COHESION IN VIETNAMESE EFL ARGUMENTATIVE WRITING: AN ANALYSIS OF TYPES AND ERRONEOUS USE OF COHESIVE DEVICES

Long Viet Le, Bao Trang Thi Nguyen, Van Huy Nguyen

[1]University of Foreign Languages and International Studies, Hue University,

57 Nguyen Khoa Chiem Str, Hue, Vietnam

* Correspondence to **Long Viet Le** <longvietle.0510@gmail.com>

Abstract: The leveling up of English as a Foreign Language (EFL) academic writing necessitates multiple criteria, among which clarity and coherence earn a place. Such a criterion can be fulfiled by means of cohesive devices (CDs), tools that connect texts semantically. While numerous international studies have examined CDs in EFL writing, research focusing on Vietnamese tertiary contexts, especially in argumentative essays, is limited. This study, therefore, was set out to explore the use of CDs in argumentative writing by English-majored students in a university in Vietnam. A manual analysis was done on 30 argumentative essays written under a 45-minute time constraint during a writing course to investigate how often CDs and their usage errors occurred. The results shed light on the distribution of CDs, wherein grammatical CDs reigned dominance. Among these, reference devices were the most frequently used items, followed by conjunctions. Advanced cohesive forms like substitution and ellipsis were scant, and lexical cohesion was confined to basic reiteration, predominantly repetition. Regarding errors, unnecessary addition occurred most often, trailed behind by misuse, omission, and redundant repetition. Reference, especially demonstrative reference, represented the majority of errors. These patterns are indicative of a reliance on foundational cohesion strategies and thus suggest instructional needs for more varied CD usage to enhance writing coherence.

Keywords: cohesive devices, argumentative writing, EFL writing, Vietnamese students

1. Introduction

In academic writing, particularly in argumentative essays, achieving coherence and clarity is essential. This can be realized by means of cohesive devices (CDs), which have been shown to correlate positively with writing quality (e.g., Feliks et al., 2024). CDs play a crucial role in linking ideas, structuring arguments, and ensuring a logical flow within the text (Hinkel, 2001). These devices include various linguistic grammatical and lexical cohesion tools such as reference, conjunctions, substitution, and lexical cohesion that help organize information and guide the reader through complex arguments. For English as a Foreign Language (EFL) students, the effective use of CDs is particularly important, as it enhances readability and supports the communicative intent of academic writing (Halliday & Hasan, 1976), ultimately contributing to writing quality across proficiency levels (Yang & Sun, 2012).

International research has extensively explored CD use among EFL students, focusing on how CDs contribute to writing quality (e.g., Todd et al. 2007), the frequency of CDs (e.g., Mawardi, 2014; Zhang, 2000) and the erroneous use of these linguistic elements in EFL writing (e.g., Ong, 2011; Rahman, 2013). However, fewer studies have examined the use of CDs in Vietnamese EFL contexts, particularly within argumentative essays. Argumentative writing, as a genre, often presents considerable challenges to native English speakers (Schneer, 2014), which may be even more demanding for non-natives. This genre is conceptually and structurally more challenging than narratives, as arguments require complex organization and place significant cognitive demands on writers (Dastjerdi & Samian, 2011). Therefore, it demands a higher level of cohesion to present well-supported arguments and maintain persuasive clarity. Earlier studies in Vietnam, such as Ngo Thi Tuyet Nhung (2010) and Bui Thi Nga (2011), analyzed CDs in translated news discourse and reading comprehension texts. More recently, Vietnamese reseachers have shifted their focus to academic writing. Bui Phu Hung (2022) analyzed the use of CDs and their misconceptions in academic reports by final-year English majors, Nguyen Quoc Tuan et al. (2023) investigated CD usage in paragraph writing by pre-intermediate learners, and Diep Gia Luat and Le Thi Ngoc Diep (2024) examined CDs and coherence errors in academic essays by junior English majors. However, none of these studies have specifically explored how CDs are employed in argumentative essays, leaving a gap in understanding how Vietnamese EFL students employ CDs to map arguments in this challenging genre.

Considering this gap, this study aims to contribute to the existing literature by exploring the types, frequencies, and usage errors of CDs in argumentative essays written by Vietnamese third-year English majors. It specifically aims to answer the following research questions:

1. What types of CDs were used in argumentative essays by Vietnamese English-majored students?

2. What errors were made in using CDs in argumentative essays by these students?

The findings of the present study point to a number of valuable practical implications for improving cohesion in EFL writing.

2. Literature Review

2.1 Cohesive Devices

CDs are linguistic elements that link ideas, sentences, and paragraphs, a facilitation of coherence within a text (Halliday & Hasan, 1976; Halliday & Matthiessen, 2014). These authors classify CDs into grammatical and lexical categories. While Halliday and Hasan's (1976) seminal taxonomy laid the foundation for understanding cohesion, Halliday and Matthiessen's (2014) work introduced several modifications and refinements, particularly in lexical CDs. These classifications and examples are summarized in Table 1 and Table 2, which provides definitions and examples to illustrate the sub-categories and their usage. Grammatical CDs include reference, substitution, ellipsis, and conjunctions, which structure the text logically, while lexical CDs, such as reiteration and collocation, enrich semantic connections, according to these authors. Effective use of CDs is fundamental for clear and cohesive writing, particularly in academic contexts where logical flow and readability are paramount (Rahman, 2013).

