Educational and Humanities
ISSN Print: 3104-4352
ISSN Online: 3104-4360
CD ISSN: 3104-4379
https://doi.org/10.63313/EH.9109

A Corpus-based Descriptive Study of Adversative Connectives in High School Students' English Writing: A Case Study of a Senior High School in Nanchong

Xuan Luo
China West Normal University, Nanchong, 637000, China

How to cite this paper: Luo, X. (2026). A Corpus-based Descriptive Study of Adversative Connectives in High School Students' English Writing: A Case Study of a Senior High School in Nanchong. Educational and Humanities, 4(2), 52–66. ISSN Print: 3104-4352, ISSN Online: 3104-4360.
https://doi.org/10.63313/EH.9109
Published: 2026-08-26

Copyright © 2026 by author(s) and Erytis Publishing Limited.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/
CC BY 4.0

Abstract

This study explores the use of adversative connectives in high school students' English writing through a corpus-based descriptive approach. The data were collected from a mid-term examination conducted in a public senior high school in China, including two types of writing tasks: a practical writing task and a narrative writing task. By analyzing students' written texts, the study examines the frequency and contextual appropriateness of adversative connectives. The analysis shows that students rely heavily on a limited number of high-frequency adversative connectives, particularly but, while other connectives such as however and although are used far less frequently. Although many instances of adversative connectives are employed appropriately to express contrast or concession, mechanical and unnecessary uses are also identified. These problems indicate that students may possess basic awareness of contrastive relations but lack sufficient control over connective variety and discourse-level appropriateness. From a pedagogical perspective, the findings suggest that English writing instruction in high school should place greater emphasis on discourse-level features, especially the functional use of connectives in context. The study aims to provide practical insights for improving writing instruction and assessment in examination-oriented classrooms.

Keywords

Adversative Connectives; Corpus-Based Study; High School English Writing; Discourse Cohesion; EFL Learners; Discourse Competence; Examination Writing

1. Introduction

1.1. Background of the Study

Writing is widely regarded as one of the most challenging skills for learners of English as a foreign language (EFL). Unlike listening or reading, writing requires learners to actively produce language and to integrate multiple aspects of linguistic

knowledge, including vocabulary, grammar, and discourse organization. For high school students, writing is not only a means of communication but also an important component of large-scale examinations, which places additional pressure on learners to produce accurate and coherent texts within limited time.

In English writing, coherence and cohesion play a crucial role in helping readers understand how ideas are connected. Cohesion refers to the explicit linguistic devices that link sentences and clauses together, making a text easier to follow. Among different cohesive devices, connectives are particularly important because they signal logical relationships such as addition, cause, contrast, and concession. Without appropriate use of connectives, even grammatically correct sentences may appear disconnected or confusing to readers.

Adversative connectives, such as but, however, and although, are commonly used to express contrast or unexpected outcomes. These connectives often mark shifts in attitude, evaluation, or reasoning and therefore play a key role in organizing discourse. For example, writers may use adversative connectives to contrast expectations with actual results or to introduce alternative viewpoints. When used effectively, adversative connectives can enhance textual coherence and make the writer's ideas more persuasive.

However, mastering adversative connectives is particularly difficult for EFL learners. Unlike basic grammatical structures, the use of adversative connectives requires an understanding of discourse-level relationships. Learners must be able to judge whether a contrast is logically necessary and select a connective that accurately reflects the intended meaning. As a result, misuse or overuse of adversative connectives is a common phenomenon in learner writing.

1.2. Problems in High School English Writing

In the context of high school English education in China, writing instruction has traditionally focused on sentence-level accuracy, including correct grammar usage and vocabulary choice. While these aspects are undoubtedly important, discourse-level features such as cohesion and coherence often receive less systematic attention. Many students are taught to include connectives in their writing, but they are rarely guided to consider why a particular connective is used or whether it is appropriate in a specific context.

As a result, students may develop a mechanical approach to connective use. In examination writing, connectives are sometimes inserted simply to make the text appear more complex or sophisticated. This tendency is especially evident in the use of adversative connectives, which are frequently placed at the beginning of sentences without a clear contrast between ideas. Such usage may not improve textual coherence and can even confuse readers.

