

# A Systemic Functional Linguistics Analysis of Cohesion and Coherence in Written Nursing Care Reports

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**Abstract:** This study analyses 25 nursing care reports written by nursing students majoring in the International Class of Nursing Diploma at a higher education institution in Indonesia. The main research focus is to assess the cohesion and coherence of nursing care reports in relation to their grades. The Systemic Functional Linguistics framework, with a focus on the textual metafunction, serves as a tool for analyzing cohesion, Thematic structures and Thematic development of the texts. The analysis of text cohesion revealed that all texts predominantly used lexical cohesion and reference to build internal ties within the texts. Reiteration of the same lexical items throughout the texts and heavy use of personal pronouns indicated the exploitation of these systems. In terms of coherence via Thematic structure, it was found that textual Themes were predominantly used. All the texts relied heavily on unmarked Themes, with no evidence indicating a proportional use of marked and unmarked Themes. In terms of Thematic development, Theme reiteration was the main method of text development for all texts. However, a few instances of Zig-zag Thematic development were found in texts in the higher graded categories. None of the texts used multiple Rheme patterns as an alternative method of text development.

**Keywords:** *Systemic Functional Linguistics, textual metafunction, cohesion, coherence*

## INTRODUCTION

Globalisation has significantly advanced the status of English in professional workplaces. Evans (2010) states that globalization and decolonization are two influential factors contributing to the primacy of English as a professional language. Evans points to Hong Kong as an example of a country that relies heavily on the use of English as a tool of communication in economic activity and a means of integration into global economies. Such incentives have brought English to the center of the global system as the means of formal written communication in professional workplaces (Graddol, 2006 in Evans, 2010).

One instance of the growing status of English as the language of professional communication is the need for English skills in the healthcare sector. English plays an important role for nurses seeking a job in Western countries. As professional healthcare

workers, nurses are required to meet a certain level of English proficiency to be hired in international hospitals. A study conducted by O'Neill (2011) highlights the ways in which international nurses who use English as second or foreign language adapt and integrate themselves into the Australian workforce. The study involved ten participants, of whom five were Indian, four Chinese and one Nepalese. The result showed that these nurses faced difficulty in managing their roles as language learners and professional health workers. The participants responded that they were not supported by sufficient language knowledge and social and cultural information. These findings are in line with the statements of Nickerson (2015) on the influence of the language and culture of the country of destination on the use of language in a workplace.

For international nurses, the problems of developing English skills are inseparable from the English courses provided to them by their former educational institutions. A study by Saragih (2014) conducted in Indonesia reveals that there is no designated ESP curriculum in nursing programs run in nursing colleges in Indonesia. 50 Nursing students from 5 different nursing colleges, 5 ESP lecturers, and 2 Indonesian nurses working in English speaking countries were respondents for this study. From the interview, Saragih noted that the majority of the ESP lecturers used no specific curriculum. Different institutions have their own ESP courses for nursing, with differing standards of competency. Consequently, ESP lecturers are obliged to use relevant sources taken from the internet or books in which most of the content is in general and academic English. Ideally, English for nursing curricula should contain specific materials to meet the specific learning needs of specific learners.

Within the present research context—that of nursing students majoring in the International Class Program at a higher educational institution in Indonesia—the necessary subject content of English for Nursing education is the field of nursing care. Nursing students in this international program are trained to be able to provide clients with standard nursing care. Besides the provision of care itself, all actions taken by nursing students must be documented in a nursing care report which is written in English. This is because the nursing care reports will be read by other nurses and health practitioners from the practice hospital which is based in Kuching, Malaysia. To ensure the readers to get access to the information, therefore, English is chosen as the official language for communication.

As a written text, the nursing care report relies on its coherence and cohesion as a means of delivering the intended messages. The inadequacy of these two elements can hinder readers from achieving a clear comprehension of a text. Halliday and Hasan (1976 as cited in Eggins, 2004) argue that 'texture' is the distinctive characteristic of text that makes it different from non-text. Cohesion creates unified ties among clauses within the text itself, rendering the text understandable. As Halliday and Hasan (1976) assert, 'There has to be cohesion if meanings are to be exchanged at all. Cohesion itself does not suffice the texture of a text, coherence is also essential as a context in which the text makes meaning' (as cited in Eggins, 2004, p. 53). Thus, cohesion and coherence are essential elements that form the texture of a text.