Table 1: Classification of Grammatical CDs (Halliday & Hasan, 1976, pp. 55-285)

Category	Sub-category	Definitions	Examples
Reference	Personal Reference	Reference to people or entities using pronouns and possessives (e.g., *he*, *her*, *theirs*).	John's house is beautiful. He had **it** built last year.
	Demonstrative Reference	Demonstration of something in the text using demonstratives and definite articles (e.g., *this*, *that*, *the*)	I like the lions, and I like the polar bears. **These** are my favorites.
	Comparative Reference	Comparison of elements in terms of similarity or difference using adjectives or adverbs (e.g., *same*, *more*,	I have never seen a **more brilliant** performance than last night's.

differently)

Substitution	Nominal Substitution	Replacement of a noun with another item using *one/ones* or *the same*.	Are you planting trees here? - I thought of planting some apple **ones**.
	Verbal Substitution	Replacement of a verb phrase with *do*, *does*, or *did*.	I don't know the meaning of half those long words, and, what's more, I don't believe you **do** either!
	Clausal Substitution	Replacement of a clause with *so* or *not*.	Is there going to be an earthquake? - It says **so**.
Ellipsis	Nominal Ellipsis	Omision of a noun while the meaning remains clear.	Four other Oysters followed them, and yet another four **[Oysters]**.
	Verbal Ellipsis	Omission of a verb or part of a verbal phrase.	Has he seen it? - He may have **[seen it]**.
	Clausal Ellipsis	Omission of an entire clause while retaining meaning.	Who was going to plant a row of poplars in the park? - The Duke was **[going to plant a row of poplars in the park]**.
Conjunctions	Additive Conjunctions	Addition of similar or related ideas (e.g., *and*, *furthermore*).	My client says he does not know this witness. **Further**, he denies ever having seen her or spoken to her.
	Adversative Conjunctions	Indication of contrasts or opposing ideas (e.g., *but*, *however*).	He's not exactly good-looking. **But** he's got brains.
	Causal Conjunctions	Indication of cause-and-effect relationships (e.g., *because*, *therefore*).	She felt that there was no time to be lost, as she was shrinking rapidly; **so** she got to work at once.

			The weather cleared just as the party approached the summit. **Until then** they had seen nothing of the panorama around them.
Temporal Conjunctions		Indication of time relationships or sequences (e.g., *then*, *until*).	

Table 2: Classification of Lexical CDs (Halliday & Matthiessen, 2014, pp. 646-649)

Category	Sub-category	Definitions	Examples
Reiteration	Repetition	Repetition of the same word or phrase for emphasis or cohesion.	There's a **boy** climbing that tree. The **boy**'s going to fall if he doesn't take care.
	Synonymy	Use of words with similar meanings to maintain coherence.	There's a **boy** climbing that tree. The **lad**'s going to fall if he doesn't take care.
	Antonymy	Use of words with opposite meanings to create contrast.	He fell **asleep**. What **woke** him was a loud crash.
	Hyponymy	Connection between general and specific terms where one is a subset of the other.	Instead of running **trains** as they're run at present as public **vehicles** you hire out small trains to individual drivers.
	Meronymy	Relationship between parts and their whole.	She knelt down and looked along the passage into the loveliest **garden**. How she longed to get out of that dark hall, and wander about those beds of bright **flowers** and those cool **fountains**,…
Collocation		Use of words that frequently occur together due to conventional associations.	A little fat man of Bombay was **smoking** one very hot day. But a bird called a snipe flew away with his **pipe**, which vexed the fat man of Bombay.

2.2   Cohesion Errors

Although error analysis (EA) has faced criticism for focusing on learners' deficiencies, it remains pedagogically valuable (Nguyen Thi Bao Trang et al., 2022). Concerning the significance of errors, EA may come across as an efficient way to describe and explain the faulty made by EFL learners (Sompong, 2014). Such analysis will reveal the error sources from which teachers are able to plan pedagogical feedback on their students' writing and better their future instructions. For instance, errors can reflect developmental stages of language acquisition, serving as indicators of learners' interlanguage progress. The purpose of EA, therefore, is to examine which knowledge a learner possesses, which knowledge they are lacking in, and to "ultimately enable the teacher to supply him not just with the information that his hypothesis is wrong, but also, importantly, with the right sort of information or data for him to form a more adequate concept of a rule in the target language (TL)" (Corder, 1974, p. 170).

The classification of errors is necessary for conducting error analysis (Sompong, 2014). In the research field of cohesion, cohesion errors, according to Ong's (2011) classification, include four categories: 1) omission; 2) unnecessary addition; 3) misuse; 4) redundant repetition. The following definition of each type, presented in Table 3, is taken from Ong (2011, p. 49). This classification has been validated by studies such as Bui Phu Hung et al. (2021), who studied expository writing by Vietnamese and Filipino EFL teachers, and Bui Phu Hung (2022), who analyzed Vietnamese EFL students' use of CDs, proving its relevance across diverse linguistic contexts.

Table 3: Classification of Cohesion Errors (Ong, 2011, p. 49-55)

Types of cohesion errors	Definitions	Examples
Omission	The omission of CDs occurs when a particular CD is expected in the text but is not there.	She studied hard, but **[because]** she was nervous, she made mistakes on the test.
Unnecessary addition	This error occurs when a particular CD is used unnecessarily or redundantly in the text.	The world is changing rapidly, and **the [to omit]** competition is very fierce.
Misuse	The misuse of CDs occurs when a	In the whole world, in every area,

	particular CD is used incorrectly. More specifically, a correct form should be used to replace the wrong one.	**however [whether]** it is poor or rich, accepting education is the basical right of citizens.
Redundant repetition	The redundant repetition takes place when CDs are used more than once in the text but either some or all of the use can be replaced by other words.	When we grow up, when we are in the society, we have the same mind to serve **others**, to be polite to **others**, to be tolerant to **others**, conflicts and trouble will reduce.

Cohesion errors can result from both interlingual and intralingual factors, as noted by studies in EFL contexts tracing the sources of errors (e.g., Fu, 2006). According to James (1998), interlingual errors stem from first language (L1) interference, where learners transfer structures, idioms, or grammatical rules directly of the TL, leading to non-target-like forms. Intralingual errors, on the other hand, arise from within the TL per se, often due to incomplete knowledge of TL rules. These error sources may have significant pedagogical implications since understanding whether cohesion errors are interlingual or intralingual in origin allows teachers to tailor their instruction more effectively.

2.3   Previous Studies and Research Gap

Research on CDs has been of different focuses, with some studies addressing the instruction of CDs and its effectiveness (e.g., Zoghipour & Nikou, 2016), while others have explored the correlation between the use of CDs and writing quality (e.g., Crossley & Mcnamara, 2010). This review, however, concerns itself with literature on EFL students' use of CDs, relevant to the scope of the present study.

