

THE RELATIONSHIP BETWEEN COHESION AND COHERENCE IN WRITING:
THE CASE OF THAI EFL STUDENTS

A THESIS
BY
PARIN TANAWONG

Presented in Partial Fulfillment of the Requirements for the
Master of Arts Degree in Teaching English as a Foreign Language
at Srinakharinwirot University

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This study investigates the relationship between cohesion and coherence in English compositions. Cohesion facilitates text comprehension and is assumed to be related to text coherence. However, many studies could not find such correlation. The absence of the correlation might have been caused by an improbable analogy between the quantity of cohesive ties and the quality of coherence. This study examines the correlation between the two features. Forty-six English compositions from Thai EFL students were analyzed. Cohesive ties were identified, counted, and categorized. The characters of cohesion and coherence were described. The qualities of cohesion and coherence were scored using rating scales. The result shows that the correlation coefficient between the quality of the two features is $r=0.48$ with a significance level at $p=0.002$. This suggests that there is a statistically significant medium correlation between the quality of cohesion and that of coherence in the English compositions of Thai EFL students.

ความสัมพันธ์ระหว่างการเชื่อมโยงความและการเกาะเกี่ยวความของการเขียน:
กรณีศึกษาของนักเรียนไทยที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศ

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ปริญทร์ ทานะวงศ์ นี้ศึกษาความสัมพันธ์ระหว่างการเชื่อมโยงความและการเกาะเกี่ยวความของการเขียน การเชื่อมโยงความเป็นส่วนช่วยเสริมความเข้าใจให้กับเนื้อความและมีข้อสันนิษฐานว่าการเชื่อมโยงความทำให้นักเรียนมีการเกาะเกี่ยวความ อย่างไรก็ตามมีงานวิจัยก่อนหน้านี้ที่ไม่พบความสัมพันธ์ดังกล่าว การขาดหายไปของความสัมพันธ์นี้อาจเกิดจากการเปรียบเทียบกันอย่างไม่เหมาะสมระหว่างจำนวนของตัวเชื่อมในการเชื่อมโยงความกับคุณภาพของการเกาะเกี่ยวความและคุณภาพของงานเขียนโดยรวม ดังนั้นปริญทร์ ทานะวงศ์ จึงทำการทดสอบความสัมพันธ์ดังกล่าวโดยศึกษางานเขียนจำนวน 46 ชิ้น จากนักเรียนไทยที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศ ผู้วิจัยได้ให้ผู้ให้คะแนนงานเขียน 2 คน ทำการสกัดตัวเชื่อมโยง นับและจัดหมวดหมู่ตัวเชื่อมโยง พร้อมทั้งประเมินคุณภาพของการใช้ตัวเชื่อมโยง พร้อมกันนี้ผู้ให้คะแนนทั้งสองคนก็ประเมินคุณภาพของการเกาะเกี่ยวความด้วย ซึ่งผู้วิจัยได้นำเสนอคุณภาพของการใช้ตัวเชื่อมโยงดังกล่าวและคุณภาพของการเกาะเกี่ยวความในปริญทร์ ทานะวงศ์ นี้ จากนั้นผู้วิจัยได้ใช้สัมประสิทธิ์สหสัมพันธ์ในการหาความสัมพันธ์ระหว่างคุณภาพของการเชื่อมโยงความและคุณภาพของการเกาะเกี่ยวความและพบระดับความสัมพันธ์อยู่ที่ $r=0.48$ ที่ระดับนัยยะสำคัญทางสถิติ $p=0.002$ ซึ่งหมายความว่าคุณภาพของการเกาะเกี่ยวความนั้นมีความสัมพันธ์ระดับปานกลางกับคุณภาพของการเชื่อมโยงความ

The thesis titled
“ The Relationship between Cohesion and Coherence: The Case of Thai EFL Students ”
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CHAPTER 1

INTRODUCTION

This chapter is the introduction. It presents the reasons why the present study needs to be conducted. The chapter starts with the background, which briefly states the related theories, the related previous studies, and the gap those studies have not yet fulfilled. Then, the chapter states the problems, the objectives of the study, the research questions, and the research hypothesis. At the end, the chapter presents the significance of the study and the definitions of terms.

Background

Researchers are looking for overarching factors that distinguish good and poor writing. These factors are crucial in shaping classroom instructions and helping foreign and second language learners to write successfully in the target language. At the beginning, *contrastive analysis* (Lado, 1957) was introduced. The analysis explains that the degrees of difficulties in acquiring a foreign or a second language depend on the distance between the learners' native and the learners' target languages. Later, Corder (1967) suggested that most of the difficulties were alternatively from the process of acquiring the target language similarly to the process of acquiring the native language when the individuals were children. This is the introduction of *error analysis*. Error analysis focuses on types and quantity of errors. The analysis formulates instructions to help the learners to produce error-free writing. Nevertheless, well-formed sentences yet do not guarantee good writing quality, because the sentences still appear in chunks and do not supply a uniform piece of writing. At this point, the connectedness of sentences is concerned and two involved factors are cohesion and coherence.

Cohesion is the use of *cohesive ties* to sequence and connect sentences together, facilitating text to be understood as connected discourse. Such concept of cohesion is

firstly introduced by Halliday and Hasan (1976). Coherence is a continuity of senses among the knowledge activated by the expressions of the text and make text makes sense to the reader (de Beaugrande & Dressler, 1981). Researchers (Johns, 1986; Lee, 2002) claimed that for a text to be coherent, it needed cohesion. Johns (1986) suggested that coherence in a written text involved a multitude of text-based features: cohesion and unity, and reader-based features: the interactions between the readers and the text depending on prior knowledge. Lee (2002) collected a number of literatures and introduced features that contributed text coherence. These features were *macrostructure* (Hoey, 1983; Martin & Rothery, 1986), *information structure* (Danes, 1974; Firbas, 1986 as cited in Lee, 2002), *the connectivity of the underlying content* (Kintsch & van Dijk, 1978; van Dijk, 1980), *metadiscourse* (Crismore, Markkanen, & Steffensen, 1993; van de Kopple, 1985), and *cohesion* (Halliday & Hasan, 1976). In addition, Lee (2002) and Witte and Faigley (1981) suggested that coherence interacted with overall writing quality at a strong degree. This implies that cohesion must also influence overall writing quality, because cohesion is part of coherence.

To verify that cohesion is a factor that contributes to coherence or overall writing quality, many studies have investigated the relationship between them. The findings from these studies, however, are not unanimous. Witte and Faigley (1981) studied high and low rated essays written by university students and found that high rated essays have denser cohesive ties than low rated essays. Khalil (1989) studied the relationship between the quantity cohesive ties and the coherence scores in twenty essays written by Arab university students. The results showed that there was a low correlation between cohesion and coherence. Chiang (1999) studied the relationship between various grammatical and discourse features in 172 essays using rating scales. He found that the raters relied heavily on cohesion in judging the quality of essays. Liu and Braine (2005) studied the

relationship between the quantity of each type of cohesion and writing quality in fifty essays written by freshmen in a university in China. The result showed that the quality of writing correlate to each type of cohesive ties at different degrees. Lexical cohesion correlated to the quality of writing the most, followed by reference and conjunction. Dueraman (2006) studied the relationship between the quantity of cohesive ties written by fourteen Malaysian and fourteen Thai medical students. The result showed that there were no differences in the number of cohesive ties used between high and low writing quality of the essays. This suggests that cohesion does not contribute to text coherence. Crossley and McNamara (2010) investigated the relationship between cohesion, coherence, and overall quality of 184 essays written by a group of university students. The result showed that coherence was predictive to overall writing quality and there was negative correlation between the quantity of cohesive ties and the overall writing quality. This means high rated essays in coherence had less cohesive ties and vice versa. The fluctuation of the previous studies' results means that the investigation has no repeatability and this suggests that the actual relationships between cohesion and coherence/overall writing quality have not yet been revealed.

Chiang (1999) suggested that the fluctuation of the results might have been caused by the improper analogy between the quantity of cohesive ties and the quality of coherence. The present study agrees with Chiang (1999) and suggests that such fluctuation may be caused by two assumptions. First, the previous studies determined the relationship by interpreting a correlation value derived by statistical mathematics, which represented the strength and the direction of the linear relationship between the two variables. This means the correlation would be positive if and only if the compositions or essays show increasing quantity of cohesive ties along with increasing quality of coherence or overall writing quality. However, it is questionable that does the increasing

quantity of the cohesive ties must yield the increasing quality of coherence or overall writing quality indefinitely, or should there be an optimum amount of cohesive ties in a composition that effectively facilitates maximum text coherence. If it is the latter, the amount of the cohesive ties which is greater than this optimum point is redundant and do not help text to be coherent. As such, applying a statistical linear equation to search for the relationship between cohesion and coherence or overall writing quality would not be valid. Second, the previous studies conducted their experiments on various participants' native language background. The previous studies investigating the relationship on the native speakers could have assumed that the participants used cohesive ties correctly and appropriately because it was their native language. Therefore, the quantity of the ties could have been an indicator distinguishing high and low coherence or good and poor writing quality. In contrast, the previous studies investigating such relationship on foreign and second language participants, there could have been more chances that grammatical errors and inappropriate uses of the cohesive ties occur. A high number of them in a text could have caused difficulty to a reader. In result, the reader felt that the writing was less coherence and had poor writing quality. But this does not mean cohesion does not facilitate coherence and overall writing quality in general. Therefore, more research with alternative methods is needed to investigate the relationships.

Statement of the Problem

The improper analogy between the quantity of cohesive ties and the quality of coherence cause the fluctuation in the previous studies' results. The fluctuation conceals the actual relationship between cohesion and coherence.

Objectives of the Study

1. To underline the characters of cohesion and the characters of coherence in order to assess their qualities.
2. To compare the quality of cohesion and the quality of coherence in order to find the relationship between them.

Research Questions

1. What are the characters of cohesion and the characters of coherence in English compositions written by Thai EFL college students?
2. Is there a relationship between cohesion and coherence in the compositions written by Thai EFL college students?

Scope of the Study

This study investigated the relationship between cohesion and coherence in writing on twenty-three Thai EFL undergraduate students at Srinakharinwirot University.

Research Hypothesis

The present study suggests that the investigation of the relationship must focus on the quality of cohesion, not the quantity, to avoid the improper analogy in the relationship investigation. The quality of cohesion shows how well the sentences are connected to form a text and it must be judged on how cohesive ties are used in a text. Using the ties correctly and appropriately should return high quality of cohesion and if the relationship between cohesion and coherence do exist as theoretically suggested, the higher quality of cohesion must result in high quality of coherence. With the methodology presented by the present study, the actual relationship between cohesion and coherence should be revealed.

Significance of the Study

This study is value to the researchers in the field of foreign and second language acquisition in that, first, it provides an alternative method to investigate the relationship between cohesion and coherence with regardless to the quantity of cohesive ties and the participants' native language background. The result, therefore, reveals the actual relationship between two discourse features. Second, the present study provides the characters of cohesion and the characters of coherence of Thai EFL college students. The characters found in the present study are preliminary data for the researchers to study and seek for approaches to improve students' discourse in writing.

Definitions of Terms

Cohesion grammatical errors are errors occurred when a person use cohesive tie incorrectly with respect to English grammar.

Cohesion non-grammatical errors are errors occurred when a person use cohesive ties correctly in grammar, but the way the ties are used is difficult to a reader to understand.

Optimum quantity of cohesive ties is the suitable amount of cohesive ties in a composition or in a text that contribute to maximum text coherence and highest overall writing quality.

Overall writing quality is the quality of writing, which is holistically assessed by raters.

CHAPTER 2

REVIEW OF LITERATURES

This chapter contains the theories of cohesion and coherence and the details of the related studies. The chapter begins with the origination of discourse analysis in writing. Then the chapter goes to the theory of cohesion found by Halliday and Hasan (1976). Later, the chapter presents the studies that proposed the theory of coherence. At the end of the chapter, the previous studies investigating the relationship between cohesion and coherence are presented.

Toward Discourse Analysis in Writing

Writing requires the writer to articulate ideas and synthesize various perspectives to produce persuasive communication through written text. A writer needs knowledge in vocabulary and grammar to write a sentence, a paragraph or a more complicated piece of writing such as an essay or a report. The writer needs a discourse to show the logical connections of sentences and the organization of ideas which would make the writing intelligible to a reader. Writing is difficult, but it could be accomplished if the writer has writing skills, which could be gained by practices (Myles, 2002) and being instructed (Crowhurst, 1990).

Writing in a second and a foreign language is more difficult because second or foreign language writers cannot avoid confronting social and cognitive challenges related to a second and a foreign language acquisition (Myles, 2002). To improve the second and foreign language writing, the writers also need practices and instructions. To enhance practices and instructions for second and foreign language learners, scholars have come up with theories to facilitate the learners to acquire the target language in writing.

At the start, scholars have analyzed non-native speakers' language production with *contrastive analysis* (Lado, 1957). It explains that the degree of difficulty learning a

second or a foreign language depends on the distance between the first and the target language of the learners. Later, Corder (1967) suggested that the difficulties occurred among the foreign and second language were from other aspects in the progress of language learning the same as when the learners learned their first language. This is the introduction of *error analysis*. Both approaches, contrastive analysis and error analysis, focus on text characters within sentence boundary, but yet these two theories cannot answer why the language productions from EFL and ESL learners, which contained well-formed sentences, still showed foreign features to English native speakers. Kaplan (1970) explained this phenomenon as the learners were not capable to produce texts to meet logical and cultural expectations of native speakers of English. Therefore, writing analysis must go beyond sentence boundary toward the connections between sentences and toward discourse features, cohesion and coherence.

Cohesion

The connection between sentences may play a role in connected discourse. To connect the sentences together, a writer needs *cohesion*. Cohesion utilizes *cohesive ties* to sequence and connect sentences together causing a text to be in one piece, not a group of unrelated sentences (Halliday & Hasan, 1976). Halliday and Hasan (1976) categorized cohesive ties into five types which are reference, substitution, ellipsis, conjunction, and lexical cohesion. The concept of each type of cohesion and its subtypes are as follow.

Reference. Reference is the use of a word to refer to an item in the real world or in a text. When a reference is pointing to an item outside the text, it is defined as *exophoric reference*. But when it is pointing to an item within the text it is defined as *endorphoric reference*. By Halliday and Hasan (1976)'s definition, cohesion is the connection of sentences in a text. Therefore, exophoric reference is out of our framework,

because exophoric reference points to items outside the text, to the items in the real world. Only endorphoric reference shows cohesive property.