A number of studies on cohesion and coherence have been conducted by investigating the use of Theme–Rheme as a framework for assessing coherence in students' writing (see Arunsirot, 2013; Aziz, 1988; Ebrahimi & Khedri, 2012; Hawes, 2015). Comprehensive research on this topic was undertaken by Wei (2016), who compared the use of Theme and Thematic progression in English essays written by Chinese college students and native English learners, as well as the effects of explicit instruction on these, by comparing pre- and post-teaching writing samples. However, Wei's results may not be generalizable to ESP, particularly English for Nursing. In addition, there are still very few investigations of Theme–Rheme as markers of coherence and cohesion across various disciplines in ESP. Therefore, the present study aims to fill this void by investigating how coherent and cohesive elements are realized in nursing care reports written by nursing students in the International Class of the Nursing Diploma at a higher educational institution in Indonesia. There are two research questions that need to be answered in this study: 1. *What are strategies for creating cohesive ties predominantly used in nursing care reports?* 2. *What kinds of Thematic structure and Thematic development prevail in nursing care reports?* Based on those questions, this study is intended to look at the most frequently occurring forms of Thematic structure and Thematic development that are used as coherence makers and the types of cohesive device most commonly used in nursing care reports.

## METHOD

### Research Design

This study uses discourse analysis as its research method, within which an SFL framework, with a focus on the textual metafunction analysis, serves as a tool for analyzing and interpreting the data. From this perspective, a clause is always a representation of (i) the experiential meaning that the author intends to express, (ii) a form of interaction between the author and the reader and (iii) a means of organising a structured text, telling the readers about the writer's experience of the world and inviting them to experience it also.

The analysis highlights cohesion in the text through the identification of specific language systems, such as *reference*, *conjunction*, *substitution*, *ellipsis* and *lexical cohesion*, which are exploited by text makers. In addition to cohesion, the coherence of text is also identified. From an SFL perspective, text coherence is achieved through the appropriate deployment of Theme–Rheme structure and Thematic development (Thematic progression). A theme, as 'the starting point for the message' (Halliday & Matthiessen, 2004), is the first constituent in the clause and tells the reader what the clause is about. Rheme is remainder of the clause that comes with the Theme.

In terms of Thematic structure, three kinds of Thematic organizations are investigated in this research: *topical*, *interpersonal* and *textual* Themes (Eggins, 2004). These three Thematic choices determine the coherence of the text in SFL perspective. Topical Theme occurs when one of the elements of Transitivity (participant, process or circumstance) is put at the first position in a clause. Interpersonal Theme occurs when

one of the interpersonal elements—‘the unfused Finite (in interrogative), and all four categories of Modal Adjuncts: Mood, Vocative, Polarity and Comment’—are found in Thematic position (Eggins, 2004, p. 302). The last type is textual Theme, which shows a cohesive tie within a clause which is realized through the use of continuity adjuncts, such as ‘oh’, ‘well’, ‘yeah’ and ‘no’, and conjunctive devices (Eggins, 2004).

Another element that needs to be analyzed in relation to the coherence of text is Thematic development or Thematic progression. This concept refers to the ordering of Theme and Rheme throughout a text. In other words, the order of Theme-Rheme in a text determines the category of Thematic progression being used and this choice affects the text coherence. Eggins (2004) categorizes Thematic development into three types: *Theme reiteration*, the *Zig-zag* pattern, and the *multiple Rheme* pattern. Theme reiteration is shown through the reiteration of the same topical Theme throughout the paragraph, while the *Zig-zag* pattern places an element that made up the Rheme in the previous clause as the Theme in the next clause. The multiple Rheme progression takes place when the Rheme of the first clause comes with an element that can then be split up and used in the Themes of the clauses that follow (Droga & Humphrey, 2002).

### **Setting and Research Objects**

The present study used a sample of 25 nursing care reports written by nursing students majoring in the International Class Program at a higher educational institution in Indonesia. A small set of data was taken from the *Case Description* section of these nursing care reports; this section elaborates on the client's identity, history of illness, past medical records and family's history of illness. This information functions as a guide for a nurse in performing a further assessment and taking actions to care for the client. More importantly, in the educational context, this section offers a picture of students' real writing ability, since students are required to describe and report in their own words what they have done during preliminary clinical observation. Students are not required to quote from external sources in these texts. As an academic piece of writing, the text should be written in the correct format and present clear information to readers, nurses or other healthcare practitioners. Failure to write this report appropriately may create difficulty for stakeholders in understanding the intended messages.

### **Data Collection Method and Analysis**

The data were taken from 25-photographed case description-sections of the nursing care report. At the time of the investigation, the soft files of the documents were not accessible due to the library only has hard copies of the documents. So, the data were only possible to be garnered through photographs. The data were classified into three achievement grades: Grade A, Grade AB and Grade B because the reports were graded and marked. The grading was compiled with the Guidance of Assessment of Nursing Care Report of that institution. Below is the marking system quoted from the division of Evaluation and Assessment of that institution.

