

Grammatical cohesion found in undergraduate student's thesis writing: A case study at one private university in Indonesia

Risma Liyana Ulfa¹, Reski Ramadhani^{2*}

¹Department of Informatics Engineering, Garut Institute of Technology, Garut, Indonesia; email: r.liyana@itg.ac.id ²Department of Civil Engineering, Garut Institute of Technology, Garut, Indonesia; email: reski_ramadhani@itg.ac.id

ABSTRACT

Writing an excellent and comprehensive text depends on applying appropriate grammatical cohesive devices. This study aims to investigate the types and errors of the grammatical cohesive devices found in the undergraduate student's thesis. The analysis used in the present study applied the framework of Systemic Functional Linguistics (SFL) proposed by Halliday and Hasan (2014). Through the qualitative design with content analysis, this study examines two undergraduate students' theses, focusing on finding and discussing sections at one private university in Jakarta. The analysis revealed that grammatical cohesive devices in the thesis are not diverse. The data's most dominant grammatical cohesive devices are references and conjunctions—no elliptical and substitution devices are found in the data. Besides, errors in applying grammatical cohesion in the undergraduate students' writing were found, especially in using personal and demonstrative references and extension conjunctions. It indicates that the students still lack understanding in applying the knowledge of grammatical cohesion in their writing, influencing the readers' understanding in capturing information from the thesis. It implies that the knowledge of appropriate grammatical cohesion is essential for students in academic writing, predominantly undergraduate thesis, to convey the ideas and information properly and coherently.

Keywords: Cohesive Devices; Discourse Analysis; Grammatical Cohesion; Undergraduate Student's Thesis

INTRODUCTION

One of the must-have skills in the 21st century for undergraduate students is writing. Writing is undoubtedly essential for college students, and they are required to master this skill to complete their university studies successfully (Motallebzadeh et al., 2018; Pentury et al., 2020; Ratama et al., 2021; Syam, 2020). However, they should not only use this skill to know letters and different words and understand their meaning, but they should also synchronize what they read, including the context emphasized by writers (Rizki et al., 2022). Moreover, writing activities aim to remember and explore ideas and solve specific problems (Afrianto, 2017; Sari et al., 2021; Toba et al., 2019). If the students as writers stop only the micro-level of knowing, it is undoubtedly called the only literate level.

*Corresponding Author: reski_ramadhani@itg.ac.id Article history: Received: December 28, 2023 Revised: January 13, 2024 Accepted: February 05, 2024 Published: February 15, 2024

Citation: Ulfa, R. L., & Ramadhani, R. (2024). Grammatical cohesion found in undergraduate student's thesis writing: A case study at one private university in Indonesia. *English Learning Innovation*, 5(1), 120–131. https://doi.org/10.22219/englie.v5i1.31406

© Copyright: Ulfa et al.



This is an open access article under the CC–BY-SA license P-ISSN 2723-7400 E-ISSN 2723-7419 thinking skills before they put what they read into their writing to make paragraphs readable (Bezanilla et al., 2019; Chen, 2019; Episiasi et al., 2022; Wrahatnolo & Munoto, 2018). In addition, the writing activity connects sentence to sentence and applies paragraphs to each context.

Writing is one of the most challenging skills to master for students. Moreover, teaching writing skills in Indonesia, especially at the college level, requires enormous effort. Teaching writing does not only focus on the grammatical accuracy or the connection between sentences or paragraphs, but also there are some components and competencies that should be considered, i.e., social function, language and semantic features of the text, logical development of ideas, organization, cohesion and coherence, punctuation, style, expression quality, spelling, and meaning (Graham, 2019; Herman et al., 2023; Leli, 2020; Syam, 2020). However, instead of paying attention to developing writing skills, most teachers in English as a foreign language classroom are primarily concerned with teaching writing conventionally, which they emphasize reinforcing grammatical accuracy (Afzal et al., 2022). Also, schools provide various kinds of text to familiarize students with text organization, such as narrative, descriptive, procedure, report, and exposition. Nevertheless, they still need to learn how to develop and create their text. At the college level, students must also write a final project as a thesis to complete their study, which consists of five chapters suited to specific institution policies. Therefore, their understanding of writing a good text determines their success in completing their final

