Cohesive Devices Used in Argumentative Essays by Undergraduate EFL Learners

Hesti Rokhaniyah[1], Wildi Adila[2], Dwi Ana Binti Yulianti[3]

[1]Universitas Darussalam Gontor, Jawa Timur, Indonesia. E-mail: nunun6323@gmail.com
[2]Institut Agama Islam Negeri Surakarta, Jawa Tengah, Indonesia. E-mail: wildi.adila@iain-surakarta.ac.id
[3]Universitas Muhammadiyah Ponorogo, Jawa Timur, Indonesia. E-mail: dwiana@umpo.ac.id
*Corresponding author

ARTICLE INFO

ABSTRACT

Cohesive devices are crucial points recognized as essential features of a good essay, yet employing them in an essay appropriately becomes problematic for learners. This study analyzes qualitatively cohesive devices to investigate EFL learners. It aims at examining how EFL learners apply cohesive devices in argumentative essays, the frequencies of cohesive devices errors in their writings, and the possible causes of EFL learners to produce cohesive devices. Twenty-five learners of the Department of International Relations, at a university in Ponorogo, were requested to produce argumentative essays that consisted of five paragraphs. Twenty-five essays had been identified with the number of errors of grammatical cohesion. Those errors were then analyzed to determine the possible causes affecting the learners' errors. The find revealed that the number of grammatical cohesion utilized by EFL learners reached 2172, while 168 obtained errors. There was a heavy reliance on cohesive item use. The intralingual transfer mostly influenced the errors produced than the interlingual transfer. The intralingual errors percentage represented 96,9%; interlingual transfer errors reached 3.03%. It occurred due to the learners' inability to employ the grammar rule. Hence, lecturer should employ the strategies for learners' writing ability development, such as implementing collaborative learning, delivering the feedback, exposing learners to exercise, and applying a learning management system to result higher level of cohesion.

1.   Introduction

One of the prevalent issues in essay writing is the cohesive aspect. The cohesion aspect made the writing more effective and communicative, enabling readers to obtain the point easily. The demonstration of producing coherent was just as cohesive devices to guarantee cohesion in writing the text (Salman & Yaseen, 2017). The issue that the prior research did not answer was the effect of cohesive devices on argumentative essays. They simply impacted writing as they affect learners with different syntactic devices utilized to extend discourse to cohesive text. The research objective was to analyze the most frequently applied cohesive devices as an indication of learners' competence to vary cohesive devices used in argumentative essays. Cohesive devices in writing argumentative essays affected comprehension as they assisted readers in integrating between sentences in a text. They also told the readers what the writers were doing in a sentence and helped guide them through writing. Cohesive devices

signal the readers the relationships between the different clauses, sentences, and paragraphs. This made the message more concise.

Vitse and Poland (2017) defined cohesion as using cohesive devices with relations among sentences and parts of a text. Cohesive devices enabled readers to capture the meaning between what preceded and what followed. Likewise, Patriana et al. (2016) argued that cohesive devices were certain words or phrases and their location within the discourse activated a set of expectations of what might follow. The demonstration to create coherence is a cohesive discourse to make cohesion in writing the text. The discourse device in writing was likewise substantial as it gave learners syntactic devices to extend any discourse to cohesion (Uru, Sudirman, & Nugroho, 2021). Without getting the linguistic ties, one cannot provide a coherent discourse. They perceived cohesion as the factor distinguishing the texts from non-texts (Trisnaningrum, Alek, & Hidayat, 2019). Cohesive device mastery is essential for academic writing and significant for any courses in which English is the instruction medium.

Many scholars have researched cohesion and coherence (e.g., Sari & Indarti, 2016; Hamed, 2014; Patriana et al.; Mohamed, 2016; Chanyoo, 2018). Some researchers (Trisnaningrum, Alek, & Hidayat, 2019; Astariani, 2020; and Rahman, 2018) have risen since the book *Cohesion in English* by Haliday dan Hasan, 1976 was published. They explained that cohesion was fulfilled through the proper cohesive devices (CDs) utilized in writing. They were significant elements recognized as essential features of the essay and had an important role as they created the text unity. Astariani (2020) revealed that cohesive devices helped the essay be "make sense" as the characteristics of good writing were semantic and logical. Therefore, the writer could employ great consideration of putting CDs in writing.