Another common problem is the limited variety of connectives used by students. High-frequency connectives such as but are often overused, while other forms like

however or nevertheless are rarely employed. This overreliance on familiar connectives may reflect students' limited exposure to discourse-level instruction and their desire to minimize cognitive load under examination conditions.

These problems suggest that students' difficulties with adversative connectives are not simply grammatical errors but are closely related to discourse competence. Understanding how students use adversative connectives in real examination contexts is therefore essential for improving writing instruction and assessment practices.

1.3. Purpose and Significance of the Study

Against this background, the present study adopts a corpus-based descriptive approach to investigate the use of adversative connectives in high school students' English writing. By analyzing writing samples collected from a mid-term examination, the study aims to identify general patterns of connective use and to explore common problems related to frequency, variety, and discourse appropriateness.

Unlike longitudinal studies that examine language development over time, this study focuses on a snapshot of student writing at a specific stage of learning. Such a descriptive perspective is particularly suitable for classroom-based research, as it reflects authentic writing performance under examination conditions.

The significance of this study lies primarily in its pedagogical implications. By revealing how adversative connectives are actually used in student writing, the findings can help teachers better understand learners' discourse-level strengths and weaknesses. The study also aims to raise awareness of the importance of teaching connectives as functional discourse devices rather than as isolated grammatical forms.

2. Literature Review

2.1. Cohesion and Adversative Connectives

The concept of cohesion was systematically proposed by Halliday and Hasan (1976), who defined cohesion as the set of linguistic resources that enable different parts of a text to be linked together. According to their framework, cohesion is not simply a matter of grammatical correctness, but a semantic relationship that contributes to the overall unity of a text. They identified five major types of cohesive devices: reference, substitution, ellipsis, lexical cohesion, and conjunction.

Among these cohesive devices, conjunction plays a crucial role in expressing logical relations between clauses and sentences. Conjunctions do not create cohesion by themselves; instead, they signal how the meanings of different parts of a text are related. Halliday and Hasan (1976) classified conjunctive relations into four main categories: additive, adversative, causal, and temporal. Adversative conjunctions are used to indicate contrast, correction, or unexpected outcomes, making them

particularly important in argumentative and narrative writing.

Halliday (1994) further elaborated on the nature of adversative relations and emphasized that contrast in discourse is often more complex than simple opposition. Adversative connectives may signal a shift in expectation, evaluation, or perspective rather than a direct contradiction. For example, the connective but can be used to introduce an idea that runs counter to what the reader might anticipate based on the preceding clause. This subtle discourse function requires writers to have a clear awareness of logical relations at the text level.

From a cohesion-based perspective, the appropriate use of adversative connectives reflects a writer's discourse competence. Writers must be able to judge whether a contrast is logically necessary and select a connective that accurately represents the intended meaning. This requirement makes adversative connectives more challenging than basic grammatical structures, especially for second language learners.

From the perspective of systemic functional linguistics, the complexity of adversative connectives lies in their dual role: they function both as logical operators and as markers of the writer's stance toward the text. Halliday and Hasan (1976) emphasize that adversative relations are not merely logical markers but are essential for the management of the "message". Specifically, these connectives serve as a bridge between the reader's expectations and the writer's actual propositional content. In the context of second language acquisition, this management becomes increasingly complex as learners must navigate between their native language (L1) logic and the target language (L2) discourse norms. Research by Zhou Wenbo (2023) highlights that for Chinese high school students, the use of cohesive devices is often a double-edged sword: while they provide a surface-level structure, their mechanical application can lead to "pseudo-coherence" where the text looks connected but lacks deep logical unity. This is particularly evident in examination-oriented writing, where students are under pressure to demonstrate linguistic complexity, often resulting in what researchers call "lexical fossilization," where learners stop exploring more nuanced alternatives like nevertheless or nonetheless once a basic communicative goal is met.

2.2. Adversative Connectives in Second Language Writing

A substantial body of research has examined the use of connectives in second language writing. McCarthy (1991) argued that cohesive devices play an essential role in discourse organization, but their misuse may lead to unclear or misleading interpretations. In EFL contexts, learners often demonstrate an imbalance between the frequency of connective use and functional appropriateness.

Previous studies have consistently shown that EFL learners tend to overuse a limited number of high-frequency connectives. Among adversative connectives, but is frequently reported as the most commonly used form, while connectives such as

however, nevertheless, and nonetheless are underused. This pattern has been observed across different proficiency levels, suggesting that reliance on familiar forms is a widespread phenomenon in learner writing.

