

## CHAPTER I

### INTRODUCTION

This beginning chapter encompasses confirmations for each specification of background of the study, research questions, the objectives of the study, significance of the study, scope and limitation of the study, and definition of the key terms.

#### **1.1 Background of the Study**

Lexical bundles are a part of linguistic features. The importance of these linguistic features raised intention among linguist to describes all-important role of lexical bundles as part of study.<sup>1</sup> Related to that, it is becoming the linguistic trend to studies phraseological units (PhU).<sup>2</sup> Numerous researchers collect multiples target text to define and process the lexical bundles based on the purpose of studies. All of the presence studies highlight the significance of the lexical bundles which carried particular structural forms and noticeable discourse functions. As cited in Gezegin, Cowie claims that the major concerns of the study of phraseology literally on the structure meaning and about use of word combination including idiom, collocations and a word arrangement of more than one word (lexical bundle).<sup>3</sup> As cited in Oberhue, Biber et al. points out that lexical bundles are strings of three or more words that frequently occur together.<sup>4</sup> Their frequent use helps to shape the meaning in a text and make difference in a register.<sup>5</sup>

As cited in Mizumoto, Biber et al. declares that specific set of lexical bundles are showing often like “as a result of,” “at the same time,” and “the way in which” in written discourse and “I don’t know what,” “can I have a,” and “do you want to” in spoken discourse. The name for lexical bundle is not as a single

---

<sup>1</sup> Hadi Kashiha & Chan Heng, “An Exploration of Lexical Bundles in Academic Lectures: Examples from Hard and Soft Sciences,” *The Journal of Asia TEFL* Vol.10 No. 4, 2013

<sup>2</sup> Juan-Peromingo, “The Use of Lexical Bundles in the Written Production of Spanish EFL University Student,” *Proceedings. Riga: University of Latvia Publishing*, 2009.

<sup>3</sup> Betül-Gezegin, “Lexical Bundle in Published Research Article: A Corpus-Based Study,” *Journal of Language and Linguistic Studies* 15 (2), 2019.

<sup>4</sup> Nichole Oberhue, “Lexical Bundles in Academic Discourse”, *nicholeoberhue.com*, 2012

<sup>5</sup> Ken Hyland, “Academic Clusters: Text Patterning in Published and Postgraduate Writing. *International Journal of Applied Linguistics* 18(1), 2008

name. Some experts referred variously for the term of lexical bundle.<sup>6</sup> There are more than 40 terms belong to lexical bundle” such as *formulaicity* and *formulaic sequence*,<sup>7</sup> *multi- word sequences*.<sup>8</sup> As cited in Bal, BalBanerjee & Pedersen adds other label for lexical bundle that is *n-grams*,<sup>9</sup> *prefabricated routine* and *patterns (prefabs)*, also as cited in Erman and Warren, Nattinger and DeCarrico mention that as *lexical phrases*.<sup>10</sup> Hyland used *chunk*, *cluster* specially to address the importance of multi-word units in language.<sup>11</sup> Those terms appear across many studies interested in word combinations of English language.

The constant and appropriate application of lexical bundle in English language production is important. Lexical bundles are valuable to the fluid of English production.<sup>12</sup> Hyland argues the practicality of putting lexical bundle in written text from dissimilar disciplines which produced by writers of different fields demonstrated to “develop their arguments, establish their credibility and persuade their readers”.<sup>13</sup>

In addition, as cited in Hyland and Jiang, Hoey explains that sentences are typically made up of interlocking bundles as words are mentally primed for use with other words through our experience of them in frequent associations.<sup>14</sup> From those statement, it can be stated that the typical used of bundles will display writer’s competence and remove any potential problems while reading.

