LEXICAL BUNDLES IN MEDICAL JOURNAL ARTICLES: COVID-19 ARTICLE JORUNALS

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Abstract
Lexical bundle usually appears in any text. It is always used with the same form and same structure in a text to explain or to express something. This form of constructing the words is totally come from the author or writer based on his or her vocabulary knowledge and grammatical knowledge. This research aims to find out the lexical bundles in medical journal article, and this research also aims to analyze the structure of lexical bundles found in the medical journal articles. This is a corpus database research. The data derived from 10 medical journals which focused on covid-19 issue and those journals consist of 204 articles. The data was analyzed by using software AntConc 3.5.8. The result of the research showed there 953.290 tokens in whole articles, then there are 6 lexical bundles found which divided into 4 lexical bundles with 4 words and 2 lexical bundles with 3 words. Based on the analyses of data indicated that the lexical bundles found were formed by using preposition and then combined with the noun phrase.

Keywords: Corpus data, Covid-19, Lexical bundles, Journal articles.

Abstrak
Bundel leksikal biasanya muncul di teks apa pun. Itu selalu digunakan dengan bentuk yang sama dan struktur yang sama dalam sebuah teks untuk menjelaskan atau mengungkapkan sesuatu. Bentuk konstruksi kata-kata ini sepenuhnya berasal dari penulis atau penulis berdasarkan pengetahuan kosa kata dan pengetahuan gramatikalnya. Penelitian ini bertujuan untuk mengetahui bundel leksikal dalam artikel jurnal medis, dan penelitian ini juga bertujuan untuk menganalisis struktur bundel leksikal yang terdapat dalam artikel jurnal medis. Penelitian ini merupakan penelitian database korpus. Data tersebut berasal dari 10 jurnal kedokteran yang fokus pada isu covid-19 dan jurnal tersebut terdiri dari 204 artikel. Data dianalisis dengan menggunakan perangkat lunak AntConc 3.5.8. Hasil penelitian menunjukkan terdapat 953.290 token di seluruh artikel, kemudian ditemukan 6 bundel leksikal yang terbagi menjadi 4 bundel leksikal dengan 4 kata dan 2 bundel leksikal dengan 3 kata. Berdasarkan analisis data menunjukkan bahwa kumpulan leksikal yang ditemukan dibentuk dengan menggunakan preposisi dan kemudian digabungkan dengan frase nomina.

Kata kunci: Data korpus, Covid-19, Lexical bundles, Artikel jurnal.

I.INTRODUCTION

Among academics, a research article is one of the most vital methods of disseminating information (Hyland, 2011). The ability to effectively convey ideas and knowledge to readers relies on the skilful use of standard words, phrases, and a formulaic language. No one should be surprised to

learn that English is one of the most spoken languages worldwide. To a greater or lesser extent, many nations now use English as a secondary language, and others have made learning English a top

priority. Second-language acquisition in English calls for a great deal of initiative on the part of the learner. Mastering these foundations is essential for using English effectively in any setting. Perhaps this is due to the fact that the four skills necessary to communicate effectively in English are listening, speaking, reading, and writing (Sadiku, 2015). Acquiring proficiency in every one of these skills is no easy task. Before beginning this course, students should have a solid grasp of English grammar and a sizable vocabulary. You need to have these mastered if you want to be an expert sentence-builder in English. If you want to be successful in your efforts to learn English, one of the most fundamental concepts you must understand in advance is vocabulary (Agustina, 2014).

Wilkins (1972) argues that a common vocabulary is essential for effective communication. According to Harmer (1991), a language's vocabulary is "the vital organs and the flesh." Since (Lewis, 1993) argued that learning English should begin with a focus on vocabulary rather than grammar, a lexical approach has been proposed as the best method for acquiring the language. It's a purely academic question whether or not one needs to know all the words and lexemes in a dictionary. One area that has seen recent progress is the study of "word clusters" as opposed to individual words. Investigational word groups typically consist of more than just a couple of words strung together. Various scholars have given these collections of words varying names. Those words are referred to as a "lexical bundle" in (Biber et al., 1999). According to their definition, a lexical bundle is a collection of words that share a common register and play a significant role in shaping that register. Lexical bundles are the most common recurrent sequences of words in a given register, as defined by Fitzmaurice & Biber (2006).