Endorphoric reference consists of two subtypes which are *anaphoric* and *cataphoric* reference. Anaphoric reference is the referring to an item in the preceding sentence and cataphoric reference is the referring to an item in the following sentence.

Figure 1 shows the structure of reference.

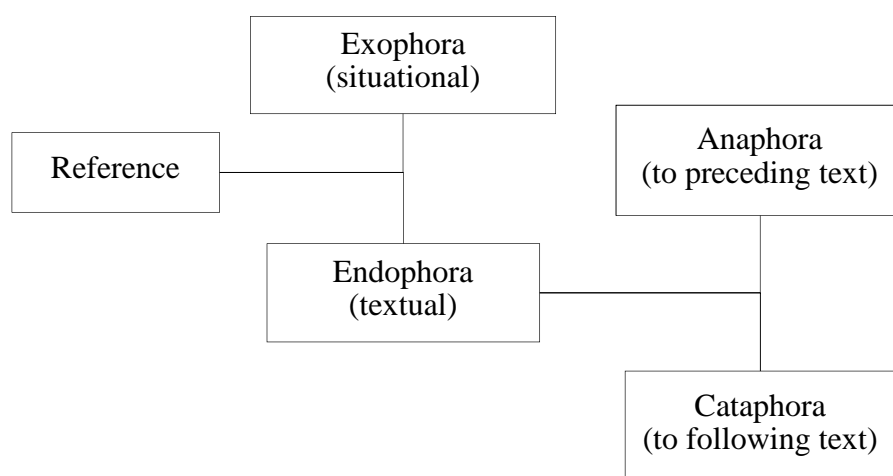


Figure 1. Diagram shows types of reference

The diagram in figure 1 is the categorization of reference in terms of the position of the referred items. The items can be either inside or outside text (endophoric or exophoric, respectively) and either in the previous or in the upcoming sentence (anaphoric or cataphoric, respectively). English reference cohesion is categorized into three subtypes which are personals, demonstratives, and comparatives. Their concepts are as follow.

Personal reference. A lexical item can be referred by a pronoun, a possessive determiner, or a possessive pronoun. Such references are defined as *personal reference*. They can be either exophoric or endophoric. For example, item “I” in example (1) is exophoric, because it refers to the speaker which resides in the real world, while item

“He” in example (2) is endophoric because it refers to John in the text and also a person could notice that “He” is also cataphoric, because “John” is in the preceding sentence. However, only endophoric personal reference such as “He” in example (2) corresponds to the definition of cohesion defined by Halliday and Hasan (1976). The analysis of cohesion in the present study will not determine exophoric reference such as “I” in example (1) as it refers to the item in the real world and it does not have cohesive property which connects the sentences together.

(1) I have a car.

(2) John has just bought a car. He loves it very much.

Demonstrative reference. Demonstrative reference is used to identify an item relates to location and time. Such usage requires proximity reference such as *this, these, that, those, here, there, then, and the*. Similarly to personal reference, demonstrative reference can be exophoric and anaphoric.

(3) Leave that there and come here.

(4) John has gone to Thailand. This time he will be there for a year.

In example (3) the speaker and the listener both implicitly know that “there” is a place around the listener and “here” is a place around the speaker. These two demonstrative references are exophoric and they are not considered to have cohesive property. In example (4), “there” refers to “Thailand” and is endophoric, because it refers to an item in the text. Also, “there” in example (4) is anaphoric reference because it refers to “Thailand,” which is in the preceding sentence.

Comparative reference. Comparative reference is used to refer to an item via identity and similarity. The usage adopts adjectives such as *same, equal, similar, different, else, better, more*, etc., and adverbs such as *so, such, similarly, otherwise, so, more*, etc. to signal the reference.

(5) It is the same car as we saw yesterday.

(6) The distance of the earth from the sun makes it suitable to sustain life.

Searching for the other planets with the same distance from their mother stars is to search for an extra-terrestrial life.

(7) The blue t-shirt has the same size as the green one.

From example (5) and (6), the item “same” is used as comparative references. In example (5) the item “same” help referring to a car, which both persons have seen the other day in their real world situation. Therefore, item “same” in (5) is exophoric and does not have cohesive property. In example (6), the item “same” refers to *the specific distance between the earth and the sun*. The reference is endophoric because it points to an item within the text, therefore, it has cohesive property and it is anaphoric, because it points to the preceding sentence. In sentence (7), the word “same” is used to show that both t-shirts share a character, the size in this case. The item “same” in example (7) does not refer to any items in the text; therefore it is a reference and does not have cohesive property.

Substitution. Substitution is a replacement of an item by a general word to avoid repetition. There are three types of substitution which are nominal, verbal and clausal substitution.

Nominal substitution. Nominal substitution is a replacement of *one* or *ones* instead of repeating the same word in nominal group. In example (8), item “one” is used to replace item “suite” in the preceding sentence. The replacement avoid the repetition of item “suite”, however if item “suite” is repeated in example (8), the sentences could still be meaningful.

(8) John has only white and black suit. The white one is from his wedding.

Verbal substitution. Verbal substitution is a replacement of an element in verbal group. In English, the device used as verbal substitution is *do*. This is mostly used in spoken language. For example, “do” in example (9) is used to substitute *be on time* and item “do” in example (10) is used to substitute “like to go to Bangkok.”

(9) The train does not run on time as it used to do.

(10) Do you like to go to Bangkok? – Yes, I do.

Clausal substitution. Clausal substitution is a replacement of an entire clause. It is the substitution of elements in both nominal and verbal group. The items to be used to substitute are *so* and *not*. Item “so” in example (11) substitutes the clause “orbit around the sun” in the preceding sentence. In example (12) “not” replace the clause “recognise him.” It is worth noting that *and* and *but* are used here to merge the preceding and the following sentence in example (11) and (12). They are conjunction, another type of cohesion which will be discussed later in this chapter.

(11) The earth orbits around the sun and so do other planets.

(12) We should recognise him when we see him.

Yes, but supposing not. What do we do?

Ellipsis. The function of ellipsis is the same as substitution but the item is replaced by nothing, in other words, it is omitted. The omission of an item is to avoid the item repetition. The omission would not ruin the quality of the text if the context is obvious for the readers to comprehend. As ellipsis and substitute are similar, so the subtypes of ellipsis are classified identically to substitution: nominal, verbal, and clausal.

Nominal ellipsis. Nominal ellipsis is the ellipsis of an item in nominal group, which generally is the subject of the sentence. In example (13), “student” is omitted in the second sentence, but a reader could assume that it is “The Thai student...” from the preceding sentence.

- (13) There are two English students and one Thai student in the class. The Thai has been here for one year.

Verbal ellipsis. Verbal ellipsis is the omission of an item in verbal group, which is a group of verbs in a sentence. In example (14) the sentence “Yes, I have” is the shortened form of “Yes, I have been studying.” Most readers can guess the full form of the sentence from the question sentence of example (14).

- (14) Have you been studying?

Yes, I have.

In example (15), the item “might,” “was to,” “may not,” and “should” indicate that there is an omission of items in verbal groups. A reader could predict that verb “do” is omitted.

- (15) Is Jane going to do this?

She might,

She was to,

She may not,

She should if she wants her homework done.

Clausal ellipsis. Clausal ellipsis is the omission of items in both nominal and verbal group. Generally, it would be looked like the whole clause is omitted but leave some elements for the reader to recognize the omitted items. In example (16), “...I read [10] pages...” is omitted, but the reader could predict the omitted text, which is supposed to surround number “10” from the text that surround number “50.”

- (16) I read 50 pages of the book yesterday and 10 today.

Conjunction. A conjunction can be used as a cohesive tie. A conjunction is not used to refer any particular item in the text, but it is used to connect sentences in terms of meanings. Conjunction ties are categorized into additive, adversative, causal, and temporal.

Additive. The function of additive conjunction is to add information to a sentence using a tie such as *and, also, too, furthermore, additionally*, etc. The tie can negate the sentence using the ties such as *nor, and...not, and...not...either, neither*, and...neither, etc.

- (17) For the whole day he climbed up the steep mountainside, almost without stopping. And in all this time he met no one.

Item “And” in example (17) adds information about the loneliness of the climber climbing up the hill. In example (18), the item “Neither” is a negated additive conjunction. It signals that the *beds* are also not a problem like the *camp meals*.

- (18) Camp meals are no great problem. Neither are beds, thanks to air mattresses and sleeping bags.

Adversative. The function of adversative conjunction is to indicate a contrary to a reader’s and listener’s expectation. The adversative ties are such as *yet, though, only, but, in fact, rather*, etc.

- (19) For the whole day he climbed up the steep mountainside, almost without stopping. Yet he was hardly aware of being tired.

Item “Yet” in the second sentence of example (19) is used to give the information which its content contradicts to the expectation of a reader reading the first sentence in example (19).

Causal. The function of causal conjunction is to express the sentences’ relationship between the cause and the result. The ties such as *so, then, for, because, for this reason, as a result, in this respect*, etc., are used to perform this function.

- (20) For the whole day he climbed up the steep mountainside, almost without stopping. So by night time the valley was far below him.

The second sentence in example (20) is the result of the first sentence and the device “So” is used to signal this cause and result relationship.

Temporal. The last type of conjunction is temporal conjunction. The function of temporal conjunction is to signal the sequence of events and time. The ties such *then*, *next*, *after that*, *next day*, *until then*, *at the same time*, *at this point*, etc. are used for temporal conjunction.

- (21) For the whole day he climbed up the steep mountainside, almost without stopping. Then, as dusk fell, he sat down to rest.

Item “Then” in example (21) is a temporal tie used to signal the sequence of events related to the climber in example (21).

Lexical Cohesion. Lexical cohesion is different from previous types of cohesion because lexical cohesion is non-grammatical. This type of cohesion is achieved by the selection of vocabulary. There are two types of lexical cohesion which are reiteration and collocation.

Reiteration. Reiteration is the repetition of a presupposed item. A word used to repeat the item could be a synonym, a superordinate, and a general word. In most cases, reiteration is accompanied by demonstrative reference “the.”

- (22) I saw a small dog in the kitchen again.

The dog (repetition) was very dirty.

I was thinking to keep that animal (superordinate) out.

The puppy (synonym) was obviously not up to it.

The kitchen is for us not for the four legs (general word).

Collocation. Collocation is the use of words that are commonly found together. This group of words work as a network conveying meanings from a text. The words could be words with opposite meanings (e.g. man/woman, love/hate, tall/short), pairs of words from the same order series (e.g. days of the week, months, etc.), pairs of words from unordered lexical sets e.g. meronymy, (e.g. body/arm, car/wheel, hand/fingers, mouth/chin), co-hyponyms (black/white, chair/table) or association based on history of co-occurrence (e.g. rain, pouring, torrential). When lexical cohesion occurs in a text, it occurs in a series. Example (23) shows a use of lexical cohesion.

- (23) *Sagittarius*, the *Archer*, hosts several of summer's best deep-sky objects, but you'd be hard-pressed to find one finer than the Lagoon Nebula (M8). Deep inside this cloud, dense pockets of gas and dust collapse under their own weight to form new *stars*. The most massive of these *newborns* radiate prodigious amounts of ultraviolet light.

In example (23), the “pockets of gas and dust...” are meronyms of the Lagoon Nebula and gas and dust is the set of words which are always found together when talking about the universe. In addition, this example also shows reiteration in italic words. “*Sagittarius*” is a synonym of “*Archer*” and a general word “*newborns*” is used to avoid repeating “*stars*” in the preceding sentence.

Analyzing lexical cohesion is obviously more difficult than other cohesive type because there is no exact keyword to look for. Halliday and Hasan (1976) suggested that when analysing lexical cohesion in a text, it is important thing to use common sense on the nature and the structure of the language's vocabulary.

Halliday and Hasan (1976)'s cohesion has potential to connect sentences together to generate the continuity of text. However, solely cohesion is inadequate to make a text make sense. It is because cohesion is just the surface connection of a text. In order to

make a text make sense, the text needs coherence, which does not equate to cohesion (de Beaugrande, 1980; Dijk, 1977; Enkvist, 1979; Grimes, 1975; Witte & Faigley, 1981).

Coherence

Coherence is the understanding that a reader derives from a text, which the text may be more or less coherent depends on a number of factors such as prior knowledge and reading skill (McNamara, Kintsch, Songer, & Kintsch, 1996; O'reilly & McNamara, 2007). When a person is reading or listening to a text, the person expects “the feeling that a text hangs together, that it makes sense, and is not just a jumble of sentences” (McCarthy, 1991, p.26). Therefore, there must be a “semantic property of discourses based on the interpretation of each individual sentence relative to the interpretation of other sentences” (Dijk, 1977, p.93) within the text. But how does this property affect a text in the way cohesion cannot do? This question is answered as “a text makes sense because there is a continuity of senses among the knowledge activated by the expressions of the text.”(cf. Hörmann, 1976). This continuity of senses is *coherence*.

Johns (1986) suggested that coherence involves a multitude of text- and reader-based features. Text-based features are cohesion (i.e. the connection between sentences and paragraphs) and unity (i.e. sticking to the point), while reader-based features are the interaction of the readers toward the text via their prior knowledge related to the text's content (Ahmed, 2010). When a person is aroused by a text expression (text-based features), the person recalls his expectations and experiences regarding to the organization of related events and situations (reader-based features). The person, then, raises predictions or hypotheses of the incoming information. If the rest of the text correctly responds, it triggers the continuity of senses and causes the person feels that the text is coherent.

Lee (2002) reviewed a number of literatures and discovered the features that might have contributed to text coherence. The first feature is a macrostructure that provides specific text characteristics with regard to its communicative purpose (Hoey, 1983; Martin & Rothery, 1986). Macrostructure is the outline of the mechanism of the text helping the readers and the writers to see the relationship between sentences and how they form a whole. For the writers, the feature is framed by the communicative purpose. For example, a writer may use a chronological pattern to tell a story. Harris (1990) looked at this as the way the writers choose to organize sentences with respect to their information. He has studied paragraphs of science textbooks and focused on their organization. He has found that biology, chemistry, geology, and physics textbooks contain different arrangement of sentence types. For example, physics textbooks tend to identify topic or hypothetical situation at the beginning while geology textbooks tend to state scientific fact first.