Table 1: Marking System for Nursing Care Report Final Examination

Mark	Range of scoring	Values	Criteria
A	85–100	4	HIGH DISTINCTION
AB	75–84	3	DISTINCTION
B	65–74	2	CREDIT
C	55–64	1	PASS
D	0–55	0	FAIL

The analyses were undertaken in two steps: the analysis of text cohesion and the Theme–Rheme analysis. More specifically, the analysis followed the steps below:

1. Locating and numbering each T-unit;  
Identifying the Theme–Rheme division in each T-unit using a slash ‘/’;  
Identifying Thematic structures and Thematic progression types in each sample of text;  
Counting the raw numbers and calculating percentages;  
Tabulating and presenting the data;  
Conducting discourse analysis using SFL framework; and  
Making inferences and conclusions.

## FINDINGS AND DISCUSSION

### Findings

#### *Outcomes of the Text Cohesion Analysis*

The findings encapsulate how the exploitation of the systems of reference, lexical cohesion, conjunction, ellipsis, and substitution contribute to the cohesion of the nursing care reports.

*Table 2: Number of Cohesive Devices found in Grade A, AB and B Nursing Care Reports*

Grade	Types of Cohesive devices					Total lexical devices found
	Reference	Lexical cohesion	Conjunction	Ellipsis	Substitution	
A	222 (43.3%)	239 (46.6%)	48 (9.4%)	4 (0.7%)	0 (0%)	513
AB	563 (41.64%)	589 (43.6%)	181 (13.4%)	15 (1.1%)	4 (0.3%)	1352
B	64 (39.8%)	78 (48.44%)	17 (10.6%)	1 (0.62%)	1 (0.62%)	161

From the data, it can be clearly observed that lexical cohesion and reference are the two most prevalent cohesive markers in the texts. There are three main linguistic elements

that describe the use of reference within nursing care descriptions: *personal*, *demonstrative* and *comparative* reference.

The following example illustrates how personal reference was used throughout the texts.

**Client (P)** said that **her family (P)** does not have any disease such as a cyst or a tumor and **client (P)** also has no tumor disease in advance. **Client (P)** said in her family also there was no sufferer hereditary disease **such as (C)** hypertension, diabetic mellitus, etc. **Client's husband (P)** said that in **their family (P)** also there were no sufferer breast cancer and any other cancer. **Client (P)** said that only **she (P)** in her family that sufferer **this (D)** cancer.

Note: P = Personal reference, D = Demonstrative reference, C = Comparative reference.

From that example, there is only one instance for each of demonstrative and comparative references, while the remainder of the text is cohesively linked through the use of personal references.

The present study further delves into semantic ties within the elements of the clause by examining word repetition and the relationships of synonymy, antonymy, hyponymy and meronymy that occur within the text. The nursing students demonstrate the ability to use specific language features indicating semantic ties between the elements of the text, even though, to some extent, their skill in this area is limited and inflexible. Repeating similar words throughout the text is a common issue for students. On the other hand, competence in using other resources, such as synonymy, antonymy, hyponymy, and meronymy, is still below the expectation. This skill is very limited and does not reflect a sufficient command of language proficiency in relation to building a cohesive English text among these students. The following excerpt is evidence of this issue:

*The next of kin is Mr. A. **He** is 50 years old and **he** is client's husband. **He** graduated from elementary school and **(he)** work as a labor.*

## Text 1 (Grade A)

<u>Before</u> client	was hospitalized on May 30, 2015	the client	said	that she	felt pain in her chest 6 hours before hospitalized
Textual, topical	Rheme	Topical	Rheme	Topical	Rheme
<u>And</u> the pain	become worse	<u>when</u> she	do a lot of movement and activity		
Textual, topical	Rheme	Textual, topical	Rheme		
She	try to take a rest	<u>when</u> the pain	come	<u>but</u> the pain	cannot be controlled
Topical	Rheme	Textual, topical	Rheme	Textual, topical	Rheme
She	also complaining of shortness of breath	<u>and</u> client's husband	decided to bring her to accident and emergency in Ulin Banjarmasin Hospital		
Topical	Rheme	Textual, topical	Rheme		

## Text 2 (Grade AB)

<u>When</u> there	was an assessment on June 30, 2015	the client's father	said	That the client	had a complaint of headaches, nausea, vomiting, fever, and cough
Textual, topical	Rheme	Topical	Rheme	Topical	Rheme
<u>And</u>	2 days before he was hospitalized	the client's eyes, face and his extremities.	began swollen		
Textual	Rheme	Topical	Rheme		
<u>Next</u> , the client's father	took his son to the doctor's clinic	the doctor	observed his son	<u>and</u> he	gave the advice to take the client to the hospital.
Textual, topical	Rheme	Topical	Rheme	Textual, topical	Rheme
<u>After</u> the client	arrived at the hospital				
Textual, topical	Rheme				

He	got treatment at emergency unit.				
Topical	Rheme				

The texts above further depict the dominant use of conjunctions to add more information and time set within the clauses. It is clearly seen that the types of conjunction are very limited.