Lexical bundle usually appears in any text (Fitrianasari et al., 2018). It is always used with the same form and same structure in a text to explain or to express something. This form of constructing the words is totally come from the author or writer based on his or her vocabulary knowledge and grammatical knowledge. This lexical bundle does not consist of two words while it can stand from three, four or five words. There are a few researchers who have conducted some research about lexical bundles which are used by the author from a certain text. For instance, Kwary et al., (2017), conducted about lexical bundles in journal articles across academic discipline, and the result showed that the most lexical bundle come from physical science and social science papers. This kind of research is really important because people can realize what they have written down in their own

papers and how it is constructed. By knowing these all patterns the learners can realize that they have to make some variation in their writing or they have to keep doing on it. The words construction surely will decide whether the points or ideas which have been expressed will be understood by the reader or not. Based on the explanation above, This research aims to find out the lexical bundles in medical journal article, and this research also aims to analyze the structure of lexical bundles found in the medical journal articles. Instead of finding the lexical bundles, the researcher also would like to analyze the structure of it and how it's the function in the sentence.

II. METHOD

This research is the corpus data research. The data of this research derived from 10 medical journals, and those all journals contained 204 articles as a whole. These all medical journal articles discussed about the same issue that is about the corona virus disease which had been seen in the various perspective. All the data which have been collected then converted to txt form because the software which had been used to analyze the data is AntConc 3.5.8. and it requires all the files which are wanted to be analyzed should be in txt file form. After analyzing the data it will be explained descriptively based on the data provided.

III. RESULT AND DISCUSSION

Based on the analyses of the data, the 204 articles contain 953.290 tokens. It was found that there are 4 lexical bundles with four words and 2 lexical bundles with three words. These all findings

appeared in at least 12 articles and they also got 20 hits at least in whole articles. The finding can be seen in the following explanation:

1	On a case by	20 hit	10 article
2	at the same time	26 hit	16 article
3	for the development of	28 hit	12 article
4	as a result of	28 hit	24 article
5	large number of	36 hit	30 article
6	in this case	23 hit	15 article

No	Lexical bundle	Type	Article & hits		Remarks (Tittle)
1	*"On a case by"*	Collocation: Pre + N Lexical bundle: 4 words Bundle	12 articles total 22 hits	1.	Coronavirus disease 2019 and pregnancy (2 hits)
				2.	COVID-19 critical care perspective informed by lessons(1 hit)
				3.	Covid-19 from bench to bed side (1 hit)
				4.	First know person to person transmission of severe accurate respiratory syndrome coronavirus (1 hit)
				5.	Labor and delivery guidance for COVID-19 (1 hit)
				6.	Society of cardiovascular computed tomography guidance (5 hits)
				7.	1-s2.0-S0002937820301976-main (2 hits)
				8.	1-s2.0-S0140673620306073-main (1 hit)
				9.	1-s2.0-S187140212030076X-main (1 hit)
				10.	1-s2.0-S1934592520301258-main (5 hits)
				11.	1-s2.0-S2352556820300291-main (1 hit)
				12.	1-s2.0-S2589933320300409-main (1 hit)

Based on the data shown in the table above, the "on a case by" become one of the lexical bundles found in the article. It was found from 12 articles and got 22 hits in it. It is derived from preposition and combined with the phrasal noun.