The second feature is information structure. It guides the readers along the development of the text's topic and how the content within text evolves (Danes, 1974; Firbas, 1986 as cited in Lee, 2002). Two major elements in information structure are *topic* and *focus* (Bardovi-Harlig, 1990). Topic is an element which has already been introduced in the preceding sentence and focus is the element of new information in the following sentence. In the second sentence of example (24), the topic of the sentence is "It" which refers back to "Curiosity" in the preceding sentence. And the focus in the second sentence is "experiment" which is the new information adding up the topic "The rover."

- (24) Curiosity has already landed on Mars. The rover will start an experiment in a few hours. But now the scientists have to finish checking all the equipments on board.

In a sentence, it is not necessary that the topic is at the beginning of the sentence and followed by the focus, if the sentence is standing alone. For example, if the second sentence in example (24) is rewritten in the way that the focus is at the beginning, followed by the topic, the sentence would still be intelligible. The rewritten sentence is “An experiment conducted by the rover will start in a few hours.” However, if this reposition of topic and focus lives in a context, the reposition of the topic and the focus may abrupt the continuity of sense. The rewritten of the second sentence of example (24) when resides in its context as shown in example (25), the readers or the listeners could feel that the second sentence of example (25) slightly jumps out of the text.

- (25) Curiosity has already landed on Mars. An experiment conducted by the rover will start in a few hours. But now the scientists have to finish checking all the equipments on board.

The third feature of coherent gathered by (Lee, 2002) is “the connectivity of the underlying content evidenced by relations between propositions.” (Kintsch & van Dijk, 1978; van Dijk, 1980). The types of the connection include conditionally, concurrently, and causally (McCagg, 1990).

- (26) Curiosity is packed with the most sophisticated movable laboratory that has ever been sent to another planet. It is to spend at least two years examining rocks within the 96-mile crater it landed in, looking for carbon-based molecules and other evidence that early Mars had conditions friendly for life.

There are two sentences in example (26). The main idea of the first sentence is that a scientific vehicle contains a number of scientific equipments. And when a person reads the second sentence, it could response why it has to carry such that much of equipments. This is a causal relation between the sentences. The relation of sentences in

example (26) could be explicitly linked by conjunction cohesion “because,” but in this case it is omitted.

The fourth feature is the connectivity on the surface of text. Of course Lee (2002) referred this feature back to Halliday and Hasan (1976) which has been stated in the previous section in this chapter.

The last feature introduced by Lee (2002) is the appropriate metadiscourse features (Crismore, et al., 1993; van de Kopple, 1985). This feature requires explicit markers to be included in clauses or sentences that go beyond the content itself, frequently to examine the purpose of the sentence or a response from the author. It helps a reader to organize, interpret and evaluate information. Markers such as “to sum up, I believe, candidly” are used to show the writer’s intentions. To show the writer’s confidence, a writer may use “may, perhaps, certainly, must.” To signal the reader about logic within the text, the writers may use markers such as “therefore, however, but,” and to show the sequence in the text markers “firstly, secondly, finally” can be used.

In conclusion, many researchers look at cohesion as a factor facilitates text coherence. Coherence itself is considered to be a crucial factor that plays an important role in overall writing quality. Hence, there must be relationships among cohesion, coherence, and overall writing quality at certain strength. Many researchers conducted empirical studies to verify the theory and to reveal the accurate relationships between the three features, which would benefit the instruction techniques in second and foreign language classrooms.

Related Studies

Researchers have been studying discourse features to understand the mechanisms and the relationships among the discrete textual feature, cohesion; the more abstract textual feature, coherence; and the most abstract textual feature, the overall writing quality.

Witte and Faigley (1981) examined Halliday and Hasan's theory of cohesion. They picked up five low rated essays and five high rated essays from ninety essays written by University of Texas freshmen students on a specific topic. The result showed that high rated essays had denser cohesion than low rated essays. For high rated essays, there were cohesive ties in every 3.2 words. For low rated essays, there were cohesive ties on every 4.9 words. Focusing in to the detail of cohesive types, reference was used about twice more in high rated essay than low rated essays. Conjunction was used thrice more in high rated essay than low rated essays. Lexical cohesion was used two third of the overall cohesive types. There were lexical ties in every 4.8 words for high rated essays and in every 7.4 words for low rated essays. The finding also showed that high rated essay writers used all five types of cohesive ties, while low rated essay writer used only three of them. Even their investigation showed that the number of cohesive ties distinguished high and low rating essays, but they argued that there could have been more factors that caused text to be coherent.

Khalil (1989) studied the relationship between Halliday and Hasan (1976)'s cohesion and coherence in 20 compositions written by Arab EFL freshmen students from a university in Palestine. They were asked to write a one-paragraph English composition on a topic. The researcher identified, counted and categorized all cohesive ties, while four native speakers rated coherence using a rating scale. The correlation between these two features was calculated. The result showed that the correlation did exist but at low degree.

The identification of cohesion showed that lexical cohesion, particularly reiteration, was used the most followed by conjunction and reference. The evaluation of coherence showed that the most coherent composition elaborated ideas on the main topic and made the main idea clear, while the least coherent composition provided unclear main idea.

Chiang (1999) investigated the relationships among grammatical and discourse features. There were two grammatical features, which were morphology and syntax; and two discourse features, which were cohesion and coherence. The participants of this study were more than 200 college students who enrolled a French course at a university in the United States. Each of them was asked to write an essay containing 250 to 300 words in length on a specific topic. However, only 172 essays from the participants were investigated in this study and the cause of the reduction was not stated. There were four rating scales used to evaluate the four features of the essays. There were three native speakers of French rated the essays. The result showed that the raters relied on a great degree on discourse features, especially cohesion, in judging the overall quality of the essays.

Pongsiriwet (2001) investigated the relationship among grammatical accuracy, discourse features, and the overall writing quality. The participants in this study were 155 freshmen students from different majors at a Thai university. They were asked to write one English composition on a topic. Two raters rated discourse features, cohesion and coherence, and overall writing quality using rating scales adapted from Chiang (1999). The scores from the rating scales were calculated to find the correlation. The result showed that coherence highly correlated to overall writing quality followed by cohesion. The statistic calculation suggested that the raters relied heavily on discourse features assessing writing quality.

Liu and Braine (2005) investigated Halliday and Hasan (1976)'s cohesion in English of 50 first year students who enrolled Basic English Writing class at a University in China. The participants were none-English major students. At the end of the class each of them were asked to write a 150-200 word argumentative essay on a particular topic. This was a test and the participants had 30 minutes to finish their essays. The researcher identified and counted all 5 categories of cohesive ties from each composition. Writing quality is rated by two raters using a rating scale. The correlation between the amount of the ties and the score of writing quality was calculated. The result showed that the writing quality correlated to each type of cohesive tie at different degrees. Lexical cohesion correlated to the quality of writing the most followed by reference and conjunction. Lexical devices were used the most, but the researcher found that students had limited choice of vocabulary and they had problems with collocation. For reference, the researcher found that the students shifted pronouns, omitted or misused definite article, and underused comparative reference.

Dueraman (2006) examined cohesion and coherence in narrative and argumentative English essays. The participants in this study were 14 Malaysian and 14 Thai second year medical students at a Malaysian and a Thai university. The participants were asked to write one narrative and one argumentative essay. Therefore, there were 56 essays in total to be used in this study. The overall writing quality was assessed by a Thai and an American EFL teacher using a holistic rating scale. The researcher only looked at reference, conjunction, and lexical cohesion. Substitution and ellipsis were excluded because they are rarely found in academic writing. The cohesive ties found in essays were counted and categorized. The result showed that both Thai and Malaysian participants used reference the most followed by conjunction and lexical cohesion (particularly the reiteration) in both narrative and argumentative essays. In summary, the amount of

cohesive ties could not distinguish high and low rated essays written by both Thai and Malaysian participants.

Bennui (2008) investigated the native language interference in paragraph writing. The researcher analyzed three level of interference, namely words, sentences, and discourse. There were 28 participants in this study. They were third year students from seven different majors, but their minor subjects were English. Each participant was asked to write a short paragraph on a given topic. They were also asked to use cohesive ties to connect sentences to form paragraphs. This task was a part of the final examination, so the participants have limited time to accomplish the task. The researcher assessed the students' writings holistic scoring with a highest mark of three. Also, the researcher described the interference in the participants' paragraph qualitatively. The result showed that apart from word and sentence interference there was also interference of discourse. Bennui (2008) has categorized the interference of discourse into four groups. First, some participants wrote very short paragraphs, some of the paragraphs consisted of just one or two sentences. Second, there was redundant repetition of nouns instead of pronoun. Third, the participants used too many cohesive ties (i.e. because, before, and, when, but, that, for example) in one sentence which made overly long sentence in their paragraphs. Last, the redundant style of Thai writing appeared in their paragraphs. The researcher explained this phenomenon as Thai writing requires inflation of words to motivate the readers. However, when this style of writing appeared in the participants' English paragraph, it caused their writing to be difficult for the native speakers of English to comprehend.

Chen (2008) investigated the use of cohesive ties and the relationship between the ties and the writing quality of 23 undergraduate students who enrolled Basic English Writing course at a university in China. Each participant produced two compositions; therefore forty-six compositions were used in the study. The researcher counted and

categorized cohesive ties excluding substitution and ellipsis because they were rarely used in writing. Overall writing quality was assessed by holistic rating scale. The relationship between the quantity of cohesive ties and writing quality were examined. The result showed no significant relation between them. The researcher found that the participants used lexical cohesion the most, followed by reference and conjunction. Most of lexical cohesion found in students' composition was the reiteration. The researcher suggested that this is because the participants had limited vocabulary. For reference, it was found that the participants used a lot of "you" in their compositions which made their writing too subjective and personal. For conjunction, additive conjunction "and" were used the most. It could have been because it was the simplest tie to link linguistic elements and it had been taught at the early stage of language learning.

Crossley and McNamara (2010) investigated individual text features, including cohesion and coherence, in order to examine their relation to holistic writing quality. The study examined 184 argumentative essays written by undergraduate students at Mississippi State University, USA. Two raters rated each essay's text features and holistic quality on scale 1 to 6. The researcher used the third rater if the inter-rater reliability is lower than a specific value. The result showed that coherence strongest correlate to essay's holistic quality followed by the relevance of content and cohesion.

Khongput (2010) investigated EFL teachers' perspectives on good writing by questionnaire. Twenty-one EFL teachers from Thai universities completed the questionnaire. Seventeen of them were Thai EFL teachers and four of them were English native speakers. The researcher underlined his study about the Thai EFL teachers that they had a lot of experiences in English teaching and had been in English speaking country for a long period of time, enough to assume that the way they comprehended text was similar to that of the native speakers. The result showed that the majority of the

participants have considered coherence is the most important feature to distinguish good and poor writing, followed by cohesion.

CHAPTER 3

METHODOLOGY

This chapter presents the solution that lead to the answers of the research questions. The chapter begins with the details of the students and the raters, followed by the details of the compositions for the discourse analysis. Then, the chapter presents the instrumentation which is used to extract cohesive ties and the criterions for the raters to score cohesion and coherence. Later, the chapter presents a statistical mathematic calculation to analyze data and its interpretation which reveals the relationship between cohesion and coherence.

Students

The students were twenty-three undergraduate students in English major, Department of Western Languages, Srinakharinwirot University. The students had passed Basic Writing Course, and at the time the researcher approached the students, they were studying Writing Composition I course in the first semester of 2012. The students' ages were from eighteen to twenty years old and Thai was their native language.

Raters

The present study required two raters. Both raters were M.A. students in Teaching English as Foreign Language (TEFL) at Srinakharinwirot University. One of the raters had English teaching experience for five years and the other one had experiences in academic writing in English speaking country for more than a year. The second rater is the research of the present study.

Compositions

Forty-six compositions were used in this study; two compositions were collected from each of twenty-three students. Therefore, there were forty six compositions in total. The compositions were the products of the writing tasks in Writing Composition I

Course, which were written to response to the articles the students had been assigned to read. All compositions collected for this study were final drafts. The students were allowed to produce up to four drafts. The compositions had gone through teacher's and peers' reviews. The reviews were made in the way that acknowledged the writers about the characters of the compositions' content, not that of linguistic features. The purpose of using the final drafts was to investigate the students' cohesion and coherence capacity at their best. All sentences in the compositions were numbered. Font size, line spacing, and paragraph adjustment of each composition were reformatted to be identical aiming to reduce any biases which might have occurred from non-content related appearance of the compositions. All compositions were made in hard copies to be handed to the raters.

Instrumentation

This study used three instruments to extract data from the compositions and to prepare the data for the analysis. The instruments were cohesive tie identification form, cohesion rating scale form, and coherence rating scale form.

Cohesive tie identification form provided space for the raters to fill in information of cohesive ties (see appendix). The information was as follow:

- (1) Cohesive ties and the sentence the ties are found.
- (2) The subtype of each cohesive tie
- (3) The presupposed items and the sentence the presupposed items are found.
- (4) The correctness or appropriateness of how each tie is used.
- (5) Comments and suggestions

This information was preliminary data for the raters to rate the quality of cohesion in cohesion rating scale form. To complete cohesive tie identification form, the raters had to identify cohesive ties and labeled the ties with the sentence number where the ties

resided. Then the raters categorized the ties into five categories and into subtypes with respect to Halliday and Hasan (1976). For reference, substitution, ellipsis, and lexical cohesion; the raters had to identify the presupposed items and labeled the items with the sentence numbers. For conjunction, the raters had to identify the sentences which were connected by the conjunction ties. The sentence numbers were also labeled. The raters judged if a tie was used correctly or appropriately in its context and wrote comments or suggestions about the ties to help them remind of any aspects they might need to assess cohesion quality or to communicate with the researcher. As soon as a cohesive tie identification form was completed on a composition, the raters had a thorough cohesion quality from the composition.

Cohesion rating scale form is used to measure the quality of cohesion. The raters used this form to rate the quality of each type of cohesive ties defined by Halliday and Hasan (1976).

- (a) References are used appropriately and accurately.
- (b) Substitution is used where needed and accurately.
- (c) Ellipsis is used where needed and accurately.
- (d) Conjunction words are used judiciously and accurately.
- (e) Sets of words are used meaningfully and appropriately.