*Text 3 (Grade B)*

Client	said	he	already suffer for the pain on the hip for about 3 weeks
Topical	Rheme	Topical	Rheme
The pain	start from the abdomen		
Topical	Rheme		
<i>and</i> (the pain)	spread widely to hip		
Textual, topical	Rheme		
The doctor	said	that the client	suffer for hydroureter
Topical	Rheme	Topical	Rheme
<i>and</i> (the doctor)	suggest client to the hospital		
Textual, topical	Rheme		
She	still can handle the pain		
Topical	Rheme		
<i>But</i> the pain	starts to disturb her activity		
Textual, topical	Rheme		

The textual Themes in those three texts are realized in the use of conjunctive devices: *when, before, after, next, but and*.

Other resources that are used by the students to produce a cohesive text are ellipsis and substitution. The use of these resources aims to avoid redundancy and repetition in a text.

Table 3: Use of Substitution and Ellipsis in Grade A, AB, and B Nursing Care Reports

Grade	Substitution	Ellipsis
A	0 (0%)	4 (100%)
AB	4 (21%)	15 (78%)
B	1 (50%)	1 (50%)

Referring to that table, four examples of ellipsis are found in all samples, whereas no instance of substitution is found. Although the Grade AB texts contain ellipsis and substitutions, the ellipsis is still the most frequently used resource. There is no significant comparison to be made between ellipsis and substitution in the Grade B texts since there is only one example of each item.

### Outcomes of the Theme–Rheme Analysis: Grade A, AB, and B Nursing Care Reports

Table 4 below provides overall instances of Thematic structures used in the Grade A, AB, and B nursing care reports. The analysis highlights three types of Thematic structures that prevail in the texts: *topical*, *textual* and *interpersonal* Themes.

Table 4: Instances of Thematic Structures in Grade A, AB, and B Nursing Care Reports

Grade	Number of topical Themes	Number of textual Themes	Number of interpersonal Themes	Total Thematic structures found
A	262 (83%)	52 (17%)	0	314
AB	731 (79%)	191 (21%)	0	922
B	79 (85%)	14 (15%)	0	93

Although the result shows that the highest frequency belongs to the use of topical Themes in nursing care reports, this is not the case for comparison. The study has merely considered the instances of textual and interpersonal Themes as key elements to determine how the students structured their texts. According to the data, the students demonstrate limited ability to use textual Themes to structure their writing. This is indicated by the small proportions of textual Themes of the total: 52 textual Themes out of 314 were found in the Grade A texts, 191 out of 922 in Grade AB, and 14 out of 93 in Grade B. However, there were no incidences of interpersonal Themes found in any of the texts. Grade AB seems to represent texts using more textual Themes than the other grades. The following example of analysis show instances of textual Themes as they are used in nursing care reports.

*Text (Grade AB)*

Client's initial	is Mrs. S		
Topical	Rheme		
She	is 63 years old		
Topical	Rheme		
She	Lives in Telaga Langsat		
Topical	Rheme		
She	was married	and (she)	has three children
Topical	Rheme	<u>Textual</u> , topical	
She	Graduated from elementary school		
Topical	Rheme		
Client	entered to Ulin General Hospital on Friday, 4 <sup>th</sup> of June 2015 at 14 pm	<u>and she</u>	was hospitalized in Seruni ward with a medical diagnosis is the Hemorrhagic stroke
Topical	Rheme	<u>Textual</u> , Topical	Rheme

Two instances of textual Themes are evident in this example. Apart from the less frequent exploitation of textual Theme, none of the texts demonstrate interpersonal Themes as a point of departure.

In relation to text organization, the analysis also highlights markedness of Theme as a 'stand out' feature of text coherence. Droga and Humphrey (2002) argue that marked Themes that are chosen by a competent writer or speaker may contribute to the information that the writer tries to focus on and shape a distinctive text organization.

*Table 5: Thematic Markedness in Students' Texts*

Grade	Marked Themes	Unmarked Themes	Total instances
A	25 (10%)	234 (90%)	259
AB	79 (10%)	687 (90%)	766
B	3 (4%)	78 (96%)	81

From the data in Table 5 above, it is clear that unmarked Themes are used most frequently across the three grades, whereas marked Themes occupy only very small percentages, at 10% for Grades A and AB and 4% for Grade B. This means that the majority of nursing students tend not to place 'stand out' elements at the beginning of a clause; the subject of the clause still predominantly coincides with the Theme. In addition, all sentences in nursing case descriptions are declarative; thus, high frequencies of use of unmarked Theme are a common issue. The following example contains a significant difference between the use of marked and unmarked Themes in this text.