Regarding the frequency of CDs, earlier studies such as Zhang (2000) showed lexical cohesion as the dominant CD type in Chinese undergraduates' expository writings, with conjunctions and reference ranking behind, a pattern echoed in Omani EFL students' descriptive essays analyzed by Rahman (2013). Other studies on narrative, or computer-mediated communication texts (e.g., Mawardi, 2014), on the other hand, consistently found that reference was the most dominant CD employed by students, followed by lexical cohesion, conjunctions, ellipsis, and substitution. Building on this foundation, more recently, Nirwanto (2021) analyzed Indonesian students' use of CDs in opinion essays, confirming the dominance of reference and conjunctions but noting the absence of ellipsis and substitution. This is consistent with Memar and Kamyabigol's (2021) findings in their analysis of advanced Persian learners' expository texts. Other studies such as those by Khalil and Abu-Ayyash (2023) that

focus specifically in lexical CDs have also been carried out. Khalil and Abu-Ayyash (2023) identified repetition and collocations as the most utilized lexical CDs among Arab EFL learners' narrative essays in the UAE. The reviewed studies as a whole demonstrate a focus on reference, conjunctions, and lexical cohesion as dominant CDs among EFL learners in different linguistic settings.

Genre-wise, while much of the existing literature has focused on descriptive, narrative, and expository texts, argumentative essays have also been studied across different EFL contexts (e.g., Dastjerdi & Samian, 2011; Yang & Sun, 2012). Nindya and Widiati (2020) identified reference and conjunctions as the most frequently used CDs, while substitution and ellipsis were notably rare. In contrast, Sanczyk (2010) found lexical cohesion to be the most frequent device among Polish undergraduates, followed by reference and conjunctions. These findings align with Dastjerdi and Hayati's (2011) study on Iranian EFL learners, which also highlighted lexical cohesion as the most common device. This divergence in findings may be due to differences in learner contexts, writing instruction, or methodological approaches across studies. Besides, Nindya and Widiati (2020) noted frequent errors, particularly in reference and substitution, often attributed to intralingual transfer. Despite variations in focus and findings, these studies underline the importance of reference and conjunctions in argumentative writing, which is in alignment with studies in other writing genres.

Another strand of research has analyzed the erroneous use of CDs in EFL writing, with researchers highlighting common issues such as underuse, overuse, and misuse across different types of CDs (Hinkel, 2001; Ong, 2011; Rahman, 2013). Nindya and Widiati (2020) observed that Indonesian EFL learners often misused definite articles. Similar patterns were noted by Ong (2011), and Zhang (2000), who reported frequent inappropriate use or omission of definite articles by Chinese EFL learners. In terms of conjunctions, Nirwanto (2021) revealed that this category was a significant source of errors, with Hamed (2014) further specifying that adversative conjunctions caused the most difficulty, followed by additive and causal ones. This aligns with Kwan and Md Yunus (2014), who found that medium-level Malaysian pre-service teachers made the most errors with reference and conjunctions, whereas high-level peers faced challenges with lexical cohesion, ellipsis, and reference. Overall, the studies collectively highlight persistent errors in CD usage, particularly in reference, conjunctions, and definite articles, as well as a general overreliance on repetition and underutilization of substitution and ellipsis.

In Vietnam, researchers have progressively investigated CD usage in EFL contexts across various writing genres. For example, Bui Phu Hung et al. (2021) compared expository writing by Vietnamese and Filipino EFL teachers, identifying frequent use of reference and conjunctions but limited lexical cohesion, alongside errors such as omission and redundancy. Bui Phu Hung (2022) examined academic reports by final-year English majors, pointing out frequent misuse, redundancy, and omission of CDs, often influenced by misconceptions and first-language interference Nguyen Quoc Tuan et al. (2023) analyzed paragraph writing by pre-intermediate EFL learners, reporting a reliance on grammatical cohesion, such as reference and conjunctions, and limited lexical cohesion. Diep Gia Luat and Le Thi Ngoc Diep (2024) analyzed academic essays by junior English majors, revealing persistent errors in reference and lexical cohesion, such as overuse of repetition and insufficient use of synonyms and collocations.

Although research on CDs in Vietnamese contexts has expanded, studies focusing specifically on argumentative essays remain limited. This uncovers a gap in understanding both the frequency and erroneous use of CDs in argumentative writing in Vietnamese EFL context. This study addresses the gap by investigating CD usage, focusing on both their frequency and the types of errors observed in argumentative essays written by third-year English majors at a Vietnamese university. It aims to inform the development of targeted instructional strategies that enhance cohesion in Vietnamese EFL learners' academic writing.

4.   Methodology

4.1   Participants

The participants were 30 English-majored third-year students at a public university located in an urban area in Vietnam. The sampling method was convenience-based, as the participants were enrolled in a writing course taught by the second author. This course targeted argumentative writing as one of the writing genes in the syllabus. The participants were aged 20-22, displaying mixed proficiency levels from upper A2 to upper B2 as observed by the class teacher, although they were expected to reach the B2 level (CEFR) by the end of the intended writing course. They all had completed a writing course with upper B1 as the learning outcome.

4.3   Data Set

The dataset comprised 30 argumentative essays written during a timed progress test in the writing course mentioned above. The essays were written in response to the following prompt and they had 50 minutes to write on a paper sheet, with no access to external resources

(e.g., dictionaries, peer/teacher assistance). In total, 30 essays made up a corpus size of 8060 words. The average length of the essays was 268.67 words (M = 268.67, SD = 47.92).

Writing prompt:

"School plays a more important role than the family in shaping one's personality." (Evans, 1998, p. 67)

"What is your opinion? Provide reasons and examples to support your position. You have 45 minutes to write your essay. You should write about 250 words."