The raters rated each item on scale from five to one. The scale of five represented the greatest quality and the scale of one represented the poorest quality. Other scales between these two numbers represented the quality between the greatest and the lowest quality at a degree corresponds to the degree of numbers. The raters rated N/A (not applicable) if a type of cohesive ties was not found in the composition. This was to exclude the absent type of cohesive ties from averaging cohesion score.

Coherence rating scale form is used to measure the quality of coherence. The form consists of five items.

- (A) The beginning section is effective in introducing the reader to the subject and the ending gives the reader a definite sense of closure.
- (B) The ideas in the essay are all very relevant to the topic.
- (C) Ideas mentioned are elaborated.
- (D) The division of paragraphs is justifiable in terms of content relevance and the transition between paragraphs is smooth.
- (E) The writer's overall point of view is clear. These items reflect the overall organization of a composition.

Coherence rating scale form had been adapted from Chiang (1999) because the rating scale focuses on overall organization. Similarly to cohesion rating scale, each item in coherence rating scale contained scale from five to one represented the greatest to the poorest quality of coherence and other numbers between five and one represented a degree of quality corresponded to the degree of numbers. The raters rated N/A (not applicable) if a coherence item was not found in the composition. This was to exclude the absent coherence item from averaging coherence score.

Data Collection

To collect data, the researcher established an orientation with the raters. The orientation was to clear up the knowledge about cohesion and coherence, to formulate procedures for identifying cohesive ties and scoring the quality of cohesion and that of coherence. Later, both raters received all forty six compositions and the forty-six sets of instrumentations. The raters had a specific period of time to complete all the forms and returned them back to the researcher. The researcher, finally, managed descriptive data such as the characters of cohesion and the characters of coherence and inserted numerical

data such as the quantity of cohesive ties, cohesion scores, and coherence scores from all compositions in a spread sheet program for statistical analysis.

Data Analysis

The researcher analyzed the students' compositions and the data from the instrumentation to answer the first research question which asked about the characters of cohesion and the characters of coherence. To analyze the characters of cohesion, the researcher counted the quantity of cohesive ties and categorized them with respect to their types and subtypes. Then the researcher described the ties, which had been used incorrectly or inappropriately. The ties and their contexts were presented to give the clear picture of how the Thai EFL students used the cohesive ties in their compositions. The scores from cohesion rating scale form represented students' competences on cohesion. To analyze the characters of coherence, the researcher exemplified two compositions which were rated lowest and highest coherence scores and described these two compositions based on each item in coherence rating scale form.

The researcher analyzed the relationship between cohesion and coherence from the correlation between them, which was calculated using Pearson product-moment correlation coefficient (PPMCC or PCC). A result from PPMCC ranges from 0.0 to 1.0 for positive correlation and from -1.0 to 0.0 for negative correlation. Cohen (1988) interprets these values as presented in table 1.

Table 1

The interpretation of the correlation calculated by PPMCC

Correlation	Negative	Positive
None	-0.09 to 0.0	0.0 to 0.09
Small	-0.3 to -0.1	0.1 to 0.3
Medium	-0.5 to -0.3	0.3 to 0.5
Strong	-1.0 to -0.5	0.5 to 1.0

The data to be calculated for the correlation was a set of forty-six cohesion scores and a set of forty-six coherence scores. A set of forty-six cohesion scores consisted of averaged cohesion scores from the two raters rating students' forty-six compositions. For each rater, the cohesion score from a composition were the averaged scores of item (a) to (e) in a cohesion rating scale form. A set of forty-six coherence scores consisted of averaged coherence scores from the two raters rating the students' forty-six compositions. For each rater, the coherence score of a composition were the averaged scores of item (A) to (E) in a coherence rating scale form. The research inputted the two sets of data in a spreadsheet program and by calling PPMCC function, the program carried out the correlation coefficient and the significance level value for the researcher to interpret.

CHAPTER 4

FINDINGS

This chapter presents the study's findings. The first finding is the quantity of cohesive ties. We can see how many cohesive types/subtypes were used the most to the least by the students. The second finding is the characters of cohesion and the characters of coherence. The researcher describes the characters of cohesion based on cohesive errors, which are the misuses and the inappropriate uses of cohesive ties. The texts containing such errors are also presented. The researcher describes the characters of coherence by contrasting two compositions with the highest and the lowest coherence scores. The description follows the criteria of coherent text as listed in the coherence rating scale from. The characters of cohesion and the characters of coherence answer the present study's first research question. The third finding is the Pearson product-moment correlation coefficient value and its interpretation. When the raters extracted cohesive ties, they were able to score how cohesion is used by the students. Also, when they read the compositions, they were able to score how texts are coherent. The cohesion scores and coherence scores were used in the calculation of the coefficient value which is later interpreted to the relationship's strength between cohesion and coherence. This is the answer of the present study's second research question.

Quantity of Cohesive Ties

The present study discovered that the students used many cohesive ties in their compositions. Reference, conjunction, and lexical cohesion were used in all forty-six compositions, substitution was used in nine compositions, and ellipsis was used in five compositions. The following pie charts illustrate the quantity of cohesive ties and subtypes.

The pie chart in figure 2 presents the quantity of cohesive ties in percent. Lexical cohesion and reference were used the most at 44.00% and 43.36% respectively. These two types of cohesive ties were used more than 80% of the total cohesive ties. Conjunction was used at 12.14%, substitution was used at 0.37%, and ellipsis was found at 0.14%. Each type of cohesion was categorized into its subtypes.

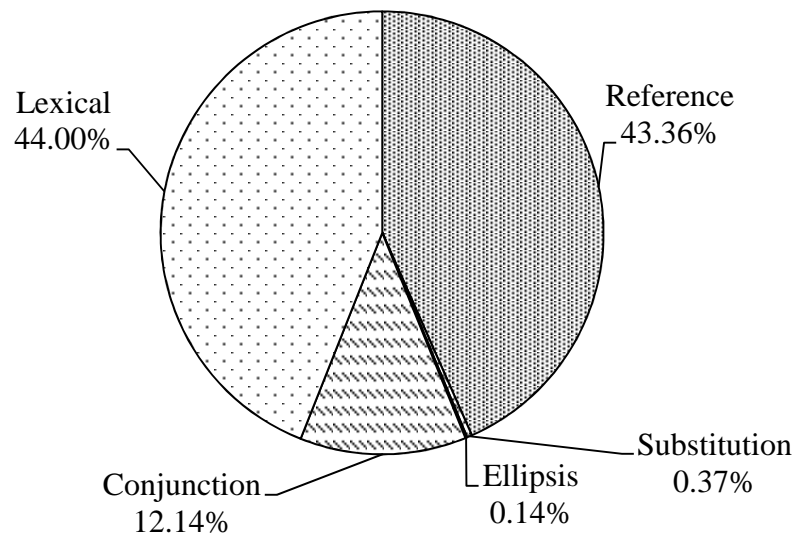


Figure 2. Pie chart presents the quantity of cohesive ties.

The pie chart in figure 3 presents the quantity of lexical cohesion subtypes in percent. The students used reiteration the most at 88.69%, followed by collocation at 9.85% and words that perform both reiteration and collocation at 1.45%.

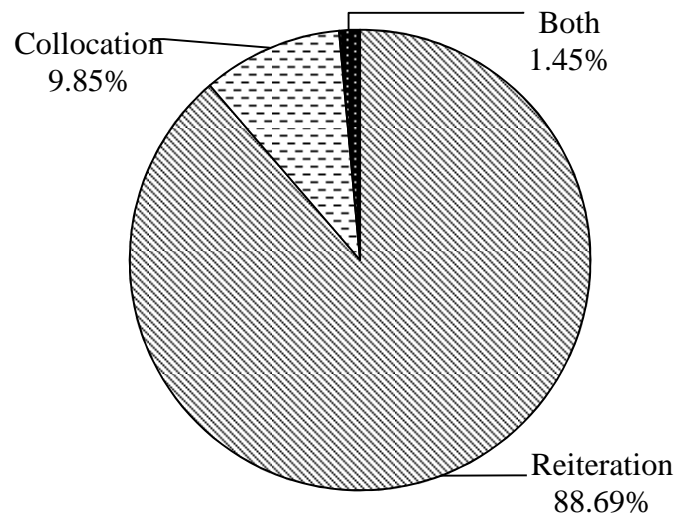


Figure 3. Pie chart presents the quantity of lexical cohesion subtypes.

The pie chart in figure 4 presents the quantity of reference subtypes in percent. The students used personal reference the most at 75.26%, followed by demonstrative reference at 24.32% and comparative reference at 0.42%.

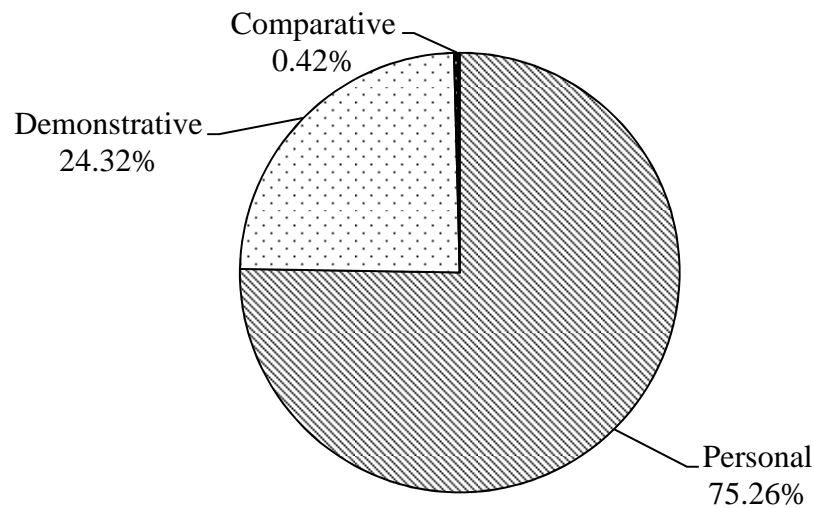


Figure 4. The pie chart presents the quantity of reference subtypes.

The pie chart in figure 5 presents the quantity of conjunction subtypes in percent. The students used causal conjunction the most at 34.02%. They used additive and temporal conjunction almost equally at 24.62% and 23.50%, respectively, and used

adversative conjunction at 17.67%. Other types of conjunction were found the least at 18.80%.

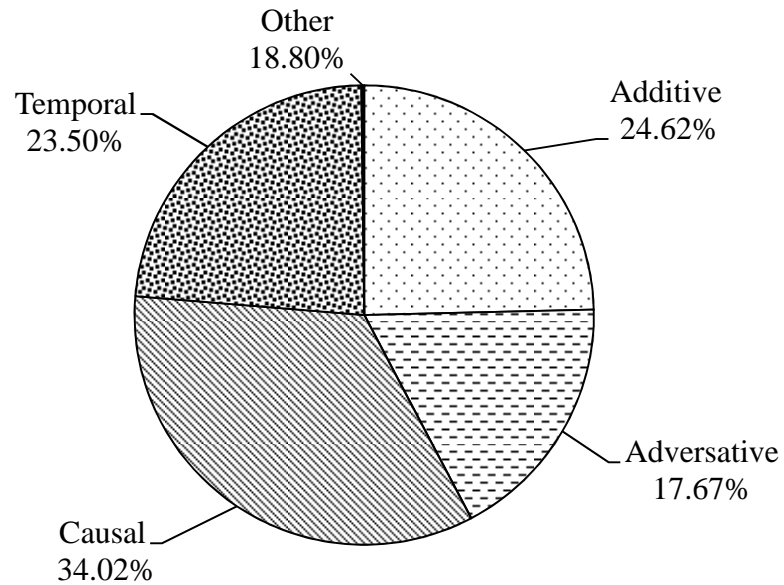


Figure 5. The pie chart presents the quantity of conjunction subtypes.

The pie chart in figure 6 presents the quantity of substitution subtypes. The students used nominal substitution the most at 43.75%, followed by causal substitution at 31.25% and verbal substitution at 25.00%.

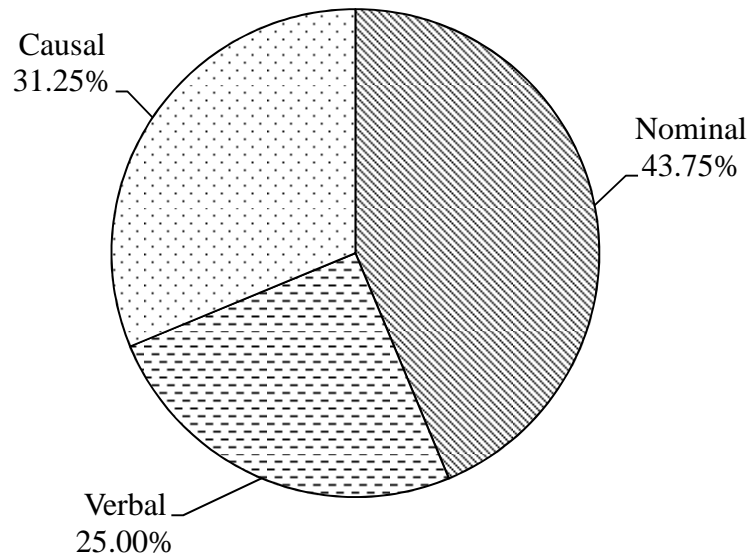


Figure 6. Pie chart presents the quantity of substitution subtypes.

The pie chart in figure 7 presents the quantity of ellipsis cohesion subtypes. The students used nominal and clausal ellipsis equally. None of the students used verbal ellipsis.