*Text (Grade A)*

While pregnant, the patient's mother checked her pregnancy to the midwife regularly once in three months. She also did USG for once and got Tetanus immunization in midwife clinic. During her pregnancy, the patient's mother consumed supplemental vitamin, milk, and another nutrient food.

The marked Themes are underlined; they create 'scene-setting' for the clause. The words 'while pregnant' and 'during her pregnancy' set the time at which the events or actions took place.

The coherence of the text can be further examined through the use of Thematic progression. Thematic progression determines how the text develops and reveals the logical thought patterns of the author. The data below describe how patterns of Thematic progression differ across the three grades.

*Table 6: Frequency of Thematic Progression Types Used in Grade A, AB, and B Nursing Care Reports*

Grade	Type of Thematic Progression			Total Thematic progressions found
	Reiteration	Zig-zag	Multiple Rhemes	
A	17 (94%)	1 (6%)	0 (0%)	18
AB	46 (96%)	2 (4%)	0 (0%)	48
B	7 (100%)	0 (0%)	0 (0%)	7

The table depicts the dominance of Theme reiterations that are used for the method of text development. In Grade A texts, there are 17 out of 18 instances found, however, there is only one Zig-zag Thematic progression found. The similar problem also happens to Grade AB texts where Theme reiterations are noted by 43 out of 48 incidences while there is only two Zig-zag texts development found. These instances demonstrate students' limited ability in using various types of text development. This is particularly evident in the Grade B texts, where there are no other instances of text progression except reiteration. More specific examples are provided in the excerpts below, showing how Theme reiteration and Zig-zag Theme patterns are used in nursing case description texts.

*Text 1 (Reiteration)*

Sentence 1		Sentence 2	
<u>Client's husband</u>	said that she is hospitalized with heart failure.	<u>Client's husband</u>	said that client know she has heart failure since a year ago.
Theme	Rheme	Theme	Rheme

*Text 2 (Zig-zag pattern)*

Sentence 1	Sentence 2			Sentence 3	
Client family	said	that her family	ever got <u>this disease</u> seem to like her mother.	<u>The hypertension</u>	is from her mother
Theme	Rheme	Theme	Rheme	Theme	Rheme

The underlined parts signal how these texts progress through the reiteration of those words. The predominant use of Theme reiteration reflects students' limited choices for text development. This limited choice of Thematic development may hinder the reader from engaging effectively with the text by rendering the texts more formulaic and monotonous. In contrast, Zig-zag patterns are more likely to attract the reader to engage with the text, since they introduce new information through the text progression: Eggins (2004) argues that this type of text progression promotes a sense of cumulative messages flowing to the reader.

## **DISCUSSION**

### *The Most Common Cohesive Device Used in Nursing Care Reports*

From the data, the analysis reveals lexical cohesion (semantic ties) to be the most frequently used cohesive marker, followed by reference as the second most frequently used. Reiterations of the same personal pronouns constitute one writer's strategy for creating semantic bonds between the elements of the clause. This semantic bonding is aimed to maintain focus on the main topic of each text. Khalil (1989) infers that the overrepresentation of lexical cohesion in EFL students' writing is created by their excessive repetition of the same vocabulary. However, Halliday and Hasan (1976) point out that repetitive occurrence of lexical items such as pronouns, prepositions, and auxiliaries may lead to a less essential role of the lexical items in making cohesive text. Fewer cohesive ties would mean fewer semantic ties, and this may lead to a poorer quality of writing.

In addition to these issues of the cohesive device, the repetition and the overuse of personal pronouns by the nursing students may point to students' very basic level of skill in making meaning in a text. The reiterations of the same personal pronoun throughout the texts may enable students to keep the idea on the track, but, it is not the only strategy to make text cohesion. Halliday and Hasan (1976) argue that reference is the way to establish a context for lexical cohesion.

To logically organize a text, conjunction plays a crucial role. The results of the text analysis highlight a predominant deployment of additive conjunction by nursing students. The conjunction 'and' is the only conjunctive device the students used to build

internal connection within the clauses. The use of ‘and’ in the following examples reflects how the student makes meaning in the text.