4.4 Data Analysis

The collected essays were first anonymized and assigned unique identifiers (E1 to E30) to ensure confidentiality. They were manually reviewed to identify, categorize, and quantify CDs based on the established frameworks by Halliday and Hasan (1976) and Halliday and Matthiessen (2014) (see Table 1 and Table 2), which have been widely adopted in CD research (e.g., Nirwanto, 2021). The frequency of each CD type was tallied and recorded in a structured Excel sheet. Percentages of CD types were calculated to provide a quantitative basis for identifying trends and patterns. Below are examples of each type of CDs as they were used in the original essays of the students:

- **Reference:**

Personal reference:

*Most children have a closer relationship with **their** parents than with **their** teacher. (E2)*

Demonstrative reference:

*School is not able to fill **this** blank whatever they try. (E9)*

Comparative reference:

*And especially, student are obey to parents, teacher and polite to the people **older** than them. (E13)*

- **Substitution:**

Nominal substitution:

*In summary, school and the family are factors which decide how one's personality is. Each **one** affect in many different ways. (E9)*

Verbal substitution:

*In conclusion, the school plays a certain role in shaping one's personality but in no way a greater one than family **does**. (E24)*

• **Ellipsis:**

Nominal ellipsis:

*In the process of personal development, people were affected by various environment **Some [people]** think the role of school is increasingly become more significant… (E22)*

• **Conjunctions:**

Additive conjunctions:

***Furthermore**, young people who study in school, are exposed to a wide several subjects. (E30)*

Adversative conjunctions:

***However**, many family have not enough time for their children… (E26)*

Causal conjunctions:

***Therefore**, children are better prepared many basic life skills to deal with many problems. (E20)*

Temporal conjunctions:

*Children are at home six year **before** they go to school. (E16)*

• **Lexical cohesion:**

Repetition:

*…**school** is a place where many people can expose to a wide variety of subjects. At **school**, they know many knowledge… (E8)*

Synonymy:

*…shaping one's **personality** includes many factors. In my opinion, both school and family are important role in shaping one's **character**. (E8)*

Antonymy:

*…and almost of the time we are **at home**. It must be have the parents management to control our activities avoiding the bad affect from **outside**. (E13)*

Hyponymy:

*Family is the first primary group that **babies** reach. In the fact that **people** spend their life about 5 or 6 years to live in their home before (E7)*

Meronymy:

*First of all, school is a place where many people can expose to a wide variety of **subjects**. At school, they know many **knowledge** through natural and social subjects… (E8)*

Collocation:

*…children usually spend the first two or four years of their life at **home** before they go to school. **Family** background also affect a little part of shaping their characteristics. (E25)*

The analysis of errors was conducted after the identification of all CDs in the essays. For consistency, the same author who identified the frequency of CDs also conducted the EA, ensuring a systematic and uniform approach to the data. Drawing on the frameworks established by Ong (2011) (see Table 3), the errors were classified into four categories: omission, unnecessary addition, misuse, and redundant repetition. Each essay was meticulously reviewed multiple times to ensure a thorough identification and categorization of errors. The frequency of each error type was systematically recorded in a Excel sheet to identify error patterns. Examples of errors made are presented as they were in the students' essays as below:

- **Omission:**

   *In conclusion, I would agree that the school and the family have the both important role for young people. They will not be mature if lack of one of **[the]** roles. (E4)*

- **Unnecessary addition:**

   *Second, before going to school, students had had five years of their lives at home… Their thoughs and activities **of them [to omit]** mostly come from family. (E10)*

- **Misuse:**

   *Always make sure that children will have a great environment to grow and shape **one's [their]** personality. (E12)*

- **Redundant repetition:**

   *Family always besides their children everywhere and every time. It is a closer relationship with **children's** parents than with **children's** [their] teachers. (E4)*

An experienced EFL teacher was trained to independently code 10% of the dataset. The training was conducted by the researcher who also identified the CDs and their errors in this study, to ensure consistency in coding practices. Discrepancies in coding were resolved through discussion, ensuring consensus and consistency in the final results. The interrater reliability

scores are presented in Table 4. According to Yin (2015), at least 80% agreement should be reached and values of kappa should lie between .60 and 1.0, which demonstrate that there was substantial agreement between the raters in this study.

Table 4: Interrater Reliability Scores

	Percent Agreement (%)	Cohen's Kappa Coefficient
Grammatical CDs	84.62	.79
Lexical CDs	83.33	.76
CD errors	100	1.0

5.   Findings

5.1   Distribution of CDs in Students' Essays

As shown in Table 5, the analysis identified a total of 2,177 CDs across the 30 essays. Grammatical cohesion made up 65.23% of the total CDs, while the remaining 34.77% belonged to lexical cohesion. Among the former, reference was the most frequently used type, holding the largest share of 42.03% of the total CDs, followed by conjunctions at 22.88%. Substitution and ellipsis were minimally used, accounting for only 0.23% and 0.09%, respectively. Among the latter, reiteration resources reigned supreme (746 tokens to 11 tokens of collocation).

Table 5: Frequency of CDs in Students' Essays

Cohesive devices		Frequency	Percentage (%)
Grammatical	Reference	915	42.03
	Substitution	5	0.23
	Ellipsis	2	0.09
	Conjunctions	498	22.88
	Total (1)	*1420*	*65.23*
Lexical	Reiteration	746	34.27
	Collocation	11	0.50

Total (2)	*757*	*34.77*
Total (1+2)	**2177**	**100**

The detailed breakdown of reference usage is presented in Table 6, indicating that personal reference was the most prevalent (55.41%), followed by demonstrative reference (31.26%) and comparative reference (13.33%).

Table 6: Frequency of Reference Devices in Students' Essays

Types of reference	Frequency	Percentage (%)
Personal reference	507	55.41
Demonstrative reference	286	31.26
Comparative reference	122	13.33
Total	**915**	**100**

Substitution and ellipsis devices, detailed in Table 7, were rarely employed. Substitution occurred only five times, with nominal substitution accounting for 60% and verbal substitution for 40%, while clausal substitution was not observed. Ellipsis was used only twice, exclusively in the nominal category, with no token of verbal or clausal ellipsis. However, these findings should be interpreted with caution since there were only several tokens of these types, given the small size of the dataset.

Table 7: Frequency of Substitution and Ellipsis Devices in Students' Essays

Types of substitution and ellipsis		Frequency	Percentage (%)
Substitution	Nominal	3	60
	Verbal	2	40
	Clausal	0	0
Total		**5**	**100**
Ellipsis	Nominal	2	100
	Verbal	0	0

Clausal	0	0
Total	**2**	**100**

The revelation in the use of conjunctions, as in Table 8 below, is that additive conjunctions were the most frequently used (62.25%), standing before temporal conjunctions (17.47%), causal conjunctions (11.44%), and adversative conjunctions (8.84%) descendingly.