In Indonesia, a thesis as the final project required by all undergraduate students must be submitted to get a bachelor's degree. This project is made through a scientific process to gain knowledge or seek the findings of the research activities. Producing a good thesis has challenges since it has complex and lengthy processes. Besides reading much literature, students must also put information critically and logically into their writing to build sentences or paragraphs (Kirana et al., 2020). Students should pay attention to several textuality requirements to build meaningful, logical, and critical sentences and paragraphs. According to Zaimar (2009), seven categories called textuality requirements should be involved in writing paragraphs, i.e., coherence, cohesion, intentionality, acceptability, informativity, situationality, and intertextuality. However, the present study analyzes cohesive devices in undergraduate students' thesis writing. In this case, cohesion analysis focuses on grammatical unit analysis, emphasizing the meaning of supporting ideas as a whole passage (Halliday & Hasan, 2014). This issue is essential since it is still challenging for students to write paragraphs coherently and cohesively (Prasetyaningrum et al., 2022).

A cohesive device is part of the discourse analysis tool. It is essential in writing excellent formal and informal text, including a thesis, because it can produce logical and meaningful text. Furthermore, cohesion aims to make the text orderly and excellent and help readers understand and absorb the information conveyed easily (Junina, 2022; Rizki et al., 2022). Besides, a text can be relevant and communicative because of cohesive devices (Hernawati & Simatupang, 2022). Moreover, Halliday and Hasan (2014) also stated that cohesion connects meaning within the text and creates it as a logical text. The cohesive devices are crucial parts of the text. A text will only be logical and comprehensible if readers read from one to another paragraph smoothly (Delfia et al., 2023; Episiasi et al., 2022; Jayanti & Hidayat, 2021). The idea should be connected from sentence to sentence. Therefore, in writing a thesis, the appropriate cohesive devices should be applied to make the thesis readable and comprehensive.

Appropriate cohesion devices in a text can show an apparent relationship between one form or unit and another to create complete and precise meanings. In this case, two kinds of cohesions are used to build comprehensive text, i.e., grammatical cohesion and lexical cohesion (Halliday & Hasan, 2014). The grammatical cohesion uses the markers from linguistic elements that can be categorized as reference, ellipsis, substitution, and conjunctions (Halliday & Hasan, 2014). The use of these devices is to connect ideas between sentences (Sidabutar, 2021). On the other hand, lexical cohesions are built by repeating words or phrases, synonyms, antonyms, hyponyms, collocations, meronymy,

and isotopy (Halliday & Hasan, 2014). Lexical cohesion semantically shows the relationship between or among elements or words in a discourse (Sidabutar, 2021). However, the present study only focuses on analyzing grammatical cohesion in undergraduate students' thesis writings and the errors found in using these devices. In this case, grammatical cohesion is considered to have a strong relationship among the sentence elements, particularly in grammar (Hernawati & Simatupang, 2022).

Several prior research studies have been related to grammatical cohesion analysis in various kinds of text. Kirana et al. (2020) did the first study, which focused research on lexical and grammatical cohesion analyses in thesis abstracts. The study reported that the dominant lexical and grammatical cohesion that occurred in the data was repetition, while, in terms of grammatical cohesion, most of the devices occurred in references. However, besides the error of using lexical and grammatical cohesions also occurs, the abstracts are still considered good. Furthermore, Muttaqin et al. (2020) also studied a similar issue related to grammatical cohesion in the Students' Final Project Proposal. The study showed that conjunctions and references are the most common grammatical cohesion devices in students' projects. It indicates that the student's project has been written cohesively. Moreover, another research conducted by Prasetyaningrum et al. (2022) about grammatical cohesion found in students' undergraduate thesis reported that substitution and ellipsis were the most dominant types of grammatical cohesion. The study indicates that using appropriate grammatical cohesion can help students connect the ideas in their writing cohesively and comprehensively.

Prior research has shown the importance of grammatical cohesion in good writing. However, most researchers rarely focused on the grammatical cohesion analysis of undergraduate students' theses. Besides, most of the researchers only focused on analyzing the types of grammatical cohesion devices that occurred in the writings. However, the error analysis was mostly ignored. In this study, the researcher is interested in analyzing the types and errors of grammatical cohesion that occurred in the undergraduate students' writing, focusing on the result and discussion section only. The result and discussion section in a thesis is one of the most essential parts since it presents the result of the research and answers the research questions developed in the first section of the thesis (Kusuma et al., 2022). Therefore, because of its importance, the information presented should be clear and comprehensive so the reader can understand it correctly. It can be realized through the use of appropriate grammatical cohesion devices. Therefore, from the fundamental issue mentioned above, this study aims to analyze and describe (1) the types of grammatical cohesion devices found in undergraduate students' theses and (2) the errors in using grammatical cohesion devices found in undergraduate students' theses.