A number of scholars analyzed how learners applied CDs in their essays (Rassouli & Abbasvandi, 2019; Rahayu & Cahyono, 2015; Hamed, 2014). The data showed that most learners had various barriers to employing CDs effectively and appropriately. Rahman undertook a study, for instance, which revealed that producing a coherent text was a difficult task for Indonesian EFL learners. Their difficulties were mainly because of the unity of the ideas employing particular markers. Omar, Hamad, and Saleem (2020) also pointed out many errors in employing discourse markers to produce essay writing. It indicates that writing coherent text became problematic for EFL learners. This problem also attracts the researchers to observe learners' errors in employing CDs. The error of cohesive devices seemed to be an intensive concern for learners in Saudi Arabia, China, Yemen, and Malaysia (Klimova & Hubackova, 2018). Learners had displayed various results dealing with how EFL learners implemented CDs in the essay. However, learners' essays showed similarity that ESL and EFL learners had difficulty using CDs appropriately in writing. This research focused on using CDs consisting of conjunction, reference, ellipse, and substitution in argumentative essays.

The aforementioned studies mostly analyzed how EFL learners overcome the problem of employing cohesive devices. However, the previous research only focused on using CDs instead of examining the frequencies of CD errors and the possible causes of EFL learners writing CD errors. Figure out the causes of error is significant to be carried out by employing better procedures to examine the source

contributing to the error. The strategy to covey EFL learners' difficulty in using CDs was analyzing the error (Nilopa, Miftah, & Sugianto, 2017). Mohammed (2015) explained that learners revealed what the barrier to comprehending was. If EFL learners knew what triggered them to produce an error, they would pay heed to the errors. Brown (2007) identified the cause of errors into two main sources that contribute to errors: intralingual and interlingual transfer. The intralingual transfer was often called developmental error. It occurred because of learners' inability to employ grammar rules in the target language. The intralingual transfer error example comes from the study's empirical finding, which could be seen in the sentence *they joined the English because they liked it.* The intralingual error occurred as EFL learners applied the article "the" inappropriate before the name of the field of study when it was not required (Klimova & Hubackova, 2018). Pertinent to this, Brown (2007) explained that the intralingual errors were often influenced by learners when they learned a second language.

The interlingual transfer happens because of learners' native language (L1) interference. For instance, the interlingual transfer error was: the computer you bought is different from *the one I have.* The writer wrote the phrase, different with, as Indonesian-English word by word translation for: *berbeda dengan.* The intended meaning of the sentence was *different from.* As lexical repertoire was, learners, translated the phrase into different with, instead of different from. Klimova and Hubackova (2018) argued that the problem happened as writers transferred their L1 to L2 writing practice. Murtiana (2019), L2 learners committed interlingual errors in the same vein as they used their L1 as a medium to learn L2. They transferred structure from L1 to L2. Hence, learning L2, this interlingual error occurred when EFL learners could not distinguish L1 from L2.

Halliday and Hasan (1976) decided CDs into grammatical and lexical cohesion. Grammatical cohesion tied reference, substitution, ellipsis, and conjunction; lexical cohesion consisted of reiteration and collocation. The use of grammatical cohesion in learners' argumentative essays has become the focus of this study. Investigating how they apply CD errors is also essential as CDs affect the writing quality. Admittedly, the presence of the error does not always make the writing incoherent.

Nevertheless, the errors' existences affect the writing quality. Rahayu and Cahyono (2015) identified the correlation between the conjunction errors of undergraduate Chinese EFL learners, yet EFL learners at different proficiency levels deviated from developing their cohesive errors. In a different aspect, Hidayat (2016) also conducted research to observe the use of conjunction and the errors in essays written by Spanish learners. The conjunction errors were relevant to the quality of writing; the higher the learner produced the errors in their essays; it can lower the paragraph quality

