

A Corpus-Based Study Based on a Structural and Functional Analysis of Lexical Bundles in Online Business News (Kajian Berasaskan Korpus Berdasarkan Analisis Struktur dan Fungsi Berkas Leksikal dalam Berita Perniagaan Dalam Talian)

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ABSTRACT

While numerous studies have explored formulaic language in English for Specific Purposes (ESP) across genres and registers, the linguistic demands of rapid digitalization, especially in online business news, remain under-investigated. Unlike previous studies, this study analyses lexical bundles in business news articles published in 2025, capturing shifts in register driven by trade policy and tariffs. Specifically, the study's objectives were to investigate the frequency of lexical bundles used in online business news from January to May 2025, and to examine the extent to which a functional taxonomy can characterize these bundles. A total of 450 business news articles from three news agencies, i.e., BBC, CNN, and Reuters, comprising 321,225 running-word tokens, were compiled and analyzed using the AntConc software. The analysis identified 67 four-word lexical bundles meeting the frequency and range criteria. Structurally, noun phrase-based bundles, e.g., *the world's largest* and *a global trade war*, were the most frequent, followed by prepositional phrase-based, verb phrase-based, and clause-based bundles. Functionally, referential bundles, e.g., *in the first quarter* and *at the same time*, were predominant, particularly those indicating identification/focus and time/place/text deixis. Stance bundles and special conversational bundles, especially reporting expressions, e.g., *said in a statement*, were also notable. The outcomes of this study provide meaningful resources for instructors to improve students' learning of lexical bundles, specifically in online business news. Furthermore, the findings suggest that ESP instructors should prioritize noun-phrase structures to help students master the linguistic style of modern digital reporting.

Keywords: Business English; corpus linguistics; formulaic language; lexical bundles; online business news

ABSTRAK

Meskipun telah banyak kajian yang meneroka bahasa berformula dalam Bahasa Inggeris Untuk Tujuan Khusus (ESP) merentasi pelbagai genre dan laras bahasa telah dilakukan, namun tuntutan linguistik akibat digitalisasi yang makin berkembang, terutamanya kajian melibatkan berita perniagaan dalam talian masih kurang diteliti. Berbeza dengan kajian terdahulu, kajian ini menganalisis berkas leksikal perniagaan dalam artikel berita perniagaan yang diterbitkan pada tahun 2025 untuk mengenal pasti perubahan laras bahasa yang didorong oleh dasar perdagangan dan tarif. Objektif kajian ini ialah untuk menyiasat kekerapan berkas leksikal yang digunakan dalam berita perniagaan dalam talian dari Januari hingga Mei 2025, serta meneliti sejauh mana taksonomi fungsi dapat mencirikan berkas tersebut dalam laporan berita perniagaan. Sejumlah 450 artikel berita perniagaan daripada BBC, CNN, dan Reuters telah dikumpul dan dianalisis menggunakan perisian AntConc yang merangkumi 321,225 token perkataan. Hasil analisis telah dapat mengenal pasti 67 berkas leksikal empat perkataan yang memenuhi kriteria kekerapan dan julat yang telah ditetapkan. Dari segi struktur, berkas berasaskan frasa nama (contohnya, *'the world's largest'*, *'a global trade war'*) merupakan yang paling kerap digunakan, diikuti oleh berkas berasaskan frasa sendi nama, frasa kerja, dan klausa. Dari segi fungsi pula, berkas rujukan (contohnya, *'in the first quarter'*, *'at the same time'*) didapati lebih

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dominan terutamanya yang menunjukkan identifikasi/fokus serta deiksis masa/tempat/teks. Berkas pendirian dan berkas perbualan khas, terutamanya klausa pelaporan (contohnya, 'said in a statement') juga ditemui dalam data kajian. Dapatan kajian ini dilihat dapat menyediakan sumber yang bermakna bagi para pendidik untuk meningkatkan pembelajaran pelajar mengenai berkas leksikal, khususnya dalam berita perniagaan dalam talian. Selain itu, hasil dapatan ini juga mencadangkan agar para pendidik ESP memberi keutamaan kepada struktur frasa nama bagi membantu pelajar menguasai gaya linguistik pelaporan digital moden.