Table 8: Frequency of Conjunctions in Students' Essays

Types of conjunctions	Frequency	Percentage (%)
Additive conjunctions	310	62.25
Adversative conjunctions	44	8.84
Causal conjunctions	57	11.44
Temporal conjunctions	87	17.47
Total	**498**	**100**

As described earlier, lexical cohesion, as shown in Table 9, accounted for 34.77% of the total CDs used in students' essays. This category was predominantly represented by reiteration (98.55%), while collocation was rare (1.45%), a finding that may reflect the limited scope of the data rather than a definitive pattern in students' writing. Further analysis in reiteration uncovered a considerably high frequency for repetition, which held the biggest share of 69.03% of all reiteration tokens. Other types of reiteration, in particular synonymy (14.61%), meronymy (13.94%), hyponymy (2.15%), and antonymy (0.27%), were much less frequent.

Table 9: Frequency of Lexical CDs in Students' Essays

Types of lexical cohesion		Frequency		Percentage (%)	
	Repetition	515		69.03	
Reiteration	Synonymy	109	746	14.61	98.55
	Meronymy	104		13.94	
	Hyponymy	16		2.15	

Antonymy	2	0.27
Collocation	11	1.45
Total	**757**	**100**

5.2   Errors in the Use of CDs in Students' Essays

Table 10 shows the types of errors identified in the use of CDs. In total, 223 errors were recorded across all essays. Unnecessary addition was the most frequent error type (37.67%), followed by misuse (34.08%), omission (21.97%), and redundant repetition (6.28%).

Table 10: Types of Cohesion Errors in Students' Essays

Types of cohesion errors	Frequency	Percentage (%)
Omission	49	21.97
Unnecessary addition	84	37.67
Misuse	76	34.08
Redundant repetition	14	6.28
Total	**223**	**100**

Table 11 provides an overview of the distribution of errors among different types of CDs. The majority of errors (75.78%) occurred in reference, while errors in conjunctions (7.18%) and reiteration (17.04%) were less frequent. No errors were observed in substitution, ellipsis, or collocation.

Table 11: Distribution of Errors in Students' Use of CDs

Types of errors	Cohesive devices						Total
	Grammatical				**Lexical**		
	Reference	Substitution	Ellipsis	Conjunctions	Reiteration	Collocation	
Omission	49	0	0	0	0	0	49 (21.97)
Unnecessary	84	0	0	0	0	0	84

addition						(37.67)
Misuse	33	0	0	16	27	0	76 (34.08)
Redundant repetition	3	0	0	0	11	0	14 (6.28%)
Total	**169 (75.78%)**	**0**	**0**	**16 (7.18%)**	**38 (17.04%)**	**0**	**223 (100%)**

As illustrated in Table 12, errors in reference accounted for 169 tokens, with unnecessary addition being the most common type (49.70%), followed by omission (28.99%), misuse (19.53%), and redundant repetition (1.78%). Among the subtypes of reference, demonstrative reference errors were the most frequent (66.86%), followed by personal reference errors (25.44%) and comparative reference errors (7.70%).

Table 12: Distribution of Errors in Students' Use of Reference

Types of errors	Reference			Total
	Personal	Demonstrative	Comparative	
Omission	28	19	2	49 (28.99%)
Unnecessary addition	0	84	0	84 (49.70%)
Misuse	14	10	9	33 (19.53%)
Redundant repetition	1	0	2	3 (1.78%)
Total	**43 (25.44%)**	**113 (66.86%)**	**13 (7.70%)**	**169 (100%)**

Table 13 indicates that all errors in conjunctions were related to misuse, which totaled 16 tokens. Additive conjunctions represented the highest proportion of errors (62.50%). Next were adversative conjunctions (18.75%), causal conjunctions (12.50%), and temporal conjunctions (6.25%) in descending order. No errors in omission, unnecessary addition, or redundant repetition were found in conjunctions.

Table 13: Distribution of Errors in Students' Use of Conjunctions

Types of errors	Conjunctions				Total
	Additive	Adversative	Causal	Temporal	
Omission	0	0	0	0	0
Unnecessary addition	0	0	0	0	0
Misuse	10	3	2	1	16 (100%)
Redundant repetition	0	0	0	0	0
Total	**10 (62.50%)**	**3 (18.75%)**	**2 (12.50%)**	**1 (6.25%)**	**16 (100%)**

Table 14 presents the distribution of errors in lexical cohesion, with misuse (71.05%) being the most common error type, followed by redundant repetition (28.95%). Repetition accounted for the majority of lexical cohesion errors (60.53%), while synonymy contributed 39.47%. No errors were observed in the areas of antonymy, hyponymy, meronymy, or collocation. Additionally, omission and unnecessary addition were absent in the use of lexical cohesion, which might be influenced by the small dataset and the very low frequency of these subcategories.

Table 14: Distribution of Errors in Students' Use of Lexical Cohesion

Types of errors	Lexical cohesion						Total
	Reiteration					Collocation	
	Repetition	Synonymy	Antonymy	Hyponymy	Meronymy		
Omission	0	0	0	0	0	0	0
Unnecessary addition	0	0	0	0	0	0	0
Misuse	12	15	0	0	0	0	27 (71.05%)
Redundant repetition	11	0	0	0	0	0	11 (28.95%)
Total	**23 (60.53%)**	**15 (39.47%)**	**0**	**0**	**0**	**0**	**38 (100%)**

6. Discussion

The present study aimed to examine the use of CDs in argumentative essays by Vietnamese EFL students, focusing on their frequency and errors. Findings revealed a reliance on grammatical CDs, with reference (42.03%) and conjunctions (22.88%) being dominant, while substitution and ellipsis were rarely used. Lexical cohesion was mostly reiteration, particularly repetition (69.03%). Errors were frequent, with unnecessary addition (37.67%) and misuse (34.08%) being most common, especially in reference and conjunctions.