Many studies have already investigated EFL learners' CD errors in producing essays, yet the previous research has not identified the factors influencing the errors. Hence, this study intends to focus on the gap in past research on the same topic. Therefore, this research tries to analyze how EFL learners employ grammatical cohesion to make the text cohesive in argumentative essays. The aim is to examine the most frequently applied cohesive devices to indicate learners' competence to vary cohesive devices used in writing. Moreover, this research also analyzes the EFL

learners' difficulties in employing cohesive devices. The study investigates the error types of cohesive devices which learners do. Likewise, the research also discusses the linguistic description of what possible causes contribute to learners' errors in their argumentative essays. Having been involved in this research, the learners will obtain new insight about CDs and their impacts on learners' writings. Therefore, they will be more aware that CDs help them integrate information between sentences in a text. Based on the above purposes, the research questions are: a) How do EFL learners apply cohesive devices in their argumentative essays? b) What are the frequencies of cohesive device errors in their writings? c) What are the possible causes of EFL learners producing cohesive device errors?

2. Method

2.1. Research Design

This research identifies EFL learners' written essays about cohesive devices use. The design of this research is qualitative analysis. That qualitative analysis was determined as application diagnosis and qualitative validation to identify whether the behavior was unexpected or expected. Argumentative essays were the object of analysis in this qualitative research. Essays analysis for cohesion was conducted by calculating the cohesive based on the taxonomy of the cohesive tool developed by Halliday and Hasan (1976).

2.2. Participants

The data were argumentative essays written by second-semester learners. The number of learners involved in this study was twenty-five due to the consideration of the writing teachers' access which only had one writing class in the International Relations Department. They wrote 25 argumentative essays about smoking should be banned in public places. The time to accomplish essay writing was 40 minutes. The data were utilized to answer the research problem. The argumentative essays were classified in accordance with the theoretical framework developed by Halliday and Hasan (1976)

2.3. Data Collection

The essay was used to test learners' ability to write an argumentative essay to answer problem formulation. The indicators of learners writing competence in writing the essay were content, organization, grammar, vocabulary, mechanics, and cohesive devices. The cohesive devices were measured based on the grammatical cohesion employed in learners' essays. They were composed of conjunction, reference, ellipse, and substitution. The data was gathered by asking twenty-five learners to submit their argumentative essays to the researcher through Schoology. EFL learners' essays were composed of five paragraphs, and the number of words varied to 250 words. The number of words did not define grammatical cohesion errors. Twenty-five essays were gathered from EFL learners without observing particular criteria for each respondent.

2.4. Data Analysis

Two procedures were utilized to analyze the data. First, the researchers identified grammatical cohesion in learners' essays. This research focused on learners' tendencies to apply ellipsis, reference, conjunction, and substitution when producing

their argumentative essays. Second, cohesive device errors were identified. The analysis only concentrated on grammatical cohesion. The next procedure, to analyze the data, cohesion taxonomy was employed to identify cohesion device errors in the essay, whether they were classified as repetition, misuse, omission, or unnecessary addition. Table 1 shows the error's description.

Table 1. The Intralingual Errors

No	Type of Errors	Descriptions
1	Unnecessary addition	Cohesive devices were applied unnecessarily. It does neither make the sentence cohesive nor change the meaning
2	Redundant	The overuse of the same cohesive devices in the same sentences while one of them could be substituted by other types of cohesive devices which had similar functions and meaning
3	Omission	Cohesive devices were applied in the text. If cohesive device was correctly employed, it built proper cohesion in the sentences
4	Misuse	Inappropriate cohesive devices. The use of correct cohesive device should be applied to inappropriate alternate one

Source: Halliday and Hasan, 1976, p. 81

The table categorized learners' errors, whether they were unnecessary addition, redundant repetition, omission, or misuse. Having been analyzed, the errors were identified to know the causes that affected the error. In this procedure, the researchers had to interpret what caused EFL learners' errors. This research also adopted a theoretical framework to decide the errors' source suggested by Brown (2007). The errors were classified into two, intralingual and interlingual transfer. The errors were identified into intralingual transfer relevant to the errors characteristics investigated by researchers.

3. Findings
3.1. Cohesive Devices
Referring to the research question of how EFL learners apply cohesive devices in writing their argumentative essays, they employed 2126 grammatical cohesion in their essays. Table 2 shows the frequency distribution for each category. The table shows that conjunction and reference were two grammatical cohesion chosen significantly. Table 2 also points out learners' tendency to apply grammatical cohesion in their writings. The following section explains each category and the frequently applied grammatical cohesion discussion.