Kata Kunci: Bahasa Inggeris Perniagaan; linguistik korpus; bahasa berformula; berkas leksikal; berita perniagaan dalam talian

INTRODUCTION

Lexical bundles, or multi-word combinations, are common sequences of words that occur within specific register and serve as the fundamental “building blocks of discourse” (Biber & Barbieri, 2007, p.263). According to Hyland and Jiang (2018), these lexical bundles, which appear more frequently than expected by chance, change in response to new conditions and contexts across disciplines. As essential components of discourse, they reveal the lexico-grammatical features through which experts in a community construct meaning. The mastery of these patterns are an integral part of communicative competence and serves as a key signal of successful language processing fluency (Larsson, Kim & Egbert, 2025).

Consequently, there has been an increase in interest in corpus-based studies and specific language patterns, including keywords and lexical bundles, across disciplines, e.g., Yin and Li (2021), Alasmay (2024), and Narkprom and Phoocharoensil (2022). Studies have also been conducted of correlation between students’ performance and their use of lexical bundles, e.g., Kim and Kessler (2022).

Since lexical bundles are dependent on context, their structures and functions shift significantly across modes of communication. Unlike the static conventions of academic settings, linguistic patterns in online news discourse, particularly business news reports, evolve alongside rapidly changing trends. These fluid linguistic patterns have a direct influence on the specific language and word combinations used by journalists. Recent studies have increasingly focused on authentic linguistic features within digital genres, such as newspapers (Saeedi, et al., 2023), email (Wen, et al., 2020), and press releases (Liu & Zhang, 2021). These studies emphasize that digital genres contain real-time language that differs from that in academic texts.

Despite an increase in research into digital journalism, a significant gap remains in the analysis of extended lexical bundles across multi-agency business news discourse. While previous studies (e.g., Sukman, et al., 2022) explored lexical collocations of keywords in online business news, their primary focus on single-word units leaves the more linguistically complex structures of four-word lexical bundles under-investigated. Furthermore, although recently studies have been conducted in order to explore lexico-grammatical features and their functional taxonomies within journalism (Metang & Narathakoon, 2025; Leelasetakul, 2025), these studies relied heavily on single news agencies. Hence, their findings may not reflect the diversity of language used in online news.

To address this gap, the present study compiled a specialized corpus of online business news articles (COBN) published between January 2025 and May 2025 from reputable sources, enabling an analysis of the usage of lexical bundles in business discourse. The exploration of lexical bundles in online business news was the major focus, especially for the period since January 2025, when US policy on trade started to greatly impact other countries worldwide. The

study investigated whether or not this shift resulted in a change in linguistic features that reflects the influences of trade policy on language patterns used in writing business news. The results of this study offer insights into how language is shaped during economic shifts, which is likely useful for designing instructional materials for ESP classroom. The list of high frequency lexical bundles found in this study can help students to better comprehend and write online business news in English. In order to explore these pedagogical and linguistic implications, the following research questions were formulated.

RQ1: What are the most frequent grammatical patterns of lexical bundles in online business news?

RQ 2: What rhetorical functions do these bundles perform in shaping business news reports?

LITERATURE REVIEW

CORPUS LINGUISTICS AND ENGLISH FOR SPECIFIC PURPOSES

Corpus linguistics (CL) research has acquired significant attention over the years. Corpora help scholars to examine language variation across genres in both academia (Hyland, 2008; Liu, et al., 2023; Durrant & Brenchley, 2023) and professional settings (Işık, 2023; Wen, Liu & Huan, 2025; Tosqui-Lucks, et al., 2024). Compiling large amounts of spoken or written texts reveals usage patterns, enabling researchers to understand language use, variation, and change through collections of naturally occurring texts. A systematic review by Basturkmen (2022) highlights trends in CL studies in the Asia Pacific region, using corpus analysis to explore various aspects of linguistic usage that can be grouped into identity, teaching and learning applications, under-researched settings, and linguistic inquiry. Despite many studies, more research is needed, especially in workplace and professional contexts, in order to better understand learners' long-term language needs. Additionally, Crosthwaite et al. (2023) conducted a bibliometric analysis to examine research trends related to Scopus database-indexed corpus linguistics in Arts and Humanities. The results suggest that CL research continues to grow, particularly in analyzing the language used in social media or in digital genres. The findings also show that genres, registers, lexical bundles, and metaphors remain popular topics in CL studies.

