary the written texts, not only for thesis but also others. Furthermore, it would be better to do the research related to the use of cohesive devices in writing in English.

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