Table 2 The frequency of grammatical cohesion

No	Category	Number	Mostly used
1	Conjunction	571	So, therefore, and, but, because, after, before, although, first, second, in brief
2	Reference	1631	It, they, their, them, the, (adjective+er)
3	Ellipsis	9	both
4	Substitution	5	One, ones

3.1.1. Conjunction

The conjunction used was mostly employed after reference. Five hundred seventy-one conjunctions were found in learners' essays. The subcategory conjunction, additive, adversative causal and temporal were applied. The additive such as "and" was found with the highest frequency. "Because, therefore, so", were dominantly employed to show the result and causalities. The additive "and" got the highest frequency; in adversative use, learner frequently applied "but, after, before, and although. While making sequences, the most frequently applied temporal conjunction were "first, second, in brief". Figure 1 is an example of learner's argumentative essay.

Medical research shows that smoking not only causes health problem for smokers but also for people surround by. Because smoking is dangerous, many believe that smoking especially in public area should be banned. Although so many arguments on both side, I agree that the ban is the proper course of action

The ban occurs for some reasons. First it can be passive smokers' mistake to inhale others' people smoke by visiting places where it is permitted. Furthermore, If they prefer not to smoke passively, and they don't need to go place where smoking is allowed. And second, many studies show that a lot of gases are very harmful to the environment such as polluting the environment affect to human beings health. Therefore, smoking should be banned.

Smoking a head of many children may give influence for them because children repeat what they observe and they are affected by the normality of smoking around them. If some people smoking a head of children, the kid will think that smoking will be good think, but it is not true. Furthermore, the more the children will be exposed to smoke, the higher the prospect of children become smokers. Cigarette is very harmful to passive smoker. Therefore cigarette smoke is very harmful not only for the smokers but also the others who are around

Figure 1. One of the learner essays

Grammatical cohesion applied by EFL learners was conjunction as well as reference. The reference use, such as demonstrative and the personal reference were required in the text. Likewise, learners' particular used conjunctive items. They used the exact meaning of grammatical cohesion to avoid the overuse of specific item. As the alternative, instead of employing "and "or "in addition" in the sentences many times, the learner could use "similarly, furthermore, or likewise". In the adversative use, learners could modify "although, but" to other choices for example: however, yet, and nevertheless. "Because and so" could be substituted by "therefore, due to, for, thus, or hence".

The analysis revealed that learners tended to apply certain grammatical cohesion influenced by some reasons. This reason came from inadequate exposure gained by the learner with limited knowledge to use various grammatical cohesion. Insufficient exposure to the use of cohesive devices might affect to minimal amount of knowledge. When learners lacked choices to apply conjunctions, they tended to apply their sense, which could lead them to apply inappropriate conjunction. Another factor was conjunction use could be influenced by learners' L1. The inappropriate use of conjunction was the effect of L1, which appeared in the target language (L2). This could also be influenced by the lecturers' instruction on applying conjunction which were not explicitly spoken. Instruction of cohesive devices could assist learners in advancing their use.

3.1.2. Reference

References were dominantly applied among grammatical cohesion. The 1631 references happened in EFL learners' essays covering demonstrative, comparative, and personal references. Figure 2 is an example of the learner's composition

> Being someone who experiences secondhand smoke, it is unpleasant experience. Smoking can kill and person's habit should not make deaths judgment. Many people play victim to the atrocity; it is controversial topic that exists today. Some organizations should ban smoking if they wish. They argued that smoking has been banned in public places because it can affect cancer. They do not wish cancer upon anyone and passive smoker. In fact passive smokers are bigger than smokers. Furthermore, the risk of breathing problem, allergies and asthma is higher
>
> If the problem is not discussed, there can be no solution to it. Passive smokers affect someone and send them to their diseases. Secondhand smoker is big health risk of not only themselves, but the people surround them. The problem is smoking is illegal in public places because of the tool smoking has on someone around them. Smoking should not be allowed to public places, but they should take the issues that get along with it. They have already known that smoke already kills. Tobacco tightens the noose and set for their slowly death. Smoker not only kills themselves, but also buries them in their cold graves.
>
> In my point of view, a death in our family is really upsetting and having somebody taken away from us is very heartbreaking. It is the case that people health is more essential than business. Restaurants and pub can adapt to ban by allowing smoking areas. In brief, it should be issued illegal for smoking in public places. This way can improve thousands of people health and it is positive development.