In addition to limited variety, inappropriate use of adversative connectives has also been widely reported. Learners may use adversative connectives in contexts where no genuine contrast exists, resulting in logical inconsistency. In some cases, connectives are inserted simply to mark sentence boundaries or to make writing appear more complex. Such mechanical use does not enhance coherence and may even weaken the clarity of the text.

Researchers have pointed out that these problems are closely related to instructional practices. When writing instruction focuses primarily on sentence-level grammar and vocabulary, learners may lack sufficient guidance on discourse-level organization. As a result, students may know the forms of connectives but remain uncertain about their functions and appropriate contexts of use. This suggests that difficulties with adversative connectives should be understood as discourse-related rather than purely grammatical.

2.3. Studies in the Chinese EFL Context

In the Chinese EFL context, research on English writing has increasingly emphasized discourse features in recent years. Several studies have reported that Chinese EFL learners tend to rely heavily on explicit cohesive devices, including connectives, to compensate for limited discourse competence. While such strategies may increase surface-level cohesion, they do not always lead to improved coherence.

Studies focusing on high school students have found that examination-oriented writing practices may encourage mechanical use of connectives. Under time pressure, students may prioritize the inclusion of cohesive markers over careful planning of logical relations. As a result, adversative connectives are sometimes used indiscriminately, without sufficient consideration of meaning.

Zhou Wenbo (2023), using Coh-Metrix to analyze high school students' continuation writing, found that cohesive devices were closely related to writing quality. However, the study also revealed that inappropriate or excessive use of connectives could negatively affect coherence. These findings suggest that effective use of connectives depends not only on frequency but also on functional appropriateness.

Despite growing interest in discourse-level analysis, research focusing specifically on adversative connectives in high school examination writing remains limited. Most existing studies either focus on university-level learners or adopt large-scale quantitative approaches. This leaves room for small-scale descriptive studies that examine authentic student writing in classroom contexts.

2.4. Corpus-based Approaches to Connective Use

Corpus linguistics provides powerful tools for investigating patterns in learner

writing. By analyzing authentic texts, corpus-based approaches allow researchers to identify recurring linguistic features and to examine how specific forms are used in context. Compared with intuition-based analysis, corpus methods offer greater objectivity and transparency.

Corpus-based studies on connective use have revealed systematic differences between learner writing and native-speaker writing. Learners tend to use a narrower range of connectives and show less sensitivity to genre and register. Concordance analysis, in particular, has been shown to be effective in examining the contextual use of connectives.

In recent years, tools such as AntConc and Coh-Metrix have been widely adopted in learner corpus research in China. The application of these tools has transformed the landscape of discourse analysis by providing objective, quantifiable data to supplement traditional qualitative observations. AntConc, developed by Laurence Anthony (2019), has become a cornerstone in pedagogical corpus research due to its robust "Concordance" and "Word List" functions. Internationally, researchers have utilized AntConc to identify "lexical bundles" and "collocational frameworks" that distinguish native-speaker prose from learner writing. In the Chinese EFL context, AntConc is frequently employed to track the "overuse" or "underuse" of specific linguistic features, such as logical connectives, allowing teachers to pinpoint exactly where students' interlanguage deviates from target language norms. On the other hand, Coh-Metrix, as discussed by McNamara et al. (2010), offers a more multi-dimensional perspective by measuring over 100 indices of cohesion and language difficulty. While AntConc focuses on surface-level frequency, Coh-Metrix provides data on "deep cohesion," such as causal overlap and latent semantic analysis. Recent domestic studies, notably by Zhou Wenbo (2023) and Xu Luyan (2021), have integrated Coh-Metrix to analyze the relationship between textual cohesion and the overall quality of high school compositions. By combining the micro-level word tracing of AntConc with the macro-level structural analysis of Coh-Metrix, researchers can develop a comprehensive profile of a learner's discourse competence. Although many studies emphasize large datasets and longitudinal designs, small-scale descriptive corpus studies are also valuable. By focusing on real examination writing, such studies can provide insights that are directly relevant to teaching practice.