Remarking lexical bundle in texts is a useful for writing. Thus, lexical bundle had to be found, underlined, and labelled within the texts. The sentences where the lexical bundles occurred manifests additional variability of the specific

---

<sup>6</sup> Atsushi Mizumoto et al., “Applying the Bundle-Move Connection Approach to the Development of an Online Writing Support Tool for Research Articles,” *Language Learning*, 2017

<sup>7</sup> Alison Wray and Michael Perkins, “The Functions of Formulaic Language: An Integrated Model,” *Language & Communication* 20, 2000

<sup>8</sup> Douglas Biber, Susan Conrad, and Viviana Cortes “If You Look At ... Lexical Bundles in University Lectures and Textbooks,” *Applied Linguistics* 25, 2004.

<sup>9</sup> Betül Bal, “Analysis of Four-word Lexical Bundles in Published Research Articles Written by Turkish Scholars,” *Thesis, Georgia State University*, 2010.

<sup>10</sup> Britt Erman and Beatrice Warren, “The Idiom Principle and The Open Choice Principle,” *In: Text*, 20 (1), 2000.

<sup>11</sup> Ken Hyland, “Academic Clusters: Text Patterning in Published and Postgraduate Writing,” *International Journal of Applied Linguistics*, Vol. 18 No. 1, 2008

<sup>12</sup> Oberhue, “Lexical Bundles in Academic Discourse”

<sup>13</sup> Hyland, “Academic Clusters: Text Patterning in Published and Postgraduate Writing,” *International Journal of Applied Linguistics*, Vol. 18 No. 1, 2008

<sup>14</sup> Ken Hyland and K Jiang, “Academic lexical bundles: how are they changing?,” *International Journal of Corpus Linguistics*, 23 (4), 2018.

area under investigation. Items of bundles in texts marks out the detailed and directed to their place in a sequence. The notion of lexical bundles not only builds aspects of characterizing text, but also make links to introducing image of related participants. The selected formulaic sequences must be accurately implemented by the writers. Hyland emphasizes the choosing bundles have meaning in specific discipline and influence in the particular genres of that discipline.<sup>15</sup>

Actually, as cited in Damchevska, Sinclair remarks that English speakers and English writers both are two competent subjects' identification to the occurrence of lexical bundles.<sup>16</sup> However, as cited in Hyland, Wray makes a claim about how sequences are stored in the mental lexicon, these strings are nevertheless 'glued together' in everyday discourse.<sup>17</sup> In the study of Wray and Perkins, they grant that a sequence, continuous or discontinuous, of words or other meaning elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar.<sup>18</sup>

Apart from Wray's definition, the advantageous lexical bundles expand into academic discourse, this is necessitated to show varied use of lexical bundle to develop proficient content English language. Simpson-Vlach & Ellis agree that lexical bundles have a prior position in academic discourse and be an important component of fluent linguistic production and a factor of native-like proficiency.<sup>19</sup> In academic discourse, the change of lexical bundle in specific text help to reduce processing time by using familiar patterns to structure a discourse by guiding readers through it (*in the next section, we can see that*) or by linking ideas (*is due to the, in contrast to*).<sup>20</sup>

Many corpus studies have identified recurrent patterns in corpora of written and spoken language which occur significantly more frequently in academic than in other, nonacademic registers. It is proved in Hyland's study that

---

<sup>15</sup> Ken Hyland, "Bundles in Academic Discourse", *Annual Review of Applied Linguistics*, 32, 2012

<sup>16</sup> Violeta Damchevska, "Structure of Lexical Bundles in Economics Research Articles", *The Journal of Teaching English for Specific and Academic Purposes* Vol. 7, No 2, 2019

<sup>17</sup> Ken Hyland, "Bundles in Academic Discourse", *Annual Review of Applied Linguistics*, 32, 2012

<sup>18</sup> Alison Wray and Michael Perkins, "The Functions of Formulaic Language: An Integrated Model," *Language & Communication* 20, 2000

<sup>19</sup> Rita Simpson-Vlach and Nick Ellis, "An Academic Formulas List: New Methods in Phraseology Research," *Applied Linguistics*, 31, 2010

<sup>20</sup> Hyland and Jiang, "Academic lexical bundles: how are they changing?"