*The client’s family said that the client came to the hospital and complained of fever and pain in his abdomen. During 5 days before entering the hospital, the client has got fever suddenly and his fever increases at night ....*

*A day before entering the hospital, his fever was so high, the client was cold and he also complained of a headache ....*

The use of ‘and’ in those sentences may bear a sense of a more structural than conjunctive relation. This type of conjunction merely coordinates clauses; this means that the relation between the clauses is less cohesive, even though evidently the ‘and’ is used cohesively to link one clause to another. Thus, the use of conjunction is not only mechanically correct; to make a linkage between the clauses, but its use should be functionally appropriate.

In addition to the function of adding information, conjunctions were also used to represent time settings in the nursing care reports. However, the students still demonstrated low levels of ability to use a wide range of temporal conjunctions. The ‘when’ conjunction was overused in almost all texts. Rather than giving information about a specific timing, this conjunction signals that a procedure (an action) has been undertaken or would be undertaken by the participant in relation to another action. Observe the following sentences: ‘*When asked about the problem, client answered “I do not know”*’, ‘*When his fever come, he took fever relief*’. From these sentences, it can be understood that the ‘when’ conjunction is used to relate a prior action that the nurse undertook (i.e. asking about the patient’s problem) to the next event (i.e. the client’s response), or to relate the procedure following a problem (i.e. the patient took fever relief) to the occurrence of the problem (i.e. the patient experienced fever). Other temporal conjunctions such as *after that, next, then, before* and *after* are tangibly used in the texts, but their small frequencies of use may not be able to account for text cohesion.

To summarise, the nursing care reports build text cohesion through semantic ties by the extensive use of repetition of the same lexical items throughout the text. In using this strategy, students may expect that they can keep their ideas on track. The cohesive ties between lexical items are inseparable from the role of reference as a context setter. Further, the use of conjunction in the nursing care reports, to some extent, has been misplaced. The chosen conjunctions do not necessarily reflect the appropriate functions, and merely stress the internal connections between the clauses. There are very few instances indicating the role of conjunction in external connectors between the texts.

### *Types of Thematic Structure and Thematic Development Prevailing in Nursing Care Reports*

As discussed in the findings section, the study reveals that only textual Themes were used by nursing students in addition to topical Themes for text coherence. Extensive use of this Thematic choice is not uncommon in academic texts; conjunctions, coordinate and subordinate clauses often take on the role of textual Themes. The present research outcomes are in line with Eggins's (2004) suggestion that interpersonal Themes rarely occur in scientific writing.

Moreover, the absence of interpersonal Themes may be due to the fact that these texts by their nature contain more facts than opinions. Thus, the writers do not need to influence the readers to align themselves with the author's viewpoint. The author's task is simply to provide valid information regarding the patient's health record and medical treatments.

The textual Themes are mainly used to set up a chronological order of the events that the clients' experience (*when, before, after, next*) and to add information regarding the nurse's assessment on the clients' condition (*and*). Because the case description section of the nursing report presents a narrative of facts about the client and the history of his/her diseases, the conjunction function may serve to link events that took place. In other words, conjunctions are used to signpost the narrative line of the case. This is similar to Hawkins's (1990 in Ferguson, 2013) concept of narrative illness, which follows a three-part progression comprising the pre-condition of the client, the crisis of the disease and the post-treatment. Conjunctions are needed to relay the narratives through these stages.

With respect to the use of topical Theme, it can be understood that the writing format of the nursing care reports is quite formulaic. The focus of the content is more on the client's particulars and the time settings of events rather than the development of the text based on the writer's arguments. Compared to an argumentative essay, this writing pattern lacks text development and does not prioritize engagement between the writer and the reader.

Another Thematic element that contributes to text organization is the markedness of Theme. The majority of instances of Thematic markedness represent circumstances of location that are positioned at the beginning of the clause. This Thematic choice provides clues about 'when' (temporal) or 'where' (spatial) an event or process is occurring. To illustrate this choice, the following example depicts how marked Themes are used in these texts.

**At the assessment on 3rd of June 2015 at 9 am**, the client said that he had a cough with sputum but it's steady and difficult to come out.

**One day before**, he entered the hospital. He also complained of a headache, difficult to breathe, and his body felt weak.

The underlined marked Themes indicate the time at which the events (a cough, headache, difficult to breathe and weak body) occurred. By placing this temporal information at the point of departure, the author draws the reader's attention immediately to the things that the author wishes to emphasize.

**Through accident and emergency unit**, client transferred to ICCU ward but she refused to hospitalized in ICCU.

**In Sampit Hospital**, client's child said that her mother was hospitalized about 1 day.

The preceding constituents set a spatial setting where the action is taking place (transferred to ICCU, hospitalized in Sampit Hospital). Thus, the temporal and spatial aspects are two important pieces information that needs to be explicitly evident in a nursing care report, and thus become the starting points that direct the text orientation.