6.1 Frequency of Use of CDs

The predominance of grammatical cohesion found in this study, particularly reference (42.03%) and conjunctions (22.88%), is consistent with prior studies (e.g., Nguyen Quoc Tuan et al., 2023). For instance, Nirwanto (2021) reported similar findings, noting the frequent use of reference and conjunctions in Indonesian EFL learners' opinion essays and recount texts. This trend also aligns with Nguyen Quoc Tuan et al. (2023), who found that grammatical devices dominated Vietnamese EFL learners' paragraph writing. The frequent use of reference and

conjunctions may be attributed to learners' familiarity with these devices, as suggested by Crossley and McNamara (2012). In reality, such CDs are often explicitly described and practiced in the English textbooks used in lower and upper secondary schools. In this sense, frequent use of a particular CD does not necessarily reflect proficiency but rather a possible reliance on strategies learners feel confident using. In a broader sense, these findings reflect a consistent trend across writing genres, possibly indicative of the paramounce of reference and conjunctions in EFL writing.

Additionally, the minimal use of substitution (5 tokens) and ellipsis (2 tokens) corroborates research by Memar and Kamyabigol (2021), who observed that these devices are underutilized due to their higher complexity and limited emphasis in EFL curricula. The underutilization of substitution and ellipsis observed in this study aligns with findings from Rahman (2013), Nirwanto (2021), and Nguyen Quoc Tuan et al. (2023) who noted that these devices are more common in spoken discourse and often unfamiliar to learners. Halliday and Hasan (1976) similarly argued that substitution and ellipsis require a higher level of implicit understanding, which many EFL learners may be lacking in.

By the same token, the high reliance on reiteration (98.55%), especially repetition (69.03%) within lexical cohesion also echoes studies by Khalil and Abu-Ayyash (2023), Rahman (2013), and Nguyen Quoc Tuan et al. (2023) who identified repetition as the most commonly used lexical CDs. The infrequent use of other forms of lexical CDs, such as synonymy (14.61%) and meronymy (13.94%), may indicate limited vocabulary range. Yet it could be because of a lack of awareness to use lexical CDs on students' part. This line of argument should be followed up by stimulated recall interviews with the student writers to further understand their selection of CD use.

6.2 Errors in the Use of CDS

In addition to examining the frequency of CDs, the present study identified 223 errors in CD usage, with unnecessary addition (37.67%) and misuse (34.08%) as the most frequent error types. These findings align with those of Ong (2011), who found similar patterns of reference errors among EFL learners. The frequent errors in reference (75.78% of all errors) reflect students' struggle with the use of personal, demonstrative, and comparative reference, as highlighted by Hamed (2014). This may be attributed to students' intermediate proficiency level, which limits their ability to apply reference accurately in complex argumentative structures.

To be specific in the use of reference, students in this study made the most errors in demonstrative reference (66.86%). Notably, all tokens of unnecessary addition in this category involved the definite article "the", which accounted for 95.58% of such errors. The misuse of "the" also exceeded any other CD, with 108 tokens. This result aligns with prior studies (Nindya & Widiati, 2020; Ong, 2011; Zhang, 2000), which observed that "the" is frequently misused by EFL learners. Crompton (2011) highlighted that definite articles are the most frequent source of errors in English learning. This type of error is likely interlingual rather than intralingual, as the Vietnamese language lacks an article system (Nguyen Dinh Hoa, 1997), possibly causing students to misinterpret the function of definite articles in English. For example, consider the following excerpts from the data:

*"Talking about the advantages when going to school, can't forget that school is where give **the [to omit]** lessons in a lot of fields such as maths, language, technology, biology,…" (E30)*

*Vietnamese equivalent: "Khi nói về những lợi ích khi đi học, không thể quên rằng trường học là nơi cung cấp những **bài học** trong nhiều lĩnh vực như toán học, ngôn ngữ, công nghệ, sinh học,…" (E30)*

In this example, the definite article "the" is unnecessarily added preceding "lessons" although the intended meaning in English does not require it. This misuse likely stems from the "article-less" language of Vietnamese (Nguyen Thi Quyen, 2018, p. 75). In Vietnamese, the noun "bài học" (lessons) does not require any equivalent of "the" to specify its definiteness, as definiteness is inferred from context. This linguistic difference may lead learners to overgeneralize the use of "the" in English.

Conjunctions were only misused (100%) in the absence of the other three types of errors. The most frequently misused type of conjunctions was additive conjunctions (62.50%), then adversative conjunctions (18.75%), causal conjunctions (12.50%), and temporal conjunctions (6.25%). This is different from Hamed's (2014) study in which he found that Libyan students made errors mostly in adversative conjunctions, followed by additives and causal conjunctions. Differences aside, these errors are likely due to incomplete understanding of conjunction usage or misanalysis of TL forms, reflective of intralingual rather than interlingual influences. An example from the data is:

*"**Morevers [Moreover]**, we study many things and stories about the life through the teacher." (E22)*

Vietnamese equivalent: Hơn nữa, chúng tôi học nhiều điều và câu chuyện về cuộc sống thông qua người giáo viên.

In this example, "morevers" is a misspelled version of the additive conjunction "moreover", highly likely due to the writer's incomplete understanding of the correct form.

Interestingly, no errors were observed in substitution or ellipsis, but this does not necessarily indicate mastery. Given the small size of the dataset, these findings might reflect a lack of usage rather than true proficiency. Another way to explain is, as Kwan and Yunus (2014) highlighted, learners may avoid using difficult features, a phenomenon often overlooked in traditional error analysis (Brown, 2007). This avoidance strategy could perhaps explain the low frequency of these devices in the dataset. However, this is just speculative and needs empirical evidence for confirmation.

For lexical cohesion, major finding was that errors were predominantly in misuse (71.05%) and redundant repetition (28.95%), similar to the patterns observed by Bui Phu Hung (2022) and Diep Gia Luat and Le Thi Ngoc Diep (2024) in Vietnamese academic writing. The overuse of repetition might reflect the students' limited lexical variety, gaps in TL rather than interference from L1, and ignorance of more advanced cohesive strategies, such as using synonyms and collocations. That said, this explanation needs empirical support possibly via students' reflections on their own CD use.