No	Lexical bundle	Type	Article & hits		Remarks (Tittle)
2	*"for the development of"*	Collocation: Pre+N **Lexical bundle:** 3 words bundle	13 articles 29 hits	1.	Multiple levels of analysis: clinical, molecular, and epidemiological
				2.	characterization of the SARS-CoV2 (2 hits)
				3.	Coronaviruses pandemics (2 hits)
				4.	From SARS-CoV to SARS-CoV-2 (5 hits)
				5.	Recovery from coronavirus infection through pulmonary rehabilitation 2019 (1 hit)
				6.	Recent progress in understanding 2019

						novel coronavirus (3 hits)
					7.	Type 2 coronavirus and severe acute respiratory illness (1 hit) Type 2 coronavirus and severe acute respiratory illness (1 hit)
					8.	1-s2.0-S2095882X20300414-main (1 hit)
					9.	1-s2.0-S0024320520305865-main (2 hits)
					10.	1-s2.0-S092485792030100X-main (3 hits)
					11.	1-s2.0-S0732889320304715-main (2 hits)
					12.	1-s2.0-S0924857920300674-main (1 hit)
					13.	1-s2.0-S1286457920300824-main (5 hits)
					14.	1-s2.0-S1871402120300849-main (1 hit)
3.	*"as a result of"*	**Collocation: pre+NP** **Lexical bundle:** 4 words bundle		24 articles 28 hits	1.	A review on possible modes of action of chloroquine (1 hit)
					2.	Clinical, molecular and epidemiological characterization of the SARS-CoV2 (2 hits)
					3.	Computers and viral diseases (1 hit)
					4.	Coronavirus disease 2019 infection among asymptomatic (1 hit)
					5.	COVID-19: From bench to bed side (1 hit)
					6.	Transmission, prevention, and therapeutic prospects for the COVID-19 virus (1 hit)
					7.	COVID-19, SARS and MERS (1 hit)
					8.	Wuhan, China, has had 1 confirmed case of a novel coronavirus that has caused pneumonia in 2019. (1 hit)
					9.	COVID-19: The Importance of Respiratory Airway Management, Mental Health, and Rehabilitation Treatments (1 hit)
					10.	Pathogenesis of Severe Acute Respiratory Syndrome-

				10.	Coronavirus (SARS-CoV) Infection: The Impact of Oxidative Stress (1 hit)
				11.	Recent accomplishments and future challenges in the fight against COVID-19 drug development (2 hit)
				12.	Current status of COVID-19 drug development and future directions (2 hit)
				13.	Recent progress in understanding 2019 novel coronavirus (1 hit)
				14.	1-s2.0-S1198743X20301713-main (1 hit)
				15.	1-s2.0-S0009898120302503-main (1 hit)
				16.	1-s2.0-S0010482520300627-main (1 hit)
				17.	1-s2.0-S092485792030100X-main (1 hit)
				18.	1-s2.0-S0140673620302117-main (1 hit)
				19.	1-s2.0-S187140212030076X-main (1 hit)
				20.	1-s2.0-S0188440920305403-main (1 hit)
				21.	1-s2.0-S0732889320304715-main (1 hit)
				22.	1-s2.0-S0735675720302849-main (1 hit)
				23.	1-s2.0-S0924857920301916-main (1 hit)
				24.	1-s2.0-S2589933320300483-main (1 hit)

From the data shown in table above, "for the development of" and "as a result of" became the other lexical bundles found in 204 articles. Both of are derived from preposition and then combined to noun phrase. Both of them also almost got the same hits in the articles.

				1.	Complex emergencies of COVID-19 (1 hit)
				2.	Computers and viral diseases (2 hits)
				3.	Corona (COVID-19) time musings (1 hit)
				4.	Status and outlook of coronavirus infection in 2019 (COVID-19) (1 hit)
4	*"large number of"*	**Collocation** : adj+ n **Lexical bundle:** 3 words bundle	30 articles 36 hits	5.	Coronavirus disease 2019 infection among asymptomatic and (1 hit)
				6.	COVID-19 and the Role of eurosurgeons in Nepal (1 hit)
				7.	COVID-19: Transmission, prevention, and potential therapeutic opportunities (1 hit)
				8.	Current epidemiological and clinical features of COVID-19 (1 hit)