Figure 2. *One of the learner essays*

EFL learners mainly employed personal references consisting of possessive determiner 'their', personal pronouns 'they' and it, and 'them'. 'The' as the definite article was frequently applied. In addition, learners mostly used comparative degree (adjective+er) + than/rather than for comparative reference. Since reference types were grammatically and commonly applied in the sentences, there was frequent use of reference.

3.1.3. *Ellipsis and Substitution*

The two least employed categories in grammatical cohesion were ellipsis and substitutions. Figure 3 is an example of learner's argumentative essay. In an ellipse, learners employed 'both' to represent the same noun mentioned earlier. Similarly, in the substitution, learners used 'one' and 'ones', to substitute the nouns, addressed to the prior sentence. The use of ellipses and substitutions showed limited in EFL learners' texts. The learners' essay has characterized the use of ellipsis and substitution with low frequency. In argumentative essays, learners tried to build claims and stood on their essays to convince the readers. However, ellipse and substitution features were mainly for speaking and were not employed in writing.

> Smoking should be restricted in public places. I definitely agree with this because many persons think it can cause detrimental influence on public health together with the environment
>
> Smoking in public area leads to many dangerous health issue for smokers and non-smokers. The hazard fumes from cigarette go to respiratory fact and can cause cancer for both. For instance, if someone smokes in a park or someone who surrounds inhales the fumes, it will reduce health public issue. Furthermore, public smoking will be one that affects children and young people to addict to it. Recent studies show that young people are prone to smoking when ones see smokers often
>
> Besides, smoking gives deleterious impact to environment as it causes air pollution. Smokers in public area generate harmful smoke from cigarettes that contribute to the air pollution. Moreover, smoking produces discomfort to secondhand smoker if someone smokes in public place. It only adds to air pollution because smoking people release toxins to the air. Global warming becomes the main problem due to toxins in the air,
>
> Cancer is common problem for the people who smoke for many years. The probability to escape cancer will be better after giving up this habit. However, the lung damage can be crucial. The patients' lungs are frequently to understand how much damage has occurred. In brief, smoking must be totally banned in public pace do to its severe health risk to both nonsmokers and smoker.

Figure 3. *One of the learner essays*

3.2. Cohesive Device Errors

Dealing with the second problem question about the frequencies of cohesive device errors in their writings, the error analyses in cohesive devices have been classified in four grammatical cohesion types; ellipsis, substitution, conjunction, and reference. The learners' essays performed many errors; the error occurrences are performed in the following table.

Table 3. The Error Occurrences

Category	Subcategory	Number of Error	Percentage
Conjunction	Adversative	9	5,4
	Additive	16	9,5
	Clausal	28	16,7
	Temporal	4	2,4
Reference	Personal	25	14,8
	Comparative	15	8,9
	Demonstrative	79	47

Table 3 reveals the information about errors created by learners in the grammatical cohesion category. Pertinent to the finding, the number of grammatical cohesion in learners' essays was 2172, in which the errors were 168. The error percentage of cohesive devices employed was 22,4% of the total cohesive devices. The errors produced were in the two categories, namely conjunction and reference. The following examples convey the errors.

a. *Nicotine in tobacco causes lots of diseases, like heart problems and cancer. If students smoke, they hurt them lungs*

b. *With a ban, the air quality improves and public health will spend less on treatment for cancer. However, cleaning cost will be reduce.*

In the above excerpts, the errors were categorized as misused. In example a, learners utilized pronoun "them" inappropriately. Instead, the proper use of possessive pronoun should be "their". Likewise, in example b, the error was advertising conjunction "*however*''. The proper conjunction used to replace *however* is additive conjunction "*furthermore*''.

c. *Even though little information about the danger of smoking was available on students, yet parental engagement was significant for them*

The example above showed an error, especially the unnecessary addition. EFL learners should not apply "even though" and 'yet" to state the sentence. The unnecessary addition was the use of "yet" as it did not alter the meaning if it was erased. Thus, it was ineffective sentence because of two adversative conjunctions. To make the sentence useful, "yet "should be deleted.