Both theoretical and practical contribution of this research are explained as follows. This study is conducted to inform undergraduate students in Indonesia about the importance of grammatical cohesion use in thesis writing to help them arrange the ideas quickly and coherently. Theoretically, this study is expected to provide new insight to undergraduate students, especially English department students, about using appropriate grammatical cohesion devices in their writing. Practically, this study aims to inform the students to select the appropriate grammatical cohesions in their writing to avoid errors so the information delivered can be easily understood.

METHODS

The present study analyses the types and errors of grammatical cohesion found in undergraduate students' thesis writing. This study employed a descriptive qualitative method with content analysis to analyze the types and errors of the grammatical cohesion occurring in the text (Creswell, 2012). Qualitative research is used to investigate, find, describe, and explain data that cannot be measured by a quantitative approach (Bowen, 2009). Furthermore, content analysis in this present study is a method that focuses on identifying types and errors in students' writing, entrance exams, bias in speech or propaganda, and the importance of research topics or depth works

(Khotari, 2004). In the present study, this method was used to determine grammatical cohesion types and analyze the errors found in the texts. The analysis used the types of grammatical cohesive devices proposed by Halliday & Hasan (2014).

The data of this study were taken from two undergraduate theses at one private university in Jakarta that were randomly chosen from Academic Year 216/2017. The data taken only focused on the research findings and discussion sections since those are the essential parts of a thesis to show the pictures of the result of the research and answer the research questions (Episiasi et al., 2022; Prasetyaningrum et al., 2022). Because of its importance, the information should be conveyed systematically and coherently so that the result of the research can be presented. Furthermore, these two data were taken to know the usage of grammatical cohesive devices that unify the text into a whole before labeling it as coherent by applying the perspective of grammatical cohesion from Halliday and Hasan (2014).

Based on the principle of qualitative method procedure, the analysis was done by collecting, arranging, and interpreting the data (Creswell, 2012). For the present research analysis procedure, the data randomly selected and collected from the finding and discussion sections of two undergraduate theses were analyzed in terms of the types of grammatical cohesive devices, i.e., reference, ellipsis, substitution, and conjunctions (Halliday & Hasan, 2014). The data were arranged, marked, and classified based on the previous categories and then described in detail. Furthermore, the errors of the grammatical cohesive devices were also analyzed and described to show whether the students could apply the grammatical cohesive devices in their writing appropriately. Finally, the analysis result was interpreted to give meaning to the data.

RESULTS AND DISCUSSION

The results of this study are based on the analysis of two different undergraduate theses, labeled Text A and Text B, of one private university in Jakarta. The analysis focused on the findings and discussion parts of the thesis as the most critical section that shows the research result and answers the research questions. Furthermore, the analysis focused on grammatical cohesive devices of reference, substitution, ellipsis, and conjunction. Besides, the errors in using these devices were also investigated because those will influence how the information is conveyed. Therefore, the analysis of the data will be divided into two sections. First, it focuses on the types of grammatical cohesive devices in the data. Second, it investigates the writer's inappropriate use of grammatical cohesive devices.

Types of Grammatical Cohesive Devices Found in Undergraduate Student's Thesis

To emphasize data that occurred during this study, two of four patterns as reference and conjunction were used in Text A and Text B. Both texts are presented in the unique style of undergraduate writers. In this case, the pseudonym A preferred to use compound and simple sentences in her writing. It seems to follow a river flow when reading her thesis because she used several conjunctions with the same meaning as 'next,' such as, therefore, furthermore, however, and then. Meanwhile, pseudonym B wrote his thesis primarily using simple sentences. It describes clearly and concisely how he presents his ideas based on the data that appeared.

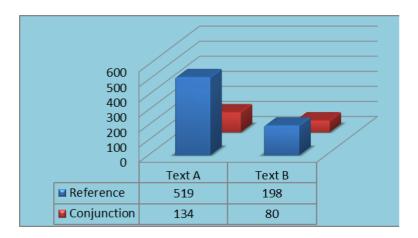


Figure 1. Types of Grammatical Cohesion in Undergraduate Thesis (Adopted from Halliday & Hasan, 2014)

Moreover, figure 1 describes the highest pattern that occurred in reference. The data revealed over 500 hundred references in Text A while only 198 references in Text B. The second pattern occurs in the second place is conjunction. Text A has 134, while 80 conjunctions are applied in Text B. Furthermore, the data is intriguing because those numbered references affect coherence. As seen in the next section, the explanation will mainly discuss how cohesive ties relate to the text. Those are reference and conjunction. It will define and see the connection between sentences in the context played in thesis writing in each research interest as the data is taken.