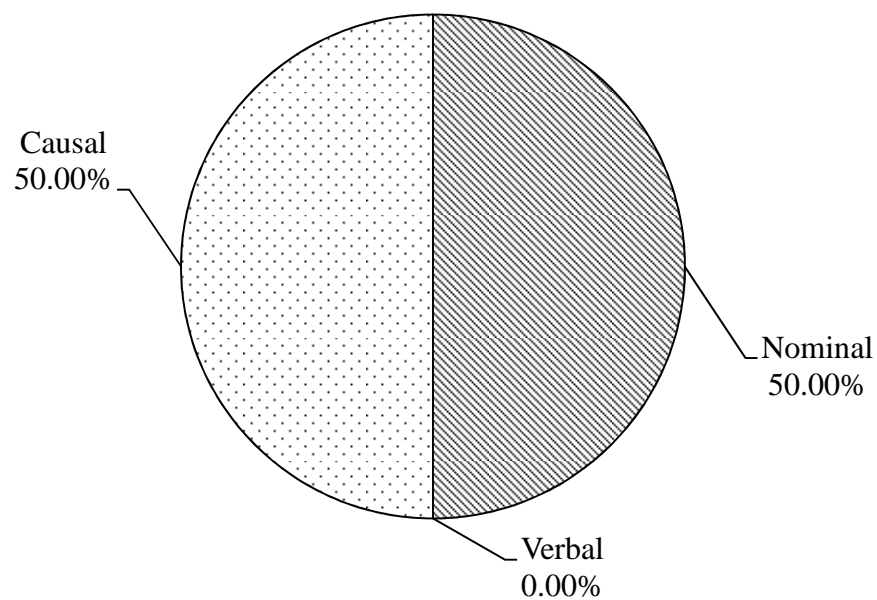


Figure 7. Pie chart presents the quantity of ellipsis subtypes.

Characters of Cohesion

The occurrence of cohesive errors signaled the characters of cohesion. The high or low amount of cohesive errors in a composition resulted in high or low cohesion quality respectively. To present the overview of the characters of cohesion, the cohesive errors were exemplified and described. They were categorized into grammatical and non-grammatical cohesive errors. Lexical cohesion, reference, and conjunction contained both types of cohesive errors. Substitution and ellipsis contained only non-grammatical cohesive errors because they were used in infinitesimal amount, so there was much less chance for both grammatical and non-grammatical cohesive errors to occur.

Lexical Cohesive Errors. The present study discovered grammatical and non-grammatical cohesive errors in the use of lexical cohesion. There was only one type of lexical grammatical cohesive errors found in this study, which was the singular/plural disagreement, and there was one type of lexical non-grammatical cohesive errors, which was the faulty word choice.

A number of the singular/plural disagreements occurred between words and their lexical ties or between the lexical ties and the contexts.

In example (27), a singular/plural disagreement occurred between a word and its repetition. A student used the word “problems” in the first sentence, but used the word “problem” in the second sentence.

- (27) Another reason is she has many better ways to solve her problems. The first way is talk to her husband about causation of his behavior and solves this problem together.

In example (28), a singular/plural disagreement occurred in a series. A student used the word “condoms” in the first paragraph. Then in the second paragraph, she used

both “condom” and “condoms.” The singular/plural disagreements from these two examples could leave the reader with confusions about the quantity of the object.

(28) Nowadays everybody understand that condoms have a useful such as prevent AIDS and pregnancy. However, majority of people do not know many details about using condoms, so some of women are pregnant. Actually, condoms have two of disadvantages.

First, the condom does not prevent from pregnancy. Some of teenagers use condoms while they have sex because teenagers think that condoms can prevent AIDS and pregnancy. Unfortunately, condom does not always prevent pregnancy because it was not manufactured properly; expiration date has passed, or ripped during using it.

A number of singular/plural disagreements occurred between words and their reiterations (e.g. general words, synonyms), or their collocations (e.g. meronyms and co-occurrences).

In example (29), a singular/plural disagreement occurred between a word and its co-occurrence. A student used the co-occurrence word “husband” not quantitatively correspond to the word “women.”

(29) The article shows that Joe Murray believes news from the newspaper that the governor of Maryland freed eight women from prison—six of them convicted of murder—on the grounds that the victims were boyfriends or husband who had been beating them up.

In example (30), a singular/plural disagreement occurred between a word and its collocation. A student used the word “freshmen”, but in the following sentence, she used the word “boy.”

(30) In the university, we have freshmen in every year. Some groups know about disadvantage of smoking so they do not do this behavior.

Conversely, few groups think smoking is fashionable especially the boy who was persuaded from senior and they see this behavior from a freshman orientation activity.

In example (31), a singular/plural disagreement occurred between a lexical tie and its surrounding context. In example (31), a student used the word “problem” after a phrase “*One of,*” which required noun to be plural. This example also shows that the student produced a singular/plural disagreement between the word “problems” in the first sentence and its repetition “problem” in the second.

(31) The present, our country has been face with a lot of problems from the smallest aspect up to the most grievous ones. *One of* problem, it’s about life after marriage.

In example (32), a singular/plural disagreement occurred between a lexical tie and the surrounding context as well as the text’s meaning. A student used the co-occurrence words “man”, “woman” and “women” in the example. The tie “women” does not quantitatively correspond to pronoun “*her*” in the sentence. This is the disagreement between the tie and the context. Other co-occurrence words apart from “women” are singular and even there is a misuse of demonstrative reference “*the,*” but we could still predict from the text’s meaning that the student wanted to exemplify an individual from each of men and women. Therefore, the tie “woman” should be used instead of “women.”

(32) *The* man and woman can have sex together when they get married. The man will have to respect the woman who loves and wants to marry. The women should not have sex with the man who is not *her* partner.

The singular/plural disagreements between the words and their lexical ties raise the doubts about the real quantity of the objects and whether the objects are the same ones as they have been previously referred to in a text.

A number of lexical non-grammatical cohesive errors were often resulted from faulty word selections. This type of errors occurred when the students used lexical ties differently from the norms, which could make texts unnatural to the reader.

In example (33), a student used the word “man,” but selected the co-occurrence lexical tie “female.” This contradicts to the reader’s expectations because when the word “man” is used, the co-occurrence word is expected to be “woman” not “female.”

- (33) I think that condoms can prevent pregnancy because condom is a device made of natural rubber latex, synthetic latex or other objects. It is sticky, stretch, durable and flexible fitting. So, condom is clause that sperm cannot pass away. When man ejaculate condom can block sperm not to pass through enter the uterus of the female has no sperm was not pregnant.

The present study discovered a fault word selection that broke cohesive property in the text. In example (34), a student used the word “child” in the second sentence to presuppose “baby” in the first sentence. The student intended to convey that the baby left by its mother would grow up to be a problematic child in the society. However, using the word “child” in the second sentence causes the absence of this connection because the developmental stage from being a baby to being a child disappeared. If the student repeated “baby” instead of “child” in the second sentence, there would be a clearer connection between the “child” and the “baby” in the first sentence and there would be a stage that link the abandoned baby and the problematic child.

- (34) If the baby was born and the mother can't bring up the baby, they often neglected or run away the baby. Fanally, the child became the tramp child and the most of them often make trouble for the people or social.

The faulty word selections give the unnaturally feeling to the readers. The readers may need slightly over normal efforts to understand the text.

Reference Cohesive Errors. The present study discovered grammatical and non-grammatical cohesive errors in the use of reference. The grammatical cohesive errors were caused by the singular/plural disagreements, the misuses of personal pronouns, and the misuses of determiners.

A singular/plural disagreement. The singular/plural disagreement occurred when the students used personal pronouns not quantitatively corresponded to the presupposed items, and proximity pronouns not quantitatively corresponded to the quantity of the nouns.

In example (35), the singular/plural disagreement occurred between a personal pronoun and its presupposed item. A student used the pronoun “it” to refer back to the word “*condoms*.”

- (35) Sometimes I have seen many organizations to distribute free *condoms*. It is commonly used for nowadays because it is a simple to buy.

In example (36), a singular/plural disagreement occurred between a series of pronouns and the presupposed item. A student used the word “she,” “her,” and “herself” to refer back to “*eight women*” instead of “they,” “their,” and “themselves.”

- (36) ...“the governor of Maryland freed *eight women* from prison six of them convicted of murder on the grounds that the victims were boyfriends or husband who had been beating them up” and I am totally agree with the

governor that freed them because I think she has reasons to murder her husband, she just try to protect herself from the abusive...

In example (37), a singular/plural disagreement occurred between proximity pronouns and the nouns they were used with. A student used the first “these” with the word “*bad time*,” which is singular; hence, “this” should have been used instead of “these.” The second “these” was used with “*problem*.” Again, “this” should have been used instead of “these.”

- (37) She was always upset and suffers from mental stress. She will become afraid of her husband or psychosis. It is difficult help to her feel better. Because it was not easy forgot to these *bad time*. So, I think that husband should stop bad behavior. When they have problem, you should talk about these *problem* and solve it together.

The misuse of personal pronoun. The misuse of personal pronoun occurred when the students incorrectly used subject, object, possessive, and reflexive pronouns.

In example (38), the misuse of personal pronoun type occurred when a subject pronoun was used in the position of an object pronoun. A student used the pronoun “she” instead of the object pronoun “her.”

- (38) When he drunk, he like to reviled and accused that she slep with another man. One morning, he drunk and beated she again.

In example (39), the misuse of personal pronoun occurred when an object pronoun was used in the position of a reflexive pronoun. A student used the object pronoun “them” instead of the reflexive pronoun “themselves.”

- (39) *They* think that is that the best way for diet quickly. *They* do not think about health risk involved with those pills. Nowadays, especially teenagers who want to be proud of them choose this method that is the wrong way.

In example (40), the misuse of personal pronoun occurred when there is a fault selection of an object. A student selected the object pronoun “them” instead of “her.”

- (40) “Most everyone thought it was a fine match. Not long after they were married she began to show bruises on her face and arm” its story happened 40-50 years ago who was told by a priest, and this word showing that her husband always beating them up.

In example (41), the misuse of personal pronoun occurred when a pronoun was used but it did not refer to any items in the text. A student used the pronoun “It”, but it does not refer to any items. The student should use “There are...” instead of “It.”

- (41) She should not use only temper to decide to do something. It have many way solve of problem.

The misuse of determiner. The only determiner that performs cohesive property is “the.” It is used to refer to a particular thing which has been talked about or is known both by the sender and the receiver of the message. The misuse of “the” occurred when the students used “the” in front of the name of a place, in front of a general noun, or in the way that it was not clear which thing the students was referring to.

In example (42), the determiner “the” was used in front of the name of a place. A student used article “the” in front of *Pineywoods*, which is the name of a place.

- (42) They not dare to help this problem when they help a couple who argue, they are scolded . So they think it not their business to help. The woman battery problem is not only in the *Pineywoods* but it occur in Iran also. In Iran, there is a man who denied his love from woman.

In example (43), the determiner “the” was used in front of a general noun. A student used the determiner “the” in front of the noun “*cosmetic surgery*.” The student intended to write about cosmetic surgery in general. It is not necessary to use “the” to

make cosmetic surgery specific. At the beginning of the composition, the student did not use any determiner with “*cosmetic surgery*” but in the second, the third, and the fourth paragraphs “the” was used. When reading these words, the reader probably wondered which specific “*cosmetic surgery*” the student was writing about.

(43) Nowadays, there are a lot of people both women and men who were attracted to *cosmetic surgery*. Most people have turn back to take care more of their look. *Cosmetic surgery* is one of the best choices for people...

...I am the one who wants to change my look to be more beautiful and attractive by *cosmetic surgery*. There are lots of people who I knew that have *cosmetic surgery*...The *cosmetic surgery* is one thing which has a good side and a bad side.

On the one hand, I agree that the *cosmetic surgery* is good...They can help you to be cute like Korean women or superstars... For me, the *cosmetic surgery* is a good choice...

On the other hand, I think that the *cosmetic surgery* is bad...Before you have the *cosmetic surgery* case, you have to prepare your mind to accept that the changes will be with you all of your life...We can see much news on television or newspaper that there are so many people who got effect from *cosmetic surgery*... You can see that the *cosmetic surgery* results in many bad things to you from this reading article. In my view, you have to study a lot about the *cosmetic surgery* before you have it.

... In my opinion, *cosmetic surgery* has both advantages and disadvantages. If you are someone who wants to have some cosmetic

surgery, you have to learn a lot of information about it until you are sure that will not affect you badly...

In Example (44), the determiner “the” was used in a way that it was not clear which specific thing the student wrote about. A student intended to give an opinion about smoking among teenagers at university. At times, she used “the” with “*university*” but at other times she did not. In the first paragraph, the student did not give any information about any university nor did she use the determiner “the” with “*university*”; hence, a reader might assume that the student wrote about any university in general. In the second paragraph, the first “the” was used, however, without any information about a university; the reader had no clue which university the student meant to. Later in the paragraph, the student wrote about the name of a university, therefore, the reader could understand which university after the second “the” the student wanted to talk about. In the last paragraph, the student did not use any determiner with the first “*university*,” but then used the determiner “the” with the last two words of “*university*.” As the reader knows which university the student wrote about, the word “*university*” without the determiner “the” would give a weird feeling to the reader, while the last two words “*university*” with the determiner “the” would give the reader the feeling that the determiner is used correctly.

(44) Nowadays, smoking is a serious problem in academy and *university*... This problem has spread in a *university*...they smoke in public such as stairs, corridors, and school buildings...

In my opinion, you should not smoke in *university*. First, smoking affects young teenagers and freshmen imitate this behavior. In the *university*, we have freshmen in every year...Second, smoking causes criminal problem. When teenagers lighting a cigarette they maybe want to try a new drug such as alcohol...When visitors see smokers in *university* uniform, it is a

bad attitude to *university*...Two months ago, I saw few smokers lighting a cigarette opposite Srinakharinwirot *university* Prasarnmit demonstration secondary School...It causes people who saw them think badly about the *university*.

In conclusion, smoking in *university* has many problems. It affects freshmen maybe imitate this behavior, It causes criminal problem, and it destroys reputation of the *university*...The *university* should persuades smokers play music or sport, show serious effects of smoking, and have trip for smokers visit morbid patients who were suffered from smoking...

The non-grammatical cohesive errors were caused by the use of a reference tie to refer to multiple items and the use of a reference tie to refer to none.

A reference tie is used to refer to multiple items. This type of non-grammatical cohesive errors commonly occurred when the students used personal pronoun. When the pronoun was referred to multiple items in the text, the reader had to take more effort to interpret the meaning of the text.

In example (45), a student used a personal pronoun “He” and its object form “him” to refer to *Nichkhun* and the *motorcycle driver*. The reader needed to pause and decide whom exactly the student was referring to.

- (45) The important thing after the accident was, *Nichkhun* was really concerned about the *motorcycle driver*. He got off a car to see him immediately and didn't escape anyhow.