7.   Implications and Conclusions

The present study examined the use of CDs in argumentative essays written by Vietnamese third-year English majors and has shed more light on the frequency, types, and errors of CD usage. The findings revealed that students predominantly relied on basic grammatical cohesion strategies, particularly reference and conjunctions, whereas more advanced cohesive techniques, such as substitution, ellipsis, and collocation, were seldom employed. Lexical cohesion was also limited, with repetition being the most frequently used type of lexical CDs, possibly indicative of a gap in students' vocabulary and lexical cohesion skills. The analysis of errors indicated that unnecessary addition and misuse were the most common issues, particularly in reference and conjunctions, while repetition highlighted a lack of lexical diversity. These patterns suggest that while students rely on basic grammatical cohesive strategies, they face challenges in employing a broader range of CDs and using them accurately in argumentative writing.

The findings of this study have significant pedagogical implications for teaching English writing in Vietnamese EFL contexts. First, EFL teachers might need to place greater emphasis on lexical cohesion, specifically by expanding students' knowledge and use of collocations,

synonymy, and other lexical techniques. As the assessment of second language writing partially relies on the variety and sophistication of vocabulary employed (Crossley et al., 2014), vocabulary-building exercises that encourage students to explore synonyms and paraphrasing could help reduce their reliance on repetition, thereby enriching the lexical cohesion in their writing. Nguyen Quoc Tuan et al. (2023) on this front recommend semantic mapping as a practical pre-writing activity to help students visualize concepts and develop word networks. These activities can enable students to reduce reliance on repetition while enriching their lexical cohesion strategies.

Additionally, since the present study has shown that students made errors across various types of CDs, including reference, conjunctions, and reiteration, error-focused teaching approaches can play a critical role in improving students' cohesion usage. Teachers can use formative feedback and scaffolded error-analysis exercises to help students identify and correct common mistakes. Genre-specific training, using model argumentative essays that demonstrate effective cohesion, can further guide learners in structuring their arguments and achieving greater coherence. Peer review activities can also be useful, allowing students to evaluate each other's cohesion strategies and learn from their peers' strengths and weaknesses.

Third, exposing students to authentic argumentative texts that exhibit a diverse range of CDs can aid in developing their understanding of effective and diverse use of cohesion, which can address their limited use of lexical CDs and overreliance on repetition, as revealed by this study. Annotating CDs in such texts can help students recognize and analyze how experienced writers use CDs to create a logical and persuasive flow. Nguyen Quoc Tuan et al. (2023) and Bui Phu Hung (2022) both emphasized the importance of integrating authentic texts and contextualized examples to model diverse cohesion strategies effectively. This practical exposure can serve as a foundation for students to experiment with similar strategies in their own writing.

7.2   Limitations and Suggestions for Future Research

This study has certain limitations, primarily related to its sample size and scope. With only 30 essays analyzed, the findings may not fully represent all Vietnamese EFL learners. Future research could involve a larger, more diverse sample to validate these findings and allow for broader generalization. Additionally, this study did not fully address the distinction between systematic errors and isolated mistakes as some issues identified as errors may have been isolated occurrences rather than consistent patterns. Therefore, stimulated recall interviews with students could be a necessary follow-up to understand their choice of CDs and better explain the results related to errors. Next, this study focused specifically on

argumentative essays; subsequent research might explore CD usage across different writing genres within the same learner cohort, to identify potential genre-specific variations in CD patterns. Further studies could also explore the relationship between students' use of different CD types, the errors they make and the quality of their writing to further inform writing instruction.

Despite these shortcomings, this study has provided insights into the patterns of CD use among Vietnamese EFL learners, identifying an over-reliance on basic grammatical cohesion, limited application of more advanced cohesive strategies, and erroneous patterns such as unnecessary addition, misuse, and repetition. It has contributed to our understanding of use of CDs in EFL contexts and pinpointed erroneous use that could inform cohesion instruction in the particular context of EFL writing.

References

1. Bui, H. P. (2022). Vietnamese EFL Students' Use and Misconceptions of Cohesive Devices in Writing. *Sage Open*, *12*(3). https://doi.org/10.1177/21582440221126993

2. Bui, P. H., Nguyen, N. Q., Nguyen, T. L., & Nguyen, T. V. (2021). A cross-linguistic approach to analysing cohesive devices in expository writing by Asian EFL teachers. *3L: Language, Linguistics, Literature, 27*(2), 16–30. https://doi.org/10.17576/3L-2021-2702-02

3. Bui, T. N. (2011). *Cohesive devices in reading texts in the book Tieng Anh 12 - Ban co ban* (PhD thesis). University of Languages and International Studies, Vietnam.

4. Brown, H. D. (2007). *Principles of language learning and teaching*. New York: Pearson Longman.

5. Corder, S. P. (1974). *Error Analysis: Perspectives on second language acquisition*. London: Longman. http://dx.doi.org/10.4324/9781315836003

6. Crompton, P. (2011). Article errors on the English writing of advanced L1 Arabic learners: The role of transfer. *Asian EFL Journal professional Teaching Articles*, *50*, 4-34.

7. Crossley S. A., McNamara D. S. (2012). Predicting second language writing proficiency: The roles of cohesion and linguistic sophistication. *Journal of Research in Reading*, *35*(2), 115–135. https://doi.org/10.1111/j.1467-9817.2010.01449.x

8. Crossley, S. A., & McNamara, D. S. (2010). Cohesion, coherence, and expert evaluations of writing proficiency. In Ohlsson, S., & Catrambone, R. (Eds.), *Proceedings of the 32nd annual* conference *of the cognitive science society* (pp. 984–989). Cognitive Science Society.

9. Crossley, S. A., Kyle, K., Allen, L. K., Guo, L., & McNamara, D. S. (2014). Linguistic microfeatures to predict L2 writing proficiency: A case study in automated writing evaluation. *Journal of Writing Assessment*, *7*(1), 1–16.

10. Dastjerdi, H. V., & Samian, S. H. (2011). Quality of Iranian EFL Learners' Argumentative Essays: Cohesive Devices in Focus. (2011). *Mediterranean Journal of Social Sciences*, *2*(2), 65.