The Implementation and Errors of Using Grammatical Cohesive Devices Found in Undergraduate Student's Thesis

References

The research findings have three kinds of reference: personal, demonstrative, and comparative. Halliday and Hasan (2014) believe that reference is an item or a topic that correlates with the same concept when the speaker, audience, reader, and writer agree while communicating. Some unique cases of reference were found during data analysis of Text A as in the following:

Excerpt 1

"In this case, it discusses the way to apply dictation technique in **the** teaching of listening comprehension achievement at ten graders of SMAN 76 Jakarta, **the** 2015/2016 academic year."

First, in this statement of the sentence in data 1, it can be seen that the subject is using 'it' to explain the application of the dictation technique to ten graders of SMAN 76 Jakarta. Before teaching, the word 'the' should not be put without putting it. Readers already know that this thesis is concerned with listening comprehension. Moreover, the pseudonym A does not need to insert 'the' before mentioning the academic year because it does not represent the rule of using the demonstrative pronoun. Also, it does not correlate with a specific place or occasion by adding it.

Excerpt 2

"Most of students who did not like English lesson, they gained low competence in English. Besides, they still faced obstacle in following the English lesson. They thought English as a complicated then considered that listening skill as the most difficult one in learning English primarily on X IIS 2 grade which got the lowest score of listening comprehension achievement among the other tenth grade classes."

Second, the sentence begins with 'most of students'. It tells readers about the samples taken from the study. The case is that students had low proficiency and did not like English subjects. The following sentence uses 'they' to describe the difficulty of learning English. It is followed by the belief of pupils that listening is the most challenging skill for them. It is supported by the result score, which stated they could not accomplish a better achievement than the other ten graders. Furthermore, the pseudonym A elaborates on the ideas of general conditions in the classroom. She uses a reference by replacing most students with 'they.' She uses the term 'dislike' to express students' unwillingness to learn English, so they have low proficiency. Also, she adds that teachers are concerned with students' completeness criterion minimum (KKM) in listening, which students have to deal with.

Excerpt 3

"But, there were still difficulties when the students learn how to arrange, complete, and write a recount text. **It** made the teacher repeat the explanation how to do **them**."

Third, the word 'it' in this consecutive sentence does not refer to a thing, a person, or a place. It simply has no reference. Before indicating that 'it' also has no meaning, the researcher analyzes to what extent it functions as a modifier or subject in a sentence by reading grammar books. The assumption that the word 'it' will refer to the difficulties is slightly confusing because difficulties mean a plural noun, but the pseudonym selects this reference. Based on the plural noun used above, it is supposed to use 'they,' but the sentence would not be proper if using it would cause the sentence to be meaningless. After that, 'them' has a function as an object in this sentence. It refers to how students learn how to arrange, complete, and write a recount text. It is unique when using them to refer to kinds of verbs. It is one of the personal pronouns used that the researcher found in this study.

Excerpt 4

"Consequently, the students could analyse the word that had been dictated from the clues that **they** knew **it** from the structure of the text and **their** comprehension **itself**."

Fourth, four references appeared in data 4. 'They' refers to the students. It refers to the word that had been dictated. The point is to the possessive pronoun of 'they.' It is mentioned before that the word 'itself' has no reference or correlation to this sentence. The last reference defines comparative in Text A. Moreover, this study has data about the usage of this kind of reference to explain the data. The researcher has put the data below in order to make the reader understand the kinds of cases that occur in undergraduate thesis writing:

Excerpt 5

"Indeed, they seemed more interesting during the teaching learning process."

The sentence above stated that students enjoy the learning process using the dictation technique. The pseudonym needed to be used in a comparative degree properly. Instead of using 'more interested,' the pseudonym was selected to write 'more interesting,' which caused the sentence to have a different meaning. It is common for non-native speakers to make mistakes relating to interest or interest. Such grammatical errors are found in other similar statements, and many videos discuss using comparative degrees. If the researcher takes this for granted, the meaning would be focused on the person, not the dictation technique the pseudonym applies. It would mislead the reader to understand the context even if it plays a small role as cohesive ties.