3. Theoretical Framework

3.1. Cohesion Theory as an Analytical Lens

The present study is grounded in the theory of cohesion proposed by Halliday and Hasan (1976). According to this theory, cohesion refers to the semantic relations that link different parts of a text and enable it to function as a unified whole. Cohesion is realized through various linguistic devices, including conjunction, which plays a central role in signaling logical relations.

Unlike grammatical rules that operate at the sentence level, cohesive relations operate across sentences and clauses. This makes cohesion particularly relevant to the analysis of writing, where meaning is constructed over stretches of discourse rather than in isolated sentences.

3.2. Adversative Relations in Discourse

Within the cohesion framework, adversative relations are used to express contrast, correction, or unexpected outcomes. Halliday (1994) emphasized that adversative relations often involve a shift in expectation rather than direct opposition. For example, an adversative connective may signal that the following idea contradicts what the reader might reasonably expect based on the previous clause.

The appropriate use of adversative connectives therefore requires writers to manage discourse-level meaning. Writers must decide when a contrast is necessary and how strongly it should be expressed. This decision-making process reflects a writer's discourse competence and awareness of reader expectations. To further refine the analysis, this study categorizes adversative relations into three specific functional sub-types based on the framework provided by Halliday (1994): "Contrastive," "Concessive," and "Corrective". A contrastive relation occurs when two propositions are compared for their differences; a concessive relation involves an unexpected result following a given premise; and a corrective relation involves the replacement of one proposition with another. Distinguishing between these sub-types is crucial for assessing student writing, as it allows the researcher to determine whether students are merely using connectives as "sentence starters" or if they truly understand the semantic nuances required to guide a reader through complex reasoning.

3.3. Application to the Present Study

For second language learners, difficulties with adversative connectives can be understood as limitations in discourse competence rather than isolated grammatical errors. Learners may be familiar with the forms of connectives but lack sufficient awareness of their functional differences and appropriate contexts of use.

Based on this theoretical framework, the present study treats adversative connectives as discourse-level cohesive devices. The framework provides an analytical lens for describing patterns of connective use and for interpreting common problems observed in high school students' English writing. Rather than constructing or testing a predictive model, the study adopts a descriptive approach that is consistent with its classroom-based research design.

4. Methodology

4.1. Research Design

The present study adopts a corpus-based descriptive research design to investigate

the use of adversative connectives in high school students' English writing. Rather than examining developmental change over time or testing specific hypotheses, the study aims to provide a detailed description of how adversative connectives are used in a particular examination context. This design is appropriate given the exploratory nature of the study and the limited scope of available data.

Corpus-based descriptive research focuses on identifying patterns and tendencies in authentic language data. By examining naturally produced student writing, the study seeks to capture realistic features of connective use under examination conditions. This approach allows for an in-depth analysis of both frequency and contextual appropriateness without relying on inferential statistical testing.

4.2. Research Corpus

The research corpus consists of English writing samples collected from a mid-term examination administered in a public senior high school in China. The participants were Grade 11 students who had received similar English instruction and followed the same curriculum. To ensure authenticity, all writing samples were produced as part of regular school assessment rather than for research purposes.

The examination included two writing tasks. The first task was a practical writing task, which required students to write an email or letter based on a given situation. The second task was a narrative or reflective writing task, in which students described a personal experience or reflected on a learning process. These two task types were selected by the school as part of routine assessment and represent common genres in high school English examinations.

All collected writing samples were anonymized to protect students' privacy. Each text was assigned an identification code indicating class and task type. The texts were then converted into plain text format (.txt) to facilitate corpus analysis. Although the corpus size is relatively small, it is sufficient for a descriptive study focusing on specific linguistic features.

4.4. Data Analysis and Limitations

Only descriptive statistics were used to summarize frequency patterns. No inferential statistical tests were conducted, as the study does not aim to generalize findings beyond the corpus. The results are interpreted as indicative tendencies rather than definitive conclusions.

Several limitations should be acknowledged. First, the corpus size is limited and represents writing from a single examination. Second, the study focuses on a specific group of students and may not reflect broader populations. Despite these limitations, the study provides valuable insights into connective use in authentic classroom contexts and offers implications for teaching practice.

5. Results and Discussion

5.1. Overall Frequency of Adversative Connectives

The analysis reveals that adversative connectives appear frequently in the corpus.