					9.	Evolution of severe acute respiratory syndrome coronavirus 2 (1 hit)
					10.	From SARS-CoV to SARS-CoV-2 (1 hit)
					11.	Immunology of COVID-19: current state of the science (1 hit)
					12.	Letter to the editor regarding article (1 hit)
					13.	Coronavirus Type 2 Induced Severe Acute Respiratory Syndrome: Remdesivir (3-Hit))
					14.	Remdesivir for SARS-CoV-2 (3 HCIM))
					15.	The Forrest Gump approach to preventing severe COVID-19 (1 hit)
					16.	Ventilation-Perfusion Scans During the Coronavirus Disease 2019 (1 hit)
					17.	1-s2.0-S0009898120302503-main (1 hit)
					18.	1-s2.0-S0010482520300627-main (2 hits)
					19.	1-s2.0-S016344532030222X-main (1 hit)
					20.	1-s2.0-S0048969720325134-main (1 hit)
					21.	1-s2.0-S0924857920301011-main (1 hit)
					22.	1-s2.0-S0924857920301114-main (1 hit)
					23.	1-s2.0-S1074761320301837-main (1 hit)
					24.	1-s2.0-S1286457920300812-main (1 hit)
					25.	1-s2.0-S1286457920300824-main (1 hit)
					26.	1-s2.0-S1546144020303082-main (1 hit)
					27.	1-s2.0-S1568997220300938-main (1 hit)
					28.	1-s2.0-S1871402120300928-main (1 hit)
					29.	1-s2.0-S1878875020310640-main (1 hit)
					30.	1-s2.0-S1878875020310640-main (1 hit)

The other lexical bundles found are "at the same time", "large number of" and "in this case". Total lexical bundles found in the 204 articles are 6 lexical bundles. Where 4 lexical bundles consist of 4 words and 2 lexical bundles consist of 3 words. The whole structure of the lexical bundles found are preposition and combined with noun phrase.

IV. CONCLUSION

Based on the finding of this research, it can be concluded that there are 953.290 tokens in total 204 articles from 10 Journals, but there are only six lexical bundles found. The structure of lexical bundles found are preposition then combined with noun phrase. The lexical bundles found consist of 4 lexical bundles with 4 words, and 2 lexical bundles with 3 words.

REFERENCES

Agustina, T. (2014). English for Specific Purposes (Esp): An Approach of English Teaching for Non-English Department Students. *Beta*, *7*(1), 37–63.

Biber, D., Johansson, S.Leech, G., Conrad, S., & Finegan, E. (1999). *The Longman Grammar of Spoken and Written English*. Pearson Education.

Fitrianasari, N. I., Sulistyorini, T., & Sugiarti, T. R. (2018). Lexical Bundles in Academic Writing by Undergraduate and Graduate Students of English Language Education Program. *English Studies Journa*, *11*(2).

Fitzmaurice, S. M., & Biber, D. (2006). Using Corpora to Explore Linguistic Variation. Amsterdam: *John University System of Taiwan Working Papers in Linguistics*, *28*(2), 31–58.

Harmer, J. (1991). *Teaching Vocabulary: The Practice of English Language Teaching*. Longman.

Hyland, K. (2011). Academic Discourse: English in A Global Context. *Journal of English for Academic Purposes*, *10*(3), 198–199.

Kwary, D. A., Ratri, D., & Artha, A. F. (2017). Lexical Bundles in Journal Articles across Academic Disciplines. *Indonesian Journal of Applied Linguistics*, *7*(1), 132–140.

Lewis, M. (1993). *The Lexical Approach: The State of ELT and A Way Forward*. Language Teaching Publications.

Sadiku, L. M. (2015). The Importance of Four Skills Reading, Speaking, Writing, Listening in a Lesson Hour. *European Journal of Language and Literature Studies*, *1*(1).

Wilkins, D. A. (1972). *Linguistics in Language Teaching*. Arnold.