Excerpt 6

"Hence, the writer was suggested to give <u>more attention</u> to the entire group and the writer should be <u>stricter</u> in order the students did not cheat any longer."

Meanwhile, this sentence is more proper than the previous one. It describes how a

teacher and the pseudonym interact and suggests the teaching process. The word 'stricter' requires the pseudonym to be decisive in handling students' behavior. Usually, the problem arises when the classroom population is significant so that students need undivided attention. Thus, the word 'more attention' indicates that during the process, the pseudonym probably finds difficulties in giving the same attention to all groups in that case. From the data above, it can be concluded that the pseudonym A made some mistakes in making possessive pronouns and comparative references. The data clearly shows that some cohesive ties do not directly affect the coherence aspect, but some improper references affect the meaning and the emphasized context.

In comparison with Text A, the pseudonym B makes some improper usage of 'the' as a demonstrative reference as follows:

Excerpt 7

"<u>The</u> lower score is 56 and <u>the</u> higher score is 97. In arranging the data to <u>the</u> frequency distribution table, the writer uses Sturgess formula for determining <u>the</u> number of class, class interval, and length of class."

There are four ways to use 'the' such as referring to someone in a conversation about, before seas, rivers, groups of mountains, and islands, there is only one of these people or things, and before superlative adjectives (Afzal et al., 2022). Based on this theory, it is clear that the first example is not appropriate because the pseudonym does not use superlative adjectives. In the second example, there are many 'the' in a sentence; thus, it has an effect that readers are easily distracted. Even the pseudonym B has stated a clear explanation, but repeating them in such an example should be reduced to simplify the sentence. Furthermore, the pseudonym B has two kinds of writing, including a comparative reference in his thesis. One has described that data 7 is improper according to grammatical accuracy, while this one relies on the comparison matter.

Excerpt 8

"Teaching speaking in descriptive text by using small group discussion seemed to <u>be</u> <u>more effective than</u> teaching by using conventional method."

From this example, the sentence is a comparative pattern using ... + more effective + than + Thus, the writer indicates the emphasis matter for this research by using small group discussion in SMK Bina Rahayu. In addition, another improper personal pronoun is found by looking at this example: 'They finally found the answer by theirselves'. Since referring to 'they' as the subject, it should be followed by using themselves, not **theirselves**. Thus, the proper sentence should be 'They finally found the answer by themselves.'

Conjunction

According to Halliday & Matthiessen (2004), there are three systems of conjunction: elaboration, extension, and enhancement. As its name suggests, the data below is categorized as part of it. The writer has arranged the data to simplify the display in each case, as can be seen below:

Excerpt 9

"First category discussed the general condition in English class primarily on students' listening comprehension achievement of the test. Most of students who did not like English lesson, they gained low competence in English. **Besides**, they still faced obstacle in following the English lesson. They thought English as a complicated then considered that listening skill as the most difficult one in learning English primarily on X IIS 2 grade which got the lowest score of listening comprehension achievement among the other tenth grade classes. **Moreover**, the teacher stated that most of them were difficult to pass the criterion of minimum completeness (KKM) concerning the school policy."

The main idea of this paragraph is to talk about students' achievement in listening comprehension. She supports the argument that the problem arises because students

prefer to avoid English lessons and have low English competence. Her ideas support what she states before initializing the underlined 'besides' and 'moreover' in her thesis. The matter comes as the effect of students' unlike English. Consequently, they can only handle learning difficulties if they like a subject. It does not add any other idea to support this paragraph. After analysis, the word 'besides' can be replaced by 'Thus, ' which emphasizes its matter; the sentence would be logical to readers' concept. Linking ideas in writing using particular conjunctions is crucial because the properties will have different meanings.

Excerpt 10

"Here, the writer was only repeat the word twice. <u>But</u>, the students were supposed to finish the task on time."

The second example consists of two sentences. The first describes the requirements of repeating the process only twice, but the following sentence does not fit to define how students should be. The word 'but' is not used to be put in it. Instead of using it, the pseudonym can focus on the word supposed to so that readers will understand at that time, time restriction for doing dictation technique is not arguably in data 10.

Excerpt 11

"It was also can be seen from the field note results that in every meetings in each cycle, **the students enjoyed and enthusiastic** to study whether they worked in group or individually."

The sentence is incorrect in this example because the word enjoyed is categorized as a verb while enthusiastic is classified as an adjective. Usually, people use 'and' to state a parallelism, which, in this case, does not. If the pseudonym wants to describe students' feelings, she has to use 'enjoy.'