In example (46), a student used the personal pronoun “they” and its possessive form “their” to refer to women and husbands. The first and the second “their” clearly refer to the “*women*” because of the words “*husbands*.” The third “their” clearly refer to the word “*husbands*” because of the word “*wives*.” In the third sentence, however, the

use of the personal pronoun “they” and “their” confuses the reader because they were used to refer to both women and husbands in the previous sentences. Therefore, the reader is unsure whom the student referred the pronouns to. It could have been either the *women*, or the *husbands* or both groups.

- (46) I think these *women* try to stop a problem with understanding but it cannot a good result with their *husbands*. Their *husbands* are not having a reason to understand with their *wives*. They use their emotion to solve problem, for example, when they angry or drink a lot of alcohol, they do not interest other feeling.

A reference tie is used to refer to none. This type of non-grammatical cohesive errors occurred when the reader could not recognize which item the students referred the reference ties to.

In example (47), personal pronouns were used without a reference or antecedent. A student used the pronouns “he” and “she” and their object and possessive forms in the text, but the student did not give any information about a male or a female in the previous sentences. Therefore, the reader needed to guess from the word “*couple*” that “he” and its other pronoun forms referred to a husband, and “she” and its other pronoun forms referred to a wife. The guessing requires the reader to put more effort to interpret the meaning. It could interrupt the flow of reading and break the text’s continuity.

- (47) Married life it is said that married life is always happy, but actually it is not happy and perfect as we think. We live together for a long time. The offensive characteristics reveal such as a quarrel, an abuse, etc. Those are causes of various problems in family. As I read narration from Pineywoods. I felt deeply affected. It is about a *couple*. Her husband injured her. Her body was covered with bruises. So she decided to kill him

by using a sharp axe split his head right half in two. The sheriff wasn't prosecuted her and let her go. After I read this story, I disagree with the judgment of the sheriff. Then...Do you agree with me?

In example (48), a student used a demonstrative without a reference or antecedent. The student used the demonstrative pronoun "those" with the word "*symptoms*" which suggested that the student must have mentioned some symptoms earlier in the text. However, the student had written about only one symptom which is the burping. Therefore, using "those" with "*symptoms*" left the reader wondering which other symptoms the student was writing about.

(48) First of all, I think carbonated beverages are not suitable for people who have flatulence like me because it makes you burp and burps and make those *symptoms* worse.

Conjunction cohesive errors. The present study discovers conjunction cohesive errors in the students' compositions. The errors were categorized into grammatical and non-grammatical. The grammatical cohesive errors occurred when the students used inappropriate conjunction ties, used conjunction ties when none was needed, and mixed ordinal numbers with adverbs.

Inappropriate conjunction ties. Inappropriate conjunction ties occurred when the students selected conjunction ties, but the ties were not suitable to the meanings of the surrounding sentences. Other types of conjunction ties might need to be replaced.

In example (49), a conjunction cohesive error occurred because an inappropriate conjunction tie was used. A student used additive conjunction tie "and" instead of the adversative conjunction tie "but." The first part of the sentence states that the laws equalize both genders, while the second part states that in fact the society does not look at

both genders equally. This shows that the second part of the sentence contradicts to the first part; therefore, the conjunction tie to be used here should be “but” not “and.”

- (49) The laws help women get equality likewise the men, and I think that our country ignores and insignificant about the women because we were used to with husband beaten his wife and look that these story it is normally.

In example (50), a conjunction cohesive error occurred because an inappropriate conjunction tie was used. A student misused the conjunction tie “but,” because the last part of the sentence is the cause of the first part; therefore, the causal conjunction tie “because” should be used.

- (50) They must study hard, but they hardly get a high score.

In example (51), a conjunction cohesive error occurred because an inappropriate conjunction tie was used. A student used the causal tie “because,” when the meaning of the sentence fit with the additive conjunction tie “and” or “for example.” In the first part of the text, the student stated that the Thai teenagers obsessed about Korean cultures. In the second, the student stated that due to the obsession, the teenagers decided to purchase some goods without thinking about the needs. This shows that the student added details to illustrate the reader of how the teenagers lost their conscious when they obsessed about Korean culture. Therefore, the additive conjunction tie “and” or “for example” should be used instead of the causal conjunction tie “because.”

- (51) Initially, Thai teenagers always are crazy everything about Korea such as singers, Korean series, Korean culture and they forget the Thai culture and didn't support Thai entertainment anymore. Subsequently, some Thai teenagers especially in young teenager (13-16 years) could lost their conscious in this case because if they find a photo, T-shirt, CD music, T.V.

series DVD, ticket concert or everything about their favored artist appear on it, they will buy all of that stuffs without analyze.

In example (52), a conjunction cohesive error occurred because a temporal conjunction is used. A student used the temporal conjunction tie “Then”, when the additive conjunction “in addition” was needed. In the first part, a student said that people should be educated about violence in order to reduce it. Later, the student suggested that the society should not ignore the family problems. The latter information gives more information to the first. Therefore, the tie that seems to be suitable here is the additive conjunction “and” or “in addition.” It is noted that the student incorrectly spelled the word “*problems*” in the example.

- (52) Everybody in society should teach and reduce violence in order to prevent the *oblems*. Then, society should not ignore family problems and impose more serious law on offenders.

A conjunction tie is used when none is needed. This type of conjunction cohesive errors occurred when the students used conjunction ties, but when the sentences’ meanings were considered, none of the tie should be used.

In example (53), the error occurred because an additive conjunction tie was used when none of the ties was needed. A student used the conjunction tie “and” when the sentences did not need any. In the first part of the example, the student stated that there were many types of news. In the second part, the student said that a type of the news is family problems, which is the elaboration of the first part. Therefore, it is not necessary to use the additive conjunction tie “And” and none of cohesive ties should be used here.

- (53) The media is very important for nowadays. It can make us know there are many different types of news. And one of the most common is the

problems of family. If asked what the main problems that often occur with many couples who are married.

In example (54), the error occurred when an adversative conjunction tie was used when none of the ties was needed. A student used adversative tie “On the other hand” at the beginning of the second paragraph, but the meaning of this paragraph does not contradict to that of the first paragraph. Moreover, none of cohesive ties is needed here. Therefore, the student used the adversative tie unnecessarily.

(54) I am the one who wants to change my look to be more beautiful and attractive by cosmetic surgery. There are lots of people who I knew that have cosmetic surgery. Most of them look more beautiful or better than the past, so it was more attractive to me to choose cosmetic surgery to change my look. In my opinion, every blessing has both advantages and disadvantages. The cosmetic surgery is one thing which has a good side and a bad side.

On the one hand, I agree that the cosmetic surgery is good because the surgeon’s knife can change you to be a new good-looking one. They can help you to be cute like Korean women or superstars.

In example (55), the error occurred when a casual conjunction tie is used when none of the ties was needed. A student used the casual conjunction tie “So,” but when the sentences’ meanings are considered, the sentence that follows the tie is not the result of the previous sentences. What the student wrote after the tie is another property of condoms, the important one that promote contraception. Therefore, it is not necessary to use any cohesive ties here. The student just listed the properties of condoms. One should note that the student misused the word “*clause*” and “clog.”

- (55) I think that condoms can prevent pregnancy because condom is a device made of natural rubber latex, synthetic latex or other objects. It is sticky, stretch, durable and flexible fitting. So, condom is *clause* that sperm cannot pass away. When man ejaculate condom can block sperm not to pass through enter the uterus of the female has no sperm was not pregnant.

In example (56), a student used the temporal conjunction tie “then,” when the sentences did not need any ties. The student wrote that she disagreed with the sheriff’s judgment, and she asked if the reader agreed with her. There is no temporal relationship between the two sentences; therefore, using “then” is incorrect and none of cohesive ties are necessary here.

- (56) After I read this story, I disagree with the judgment of the sheriff.

Then...Do you agree with me?

The mixture of ordinal numbers with adverbs. This type of error was found only once in the students’ compositions and it could be just a mistake.

In example (57), a student mixed ordinal numbers with adverbs. The student used the temporal conjunction ties “first”, “secondly”, and “finally.” The word “first” is ordinal number, but the words “secondly” and “finally” are adverbs. To correct the series of the temporal ties, the student could use “first,” “second,” and “last” or “first,” “next,” and “last.”

- (57) First, I think that women who killed their husbands did not guilt. Murder is illegal, but in this case that women must killed ...

Secondly, I think the governor release six murderesses out from the prison because they think that six murderesses cannot find a way to stop this problem about...

Finally, I think this story show about “a problem of law about violence on women” and “a problem about battery without reasonless and misunderstanding.”

The non-grammatical cohesive errors occurred when the students used too many conjunction ties in a sentence, used conjunction ties too distance from the presupposed items, and did not give enough detail to use the ties.

Too many conjunction ties in a sentence. This type of errors occurred when the students used more than one causal conjunction tie in a sentence. Such use might be correct in terms of grammar and meanings, but the reader may have to put extra efforts to understand.

In example (58), a student used the casual conjunction ties “because” twice in a sentence. First, to state the reason why she agreed with the action of the woman and second, to state the reason why the woman did what she did. The combination of the two causal events required the reader to put more efforts to understand. The student needed to fraction the sentence into two to ease the reading.

(58) I agree with her performance that she killed her husband because I think she did that because she has been injured before.

In example (59), a student used the causal conjunction ties “so” and “because” in a sentence. The student wrote about the motivations of the crime before and after the clause about the murder. Therefore, the student used both “so” and “because” to connect the sentences. To ease the reading, the student might need to rearrange the positions of the motivations and the clause about the murder and use only one conjunction tie.

(59) Damage to the body and mind for a long time it may be that she was unreasonable and anger. So, that bring to the murder was in the end because she could not bear to wait longer.

A conjunction tie is used among inadequate sentences' meanings. This type of errors occurred when a student used a conjunction tie, but it seems that the sentences' meanings had not yet been adequate for the tie to be used. The student might have just missed some information to connect the whole content. One or more sentences might be needed to bridge the gap and gave the feeling that the tie completely fit in between those sentences.

In example (60), a student used the casual conjunction tie “because,” but some information has been missed and the tie “because” has not yet fit in the text. The student wrote that Nichkhun was drunk because he had alcohol over the limit of the Korean law. In fact, when a person is drunk, it is because there is a certain amount of alcohol more than the capability of the body to maintain consciousness, not that the amount of alcohol is over the limit of the law. The student missed the link between being drunk, and breaking the law. The information about being arrested could have been added, which related to the violation of the law and the sentence could have been “Nichkhun was drunk and he was arrested because he had alcohol over the limit allowed by the law.”

(60) News reported said that Nichkhun was drunk because he had an alcohol over the limit of Korean law.

In example (61), a student used the causal conjunction tie “because,” but the text's meaning is not logical because some information has been missed. The student stated that condoms were used for contraception and gave the explanation that because condoms were made of latex or other material. The explanation does not answer why such material could be used for the contraception. To make the text more logical, the student could add some scientific fact about the materials made for condoms.

(61) I think that condoms can prevent pregnancy because condom is a device made of natural rubber latex, synthetic latex or other objects.

A conjunction tie is used too far from its presupposed item. This type of errors occurred when a student used a conjunction tie to connect sentences, but the sentences are too distance apart. As a result, it was difficult for the reader to make a connection between the sentences and the reader might feel that the text is lack of continuity.

In example (62), a student used the temporal conjunction tie, while the sentences that needed the tie were written far from each other and, as a result, caused a difficulty for the reader to make the connection between the sentences. The student used “after that” twice in the example. The first “*After that*” is used appropriately, which ordered two events: Two actors being photographed having an affair; and these two actors’ confession and apology. The student, then, wrote her opinions about this incident in multiple sentences and paragraphs before using the second “after that,” and followed by another incident: both actors’ lovers knew about them having an affair. The third incident is in a great distance from the first two and the reader has to look for the initial incident in order to connect the last incident to. This stops the flow of reading and the reader may feel there is less continuity of the text.

- (62) Kristen Stewart and Rupert Sanders were photographed kissing and hugging out side the car on July 17. *After that*, they admitted that they were wrong and apologized for what happened. When I first heard this news, I cannot believe that she had cheated on him. In my opinion, I disagree with behavior of Kristen and Rupert because it will affect to their partner about mind and morality.
- The mind, affairs can damage the trust in a relationship. It makes them feel disappointed, despair and loses of trust. After that Robert and Liberty heard news that Kristen has affair with Rupert. They are cheating to

Robert and Liberty. They hurt Robert and his wife of Rupert Sanders feelings.

Substitution and Ellipsis Cohesive Errors.

The present study discovered substitution and ellipsis cohesive errors in the students' compositions, but all of them were non-grammatical cohesive errors. The non-grammatical cohesive errors occurred when the students used substitution and ellipsis ties without any presupposed items.

In example (63), a student used the nominal substitution "one," but no item was substituted. No items within the preceding sentence could be linked to "one." The reader may be able to guess that "one" refers to a group of people, but it is difficult to specify which group.

(63) For me, male is the sexual which should help and protect the women and the poor one, they must not injure them. It would be the worst thing for men if they injured the poor one.

In example (64), a student used the verbal substitution "don't," but it does not substitute any item in the text. The reader may guess that the student used the verbal substitution to refer to the verb "explain" because there is the lexis "explanation" as a clue.

(64) If they tell you that it is good, you must follow them. Sometimes you want to know the *explanation* that how it is good or useful, but they don't.

In example (65), a student used the clausal ellipsis. A whole clause was omitted, but there was no clear clue for the reader to understand what has been omitted. The student wrote "I'm too," but it is difficult to understand what the student intended to convey. From the context, the student might convey that she is a teenager and friendship is also the most important for her.

- (65) The most teenagers extremely give precedence to their relationship with other people around them. And the friendship is the most important for teenagers. I'm too.

Characters of Coherence

The characters of coherence in this study were illustrated by comparing the lowest coherent composition with the highest coherent composition. The illustration of the selected compositions' was based on five aspects with respect to Chiang (1999): the effectiveness of the introduction and the conclusion; the relevance of ideas to the topic; the elaboration of ideas; the division of paragraphs; and the composition's overall point of view. Plenty of coherence weaknesses were found in the lowest coherent composition, and in contrast plenty of coherence strengths were found in the highest coherent compositions. Many compositions contained various proportions of coherence weaknesses and strengths.

Composition 1 was rated the lowest in coherence score. It is presented here to illustrate coherence weaknesses. This composition is a response to the article "A Sharp, Beribboned Message to Abusive Husband."