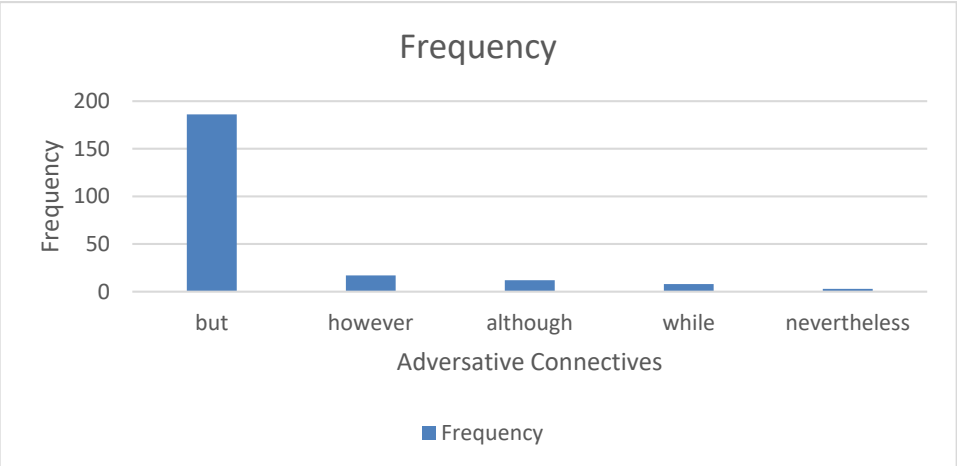


Figure 1. Frequency Distribution of Adversative Connectives in Students' Writing

As shown in Figure 1, but is by far the most commonly used form. Other adversative connectives, such as however and although, occur much less frequently, while some forms appear only sporadically or are absent altogether. Figure 1 illustrates the frequency distribution of adversative connectives in the corpus. Figure 1 provides a clear visual representation of the lexical distribution of adversative markers within the corpus, revealing several significant trends. First, the "Dominance of But" is immediately apparent, with its frequency far exceeding the combined total of all other connectives. This suggests that but has become a "default" marker for students, likely due to its syntactic flexibility and low cognitive demand. Second, the sharp drop-off between but and the next most frequent connective, although, highlights a restricted repertoire among Grade 11 learners. Third, the near absence of advanced markers such as nevertheless and nonetheless suggests that these forms are not yet part of the students' active productive vocabulary, or are perceived as too formal and "risky" for use in a timed examination setting. These statistical imbalances underscore the gap between students' basic grammatical knowledge and their higher-level stylistic variety. The dominance of but is immediately noticeable, suggesting that students rely heavily on this high-frequency connective to express contrast. This pattern is consistent across both writing tasks, indicating a stable preference rather than task-specific variation. The statistical data from Figure 1 highlights what Biber et al. (2011) describe as a "restricted repertoire" in learner language. The extreme reliance on but—often referred to as a "safe" connective—suggests that students employ a avoidance strategy. By sticking to a high-frequency word they are confident in, they minimize the risk of making complex syntactic errors during a high-stakes examination. However, this strategy comes at the cost of "lexical diversity." The near-total absence of concessive markers

like nevertheless or nonetheless indicates that students are at a plateau in their discourse development, where they can express basic contrast but struggle with the nuanced shifts in attitude that more advanced connectives provide.

The frequency results suggest that students are aware of the need to express contrast in writing. However, the uneven distribution of connectives also reflects limited variety. Students appear to favor familiar forms that are easy to use under examination conditions.

5.2. Contextual Use and Appropriateness

A closer examination of concordance lines shows that many instances of but are used appropriately to signal a shift in evaluation, attitude, or outcome. In narrative writing, but is often used to contrast expectations with actual results, which contributes positively to narrative coherence.

However, inappropriate uses are also identified. In some cases, adversative connectives are used where no clear contrast exists. For example, a sentence may introduce but even though the preceding and following ideas are logically compatible. Such usage does not enhance coherence and may confuse readers.

Another noticeable feature is the tendency to place adversative connectives at the beginning of sentences without sufficient contextual motivation. This pattern suggests that students may associate connectives with stylistic complexity rather than with specific discourse functions. As a result, connectives are sometimes inserted mechanically.

5.3. Qualitative Analysis of Typical Errors

To provide a more granular understanding of students' difficulties, this section analyzes three recurring types of errors identified during the concordance analysis. These errors are not merely grammatical; they reflect a lack of discourse competence and the influence of first-language (L1) transfer.