Based on the data, it can be concluded that, based on the analysis of grammatical cohesion in the selected thesis, there are 519 findings consisting of 83 personal, 419 demonstratives, and 17 comparative references in Text A; around 50 data demonstrative references are improper to be applied, and 20 conjunctions lead to ambiguity and change some intended message on the text. Also, a personal reference should be erased from the text because it does not refer to anything in the paragraph. Hence, the relevant data in text A only has 468 references and 114 conjunctions. While around 198 references and 80 conjunctions are found in Text B, around 4 data of demonstrative and one personal reference are improper, though it does not impact the readers' comprehension. Mostly, the sentences were arranged by using simple sentences. Thus, those give credit for the clarity aspect. The readers can quickly notice what the text is trying to explain in this section. Hence, it can be stated that only 193 references and 80 conjunctions are relevant to be used in the text. From those texts, reference is the highest rank in grammatical cohesion.

Discussion

The present study aims to investigate the types and errors of grammatical cohesion that occurred in the undergraduate student's thesis. The findings show that the grammatical cohesive devices used in the thesis have not been varied. Besides, the students also still misuse the devices. The results showed that the students use only two types of grammatical cohesion in their writing, i.e., references and conjunctions, while substitution and ellipsis are absent. Moreover, the reference devices are commonly used in the data, with 519 occurrences in text A and 198 in text B, particularly personal and demonstrative pronouns. According to Halliday dan Hasan (2014), these two devices are used to refer devices to the items in linguistic or situational texts. In other words, personal or demonstrative pronouns indicate how the writer introduces the items and keeps track of them throughout the text. This study validated the first relevant study used in this research conducted by Prasetyaningrum et al. (2022), who also focused on

the analysis of grammatical cohesive devices that occurred in undergraduate thesis, showing that the most common grammatical cohesion in the data is referenced with 6149 occurrences.

The second relevant study was conducted by Kirana et al. (2020), who focused her study on a similar topic, and the study showed that the most dominant grammatical cohesive device used in the thesis of the undergraduate thesis was referenced. However, Muttaqin et al. (2020) conducted research analyzing the students' undergraduate proposal, showing that the data's most dominant grammatical cohesive devices were conjunctions, with 238 occurrences, while references were only 235 occurrences. Therefore, although the previous and present studies focus on text analysis in undergraduate theses, the results are dissimilar. The findings indicate that the students mostly prefer to use reference and conjunction grammatical cohesive devices in their writing; no substitution and ellipsis were used. Eggins (2004) stated that the purpose of using substitution and ellipsis in writing is to simplify the sentences. It shows that the students prefer to use longer sentences in delivering their ideas in the writing. Moreover, the number of vocabulary students have is independent of their ability to use various grammatical cohesive devices to connect or deliver ideas in their writings.

Based on the study's findings, every undergraduate thesis contains grammatical cohesive devices. However, the result also showed that not all grammatical cohesive devices, particularly references and conjunctions, can be used appropriately. The errors occurred in terms of personal and demonstrative pronouns. The pronouns needed to be more precise to what those referred. Furthermore, errors also occur when using conjunctions, mainly extensive conjunctions. Extensive conjunctions are used to add or strengthen the ideas that are previously mentioned (Halliday & Hasan, 2014). Reference errors indicate students cannot find the referred items in their writings. In contrast, the errors of conjunctions show that the students need to fully understand how to connect ideas between sentences or paragraphs using the appropriate conjunctions. However, calculating the number of comparisons between the use of grammatical cohesion and its errors concludes that the undergraduate student's thesis, particularly in the finding and discussion sections, is still considered good.

The research implies that mastering the grammatical cohesion in writing is essential to writing effectively and coherently. In this case, lecturers and students should devise effective strategies to increase students' competency in writing a cohesive text using various grammatical devices. The present study shows that not all types of grammatical cohesion can be applied by the students in their writing, particularly substitutions and ellipses. It indicates that the students still do not understand how to simplify the ideas or sentences. Therefore, it should be emphasized that the lecturer or teacher needs to inform the students about how various cohesive devices are used in academic writing.