Coherence can also be achieved through the appropriate use of Thematic progression. Thematic progression dictates how Themes are structured in a text. Based on the findings, the nursing care reports used Theme reiteration as the most means of Thematic progression. The writers simply repeat an element of the clause throughout the text in order to make the text focused. Let us examine the following example:

*Client's child said that this is the first time for her mother got this disease. Client's child said that her mother has the history of falling down about 5 years ago. Client's child said that her mother complains of a headache sometimes. Client's child said that her mother has a history of gastritis.*

This is a very basic means by which a writer can keep the text on the track of its main topic. Reiterating the same participant (the client's child) maintains the continuity of the text, but a text with unchanging Theme not only risks boring the audience but also takes on a static feel. Constant repetition of the same element of the clause means that we are always departing from the same starting point, and the new information contained in the Rheme cannot go on to be further elaborated in the next clause. There is a significant relationship between the writer's choices concerning Theme and Thematic progression. Where topical Themes are constantly realized through placing pronouns (participants of the clause) in the subject position, it creates a method of text development that relies heavily on the constant repetition of the same participant as a point of departure. Consequently, resources for coherence are confined to the use of a single choice of Thematic organization.

## CONCLUSIONS

Considering the challenges faced by nursing students in writing cohesion and coherent nursing care reports, several basic steps can be implemented in writing lessons. In the first place, Theme-Rheme system and Thematic progression need to be explicitly taught to the students as the key criteria for the coherence of text and their practical uses are highlighted. Additionally, a wide variety of cohesive devices need to be explicitly taught to the students, along with their functional roles as elements of meaning-making.

Learners need to be taught how to orient their readers towards the topics of their writing, the participants involved in the text and the context that surrounds the text through the appropriate choice of Thematic development (Thematic progression).

In terms of the assessment of nursing care reports, it is essential to assess the coherence and cohesion of the text along with the elements of textual metafunction rather than focusing solely on the mechanical aspects, such as error correction in grammar, punctuation, and format. Language should be viewed as a system of meaning potential, where the meaning is very context-dependent. Examining how people use English in a specific context is much more important rather than relying heavily on the achievement of curriculum targets. Finally, collaborative writing, as a writing process, needs to be extensively implemented as a strategy of teaching and learning, since it may open up opportunities for students to learn contributively and mutually from one another.

Although this study has revealed certain findings in relation to coherence and cohesion in nursing care reports, it is not without limitations. The samples taken from a corpus of 25 nursing care reports might not yield a comprehensive picture of the features under investigation. Since the research only focused on the nursing care reports as the artifacts of social activity (i.e. the interaction between nurse and patient), the written language of the document could be productively explored further with assistance from the writers, that is, the nursing students. In addition, the outcome of this study may not be generalizable to other types of medical text, since each type has its own specific progression and structural complexity.

To extend scholarship in the field of nursing text analysis, an ethnographic study has the potential to be integrated with a textual analysis in order to build links between the text, as a medium of meaning-making, and the writer, who acts as the meaning maker. In doing so, the research would be more reliable and generalizable.

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## APPENDICES

### Appendix 1: The Result of Analysis of Themes And Thematic Progressions

GRADE	Themes			Thematic progression		
	Topical	textual	interper	reiteration	zig-zag	multiple
s1	45	6	0	3		
s2	47	15	0	2		
s3	23	4	0	4		
s4	54	14	0	2	1	
s5	54	10	0	4		
s6	39	3	0	2		
<b>TOTAL</b>	<b>262</b>	<b>52</b>	<b>0</b>	<b>17</b>	<b>1</b>	
GRADE AB						
s7	53	13	0	4		
s8	35	1	0	2		
s9	35	11	0	2		
s10	39	4	0	2		
s11	62	19	0	3		
s12	64	13	0	3		

s13	39	10	0	2		
s14	37	8	0	2		
s15	36	27	0	4		
s16	46	13	0	3		
s17	35	10	0	1		
s18	47	14	0	2		
s19	44	10	0	3	1	
s20	35	7	0	2		
s21	30	8	0	2		
s22	28	5	0	2	1	
s23	66	18	0	3		
<b>TOTAL</b>	<b>731</b>	<b>191</b>		<b>42</b>	<b>2</b>	
<b>GRADE B</b>						
s24	40	9	0	4		
s25	39	5	0	3		
<b>TOTAL</b>	<b>79</b>	<b>14</b>		<b>7</b>	<b>0</b>	