5.3.1. Semantic Misalignment and Logical Redundancy

The most frequent error observed is the use of adversative connectives in contexts where no genuine logical contrast exists. In several narrative samples, students used but to link two compatible ideas. For example:

Sample A: “I went to the library to study, but I found many interesting books there.”

In this instance, finding interesting books in a library is a natural expectation rather than a contrast. The use of but suggests that the student treats the connective as a general-purpose transition rather than a specific marker of unexpected outcomes. This “logical redundancy” indicates that students often prioritize the presence of a connective over the semantic accuracy of the relationship it signals.

5.3.2. Improper Sentence Placement and Stylistic Inconsistency

Many students began sentences with but or however without providing sufficient

context in the preceding sentence. This is particularly noticeable in the practical writing tasks (emails/letters), where a formal or semi-formal tone is required.

Sample C: "I would like to join your club. But I am busy on Saturdays."

While grammatically acceptable in some informal contexts, the frequent use of sentence-initial but in formal tasks reduces the textual sophistication. Students rarely used however with proper punctuation (e.g., using semicolons or mid-sentence placement), suggesting they lack the "stylistic range" required for different genres of writing.

5.4. Limited Variety and Stylistic Issues

The results also reveal limited stylistic awareness in connective choice. While but is frequently used in both informal and relatively formal contexts, more formal connectives such as however are rarely employed. Even in practical writing tasks that require a formal tone, students tend to rely on but rather than choosing more appropriate alternatives.

This preference may be explained by processing constraints. Under examination pressure, students may prioritize speed and accuracy, leading them to rely on familiar structures. However, excessive use of but may result in repetitive sentence patterns and reduce overall textual sophistication.

5.5. Pedagogical Interpretation

From a pedagogical perspective, the findings suggest that students possess basic awareness of adversative relations but lack sufficient control over connective variety and discourse appropriateness. Writing instruction should therefore move beyond encouraging the use of connectives and focus on how and why they are used.

Teachers may guide students to analyze authentic examples and reflect on whether a connective is necessary in a given context. Revision activities that focus on removing unnecessary connectives may also help students develop greater sensitivity to discourse coherence. In addition, explicit comparison between connectives such as but and however may raise students' awareness of stylistic differences.

5.6. Influence of Task Types on Connective Use

A significant finding of this study is the variation in adversative connective usage across different task types. The research corpus included two distinct genres: a practical writing task (an email/letter) and a narrative/reflective task. The data suggests that the communicative purpose of each genre exerts a unique "genre constraint" on how students deploy cohesive devices.

5.6.1. Connectives in Practical Writing Tasks

In the practical writing task, which required a semi-formal or formal tone, students demonstrated a higher degree of caution but a more restricted lexical range. Because the goal of an email or letter is often direct communication, students tended to use connectives primarily to clarify personal stances or constraints. However, there was a noticeable "stylistic mismatch" in this category. Despite the formal requirements of the situation, students frequently relied on the informal but to initiate shifts in requests or explanations. This suggests that while students understand the communicative function of the task, they lack the "register awareness" to switch to more formal markers like however or nevertheless to maintain professional distance.

5.6.2. Connectives in Narrative and Reflective Tasks

Conversely, the narrative and reflective tasks elicited a much higher frequency of adversative markers, particularly but. Narrative discourse inherently relies on "complication" and "resolution"—structures that naturally demand the use of contrastive markers to signal plot twists or shifts in a character's expectations. In these texts, but was often used effectively to create narrative tension, as seen in descriptions of personal struggles or unexpected outcomes. However, the narrative task also produced the highest rate of "mechanical use". Under the pressure of storytelling, students often inserted connectives as "sentence-starters" to maintain the flow of the text, even when the underlying logical relationship was additive rather than adversative.

6. Conclusion

6.1. Summary of Findings

The present study investigated the use of adversative connectives in high school students' English writing through a corpus-based descriptive approach. By analyzing writing samples collected from a mid-term examination, the study aimed to identify general patterns of connective use and to explore common problems related to frequency, variety, and discourse appropriateness.

The results show that adversative connectives are frequently used in students' writing, indicating that learners are aware of the need to express contrast and concession. Among all adversative connectives, but is overwhelmingly dominant. This strong preference suggests that students rely heavily on high-frequency and familiar forms when constructing contrastive relations, especially under examination conditions.