Composition 1

Violence is not Our Culture

The present, our country has been face with a lot of problems from the smallest aspect up to the most grievous ones. One of problem, it's about life after marriage. This problem can be caused by other problems such as domestic violence, drug and so on. Similarly, in the story is about a wife tried to protect herself from her husband who abused again and again when he drunk. In my opinion, I disagree with violence behavior of them because it's not a good way to solve a problem.

I think the story is a dilemma problem because the sheriff investigated what

everybody already knew that she made a mistake but nobody prosecuted her mistake. Everyone would like to say with her to take her feel better. I know it's none of their business but they should suggest and assist to deserve the right way. Whether, she should divorce decision or conduct the prosecution in such a way as to achieve justice. For instance, in my village has one family like the story. They have four people in family. There are father, mother, and two daughters who are young children. Erewhile, father likes to socialize with his coworkers after working ends. He had drunk a lot before he come back home. He had often quarreled with his wife when he arrived home. Sometimes he injured her. But now, this family is a very warm & loving family because they are talking a lot about their problem. My mother asked them. They said 'they don't want to be a bad role model for their daughters. I think they choose a good way to solve a problem instead they decided to attack or make a mistake that bring about to homicide.

In conclusion, as you can see. Now, domestic violence is an important problem in Thailand. Describe my opinion as seen from the newspaper. A lot of news had domestic violence that a lot of people don't think long-term any more. I think last thing we should have a pure conscience. If you think only of yourself, you'll only destroy yourself same this object and spend the rest of your life in prison.

The introduction and the conclusion in the composition are not efficient. The introduction consists of two topic sentences. The first topic sentence is the underlining domestic problem among other problems in Thailand. The second topic sentence is the writer's disagreement to the actions of the couple from the article. It is also found that the introduction is not well written. It does not contain any controlling ideas, which prompt the reader to the core content of the writing. This results in the unclear clue to the reader about the point to discuss next. In the conclusion paragraph, the writer concludes that

domestic violence is an important problem in Thailand, whereas none of the previous content has discussed the severity of the domestic violence in the country. The rest of the conclusion paragraph is the opinion of the writer, which does not relate to the topic sentence. This means the conclusion does not perform its function, which the main argument might need to be restated and the writing should give definite sense of closure.

The ideas in the composition are not relevant to the topic. From the topic, the readers would expect a discussion about violence and the Thai culture. However, the introduction proposes only problems of the country and contains the writer's opinion about the article she had read. The body contains the writer's disappointment about the neighbors of the couple in the article and exemplifies domestic violence in the writer's village. The conclusion part underlines domestic violence as a crucial problem and, again, contains the writer's opinion toward people in the society. None of the content discusses the connection between violence and the Thai culture. Therefore, the ideas in the composition fail to meet the reader's expectations.

The ideas in the composition are not elaborated. Many ideas are introduced but then left without supporting details, causing discontinuous reading and leaving no important content for the reader. In the introduction paragraph, the writer introduces the problem of life after marriage, but there is no clear explanation about how such a problem is caused by domestic violence and drugs as stated in the entire piece of writing. In the body, the writer wrote about people's actions, but no detail leads the readers to the example about the problem in the writer's village. In the conclusion, there is no detail that supports the statement "domestic violence is an important problem in Thailand." The lack of details causes the discontinuity of ideas and spoils textual coherence.

The division of paragraph is not justifiable in terms of content. There are three paragraphs in the composition: introduction, the body, and the conclusion. As said above,

the introduction and the conclusion are not effective. Ideas throughout the composition are not relevant to the topic. There is no linear flow of the story. Points disperse over the writing. Hence, the readers are left bewildered and cannot catch the exact main idea the writer wants to convey.

The composition's weaknesses stated above results in the unclear overall point of view. All weaknesses have made it difficult for a reader to see this composition as a united piece of writing and it is difficult for the reader to understand what the student wanted to convey. This composition gained the lowest coherence score, which means it is the least coherence among the students composition.

Composition 2 was rated the highest in coherence score. It is presented here to illustrate the coherence strengths. This composition is also a response to the article "A Sharp, Beribboned Message to Abusive Husband."

Composition 2

How to Prevent the Domestic Violence

According to "Motivating Factors Accounting for the Murder of Husbands by Their Wives" research was written by Pasahaee Sitdhisoradej, in 1999, the substantial motivating factor that caused wives committed murder their husbands was domestic violence – the behavior that use the force to attack both mind and body in their family.

"A Sharp, Beribboned Message to Abusive Husband" was identical issue as the research. The story was about a young woman who married a man. Everyone thought that they were a perfect couple. However, he abused her. Her neighbors knew about it but they did nothing to help her. Finally, she killed her husband, but she was not punished. After that, she remarried, and the same thing happened. I disagree with the woman behavior because she did not try to solve the problem in her family. The problems happened again and again, and it became to accumulated issue.

I read "How to Prevent the Domestic Violence" in families online magazines from <http://www.familiesonline.co.uk/>. In order to prevent the domestic violence, a couple should do the following methods: First of all, they should do activities together with love and satisfaction. Second, they should adapt their attitude when they think together. Third, they must not speak loudly when arguing because the louder they speak, the angrier they become. They must not speak impolitely because it can lead to aggressive behaviors. They should not repeat the problems they have already discussed. They should not touch each other because female has long nails whereas male has more energy, and this causes physical abuse. In addition, if they have the difficulties in living together, they should see psychiatrists because they can advise and help them to solve such problems. Finally, neighbors and others should advise them to behave well and help them to solve the problems.

In conclusion, a couple can prevent the domestic violence by doing activity together with love, adapting their attitude when they think together, speaking politely when they argue, and seeing psychiatrists when they have conflict. Moreover, the neighbors and others should help them. For example, if they see the husband attack his wife, they should call to the police officer and help her.

The introduction is sufficient to draw attentions from the readers and the conclusion is efficient to give a definite sense of closure. Composition 2 has two paragraphs of introduction. In the first paragraph, the writer referred to an article explaining that the cause of wives murdering husbands is started from domestic violence. In the second paragraph, the writer referred to the article about a case of a wife murdering husband and proposed that it was also caused by domestic violence. The two introduction paragraphs prompt the readers that to prevent the murder, domestic violence need to stop.

The body of the composition corresponds to this prompt. This showed that the introduction is efficient. In the conclusion, the writer has stressed the solutions to prevent domestic violence as they have been discussed in the body. This means the conclusion perform its function well.

The ideas of the entire composition are strongly relevant to the topic. The topic suggests the readers that the solutions to prevent domestic violence would be discussed in the composition. And they are discussed. Hence, the reader's expectations, when read the topic, have been met. The expectations were fulfilled by all the ideas in the composition. The ideas are relevant to each other and their relationship is clear. The relevance of all ideas to the topic and among the ideas themselves generates the coherence in this composition.

The composition's division of paragraphs is justifiable. The second paragraphs, however, should be the first paragraph, because the first article the writer had read should be briefed before referring the other article that suggests the cause of the murder in the first article. The introduction would be more logical and less marked with this aligning. However, the current order of paragraphs in the introduction part is still very easy for a reader to understand. For the rest of the composition, all paragraphs are in the place where they should be. The main ideas of the composition are elaborated in the body and they were concluded in the last paragraph.

Composition 2 has clear over all points of view because the composition has strengths as stated above. As such, a reader would have continuous senses reading from the topic to the very end of the composition. This has made composition 2 has coherence.

Cohesion and Coherence Scores

Cohesion and coherence scores were used to calculate the correlation between cohesion and coherence. The two raters used cohesion and coherence rating scale forms to rate each of forty-six composition. Therefore, each composition yield four values: cohesion scores from the two raters and coherence scores from the two raters as presented in table 2.

Table 2

Cohesion scores and coherence scores

Composition No.	Rater 1		Rater 2	
	Cohesion	Coherence	Cohesion	Coherence
1	3.50	4.00	3.50	2.60
2	3.25	4.40	3.00	3.20
3	3.67	2.80	4.00	2.80
4	5.00	4.80	4.00	4.00
5	4.67	2.40	4.00	3.20
6*	4.50	3.00	4.50	4.80
7	3.00	2.80	3.75	3.20
8	3.60	3.60	4.00	3.80
9	3.33	3.20	3.67	3.00
10*	3.67	2.60	4.33	4.40
11	4.00	3.20	4.00	2.60
12	4.67	4.40	4.67	5.00
13	3.80	4.00	3.20	2.60
14*	2.25	1.40	3.25	4.80
15*	3.33	1.20	3.33	3.60
16	4.00	2.60	4.00	4.20
17	4.33	4.60	4.00	3.40
18	4.00	5.00	4.00	4.80
19	3.75	5.00	3.00	3.40
20	4.33	5.00	5.00	5.00

Composition No.	Rater 1		Rater 2	
	Cohesion	Coherence	Cohesion	Coherence
21	4.00	3.60	3.75	3.20
22	5.00	5.00	4.33	3.40
23	3.00	1.40	3.67	2.75
24	5.00	5.00	4.67	5.00
25	4.67	3.20	4.33	3.20
26	3.50	5.00	4.00	4.40
27	5.00	4.60	4.00	4.20
28	3.67	4.80	4.00	5.00
29*	5.00	5.00	4.67	2.40
30	5.00	5.00	5.00	4.60
31	3.67	2.00	3.33	3.00
32	4.33	4.80	4.33	5.00
33	4.33	5.00	4.00	4.60
34	4.33	3.40	4.67	4.80
35	4.67	2.60	3.67	3.40
36	3.67	2.60	3.67	3.80
37	4.67	4.80	4.00	3.20
38	4.00	4.20	4.33	4.60
39	4.33	3.20	4.00	4.00
40	4.00	4.60	3.67	4.00
41	5.00	3.80	3.67	3.80
42	5.00	5.00	4.67	4.40
43*	4.50	4.80	3.75	3.00
44	4.67	4.40	4.00	3.40
45	4.67	2.20	4.67	3.20
46	3.00	4.40	4.00	2.80

The researcher used these data to calculate the inter-rater reliability. The inter-rater reliability shows the degree of agreement between raters. The low inter-rater reliability means the raters scored cohesion or coherence differently on a number of

compositions. These compositions should be excluded from the calculation of the correlation to maintain the inter-rater reliability at the accepted level. The present study found that the inter-rater reliability on cohesion is acceptable at $r > 0.5$, but the inter-rater reliability on coherence was very low. This means there is a number of compositions that the raters scored coherence contrastingly. These compositions have asterisk in table 2 and they were excluded from the calculating of the correlation between cohesion and coherence. After the exclusion, the cohesion's inter-raters reliability was $r = 0.56$ with a significant level at $\rho = 0.0002$ and the coherence's inter-raters reliability was $r = 0.53$ with a significant level at $\rho = 0.0005$. The r values show that the two raters have significantly high degree of agreements scoring cohesion and coherence.

Relationship between Cohesion and Coherence

The relationship between cohesion and coherence was analyzed by using statistical mathematic to calculate the correlation between them. The researcher averaged each composition's cohesion scores and each composition's coherence scores from the two raters. Therefore, there are forty values of cohesion scores and forty values of coherence scores in total, excluding the six compositions with low inter-rater reliability. The values are presented in table 3.

Table 3

Averaged cohesion scores and averaged coherence scores

Order	Composition No.	Averaged Cohesion Scores	Averaged Coherence Scores
1	1	3.50	3.30
2	2	3.13	3.80
3	3	3.83	2.80
4	4	4.50	4.40
5	5	4.33	2.80
6	7	3.38	3.00

Order	Composition No.	Averaged Cohesion Scores	Averaged Coherence Scores
7	8	3.80	3.70
8	9	3.50	3.10
9	11	4.00	2.90
10	12	4.67	4.70
11	13	3.50	3.30
12	16	4.00	3.40
13	17	4.17	4.00
14	18	4.00	4.90
15	19	3.38	4.20
16	20	4.67	5.00
17	21	3.88	3.40
18	22	4.67	4.20
19	23	3.33	2.08
20	24	4.83	5.00
21	25	4.50	3.20
22	26	3.75	4.70
23	27	4.50	4.40
24	28	3.83	4.90
25	30	5.00	4.80
26	31	3.50	2.50
27	32	4.33	4.90
28	33	4.17	4.80
29	34	4.50	4.10
30	35	4.17	3.00
31	36	3.67	3.20
32	37	4.33	4.00
33	38	4.17	4.40
34	39	4.17	3.60
35	40	3.83	4.30
36	41	4.33	3.80
37	42	4.83	4.70

Order	Composition No.	Averaged Cohesion Scores	Averaged Coherence Scores
38	44	4.33	3.90
39	45	4.67	2.70
40	46	3.50	3.60

The statistical calculation revealed the correlations between cohesion and coherence. The present study found that the correlation between cohesion and coherence gave the value of $r=0.48$ with a significance level at $\rho = 0.002$, which suggested that there was a statistical medium correlation between cohesion and coherence. This means the relationship's strength between cohesion and coherence is medium based on the Cohen (1988)'s interpretation.

CHAPTER 5

CONCLUSION AND DISCUSSION

This chapter presents a brief summary of the reasons why the present study was conducted, followed by a brief summary of the study's findings. Next, it discusses the findings concerning the quantity of cohesive ties, the characters of cohesion, the characters of coherence, and the relationship between them. Then, it points out the limitations of the study, and finally, the chapter presents the recommendations for further research on cohesion and coherence.

Conclusion

Researchers in the field of language teaching are looking for the factors that distinguish good and poor writing quality. Among these, they study cohesion, coherence, and overall writing quality. Cohesion is the most concrete factor, while overall writing quality is the most abstract, and coherence is in between. The concrete property of cohesion has made it suitable for many researchers to use cohesion as an indicator to grade coherence or overall writing quality.

To verify that cohesion can be used as the indicator, the researchers study the relationships between cohesion and coherence, or between cohesion and overall writing quality. As for cohesion, the researchers commonly focus on the quantities of cohesive ties. On the other side, coherence and overall writing quality are commonly assessed based on their qualities, which requires raters to read compositions and score them based on specific criteria or score them holistically. Then, the researchers apply statistics to calculate for the correlation between the quantities of cohesive ties and the scores of coherence or the scores of overall writing quality. Later, the correlation value is interpreted to the relationship's strength between cohesion and coherence or cohesion and overall writing quality. However, the previous studies (Bennui, 2008; Chen, 2008;

Chiang, 1999; Crossley & McNamara, 2010; Dueraman, 2006; Khalil, 1989; Khongput, 2010; Liu & Braine, 2005; Pongsiriwet, 2001; Witte & Faigley, 1981) which used this method did not reveal unanimous results. When studies disagree on the results, there must be some incorrectness in the process of the studies. As such, the actual relationships between cohesion and coherence/overall writing quality have not yet been discovered.