d. *Education to avoid tobacco use should be provided to student in each grade*

e. *Because the teachers affect the student very much they should be aware of harmful smoking.*

In example d, the omission of "the" became a problem. Article "the" was required to attach before "students" as it was a single countable noun. Actually, the

article "the" was also put as "student" in the above example to a certain student who was mentioned. In example e the error occurred on comma omission (,)to distinguish two sentences. A comma put between two clauses could make the sentence easy to follow:

> f. *I have some reasons why I do not smoke. Smoking is bad for our health, and we must avoid it. It can cause stroke, cancer, heart disease, and so forth. <u>And</u> Smoking is also pricy. The cost of a pack of cigarettes is 2 dollars. If we buy one pack of cigarettes twice a week at least, we will spend over Rp.1.220.000 yearly.*

Example f was described as a *repetition* of "and" which disrupted coherent text. The first "and" in the above sentence was regarded as inappropriate with the context. Instead of using "and", learner might put "therefore" to express the sentence "we must avoid it" was the result of the last clause "I have many reasons why I do not smoke". Similarly, the second "and" in the example, *f* was replaced with additive conjunction "moreover or furthermore.

Pertinent to the analysis above, the errors consisted of conjunction and reference. In conjunction, the most frequent error in this research was an inappropriate use of commas punctuation (,). The comma's inappropriate use happened in conjunction: adversative, additive, temporal, and causal. Thus, this error type has dominated the errors occur in the use of a conjunction. Unnecessary addition and omission were two types of error descriptions of commas' inappropriate use. The other errors also happened when the learners attached commas that were not required; hence, those errors affected the essay's coherence. On the other hand, omission occurred when learners had not to use commas in the condition where commas were needed.

3.3. Source of Errors

What possibly caused cohesive device errors were intralingual transfer and interlingual transfer. The cohesive device errors can be seen in Table 4.

Table 4. Sources of Errors

No	Category	Source of Errors	
		Intralingual Transfer	Interlingual Transfer
1	Conjunction	46	3
2	Reference	114	2
	Total	160	5
	Percentage	96,9	3,03

Table 4 illustrates that intralingual errors percentage was higher than the errors by interlingual transfer. The table showed 96,9% of the intralingual transfer result. On the other hand, the error percentage which resulted interlingual transfer was 3.03%. It indicated that the errors applied by learners were because of the learners' inabilities to employ the grammar rule. Brown (2007) assumed that intralingual errors were influenced by the learners' exposure to learn a new second language. Two errors were affected by the interlingual transfer of L1 interference. First, the errors were in the additive item "also" in the end of the sentence and the use of "neither.. or.. "instead of "neither.. nor''…in the sentence. The errors were affected by the inappropriate preference of lexical items as wrong translation. In the

semantic context, this could cause improper sentences as learners interchanged the conjunction from their L1 and target language.

4. Discussion

The use of grammatical cohesion became problematic for learners even though the cohesive devices used in academic discourse either enhanced the writing quality or improved learners' learning experience (Alyousef, 2021). The problems mostly done by learners were conjunctions and references in their argumentative essays. The main factor contributing to the repetition of conjunctions and references was limited learners' repertoire of cohesive devices. The grammatical cohesion knowledge still suffered because of less exercise. Supporting this, Gailea, Syafrizal, and Hafipah (2018) pointed out that lectures needed to provide enough rehearsal for EFL learners relevant to grammatical cohesion. By getting more rehearsals, learners knew if they had enough knowledge or if they had some difficulties doing the exercises. This could encourage them to get deeper into the grammatical cohesion used in their essay. Learners did not put the risk of applying grammatical cohesion, which was unaccustomed to them. This was the same as the research by Patriana et al. (2016) and Meneveau (2015) that EFL learners feared making errors; thus, they were reluctant to use unfamiliar cohesive devices.