Although many instances of adversative connectives are used appropriately to signal shifts in evaluation or expectation, inappropriate and mechanical uses are also observed. In some cases, adversative connectives are employed in contexts where no clear contrast exists, which weakens logical coherence. In addition, students demonstrate limited variety in connective choice and show insufficient

awareness of stylistic differences between informal and more formal adversative connectives.

Overall, the findings suggest that students possess basic knowledge of adversative relations but lack sufficient control over connective use at the discourse level. These difficulties are not merely grammatical but are closely related to discourse competence and contextual awareness. Furthermore, the findings reflect the broader impact of washback from examination-oriented instruction. When students are taught that the inclusion of cohesive devices is a criterion for higher scores, but are not taught the functional constraints of those devices, the result is often a text that is "over-conjuncted" but logically weak. This study suggests that the "mechanical approach" identified in Chapter Five is a survival strategy used by students to reduce cognitive load while attempting to meet the perceived requirements of the writing rubric. Future instructional efforts must therefore prioritize "quality over quantity," shifting the focus from the number of connectives used to the accuracy and elegance of their logical placement.

6.2. Pedagogical Implications

The findings of this study have several implications for high school English writing instruction. First, writing instruction should emphasize the functional use of adversative connectives rather than encouraging their use solely as markers of complexity. Teachers should guide students to consider whether a connective is necessary and whether it accurately reflects the intended logical relationship.

Second, greater attention should be paid to connective variety and stylistic appropriateness. Through explicit instruction and comparison of different adversative connectives, students can develop a clearer understanding of how connective choice affects tone and coherence. Classroom activities that involve revising texts to replace or remove connectives may help students become more sensitive to discourse-level meaning.

Third, assessment practices may influence students' connective use. If writing assessment focuses mainly on surface features, students may prioritize the inclusion of connectives over coherence. Therefore, teachers may consider incorporating discourse coherence and logical appropriateness more explicitly into assessment criteria and feedback. Furthermore, the findings suggest a need for "Data-Driven Learning" (DDL) in high school classrooms. Teachers could use small-scale corpora, such as the one used in this study, to show students their own patterns of overuse and misuse. By comparing student-produced concordance lines with those from native speakers, learners can visualize the "contextual gaps" in their writing. Instead of simply memorizing a list of connectives, students should be encouraged to engage in "de-conjunction" exercises—rewriting paragraphs by removing unnecessary connectives and relying on the inherent logic of their ideas to create coherence. This approach fosters a deeper "discourse awareness" that is essential for success in

higher-level English communication.

6.3. Limitations and Suggestions for Future Research

Several limitations of the present study should be acknowledged. The corpus size is relatively small and represents writing from a single mid-term examination. In addition, the study focuses on a specific group of students, which limits the generalizability of the findings. Furthermore, the analysis is descriptive in nature and does not involve inferential statistical testing.

Future research may expand the corpus size or include writing samples from different stages of learning to explore developmental patterns. Combining corpus-based analysis with qualitative methods, such as interviews or think-aloud protocols, may also provide deeper insights into students' decision-making processes in connective use.

Despite these limitations, the study demonstrates the value of descriptive corpus analysis in understanding discourse features of student writing and provides practical insights for improving writing instruction in examination-oriented contexts

References

[1] Anthony, L. (2019) AntConc (Version 3.5.8). Waseda University, Tokyo.

[2] Beaugrande, R. de and Dressler, W. (1981) Introduction to Text Linguistics. Longman, London.

[3] Biber, D., Conrad, S. and Reppen, R. (1998) Corpus Linguistics: Investigating Language Structure and Use. Cambridge University Press, Cambridge.

[4] Biber, D., Gray, B. and Poonpon, K. (2011) Should We Use Characteristics of Conversation to Measure Grammatical Complexity? Applied Linguistics, 32, 5-35.

[5] Biber, D., Johansson, S., Leech, G., Conrad, S. and Finegan, E. (2013) Longman Grammar of Spoken and Written English. Pearson, London.

[6] Celce-Murcia, M. and Larsen-Freeman, D. (1999) The Grammar Book: An ESL/EFL Teacher's Course. Heinle & Heinle, Boston.

[7] Chen, L. (2006) Connective Use in L2 Learners' Writing. Journal of Second Language Writing, 15, 1-28.