The researcher of the present study has two assumptions about the cause of the results' fluctuations in the previous studies. First, the statistical mathematics which is used to calculate the correlation is linear, but the quantity of cohesive ties does not need to linearly correlate with coherence or with overall writing quality. Therefore, when this statistical mathematics is applied, the calculation might not yield the true correlation result. Second, the previous studies have been conducted on various students' language backgrounds. In the studies conducted with native speakers, the students could have used cohesive ties correctly and effectively because it is their first language. The amount of the ties found in their compositions could have been an indicator to show how well the sentences were connected and how it resulted in textual coherence and high overall writing quality. In contrast, in the studies with non-native speakers, we cannot be ensured that the students used cohesive ties correctly and effectively. When the amount of cohesive ties is assumed to be indicator of textual coherence and overall writing quality, the results fluctuate because both textual coherence and overall writing quality could depend heavily on the correctness and effectiveness of the use of cohesive ties. As such, to determine the relationship between cohesion and coherence or cohesion and overall writing quality, it is necessary to look at the quality not the quantity of cohesive ties.

The present study has chosen to investigate the relationship between the quality of cohesion and the quality of coherence. The researcher used sixty-four compositions written by twenty-three undergraduate students from Srinakharinwirot University. The

compositions were sent to the raters for assessment of the quality of cohesion and the quality of coherence. For cohesion, the raters extracted the ties from the compositions. The ties were counted and categorized into five cohesion types based on Halliday and Hasan (1976). The present study discovered that lexical cohesion and reference were used the most at almost ninety percent in total. Both of them were also used almost equally. Conjunction was used less at about twelve percent. Substitution and ellipsis were used the least at less than one percent in total. The raters later looked at each type of cohesive ties and determined how the ties were used.

A number of cohesive errors were found and have been categorized into grammatical and non-grammatical errors. When the students used lexical cohesion, reference, and conjunction, they produced both grammatical and non-grammatical errors. But when they used substitution and ellipsis, they produced only non-grammatical errors. These errors were the information for the raters to score the quality of cohesion using a cohesion rating scale form.

For coherence, the raters scored the coherence of the compositions using a coherence rating scale form. Two compositions with highest and lowest scored were exemplified in the study to present the contrast between good and poor coherent compositions. Other compositions were scored somewhere in between.

When the scores were given based on the qualities of cohesion and coherence, the relationship discovered was the actual relationship between the qualities of the two features. The statistical calculation revealed that the scores of cohesion have medium correlation with the scores of coherence according to the interpretation suggested by Cohen (1988). In other words, there is a medium strength of relationship between cohesion and coherence.

Discussion

The present study used the quality of cohesion to investigate the relationship between cohesion and coherence. The focus on the quality of cohesion rejects the assumption that the higher quantity of cohesive ties a text contains, the higher text coherence it achieves. Because we suggested that such assumption may not be applicable in EFL context which there are concerns about the optimum amount of cohesive ties and the students' ability to use cohesive ties in their writings. By using the quality of cohesion in the present study, the relationship's strength found between cohesion and coherence should be the actual relationship between them.

In the procedure to investigate the relationship, the present study had opportunity to discover the characters of cohesion which provided information on the amount of cohesive ties and cohesive errors in the students' compositions. The amount of cohesion found in the present study corresponds to those found in the previous ones. Liu and Brain (2005), Abusaeedi and Asghar (2010) and Chen (2008) also found that lexical cohesive ties were used the most, followed by reference, and conjunction. Other previous studies' results partially correspond to the present study, for example, Khalil (1989) found that lexical cohesion is used the most followed by reference which is as equal as conjunction. Only the result from Dueraman (2006) is different as it found that reference was used the most, followed by conjunction, while lexical cohesion were used the least. The above studies claimed that substitution and ellipsis were rarely used in writing and they did not include both types of cohesion in their investigations. This supports the finding in the present study that the amount of both types of cohesion is infinitesimal. The amount of each cohesive type could be explained as, by nature, when a writer wants to write on a particular topic, the writer needs to keep repeating a set of words and their related words about the topic throughout the composition. The repetitions of the words commonly occur

with demonstrative reference “the,” which helps connecting the repeated objects or persons and if the writer wants to avoid the repetitions of words, the writer uses personal reference. As such, the quantity of lexical cohesive ties and reference is found the most as the writers need to stick the contents to their topics. The less used cohesion type is conjunction. When a writer uses a conjunction, the writer uses it only to connect the meanings between sentences and it does not need to be used all over the composition. Therefore, the quantity of conjunction was found much less than lexical cohesion and reference. Substitution and ellipsis are commonly used in speech. As the compositions in the present study and in the previous studies were writings, both substitution and ellipsis were found the least at around one percent of the total of other cohesive types.

Cohesive errors, the factor that the present study used to determine the quality of cohesion, were found and categorized into grammatical and non-grammatical errors. It is believe that the students produced grammatical cohesive errors because they were not fully competent in grammar. The grammatical cohesive errors found in the present study are subsets of common grammatical errors found in Pongsiriwet (2001) and Watcharapunyawong and Usaha (2012). Both studies conducted on Thai EFL students. The intersection between grammatical cohesive errors from the present study and those from the two studies are article, singular/plural form, pronoun, and word choice. We assume that to look for the causes and the treatments of grammatical cohesive errors is to look at those of general grammatical errors. This is probably the solution to help the students improve the quality of cohesion.

In the case of non-grammatical cohesive errors, the researcher assumes that the errors occurred because the students did not project themselves as a reader. A good example of this is when a personal reference tie was used to refer to multiple items. The writers themselves knew whom or what were referred to by the personal references they

used, but they were not aware that the readers could not see this connection. Therefore, if such connection is not clearly presented, the readers need more effort to understand the text and this could cause the interruption of the flow of reading. Another assumption of the cause of the non-grammatical cohesive errors is that the writers did not fully understand the content they were writing. This is found when the writers used conjunctions. When the writers did not understand the content, they were not able to clearly explain the relationship between the sentences and when a conjunction tie was applied, the reader felt that a point was missing or the text did not require any conjunction ties. To fix non-grammatical cohesive errors, the writers need teacher and peer reviews. The reviews would help the writers to recognize the parts of their compositions that are difficult for the readers to understand.

The present study evaluated coherence to be compared with cohesion by determining the characters of coherence. The characters of coherence were described based on the contrast of two compositions with the highest and the lowest coherence scores. It is found that the characters of coherence in the present study are similar to those in Kaewcha (2013). The present study and Kaewcha (2013) showed that the coherence weaknesses occurred because the introductions did not give a clue about the content, the ideas presented were not elaborated, and the main points of the discussion were not clear. Kaewcha (2013) suggested that the incoherent compositions in her study were caused by the absence of transition signals such as temporal conjunctions, a subtype of cohesion defined by Halliday and Hasan (1976). This signals that for a text to be coherent, it needs cohesive conjunction. To fix the coherence weaknesses, we may, of course, need to fix cohesion in the text. We also need teacher and peer reviews to help them spot coherence weaknesses and stimulate them to improve their coherence. The writers also need to be

instructed about the structure of composition and how to convey the main and the supporting ideas using such structure to improve coherence in writing.

In statistic calculation, the correlation coefficient between cohesion and coherence is 0.48 and the present study interpreted this value as the relationship between cohesion and coherence is at medium level (suggested by Cohen, 1988). The correlation coefficient value found by the present study is very similar to the value found in Pongsiriwet (2001). As well as the present study, Pongsiriwet (2001) did not use the quantity of cohesive ties to investigate the relationship and the study was conducted on Thai EFL students. This is a positive sign to imply that the relationship strength between cohesion and coherence might be around this value for Thai EFL students. More studies with similar methodology to Pongsiriwet (2001) and the present study are needed to confirm such results. Chiang (1999) used similar methodology to investigate the relationship between cohesion and overall writing quality. The correlation coefficient value is at 0.89 which is considered to be very high. This means the present study, Pongsiriwet (2001), and Chiang (1999) support the theoretical suggestions that cohesion could support coherence and overall writing quality (John, 1986; Lee, 2002). Other previous studies' correlation coefficient values are different and mostly low in correlation. Witte and Faigley (1981) explained that the low correlation between cohesion and coherence or overall writing quality is because coherence depends a great deal on factors outside the text, the factors that lie beyond the scope of cohesion. However, this explanation is based on the studies that used the quantity of cohesive ties in the investigation. Therefore, the present study is not the case and if we have more studies that use the quality of cohesion to investigate the relationship, we probably could see which theoretical side the actual relationship between cohesion and coherence falls into.

Limitations of the Study

There are two limitations in the present study. The limitations are caused by the method used to evaluate the quality of cohesion. First, the present study did not take the absence of cohesive ties into the evaluation. The absence of cohesive ties could affect the quality of cohesion and, as a consequence, affect coherence. For example, Kaewcha (2013) suggested that the absence of temporal conjunction degraded textual coherence in writing, and Crossley and McNamara (2012), in contrast, found that high-skilled readers feel that writings are more coherent if it contains less cohesive ties. The overlook of the absence of cohesion might have concealed a partial strength of correlation between cohesion and coherence. Second, the present study disregarded the possibility that each type of cohesion may correlate with coherence at different degrees. Some studies (e.g. Chen, 2008; Liu & Braine, 2005) have found various degrees of correlation between cohesion and holistic scores. Such variation might have happened in the present study. This phenomenon could have concealed the true correlation between cohesion and coherence. For example, if coherence depends more heavily on conjunction than reference, a composition with a very high conjunction score should yield a high coherence score. But if the conjunction score is averaged with a low reference score, the averaged cohesion score would be pulled down, and cause discrepancy in the correlation between cohesion and coherence.

Suggestions for Future Studies

The present study has accomplished its objectives and has answered the research questions. The methodology used by the study and the findings suggest a lot of possibilities for future studies. First, future studies can use the same methodology to investigate the relationship between the qualities of cohesion and coherence with other groups of Thai EFL learners. The studies' results will reveal the characters of

cohesion/coherence and the strength of the relationship between them in order to confirm the findings of the present study. The studies could be extended to other EFL and ESL groups apart from Thais. The results would show how the characters and strength of the two discourse features vary across different language backgrounds.

Second, future studies should include the absence of cohesive ties into the determination of cohesion quality. This would reveal the actual cohesion quality to be included in the investigations of the relationship between cohesion and coherence or cohesion and overall writing quality.

Third, future studies should investigate the effects of each cohesion types (e.g. lexical cohesion, reference, conjunction) and each cohesion errors (e.g. any grammatical, non-grammatical errors found in the present study) on coherence and on overall writing quality. This is to pinpoint which cohesion types and errors significantly influence text coherence and overall writing quality.

Fourth, future studies should investigate cohesion non-grammatical errors, for example, the uses of reference ties to refer back to multiple items and the misuses of conjunction ties with respect to the sentences' meaning. The studies should clarify whether the cause of these errors is the foreign/second language incompetence or the knowledge incompetence.

Fifth, future studies should investigate other factors, apart from cohesion, which enhance text coherence and overall writing quality. The results from such studies will benefit second/foreign language instructions in helping students to write coherently.

Last, further studies should investigate the appropriate amounts of cohesive ties that contribute to maximum text coherence. This helps the researchers to figure out the right mathematics to be used to calculate the strength of the relationship between cohesion and coherence/overall writing quality.

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APPENDIX

Cohesive Tie Identification Form

Cohesive tie (Sentence No.)	Subtype	Presupposed item (Sentence No.)	Correctness and Appropriateness (Y/N)	Comments/Suggestion

Cohesion Rating Scale Form

Items	Scale	Comments/Suggestions
(a) References are used appropriately and accurately.	5 4 3 2 1 n/a	
(b) Substitution is used where needed and accurately.	5 4 3 2 1 n/a	
(c) Ellipsis is used where needed and accurately.	5 4 3 2 1 n/a	
(d) Conjunction words are used judiciously and accurately.	5 4 3 2 1 n/a	
(e) Sets of words are used meaningfully and appropriately.	5 4 3 2 1 n/a	

Coherence Rating Scale Form

Items	Scale	Comments/Suggestions
(a) The beginning section is effective in introducing the reader to the subject and the ending gives the reader a definite sense of closure.	5 4 3 2 1 n/a	
(b) The ideas in the essay are all very relevant to the topic.	5 4 3 2 1 n/a	
(c) Ideas mentioned are elaborated.	5 4 3 2 1 n/a	
(d) The division of paragraphs is justifiable in terms of content relevance and the transition between paragraphs in smooth.	5 4 3 2 1 n/a	
(e) The writer's overall point of view is clear.	5 4 3 2 1 n/a	

Consent Letter

Parin Tanawong
 196 Phataraniwet 3, Ratchada 66,
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 ptanawong@gmail.com.
 Date: 12 September 2012
 Dear Students:

This letter requests your permission to use your writing compositions in a study for my master's thesis through Srinakharinwirot University's Department of Western Language. The study involves analyses on your writing in term of cohesion and coherence. The analyses will not affect your score or grade. Your lecturer will still be the one who does such evaluation.

Findings from this study will be reported without names or other identifiers and will be summarized rather than reported as information on individuals. All data will be stored in locked cabinets. When the study is completed, you will have an opportunity to access to the results.

No risk or disadvantage to you is foreseen. The research should benefit students, although not all benefits or risks of research can be known ahead of time, even when research is well conducted.

I have attached a form indicates that you understand the study and that you give your consent to use your compositions. This form is at the bottom part of this letter. After you have signed the form, please tear along the dashed line and return it back to the researcher.

Sincerely,

Parin Tanawong

----- (Please tear along this dashed line) -----

I have read this consent letter. I have had the opportunity to ask, and I have received answers to, any questions I had regarding the study. I understand that if I have any additional questions about my writing compositions as research subjects, I may email ptanawong@gmail.com.

I agree to give my writing composition in this study as research subjects. By my signature I affirm that I have received a copy of this consent letter.

Type/Print Student's Name

Date

VITAE

VITAE

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