Therefore, some pedagogical implications could be used by learners to overcome the same problem. First, the most frequent error of EFL learners was the definite article use. This finding corresponds to the research carried out by Dameria (2019) that the use of the article in essays became grammatical problem for EFL learners. Referring to Dameria (2019), the inappropriateness of definite articles was the most common error in learning English as a second language. Although the source of the definite article was learners' intralingual transfer, the absence of an article in Bahasa Indonesia interfered with learners using L2 article (Briguglio, 2019). Therefore, the definiteness distinction of applying a definite article should be emphasized for learners from an earlier stage. Bagheri and Mahmoudi (2015) also revealed that the use of articles should be implemented through writing and reading as they provided the repetition of article usage, which learners generalized.

Another pedagogical implication was a strategy to enhance the use of proper cohesive devices. They were supported to employ the writing process: pre-writing, drafting, revising, and editing. Research by Sari and Indarti, (2016) and Rahman (2018) revealed that the semantic mapping strategy was crucial to enhancing learners' writing essays. They were also provided the correct cohesive devices to unite the ideas. This method could be implemented in all writing steps.

Nevertheless, learners made frequent errors in the drafting process. Thus, feedback had a vital role before revising their draft. In line with this, Mohammed (2015) suggested feedback from teachers and learners could encourage them to produce their essays better. Hence, teachers had to give learners sufficient feedback to be conscious of using cohesive devices in the essays.

Learners' inability to employ cohesive devices occurred because of insufficient time in cohesive devices class. It happened as cohesive devices were small bits of the material given in one semester. Learners could not rely on the classroom and material from the. Referring to Rahayu and Cahyono (2015), the solution was employing Learning Management System (LSM). It was proper to be implemented in

teaching writing by using technology and the internet to provide an active teaching and learning process. Teachers could motivate learners to use cohesive devices on any platform from the internet. This finding also corresponds to the study by Ecarnot et al. (2015) and Chanyoo (2018) revealed that learners could study through the strategy they preferred

The results showed that learners found the barriers to applying grammatical cohesion effectively and appropriately in producing the composition. The use of grammatical cohesion enabled the writers to write the essay. However, because of insufficient knowledge of cohesive devices, inappropriate and ineffective use of cohesive devices could disturb the readers from interpreting the message or the meaning even though the meaning was successfully interpreted. Although learners' errors were common, they could be minimized to do better writing.

In light of what was stated above, the researchers suggest that a reconsideration of cohesive devices should employ in the curriculum and the way lecturers deal with especially the use of cohesive devices to assist learners in writing an essay effectively. This fact has been asserted by Rahman (2013) that the importance of writing in the curriculum is not only due to the immediate practical application. Yet, he believed that writing was a thinking tool for language development for critical thinking and studying in all disciplines. Similarly, there is a need for lecturers of writing to ignore focusing on the word and sentence levels as this results in noncohesive text. Instead, they should focus on structure-level analysis and whole texts that shift learners' attention to discourse fundamental features to achieve unity.

Finally, the overuse of grammatical cohesion, namely references, encourages the researchers to argue that learners need to be taught how to think in English while writing in English rather than thinking about their ideas and transferring them into English. The negative transfer leads to incoherence in most of the texts produced by learners. To overcome the problem above, learners should receive a lot of exposure to English texts written by a native speaker that they can analytically comprehend. It is supported by Shirazi et al. (2017), who stated that improving learners' awareness of cohesive devices was essential; they could produce good writing, including cohesion.

5. Conclusion

Grammatical cohesion in essays became troublesome for EFL learners. The number of errors occurred in learners' texts, and it was a heavy reliance on the use of grammatical cohesion. Intralingual transfer relevant to learners' grammar mastery proficiency was the most significant factor contributing to learners' errors. It implies that EFL teachers must address appropriate teaching strategies to overcome the barriers. This research investigated cohesive devices used by EFL learners with a limited number of data sources: twenty-five argumentative essays. Hence, carrying out relevant research using a more significant number of data sources is suggested for further studies. Future studies are encouraged to employ a concordance software program to assist in data analysis.

References

Aqmarina, A. (2020). The exploration of cohesive devices in synopsis writings produced by English study program students of Universitas Gadjah Mada. *SALEE: Study of Applied Linguistics and English Education*, *1*(01), 51–66.

Alyousef, H. S. (2021). Text cohesion in English scientific texts written by Saudi

undergraduate dentistry students: A multimodal discourse analysis of textual and logical relations in oral biology texts. *SAGE Open*, *11*(3).