## Appendix 2: The Result of Theme Markedness Analysis

	number of clauses	marked	unmarked
<b>GRADE A</b>			
S1	45	5	40
S2	45	8	37
S3	24	3	21
S4	54	4	50
S5	53	2	51
S5	38	3	35
<b>TOTAL</b>		<b>25</b>	<b>234</b>
<b>GRADE AB</b>			
S7	52	6	47
S8	34	7	27
S9	35	3	32
S10	40	3	37
S11	61	8	53
S12	65	5	60
S13	41	3	38
S14	37	7	30
S15	75	7	68
S16	46	5	41
S17	32	2	30
S18	46	3	43
S19	44	3	41
S20	34	2	32
S21	30	5	25
S22	27	3	24
S23	66	7	59
<b>TOTAL</b>		<b>79</b>	<b>687</b>
<b>GRADE B</b>			
S24	44	2	42
S25	37	1	36
<b>TOTAL</b>		<b>3</b>	<b>78</b>

### Appendix 3: The Result of Lexical Cohesion Analysis

GRADE	lexical cohesion				
	repetition	synonymy	antonymy	hyponymy	meronymy
A					
S1	54	0	0	0	0
S2	40	0	0	0	0
S3	11	1	0	0	0
S4	52	0	0	1	0
S5	46	0	0	1	0
S6	33	0	0	0	0
<b>TOTAL</b>	<b>236</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>
GRADE AB					
S7	35	0	0	0	0
S8	32	0	0	0	0
S9	26	0	0	0	0
S10	33	0	0	0	0
S11	57	0	0	0	0
S12	42	0	0	2	0
S13	34	0	0	0	0
S14	35	0	0	2	0
S15	63	0	0	0	0
S16	39	0	0	0	0
S17	18	0	0	1	0
S18	25	0	0	0	0
S19	42	0	0	1	0
S20	21	0	0	0	0
S21	10	0	0	0	0
S22	24	0	0	0	0
S23	47	0	0	0	0
<b>TOTAL</b>	<b>583</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>
GRADE B					
S24	36	0	0	2	0
S25	36	0	0	2	0
<b>TOTAL</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>

#### Appendix 4: The Result of Conjunction Analysis

GRADE A	conjunction			
	addition	comparison	time	consequence
S1	4	1	4	0
S2	5	4	0	2
S3	2	0	0	0
S4	2	3	4	0
S5	4	4	4	0
S6	3	0	2	0
<b>TOTAL</b>	<b>20</b>	<b>12</b>	<b>14</b>	<b>2</b>
GRADE AB				
7	8	1	6	0
8	2	0	1	0
9	4	2	2	2
10	8	1	1	0
11	16	1	5	0
12	7	1	5	0
13	11	3	0	0
14	5	0	2	0
15	13	1	1	2
16	7	0	3	1
17	3	0	2	0
18	5	2	1	2
19	6	3	2	0
20	3	1	1	2
21	3	1	0	3
22	3	0	0	0
23	4	2	8	2
<b>TOTAL</b>	<b>108</b>	<b>19</b>	<b>40</b>	<b>14</b>
GRADE B				
25	7	0	1	0
26	4	1	3	1
<b>TOTAL</b>	<b>11</b>	<b>1</b>	<b>4</b>	<b>1</b>

### Appendix 5: The Result of Reference Analysis

STUDENT	types of reference		
	personal	demonstrative	Comparative
GRADE A			
S1	24	0	2
S2	23	6	2
S3	22	5	0
S4	38	6	2
S5	34	22	2
S6	16	17	1
<b>TOTAL</b>	<b>157</b>	<b>56</b>	<b>9</b>
GRADE AB			
S7	40	21	2
S8	12	4	2
S9	7	7	2
S10	15	2	0
S11	36	5	1
S12	13	4	2
S13	31	9	2
S14	5	3	3
S15	41	11	2
S16	22	2	1
S17	25	2	0
S18	28	9	1
S19	54	26	1
S20	16	8	0
S21	16	5	0
S22	10	8	2
S23	27	18	0
<b>TOTAL</b>	<b>398</b>	<b>144</b>	<b>21</b>
GRADE B			
S24	28	2	3
S25	25	4	2
<b>TOTAL</b>	<b>53</b>	<b>6</b>	<b>5</b>

## Appendix 6: The Result of Substitution and Ellipsis Analyses

GRADE A	substitution	ellipsis
S1	0	1
S2	0	0
S3	0	1
S4	0	0
S5	0	1
S6	0	1
<b>TOTAL</b>	<b>0</b>	<b>4</b>
GRADE AB		
S7	0	1
S8	0	1
S9	0	3
S10	0	0
S11	1	3
S12	0	1
S13	0	1
S14	0	0
S15	2	0
S16	0	1
S17	0	0
S18	0	1
S19	0	1
S20	1	0
S21	0	1
S22	0	1
S23	0	0
<b>TOTAL</b>	<b>4</b>	<b>15</b>
GRADE B		
S24	1	1
S25	0	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>