Chapter 5

Conclusion and Recommendation

This chapter presents the conclusion of the study focusing on the different types of cohesive devices and the five main types of Halliday and Hasan's (1976) cohesion. It also considers matters such as the reading comprehension for nurse anesthetists. The findings will be concluded and suggested for further research.

Conclusion of the Study

The study of language use and its effects concern with discourse analysis. In this study, discourse analysis is approached to analyze written text concerning literacy of nurse anesthetists, which is ability to read and understand the anesthetic articles. Discourse analysis of the written text is a method for describing the ideas and relations among the ideas displayed in the texts. Local relations among the ideas, information, and knowledge linked together in the texts are needed for nurse anesthetists to understand when they read. Cohesion is the key feature of readable writing and plays an important role in the comprehension process. It is syntactic coherence that connects sentences and contributes most strongly to creating a text. Cohesion has been said in the discussion so far that it is only a guide to coherence.

The aims of the study are to investigate the uses of different types of textual relations and compare the uses of five main types found in the anesthetic articles to find frequencies of distribution of each type of cohesive ties.

Cohesion has been claimed in comprehension process by many researchers. Halliday and Hasan (1976: 4) claim that cohesion is only one component describing broader function of language. They define cohesion as a semantic one. It refers to a set of meaning relation that exists within the text. According to Grimes (1975: 113), cohesion is fundamentally independent of cognitive sets which relate what is being said at a moment to what has already been said. Cohesion, as described by de Beaugrande and Dressler (1981: 3), concerns the way in which the components of surface text, the actual words that we hear or see are mutually connected

within a sequence. Likewise, Horning (1993: 4) defines cohesion as the key feature of readable writing and plays a central role in reading as the process that gets meaning from print. Yule (1985: 140) claims that a text must have a certain structure which depends on factors different from those required in the structure of a single sentence. Some of those factors are described in terms of cohesion. Cohesion ties and connects sentences which exist within a text. Cohesion, according to Schifrin (1987: 9), indicates that the meaning conveyed by the text is meaning which is interpreted by speakers and hearers based on their inferences about the propositional connections underlying what are said. Regarding McCarthy (1991: 26), cohesion is only one guide to coherence in reading. A parallel view is given by Baker and Galasinski (2001: 80). They see cohesion as a device that enables the text to stick together. That is how the various elements of a text are linked to each other to form larger segment.

The publication of Halliday and Hasan's Cohesion in English (1976) has stimulated interest among writing and reading researchers concerned with the effects of cohesion in the text. This study makes use of cohesion as described by them in terms of reference, substitution, ellipsis, conjunction and lexical cohesion in order to analyze the nature of cohesive devices available in the text. Halliday and Hasan describe cohesion as the network of grammatical and lexical relations which links meaning existing within the text. The relations connect the sentences together in order to create a meaningful text. According to Halliday and Hasan (1976), reference is a semantic relation linking one element of the text to another for its interpretation. Substitution is the replacement of one element by another but ellipsis is the omission of an element. Conjunction expresses the use of formal markers to relate sentences, clauses, and paragraphs to each other. Lexical cohesion involves reiteration and collocation, reiteration is a repetition of an item or the use of a synonym, near synonym, a super ordinate or a generally related word. On the other hand, collocation is a pair of lexical items that stand to each other in word meaning and share similar contexts. Thus, Halliday and Hasan asserted that cohesion is necessary for coherence and coherence is dependent on cohesion.

In order to examine those claims, the five anesthetic articles are chosen from the American Association of Nursing Anesthetists to be analyzed by using Halliday and Hasan's model of cohesion. The articles are selected from February to June 2007, appearing on www. aana.com. The corpus of the five articles contains 14,040 words. The analysis is done in two

research questions. The first one is analysis of the different types of cohesive devices displayed in the five anesthetic articles. The second is analysis of the differences in using cohesive devices found in the five articles. All of this is done for reading of nurse anesthetist's reasons. That is the analysis should lead to conclude that the tests should have a rich of cohesion that relate to reading comprehension for nurse anesthetists.

To answer the first research question, the sentences of each article are separated by punctuation marks and numbered in order. The cohesive items then are identified and presented in the table including sentence number, number of ties, cohesive item, type of cohesion, and presupposed item. The cohesive items are analyzed and assigned with different codes of cohesive devices. After that, the totals of cohesive items are counted twice to ensure accurate analysis.

Following the model of analysis based on the types proposed by Halliday and Hasan (1976), the collected data of each article is counted to find the total number of ties classified according to the different types of reference, substitution, ellipsis, conjunction, and lexical cohesion. The total of each type of cohesive devices is calculated for the mean and the percentage of the frequency.

The results show that cohesive devices described by Halliday and Hasan play a very important role in creating ties between sentences, clauses and paragraphs. The results show that the writers use a variety of cohesive devices to make connection in the articles. All three types of reference, personal reference, demonstrative reference, and comparative reference are used. Personal reference is reference by means of function in the speech, situation, through the category of person. (Halliday and Hasan. 1976: 37). In this study, personal reference is used the second through personal pronouns such as *they, we, he, it, and one*. In addition, the writers create personal determiners through the discourse by using *its, their, his, him, our, and, them*. Demonstrative is the reference by means of location, on a scale of proximity. (Halliday and Hasan. 1976: 37). It is used through the articles such as *the, this, there, and those*. And the writers use demonstrative reference to link the sentences the most (49.76%). Furthermore, they create comparative reference that contributes to textual cohesion. It is indirect reference by means of identity or similarity. (Halliday and Hasan. 1976: 37). Comparative reference is also expressed by adjectives such as *other, additional, similar, and equal,* by adverbs such as

differently, more, less, and equally. Substitution is the replacement of an item by a substitute in place of repetition of the item. (Halliday and Hasan. 1976: 88). Substitution dose not occur in the five articles. Ellipsis is the process within the text by omitting one item. Only nominal ellipsis is displayed with nominal group. In this study, low percentage of substitution/ellipsis is traced in the anesthetic articles. The results are consistent with some previous research that found substitution/ellipsis in open registers more often than in restricted ones. It is universally acknowledged that substitution and ellipsis belong to the area of conversation, dialogue or fiction. (Buitkiene.2005).