academic writing and conversation contribute more types of lexical bundles than either news or fiction, with some 800 different four-word clusters in the conversation corpus and over 450 in the academic corpus occurring more than 10 times in one million words.<sup>21</sup>

Notably, one kind of academic writing that employed specific variations of lexical bundles is in research article text. Text of research article comes from researchers that are not only from English speaking countries but also from other language backgrounds. Although the language use in the writing of research is generally specifying the same formality. Öztürk and Köse, Zamel assert that academic discourse has its distinguishing features “because it appears to require a kind of language with its own vocabulary, norms, sets of conventions, and modes of inquiry.”<sup>22</sup> But there is also a need to proceed with caution about language features associated with the research article in their respective field.

Several previous studies address lexical bundles investigation with taking some relevant corpus of research articles to be loaded. A current source study adds list of work in lexical bundles issue used in medical research article in the order of the moves and steps done by Al-Shujairi et al. The targeted analysis take place in the discussion section. Piece of 3-5-word bundles is chosen as the consideration. 106 bundles detected in a corpus software for each move and step of the discussion section in the research article.<sup>23</sup>

A year back Gezegin explores bundles of Turkish academic published text in six different disciplines. Point of the four and five-word combination is sought to meet the aim of the study. A complete part of a research article consisting; introduction, method, results, and discussion format and with abstract part become the point attention to portrayed the spread of lexical bundle. A corpus software resulted 121 (mixture of four and five-word bundles). The structural distribution of lexical bundles mostly prepositional. And the functional characteristic revealed

---

<sup>21</sup> Hyland, “Academic Clusters: Text Patterning in Published and Postgraduate Writing”

<sup>22</sup> Yusuf Öztürk and Gül Köse, “Turkish and native English academic writers’ use of lexical bundles,” *Journal of Language and Linguistic Studies*, 12(1), 2016

<sup>23</sup> Yasir Al-Shujairi et al., “Lexical Bundles in the Discussion Section Moves of High Impact Medical Research Articles,” *Pertanika Journals Social Science and Humanities*, 28 (3), 2020

to referential bundles based on the developed taxonomy and three based functional description in the original version taxonomy is known.<sup>24</sup>

Reza Atai and Tabandeh examines the frequency, types of structures, and functional of four-word bundles produced in the academic research article written in English by English as a native language and Iranian English as a foreign language writer in two sub-genres and three-sub disciplines. The bundle identified in Iranian EFL writers is lacked varies than ENL writer. The results of the structure patterns and functional types analysis of four-word lexical bundles in research articles show dissimilarities between writers of ENL background compared with EFL.<sup>25</sup>

Gezegin states that lexical bundle has a rising status as a field of investigation.<sup>26</sup> However, high motivation to do research on lexical bundle is because the concept attributes an organized English language production. It is therefore important that researchers acquire a strong understanding of the nature of lexical bundles variation.

The present research aims to extend this line of research about lexical bundles. The advantage in studying variation of lexical bundles are they have three important properties which make them an interesting window on texts: they can be identified automatically; they play definable functional roles; and they are highly sensitive to differences between text types.<sup>27</sup>

The academic texts used for the purpose of the study are published research articles in Indonesian journals from education disciplines written by various scholars. As the result, the comparison of previous study and the recent study can be seen from the identified lexical bundles and investigation of these lexical bundles in terms of their structures and functions based on the taxonomies used for the classification of lexical bundles.