Bagheri, Z., & Mahmoudi, A. (2015). Differential effects of explicit, implicit, and incidental teaching on learning grammatical cohesive devices. *Theory and Practice in Llanguage Studies*, *5*(11), 2348.

Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). White Plains, NY: Pearson Longman.

Chanyoo, N. (2018). Cohesive devices and academic writing quality of Thai undergraduate students. *Journal of language teaching and research, 9*(5), 994-1001.

Dameria, S. (2019). The translation of cohesive devices in Indonesian and English abstracts in biology theses. *Journal of ELT, Linguistics and Translation*, *3*(1).

Gailea, N., Syafrizal, S., & Hafipah, A. (2018). The analysis of cohesive devices in students ' writing discussion text. *The Journal of English Literacy Education*, *5*(2), 88–98.

Gholami, Javad, Roghayeh Ilghamii, Hassan Molla Hossein, F. T. (2017). Cohesive devices in Iranian research papers across social sciences and medical sciences: The case of conjunctives in papers o *.... Iranian EFL Journal*, *8*(4), 292–309.

Haliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. New York: Longman.

Hidayat, A. (2016). An analysis of grammatical cohesive device of the short story the little match girl by Hans Christian Andersen 2016/2017. *English Education: Jurnal Tadris Bahasa Inggris*, *9*(2), 232–244.

Klimova, B. F., & Hubackova, S. (2018). Grammatical cohesion in abstracts. *Procedia - Social and Behavioral Sciences*, *116*, 664–668.

Mohammed, A. S. (2015). Conjunctions as cohesive devices in the writings of English as second language learners. In *Procedia - Social and Behavioral Sciences* (Vol. 208).

Nilopa, L. M., Miftah, M. Z., & Sugianto, A. (2017). Cohesive devices (CDS) in expository essay written by Indonesian students of English as a foreign language. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699.

Omar, J. A., Hamad, S. H., & Saleem, B. Q. (2020). Grammatical cohesion skill for EFL learners: The case of university level Kurdish learners of English. *European Journal of English Language Teaching*, *5*(4), 121–131.

Patriana, A.W., Rachmajanti, S., & Mukminatien N. (2016). Students' ability in using discourse markers to build coherence in composition. *TEFLIN Journal*, 27 (2), 203-214.https://dx.doi.org/10.15639/teflinjournal.v27i2/203-216

Rahman, Y. A. (2018). The use of cohesive devices in ASIAN English as foreign language journal. *Jurnal Akrab Juara*. *3*(189), 50–62.

Rahman, Z. A. A. A. (2013). The use of cohesive devices in descriptive writing by Omani student-teachers. *SAGE Open*, *3*(4).

Rahayu, T., & Cahyono, B.Y. (2015). Discourse markers in expository essays written by Indonesian students of EFL. *International Journal of Language and Linguistics*. *2*(2), 21-29.

Rassouli, M., & Abbasvandi, M. (2019). The effects of explicit instruction of grammatical cohesive devices on intermediate Iranian learners' writing. *European Online Journal of Natural and Social Sciences*, *2*(2), 15–22.

Sandra Putri Astariani, P. (2020). The analysis of cohesive devices found in good-bye. *Udayana Journal of Social Sciences and Humanities (UJoSSH)*, *4*(1), 41.

Sari, F. K., & Indarti, Y. (2016). An analysis of cohesive devices in the article entitled Bali 9 executions : A ' deliberate , culpable ssub ' of Australia published by the Australian. *Anglicist*, *05*(02), 96–102.

Shirazi, M. A., & Mousavi Nadoushani, S. M. (2017). The locus of adversative conjunctions in the research articles: Have they niched or vanished? *SAGE Open*, *7*(1), 1–6.

Trisnaningrum, Y., Alek, A., & Hidayat, D. N. (2019). Discourse analysis of grammatical cohesion devices in college students' academic writing essay. *IJEE (Indonesian Journal of English Education)*, *6*(1), 79–90.

Uru, O. B., Sudirman, A., & Nugroho, A. D. (2021). Exploring cohesions in EFL academic writing: A state of the art on the study of cohesions. *Elsya : Journal of English Language Studies*, *3*(2), 141–149.