Additional creation of conjunction is applied by using four types: additive adversative, causal and temporal. The writers utilize slightly differently all types of conjunction. They use additive conjunction such as *in addition, also, and furthermore* to link by adding to the presupposed element. The distribution of additive conjunction in the texts is found the most (30%). Also, adversative conjunction is performed to indicate contrastive relation with the previous sentence, using words like *however, only, nevertheless, and in contrast.* Moreover, causal conjunction is used to express the cause-effect relationship between two sentences, using connectors like *thus, therefore, because, for, then, and so.* The last one, temporal conjunction is used to link by signaling sequence or time. The words like *soon, recently, after and before* are found in all the texts.

Besides, lexical cohesion is linked through vocabulary connecting parts of text together. The writers use repetition of lexical items through a number of devices namely; synonymy, near-synonymy, and general word. The reiteration is constituted the most with 2,174 ties (78.77%). On the other hand, collocation shows a pair of words within the same lexical environment such as anesthesia provider......anesthesia emergency, patient.....chemotherapy, general anesthesia....anesthesia provider, totaling 586 ties (21.23%).

Also, the collected data of the five articles are analyzed to answer the second research question. The ties of reference, substitution, ellipsis, conjunction and lexical cohesion are counted and calculated, using table of frequency, mean and percentage.

Additional investigation of the second research question reveals that lexical cohesion plays a very important role throughout the discourse both in terms of reiteration and collocation. The writers consistently make more use of reiteration throughout the passage than collocation

and link not only between contiguous sentences but also between distant sentences in the texts. Lexical cohesive devices constitute the majority of cohesive ties in the five texts (83.69%). Also, this study finds that the total ties of cohesive devices occur 4.99 times per sentence, while lexical ties occur the most in the five articles (4.18 times per sentence). Consequently, the findings are consistent with some previous researches that found lexical ties constituting the majority of cohesive ties in their analysis of written texts. Yankova (2006) found that lexical cohesion performed the highest density in English texts (84%) and in Bulgarian texts (92%). She also refers to Hoey (1991) who viewed that lexical cohesion was the only type which could establish multiple connections, with clusters of lexically cohesive items arranged into networks that stretched across the whole text. In the studies of expository prose by Witte & Faigley (1981) and Stotsky (1986), lexical ties also constituted the majority of cohesive ties. Lovejoy (1991) found that most intersentential cohesive ties in three biology, psychology and history passages occurred in the lexical category and ranged from 95% to 96% of total ties in each text. (cited in Yankova. 2006). Reynolds (2001: 440) claimed that lexical repetition as the principal means of explicitly marking cohesion in a text. Meurer (2003) found that lexical ties were used the most in the essays (3.66 per sentence) and in the narratives (2.14 per sentence). He also concluded that there was high correlation between number of cohesive ties and subjective coherence ranking. Beside that, the frequency and distribution of cohesive device across registers; a legal text, a short story, and a newspaper were investigated by Buitkiene (2005). She found that lexical cohesive devices were the most extensively used ties in texts belonging to different registers. They constitute the major part of cohesive ties in all the three varieties of texts. According to Meisuo (2000), he studied the use of cohesive features in expository compositions of undergraduates. The study showed that lexical devices were the most frequently used in expository compositions. Thus, findings of this study suggest that both reiteration and collocation indicating the key concept of the discourse help create cohesion through the continuity of lexical meaning that make the relationship of sentences in paragraphs, linking paragraphs to one another and to the overall structure of the text. The continuity of cohesion creates coherence that helps nurse anesthetists with good background knowledge of anesthesia to get better understanding of the research articles.

It can be concluded that the writers make use of a wealth of cohesion to connect sentences together. Lexical cohesive density is established by the highest bond providing coherence through the use of reiteration and collocation. A wealth of cohesion indicates the key concepts of the discourse that help create coherence. If nurse anesthetists have a good knowledge of cohesive markers used in the text integrated with their background knowledge, they would be able to comprehend research articles without difficulty. Discourse analysis can help explain and determine text quality and readability.

Recommendation for Further Research

In terms of future research, cohesion is needed to expand upon and improve the present study. It appears that, cohesion is a tool that writers use to produce good quality text while readers see cohesion as a text processing operation in that they look continuously for linguistic signals that link parts of the text to others. Consequently, experimental research of cohesive knowledge should be further investigated for nursing and other fields. To improve reading comprehension, studying of cohesion can enable readers to fully understand English texts.

Conclusion

The main purpose of the study is to find frequencies of distribution of cohesive ties used in anesthetic articles involving reading of nurse anesthetists in Thailand. The findings show that the writers of these anesthetic articles make use of a variety of cohesive devices especially lexical cohesion, creating the highest bond that provides coherence to help nurse anesthetists who have good background knowledge of anesthesia to create/gain coherence and fully comprehend the texts. It can be said that cohesion is used as a tool for writers to create coherence helping in reading comprehension. Hence, studying cohesive devices is needed for readers of the nursing field in Thailand. This study then suggests conducting research of cohesive devices found in articles of other fields for further studies.