The motivation to include research articles published in Indonesian journals as the main concern of this study is because the journal wrote by mainly Indonesian-

---

<sup>24</sup> Betül Bal-Gezegin, "Lexical Bundles in Published Research Articles: A Corpus Based Study," *Journal of Language and Linguistics Studies*, 15 (2), 2019

<sup>25</sup> Mahmood Atai and Farhad Tabandeh, "Lexical Bundles in Applied Linguistics Articles: Exploring Writer, Sub-Discipline and Subgenre Variations," *ESP Across Cultures*, 11, 2014

<sup>26</sup> Gezegin, "Lexical Bundles in Published Research Articles"

<sup>27</sup> Philip Durrant, "Lexical Bundles and Disciplinary Variation in University Students' Writing: Mapping the Territories," *Applied Linguistics*, 38 (2), 2017

speaking first language and it opened up for Indonesian researcher to publish their research article. As we know that, English language become a foreign language in Indonesia. The recognition of lexical bundles in academic discipline is important for writers, and the absence of such bundles may reveal “the lack of fluency of a novice”. Adel & Erman responds that there is no doubt that another dimension of difficulty is also added for the writers who are the non-native speakers of the language they are writing in.<sup>28</sup>

As the consequence, the research articles from twelve Indonesian journals that are indexed in SINTA 1 to SINTA 6 (Science and Technology Index) is collected. All journals focus on English language studies under varies sub-topics. Ahmar et al. explain that the advantages of SINTA compared to other indexing portals that is can automatically indexing the work that has been indexed in Google Scholar and Scopus.<sup>29</sup>

The rationale behind the studies in English language is based on two aspects. First, as cited in Mbedhbi, Scott and Tribble recognize the usefulness of lexical bundles for understanding how experts’ text are produced and how they are different from the output of apprentice language users.<sup>30</sup> The second reason is the studies in English language should share a high representative of lexical bundles.

The different sizes (from two- to six-word bundles) are potential to be investigated. But, the focus material analysis in this study is four-word bundle. Hyland has noted that it is more interesting to study four-words bundles as they not only are more common than five-word units, but they also “offer a clearer range of structures and functions than three-word bundles”.<sup>31</sup> In addition, Cortes thinks that many three-word bundles are embedded in four-word bundles.<sup>32</sup> The identification of four-word bundles in the research article is not the end of work. It still remains to analyze the structure and the function of the bundles. Furthermore,

---

<sup>28</sup> Adel and Erman, “Recurrent word combinations in academic writing by native and nonnative speakers of English: A lexical bundles approach,” *English for Specific Purposes*, 31(2), 2012

<sup>29</sup> Ansari Ahmar et al, “Lecture’s Understanding on Indexing Databases of SINTA, DOAJ, google scholar, SCOPUS, and Web of Science: A study of Indonesian,” *Journal of Physics Conference Series*, 2018

<sup>30</sup> Malek Mhedhbi, “Lexical Bundles and The Construction of An Academic Voice in Business Writing,” *Advances in Language and Literary Studies*, 5(6), 2014

<sup>31</sup> Hyland, “Academic Clusters: Text Patterning in Published and Postgraduate Writing”

<sup>32</sup> Cortes, “Lexical Bundles in Published and Student Disciplinary Writing: Examples from History and Biology,” *English for Specific Purposes*, 23, 2004

this study has expanded to encompass the whole body of research article as target investigation of lexical bundles. The conventional article structure including: AIMRaD (Abstract, Introduction, methodologies, Results, and Discussion) also conclusion section is specifically will be analyzed related to the purposes of understanding the variation of lexical bundles from each sub-genre part.

### **1.2 Research Questions**

1. What are the most frequent lexical bundles in the research article?
2. What kinds of structural patterns of the lexical bundles found in the research article?
3. What are the functional characteristics of the lexical bundle identified in the research article?

### **1.3 The Objective of the Study**

1. To know the most frequent lexical bundles in the research article
2. To know kinds of structural patterns of the lexical bundles found in the research article
3. To know the functional characteristics of the lexical bundle identified in the research article

### **1.4 The Significance of the Study**

The study of lexical bundle in research articles is important. The writers of research article can perform their duty very ably. Coxhead and Byrd point out lexical bundles constitute quality of written. Extended appearance in many sources allowed users to apply it in their writing constantly. As a result, the lexical bundles activate satisfaction work. At last, the lexicographically had a strong influence to speak the language.<sup>33</sup>