LEXICAL BUNDLES

Lexical bundles, a common type of formulaic sequence, have been increasingly explored over the past few decades. These multi-word sequences, clusters, and n-grams, refer to the most recurrent sequences of three or more words in a register. Even though multi-word sequences do not form complete grammatical sentences or convey idiomatic meanings, these lexical bundles are fundamental building blocks in constructing discourse (Biber, et al., 2004). In addition, they can be both discipline-specific and vary in frequency and usage across disciplines. Corpus analysis tools are commonly used to identify multi-word units, determining their frequency and distribution depending on specific criteria (Hyland & Jiang, 2018). They can be identified into two categories: structural patterns and functional taxonomy. Structurally, lexical bundles can be either a clause e.g., *I want to know* and *I don't know if*) or as a phrase, e.g., *in that case* and *at the end of*.

Lexical bundles are categorized based on their structural functions, which include verb phrase fragments (*is one of the, can be used to*), dependent clause fragments (*I don't know why, if we look at*), and noun phrase and prepositional phrase fragments (*as far as the, a little bit of*). Functional taxonomy can be divided into stance expressions, discourse organizers, and referential expressions. Stance expressions, encompassing epistemic and attitude/modality, demonstrate how the author or speaker positions themselves regarding the information conveyed. Meanwhile, stance bundles help convey the writer's (un)certainly and possibility (*it is possible to*). Finally, discourse organizers are multi-word units that illustrate the connection between the primer and the subsequent sentences (*on the other hand*). Referential bundles are a type of lexical bundle that directly refers to specific entities or concepts within a text. They serve to clarify what is being discussed or highlight a critical attribute (*in terms of*).

Lexical bundles have been extensively explored in various contexts across different registers, including structural bundles and functional taxonomies (Yunjung, 2025; Wang & Csomay, 2024; Alasmay, 2024). Methodologically, adopting the structural and functional taxonomy analysis of Biber et al. (2004), Chen and Baker (2016) further analyzed lexical bundles in academic writing in terms of the Common European Framework of Reference (CEFR) Scale. They systematically categorized the retrieved lexical bundles against the CEFR level. Using the CEFR scale for the classification of word units is significant as it can ensure that instructional material design is geared towards the learners' proficiency level and the course goals.

A recent study by Gong et al. (2025) investigated four-word lexical bundles in introduction-method-results-discussion (IMRD)-structured medical research articles. The findings revealed significant differences in the presence and usage of lexical bundles across each subfield of medical research articles, while also highlighting overlapping usage between types. These findings enhance our understanding of medical discourse by illustrating how bundle usage aligns with rhetorical goals and by revealing nuanced functional connections across types.

In terms of pedagogical aspects, lexical bundles have been widely investigated, and a number of studies have highlighted their effectiveness. Kim and Kessler (2022) explored the relationship between lexical bundle use and holistic writing quality in test-based L2 English writing. The study analyzed 120 argumentative essays written by Chinese EFL university students during a mock test (College English Test writing section). The students' performance was divided into high and low proficiency groups. The outcomes of this study indicated that high-scoring essays used more diverse and structurally complex lexical bundles, while low-scoring essays relied more on prompt-dependent multi-words. The results also showed that bundle type and structure were associated with writing scores. Another study of the effectiveness of lexical bundles and students' writing performance was conducted by Saadatar et al. (2023). The study investigated the role of lexical bundles in differentiating proficiency levels in IELTS writing. In this case, the highly proficient students tended to use three- to four-word units more than those who achieved low writing scores. The study also indicated that explicit instruction in lexical bundles enhanced test performance, particularly with regard to coherence and lexical variety.

To sum up, studies underscore a strong relationship between the use of lexical bundles and writing proficiency. Highly proficient students used more diverse, less prompt-dependent, and more functionally appropriate lexical bundles.

BUSINESS JOURNALISM

Business news, regardless of which platforms it is on, features current updates and situations, providing readers with timely information on business-related topics in order to aid in decision-making. As a result of global technological developments, online news has been replacing printed newspapers through various platforms such as newspaper websites, live blogs, mobile apps, and social media, etc. Technological advancement and the emergence of social media cause information to disseminate rapidly, encouraging timely interaction between the audience and the news agent. Additionally, online newspapers provide the audience with newspaper archives, which allows readers to readily access previous news stories (Ihlstrom & Lundberg, 2003).