11. Diep, G. L., & Le, T. N. D. (2024). An Analysis of Coherence and Cohesion in English Majors' Academic Essays. *International Journal of Language Instruction*, *3*(3), 1-21. https://doi.org/10.54855/ijli.24331

12. Evans, V. (1998). *Successful Writing Proficiency*. Express Publishing.

13. Feliks, T., Huan, E., Ota, G., & Rahayu, G. (2024). The use of cohesive devices and the quality of student writing: Their relationship. *The International Journal of* Language *and Cultural (TIJOLAC)*, *6*(2), 50–57. https://doi.org/10.5281/zenodo.14184318

14. Fu, Z. (2006). What to follow "Make" and what to follow "Do": Corpus-based study on the de-lexical use of "make" and "do" in native speakers' and Chinese students writing. *US-China Education Review*, *3*(5), 42–71.

15. Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. Longman. https://doi.org/10.4324/9781315836010

16. Halliday, M. A. K., & Matthiessen, C. (2014). *Halliday's introduction to functional grammar* (4th ed.). Routledge. https://doi.org/10.4324/9780203431269

17. Hamed, M. (2014). Conjunctions in argumentative writing of Libyan tertiary students. *English Language Teaching*. *7*(3), 108-120. http://dx.doi.org/10.5539/elt.v7n3p108

18. Hinkel, E. (2001). Matters of cohesion in L2 academic texts. *Applied Language Learning*, *12*(2), 111–132.

19. James, C. (1998). *Errors in language learning and use: Exploring error analysis*. London: Longman. https://doi.org/10.4324/9781315842912

20. Khalil, A. A. ., & Abu-Ayyash, E. A. . (2023). Lexical Cohesive Devices and English Writing Quality. *Journal of Advances in Linguistics*, *14*, 7–19. https://doi.org/10.24297/jal.v14i.9534

21. Kwan, L. S., & Yunus, M. M. (2014). Cohesive Errors in Writing among ESL Pre-Service Teachers. *English Language Teaching*, *7*(11), 130-159. http://dx.doi.org/10.5539/elt.v7n11p130

22. Mawardi, A. (2014). An analysis of the cohesion and coherence of students' narrative writings in the English language education department of Nahdlatul Wathan Mataram University. *Journal FKIP of Gunung Rinjani University, 8*(1), 80–90.

23. Memar, Z. A., & Kamyabigol, A. (2021). A study on cohesive devices in the writing samples of advanced Persian learners. *Journal of Teaching Persian to Speakers of Other Languages*, *10*(2), 53-81. https://doi.org/10.30479/jtpsol.2020.13069.1480

24. Ngo, T. T. N. (2010). An analysis of prominent grammatical cohesive devices in online news discourse in English by Vietnamese translators. *VNU Journal of Foreign Studies, 26*(1), 51–59.

25. Nguyen, D.-H. (1997). *Vietnamese*. Amsterdam: John Benjamins. https://doi.org/10.1075/loall.9

26. Nguyen, Q. T., Nguyen, T. B. T., & Nguyen, V. Q. N. (2023). Use of cohesive devices in paragraph writing by EFL students at English language centers in Vietnam. *VNU Journal of Foreign Studies*, 39(3), 152-169. https://doi.org/10.63023/2525-2445/jfs.ulis.5099

27. Nguyen, T. B. T., Phan, Q. N., Nguyen, T. T. B., & Thai, T. P. D. (2022). The use of the high frequency verb make in opinion essays by Vietnamese EFL students. *Hue University Journal of Science: Social Sciences and Humanities*, *131*(6), 21-39. https://doi.org/10.26459/hueunijssh.v131i6C.6717

28. Nguyen, T. Q. (2018). English article choices by Vietnamese EFL learners. *VNU Journal of Foreign Studies, 34*(2), 74–89. https://doi.org/10.25073/2525-2445/vnufs.4248

29. Nindya, M. A., & Widiati, U. (2020). Cohesive devices in argumentative essays by Indonesian EFL learners. *Journal on English as a Foreign Language*, *10*(2), 337-358. https://doi.org/10.23971/jefl.v10i2.1949

30. Nirwanto, R. (2021). The adoption of cohesive devices (CDs) in the Indonesian students' opinion essays. *Premise: Journal of English Education and Applied Linguistics, 10*(1), 54–64. https://doi.org/10.24127/pj.v10i1.3239

31. Ong, J. (2011). Investigating the use of cohesive devices by Chinese EFL learners. *The Asian EFL Journal Quarterly*, *11*(3), 42-65.

32. Rahman, Z. A. A. (2013). The use of cohesive devices in descriptive writing by Omani student-teachers. *SAGE Open*, *3*(4), 1–10. https://doi.org/10.1177/2158244013506715

33. Sanczyk, A. (2010). *Investigating argumentative essays of English undergraduates studying in Poland as regards their use of cohesive devices* (Master's thesis). University of Oslo.

34. Schneer, D. (2014). Rethinking the argumentative essay. *Tesol Journal*, *5*(4), 619-653. https://doi.org/10.1002/tesj.123

35. Sompong, M. (2014). Error Analysis. *Thammasat Review*, *16*(2), 109-127.

36. Todd, R. W., Khongput, S., & Darasawang, P. (2007). Coherence, cohesion and comments on students' academic essays. *Assessing writing*, *12*(1), 10-25. https://doi.org/10.1016/j.asw.2007.02.002

37. Yang, W., & Sun, Y. (2012). The use of cohesive devices in argumentative writing by Chinese EFL learners at different proficiency levels. *Linguistics and Education, 23*(1), 31–48. https://doi.org/10.1016/j.linged.2011.09.004

38. Yin, R. K. (2015). *Qualitative research from start to finish*. New York: The Guilford Press.

39. Zhang, M. (2000). Cohesive features in the expository writing of undergraduates in two Chinese universities. *RELC Journal, 31*(1), 61–95. https://doi.org/10.1177/003368820003100104

40. Zoghipour, E., & Nikou, F. R. (2016). The impact of explicit instruction of lexicogrammatical devices on EFL learners' writing fluency and complexity. *Modern Journal of Language Teaching Methods, 1*(3), 677–689. https://doi.org/10.26655/mjltm.2016.3.1