[8] Crossley, S.A. and McNamara, D.S. (2010) Cohesion, Coherence, and Expert Evaluations of Writing Proficiency. Discourse Processes, 47, 1-30.

[9] Crossley, S.A., Kyle, K. and McNamara, D.S. (2016) The Development and Use of Cohesive Devices in L2 Writing. Journal of Second Language Writing, 32, 1-17.

[10] de Bot, K., Lowie, W. and Verspoor, M. (2007) A Dynamic Systems Theory Approach to Second Language Acquisition. Bilingualism: Language and Cognition, 7-21.

[11] Ellis, R. (2008) The Study of Second Language Acquisition. Oxford University Press, Oxford.

[12] Field, Y. and Yip, L.M.O. (1992) A Comparison of Internal Conjunctive Cohesion in the English Essay Writing of Cantonese Speakers and Native Speakers of English. RELC Journal, 23, 15-28.

[13] Fraser, B. (1999) What Are Discourse Markers? Journal of Pragmatics, 31, 931-952.

[14] Granger, S. (2003) The International Corpus of Learner English. Applied Linguistics, 24, 538-556.

[15] Halliday, M.A.K. (1994) An Introduction to Functional Grammar. Edward Arnold, London.

[16] Halliday, M.A.K. and Hasan, R. (1976) Cohesion in English. Longman, London.

[17] Halliday, M.A.K. and Hasan, R. (1989) Language, Context, and Text: Aspects of Language in a Social-Semiotic Perspective (2nd ed.). Oxford University Press, Oxford.

[18] Hosseinpur, R.M. and Pour, H.H. (2022) Adversative Connectors Use in EFL and Native Students' Writing: A Contrastive Analysis. Teaching English as a Second Language Electronic Journal, 26, 1-18.

[19] Kyle, K. (2016) Measuring Syntactic Development in L2 Writing. Journal of Second Language Writing, 34, 1-17.

[20] Lan, G. and Sun, Y. (2019) Syntactic Complexity Development in EFL Writing. System, 82, 1-12.

[21] Larsen-Freeman, D. (1997) Chaos/Complexity Science and Second Language Acquisition. Applied Linguistics, 18, 141-165.

[22] Larsen-Freeman, D. and Cameron, L. (2008) Complex Systems and Applied Linguistics. Oxford University Press, Oxford.

[23] McCarthy, M. (1991) Discourse Analysis for Language Teachers. Cambridge University Press, Cambridge.

[24] McEnery, T. and Hardie, A. (2012) Corpus Linguistics: Method, Theory and Practice. Cambridge University Press, Cambridge.

[25] McNamara, D.S., Louwerse, M.M., McCarthy, P.M. and Graesser, A.C. (2010) Coh-Metrix: Capturing Linguistic Features of Cohesion. Discourse Processes, 47, 292-330.

[26] Milton, J. and Tsang, E.S.C. (1993) A Corpus-based Study of Logical Connectors in EFL Students' Writing. System, 21, 215-226.

[27] Nunan, D. (1993) Introducing Discourse Analysis. Penguin, London.

[28] Park, S.J. (2024) Contrastive Connector Usage Patterns in English Writing by Korean Learners. The Journal of Studies in Language, 40, 205-215.

[29] Quirk, R., Greenbaum, S., Leech, G. and Svartvik, J. (1985) A Comprehensive Grammar of the English Language. Longman, London.

[30] Schiffrin, D. (1987) Discourse Markers. Cambridge University Press, Cambridge.

[31] Verspoor, M., Lowie, W. and van Dijk, M. (2008) Variability in Second Language Development from a Dynamic Systems Perspective. The Modern Language Journal, 92, 214-231.

[32] Yang, W. and Sun, Y. (2012) The Use of Cohesive Devices in Argumentative Writing by Chinese EFL Learners at Different Proficiency Levels. Linguistics and Education, 23, 31-48.

[33] Chu, L.L. and Zhao, C.F. (2011) A Study on the Use of Adversative Connectives in English Argumentative Writing of Engineering College Students: Based on a Self-built Corpus. Foreign Language World, 5, 9-15.

[34] Cao, Z.F. (2025) A Corpus-based Study of Logical Connectives in Continuation Writing of Senior High School English. Luoyang Normal University, Luoyang.