Linguistically, words or phrases that frequently appear in online business news can also help predict current and future economic trends. Qian, et al. (2019) point out that business news articles are valuable for identifying business events through analyzing headlines and leads. Qian et al.'s (2019) study incorporated some techniques, namely clustering and classification, to extract and identify significant business events from large volumes of news content. More recent research indicates that online business news is a rich resource for teaching and learning in the field of Business English, preparing students for their future professions. Hooi, et al. (2020) investigated the extent to which metadiscourse, which includes textual and interpersonal elements, plays a crucial role in engaging readers. The study found that most participants preferred business news articles with metadiscourse, as they were clearer and more engaging. This suggests that metadiscourse can be a valuable teaching resource in ESP writing classrooms. Similarly, Ha (2022) compiled online newspaper and magazine articles in order to explore the vocabulary knowledge needed for understanding online news articles. The study's findings indicate that online newspaper and magazine articles require knowledge of the most frequent 4,000-word families, as well as of proper nouns, marginal words, transparent compounds, and acronyms in order to achieve 95% coverage, with distinct lexical demands across different countries.

METHODOLOGY AND ANALYSIS

CORPUS COMPILATION

This study's news articles were collected from three online news sources, namely CNN, BBC, and Reuters, in order to explore the frequency of recurrent multi-word units used in online business news. These three news agencies, each with millions of subscribers worldwide, were selected due to their international prominence and extensive readership. Data were gathered from January to May 2025, totaling 450 articles, comprising 321,225 running-word tokens. Of the 450 news articles, the average length was 713.83 words per article.

Initially, 720 business news articles were downloaded from the three news sources. To maintain balanced representation across the global news agencies, a stratified random sampling technique was used. Articles were filtered based on three criteria, i.e., author representativeness, consistency of the business news subsections, and textual length. Regarding author representativeness, the researcher allowed a maximum of five texts per author. This helped ensure a diversity of rhetorical and usage styles. Consistency of the business news subsections constituted another filter. Only identical subsections across the three news agencies were used as sources for the news articles. Finally, the length of each news article was required to be at least

400 words in order to provide sufficient depth for analysis. At this stage, 504 texts were selected for further processing. Regarding subject matter, the content covered five sub-categories i.e., automobile and transportation, energy, finance, retail, and consumer topics. The total number of texts fell to 450. Within each subcategory, 30 business news articles were then randomly selected for analysis, resulting in 150 texts per news agency. All the articles were converted to plain text. Irrelevant elements, such as images, charts, and tables, were excluded, leaving only the content for further analysis.

Version 4.3.1 of the AntConc software program (Anthony, 2024) was employed to compile the study's corpus of business news (COBN). The collection of news articles was analyzed using N-grams. Regarding the frequency and dispersion criteria, Biber et al. (2004) suggested that bundles should attain a minimum frequency threshold of 40 occurrences per million words, and they should appear in at least 5 texts. Given the size of the present corpus, comprising 321,225 running word tokens, this corresponds to a cut-off point of approximately 10 occurrences and 5 dispersions. Therefore, the researcher used automated frequency-based techniques to identify four-word lexical bundles that occurred at least 10 times. Furthermore, a bundle had to appear in at least five different texts in order to be considered widespread and not idiosyncratic (Chen & Baker, 2010). In this study, four-word lexical bundles were selected because longer bundle lengths are understood to offer a clearer and wider range of structures and functions than other types of bundles (Hyland, 2008; Chen & Baker, 2016; Samraj, 2024). As mentioned earlier, the objective of this study is to explore lexical bundles in terms of both structural patterns and functional taxonomies. Two- or three-word units mainly display grammatical aspects, while four-word lexical bundles provide more semantically and pragmatically meaningful features, which allow an in-depth analysis of business news discourse. Following Biber et al. (2004) and Hyland (2008), contractions were considered to be separate grammatical units. For instance, it's going to was counted as a four-word unit.

After automatically determining the four-word clusters, all the bundles were manually examined in order to remove any context-dependent words or bundles containing proper nouns, e.g. the United States, and President Donald Trump. In addition, the bundles were manually checked and excluded if they constituted overlapping clusters, e.g. it has been suggested and has been suggested that. Following Samraj (2024), when overlapping bundles were found, only the more frequent bundles were analyzed further. To ensure the reliability of the manual exclusion process, the list of proper nouns and overlapping bundles was screened by three experts.

CLASSIFICATION OF LEXICAL BUNDLES

As a framework to analyze the grammatical patterns and functional taxonomies of the multi-word units frequently found in the COBN, Biber's (2004) framework provides a fundamental structural and functional taxonomy necessary for the analysis of lexical bundles across registers, including business news discourse. Given that business news discourse often employs complex and multifunctional language patterns, Chen and Baker (2016) identified a broader range of functional taxonomies, which are used in this study as a reference for inter-raters to verify and calibrate their judgments when classifying lexical bundles into functional taxonomies. For the unit of analysis, as noted previously, four-word bundles were analyzed in terms of their structural and functional taxonomies. This is because, unlike three-word units, which are common across diverse registers, four-word bundles offer more specific lexico-grammatical patterns, tied to their particular context. Thus, the analysis of the four-word units is the main focus of this current study.