CONCLUSION

This study aims to investigate the types and errors of grammatical cohesive devices found in students' undergraduate thesis. There are two purposes employed in the present study, i.e., to analyze (1) the types of grammatical cohesive devices found in two students' undergraduate theses and (2) the errors in using grammatical cohesive devices found in two students' undergraduate theses. The description and analysis show that grammatical cohesive devices in the thesis are not diverse. The data's most dominant grammatical cohesive devices are references and conjunctions—no elliptical and substitution devices are found in the data. Besides, errors in applying grammatical cohesion in the undergraduate students' writing were found, especially in using personal and demonstrative references and extension conjunctions. It indicates that cohesion is essential to make the message or information acceptable and comprehensive for the reader. This study concluded that the students still lack understanding in applying the knowledge of grammatical cohesion in their writing, which influences the readers'

understanding of capturing information from the thesis. The present study implies that the knowledge of appropriate grammatical cohesion is essential for students in writing academic writing, predominantly undergraduate thesis, to convey ideas and information properly and coherently.

CONFLICS OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

AUTHOR CONTRIBUTIONS

Ulfa, L.R.: Conceptualization (lead), methodology (lead), writing – original draft (lead), review (supporting), editing (supporting), securing funding. Ramadhani, R.: Conceptualization (supporting), methodology (supporting), writing – original draft (lead), review (lead).

REFERENCES

- Afrianto, A. (2017). Grammatical Cohesion in Students' Writing: A Case at Universitas Teknokrat Indonesia. *LEKSEMA: Jurnal Bahasa Dan Sastra*, 2, 97. https://doi.org/10.22515/ljbs.v2i2.899
- Afzal, M., Mahmood, D. A., & Hayat, U. (2022). An Analysis of Grammatical Cohesion Used in the English Essays of English Grammar and Composition for Intermediate Level. *International Bulletin of Linguistics and Literature (IBLL)*, 5(4), Article 4.
- Bezanilla, M. J., Fernández-Nogueira, D., Poblete, M., & Galindo-Domínguez, H. (2019). Methodologies for teaching-learning critical thinking in higher education: The teacher's view. *Thinking Skills and Creativity*, *33*, 100584. https://doi.org/10.1016/j.tsc.2019.100584
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), Article 2. https://doi.org/10.3316/QRJ0902027
- Chen, Y. (2019). Developing Students' Critical Thinking and Discourse Level Writing Skill Through Teachers' Questions: A Sociocultural Approach. *Chinese Journal of Applied Linguistics*, 42(2), 141–162. https://doi.org/10.1515/CJAL-2019-0009
- Creswell, J. W. (2012). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Pearson. https://books.google.co.id/books?id=4PywcQAACAAJ
- Delfia, E., Wijana, I. D. P., & Kesuma, T. M. J. (2023). Lexical and Grammatical Cohesion in the Regional Regulation Discourse of West Sumatra Province. *Journal of Language and Literature*, 23(2), Article 2. https://doi.org/10.24071/joll.v23i2.6081
- Eggins, S. (2004). *Introduction to Systemic Functional Linguistics: 2nd Edition*. A&C Black. Episiasi, E., Syaputri, W., Suramto, S., & Kasriyati, D. (2022). Lexical and Grammatical Cohesion in the Undergraduate Students' Abstracts. *Linguistic, English Education and Art (LEEA) Journal*, *5*(2), 143–152. https://doi.org/10.31539/leea.v5i2.3310
- Graham, S. (2019). Changing How Writing Is Taught. *Review of Research in Education*, *43*(1), 277–303. https://doi.org/10.3102/0091732X18821125
- Halliday, M. A. K., & Hasan, R. (2014). Cohesion in English. Routledge.
- Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An introduction to functional grammar* (3rd ed). Arnold; Distributed in the United States of America by Oxford University Press.
- Herman, H., Rafiek, M., Agustina, T., Saddhono, K., Malabar, S., Saputra, N., & Purba, R. (2023). Exploring the metafunctions to improve EFL learners' writing ability in the perspective of systemic functional linguistics. *Research Journal in Advanced Humanities*, 4(2), Article 2. https://doi.org/10.58256/rjah.v4i2.1195
- Hernawati, Z., & Simatupang, E. C. M. (2022). Grammatical Cohesion Found in "Venom:

- Let There Be Carnage" Moviescript. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *5*(3), Article 3. https://doi.org/10.33258/birci.v5i3.5890
- Jayanti, D., & Hidayat, D. N. (2021). Grammatical Cohesive Devices in Reading Text: A Discourse Analysis of English Test for Junior High School. *JET (Journal of English Teaching) Adi Buana*, 6(01), Article 01. https://doi.org/10.36456/jet.v6.n01.2021.2963
- Junina, A. K. (2022). Grammatical Cohesion in Argumentative Essays by International EAP Learners in New Zealand. *International Journal of Linguistics, Literature and Translation*, *5*(2), 98–108. https://doi.org/10.32996/ijllt.2022.5.2.13
- Khotari, C. R. (2004). *Reserch methodology: Method and techniques (second revised edition)*. New Age International.
- Kirana, R. P., Mukhrizal, M., & Jayanti, F. G. (2020). Types of Lexical Cohesion and Grammatical Cohesion in Thesis Abstracts. *Jadila: Journal of Development and Innovation in Language and Literature Education*, 1(1), Article 1. https://doi.org/10.52690/jadila.v1i1.14
- Kusuma, L. B. D., Yunita, W., & Hardiah, M. (2022). Students' Preferences of the Research Proposal Writing Feedback. *Journal of English Education*. https://www.semanticscholar.org/paper/STUDENTS%E2%80%99-PREFERENCES-OF-THE-RESEARCH-PROPOSAL-Kusuma-Yunita/06283f3e29c2ee194ba1926ac3b56875637e57d5
- Leli, L. (2020). Analysis of Coherence and Cohesion on Students' Academic Writing: A Case Study at The 3rd Year students at English Education Program. *Alsuna: Journal of Arabic and English Language*, *3*(2), Article 2. https://doi.org/10.31538/alsuna.v3i2.980
- Motallebzadeh, K., Ahmadi, F., & Hosseinnia, M. (2018). Relationship between 21st Century Skills, Speaking and Writing Skills: A Structural Equation Modelling Approach. *International Journal of Instruction*, 11(3), 265–276.
- Muttaqin, M., Saleh, M., & Hartono, R. (2020). Using Grammatical Cohesion in the Students' Final Project Proposal (A Case Study in UIN Walisongo Semarang in Academic Year 2019/2020). International Journal of Scientific and Research Publications (IJSRP), 11, 649–654. https://doi.org/10.29322/IJSRP.11.01.2021.p10979
- Pentury, H. J., Anggraeni, A. D., & Pratama, D. (2020). Improving Students' 21st Century Skills Through Creative Writing as A Creative Media. *Deiksis*, *12*(02), Article 02. https://doi.org/10.30998/deiksis.v12i02.5184
- Prasetyaningrum, A., Asrobi, M., Surayya, A., & Fikni, Z. (2022). Grammatical Cohesion in Students' Undergraduate Thesis. *Premise Journal of English Education*, *11*, 297. https://doi.org/10.24127/pj.v11i2.4744
- Ratama, I. P., Padmadewi, N. N., & Artini, L. P. (2021). Teaching the 21st Century Skills (4Cs) in English Literacy Activities. *Journal of Education Research and Evaluation*, 5(2), Article 2. https://doi.org/10.23887/jere.v5i2.30849
- Rizki, M., Hidayat, D. N., Husna, N., & Alek, A. (2022). Discourse Analysis of Grammatical Cohesion Devices in Student Explanation Texts. *Eduvelop: Journal of English Education and Development*, 6(1), 1–12. https://doi.org/10.31605/eduvelop.v6i1.1545
- Sari, Y. I., Sumarmi, Utomo, D. H., & Astina, I. K. (2021). The Effect of Problem Based Learning on Problem Solving and Scientific Writing Skills. *International Journal of Instruction*, 14(2), 11–26.
- Sidabutar, U. (2021). An Analysis of Lexical Cohesion on the Students' Writing. *JETAL: Journal of English Teaching & Applied Linguistic*, 2(2), Article 2. https://doi.org/10.36655/jetal.v2i2.533
- Syam, S. (2020). Reference: A Grammatical Cohesion In Seloka Journal Introduction Published by Semarang State University. *Journal Polingua: Scientific Journal of Linguistics, Literature and Language Education*, 9(1), Article 1. https://doi.org/10.30630/polingua.v9i1.132

Toba, R., Noor, W. N., & Sanu, L. O. (2019). The Current Issues of Indonesian EFL Students' Writing Skills: Ability, Problem, and Reason in Writing Comparison and Contrast Essay. *Dinamika Ilmu*, 19(1), Article 1. https://doi.org/10.21093/di.v19i1.1506

Wrahatnolo, T. & Munoto. (2018). 21st centuries skill implication on educational system. *IOP Conference Series: Materials Science and Engineering*, 296(1), 012036. https://doi.org/10.1088/1757-899X/296/1/012036

Zaimar, O. K. S. (2009). *Telaah wacana*. The Intercultural Institute.