As the basis of English language professional markers, thus aspects knowledge in academic discourse communities when trying to write and publish research article is very helpful. Bringing concept of lexical bundle will facilitate unproblematic practice of a researcher in his career. As Cargill and O'Connor state that keys successful science writing is not only depend on

---

<sup>33</sup> Averil Coxhead and Pat Byrd, "Preparing Writing Teachers to Teach the Vocabulary and Grammar of Academic Prose," *Journal of Second Language Writing*, 16, 2007

science-based and other additional skill.<sup>34</sup> Language-based is also important to be mastered. Because many research articles appear in English. And the writers come from different language background. It makes author those for whom English is an additional language easier develop clear and communicative language for the readers in English. Moreover, it gives a positive influence to pass paper recruitment.

### **1.5 The Scope and Limitation of the Study**

This present study prioritizes the variation of lexical bundles use in the journal research article text. The entire selected research articles were written in English with many topics of research. The available research articles were obtained from twelve Indonesian journal archives. Indonesian journal sources got score SINTA 1 to SINTA 6.

Conrad argues that “in a corpus-based study, the design of the corpus is very important because the corpus must be suitable to the research questions being addressed.<sup>35</sup> The corpus needed to be carefully compiled to properly describe Conrad’s statement. Because the aim of the study is to find the lexical bundles in research articles written in Indonesian journal. The list of journals included in the corpus study are; TEFLIN and IJAL (SINTA 1), EduLite and English Review (SINTA 2), Indonesian EFL Journal and VISION (SINTA 3), JEES and Pedagogy Journal (SINTA 4), CELTIC and JALL (SINTA 5), ELT Forum and ELT in Focus (SINTA 6).

The specified limitations of the study are noticed to some points. First, to successfully produce the corpus of 1,000,000 words, the reaching number of words calculated from the full-text sections (Introduction, Method, Result, and Discussion) and added with the abstract of the research article. The frequency of 40 times per million words corpus has to be followed to be regarded as a “lexical bundle”. The frequency threshold is normal for large written corpus.

---

<sup>34</sup> Margaret Cargill and Patrick O’Connor, *Writing scientific Research Articles: Strategy and Steps* (West Sussex, John Wiley & Sons), 2009

<sup>35</sup> Susan M Conrad, Douglas Biber, “The Frequency and Use of Lexical Bundles in Conversation and Academic Prose”, *Applied Linguistics Faculty Publications and Presentations*, 2005



The requirement that lexical bundles have to occur in different texts, with an occurrence across at least 10% of research article texts was applied. The research article corpus comprises 360 research articles from twelve journal that mentioned previously. So, 10% of the 360 research articles texts in the present study amounted to 36 texts. This identification criterion has a function to avoid the quirks of individual writers.

Second, the length of lexical bundles included in the data is four words bundles. The four words bundles means that the word types consist of four different words sequences. The main focus of identifying four-word bundles are far more common than five-word strings and offer a clear range of structures and functions than three-word bundles. In order to analyze the four-word bundles in the corpus, the Cluster/N-gram function of AntConc. 3.4.4w (Windows) 2014 is operated.

To know fixed structural patterns of the lexical bundles, the researcher adopts Biber et al 's (1999) structural taxonomy of lexical bundles. Furthermore, a functional classification of Hyland (2008) is followed in this study.

### **1.6 Definition of the Key Terms**

The present study was used these following key terms to serve an important idea related to the study. Certainly, it is essential to understand and recognize them through the definition. Therefore, the succinct explanation of each key terms is presented below;

#### **1. Lexical bundles**

Lexical bundles are strings of three or more words that frequently occur together. Lexical bundles are semantically transparent; that is, they are non-idiomatic.

#### **2. Research article**

Research article is academic written text as a result of work of a researcher in any disciplines. And it is usually published and accessible.

#### **3. Indonesian journal**

Indonesian journal is Indonesian scholarly publication containing research articles, articles written by researchers, professor and other experts. Journals focus on a specific discipline or field of study.