The analysis was conducted in two stages. First, the structural classification involved the analysis of four different types of structural units, namely noun phrase (NP)-based, e.g. a global trade war, rest of the world; prepositional phrase (PP)-based, e.g. at the end of, at the same time; verb phrase (VP)-based, e.g. is going to be, to get ahead of; and clause-related, e.g. it is important to, it should be noted. Second, the target lexical bundles can be categorized based on their discourse functions, namely referential expressions, stance bundles, discourse organizers, and special conversational reference (reporting). The list of lexical bundles along with their functions was checked by three experts, all university lecturers with more than ten years of teaching experience in linguistics. Their judgment was used to ensure the reliability of the findings (Saeedi et al., 2023). To ensure the validity of the functional taxonomies, the Index of Item-Objective Congruence (IOC) was employed. All 67 lexical bundles were classified into their respective functional taxonomies. The three experts, were invited to evaluate the congruence of the lexical bundles between the lexical bundles and their functional taxonomies. The experts independently made judgments based on the provided criteria and sample instances. The IOC values were calculated and categories with IOC values greater than .50 or higher were considered acceptable.

RESULTS

GRAMMATICAL STRUCTURES

The analysis of the lexical bundles in the corpus of business news (COBN) revealed several frequently occurring four-word units that reflect characteristic patterns of expression in this genre. Table 1 presents the 67 most common four-word lexical bundles found in the COBN. Among the most prominent bundles identified, *said in a statement*, *the world's largest*, *we're going to*, *tariffs on steel and*, and *during his first term*, were the most frequently recurrent strings.

TABLE 1. An Overview of Lexical Bundles in the COBN Corpus and Their Raw Frequencies

No.	Lexical Bundle	Freq	No.	Lexical Bundle	Freq
1	said in a statement	49	35	to impose tariffs on	16
2	the world's largest	46	36	when it comes to	16
3	we're going to	38	37	at a time when	15
4	tariffs on steel and	33	38	by the end of	15
5	during his first term	28	39	they're going to	15
6	for the first time	27	40	it's going to	14
7	a tariff on all	26	41	the first three months	14
8	in the first quarter	26	42	the vast majority of	14
9	as a result of	25	43	it's not clear	13
10	at the end of	25	44	said in a note	13
11	in an interview with	25	45	the cost of tariffs	13
12	between the two countries	24	46	to go into effect	13
13	the world's biggest	22	47	the threat of tariffs	12
14	familiar with the matter	21	48	the value of the	12
15	goods coming into the	21	49	wrote in a note	12
16	the rest of the	21	50	you're going to	12
17	did not respond to	20	51	a tax on imports	11
18	the impact of tariffs	20	52	as part of a	11
19	according to data from	18	53	the back and forth	11
20	I don't think	18	54	the first time in	11
21	in a post on	18	55	the global trade war	11
22	in his first term	18	56	wrote on social media	11
23	is going to be	18	57	a deal with the	10

24	lead to higher prices	18	58	a social media post	10
25	since the start of	18	59	he said adding that	10
26	a global trade war	18	60	in the coming months	10
27	at the same time	17	61	in the fourth quarter	10
28	in the face of	17	62	one of the biggest	10
29	is one of the	17	63	one of the largest	10
30	tariffs on goods from	17	64	prices as low as	10
31	a request for comment	16	65	the head of the	10
32	across the board tariffs	16	66	the second half of	10
33	in response to the	16	67	to get ahead of	10
34	in the form of	16			

The structural categorization adopted follows Biber et al. (2004). Figure 1 presents the proportional distribution of lexical bundles in the COBN corpus in response to RQ1: *What are the most frequent grammatical patterns of lexical bundles in online business news?* As seen in Figure 1, noun phrases plus post-modifier fragments (NP) are the most frequently occurring bundle type found in this study, with 25 out of 67 bundles (37.3%). This is followed by prepositional phrases plus noun phrase fragments (PP), comprising 20 out of 67 (29.9%), and verb phrases (VP), which comprise 15 out of 67 (22.4%). The remainder, 7 out of 67 bundles (10.5%), consist of clause-related bundles.

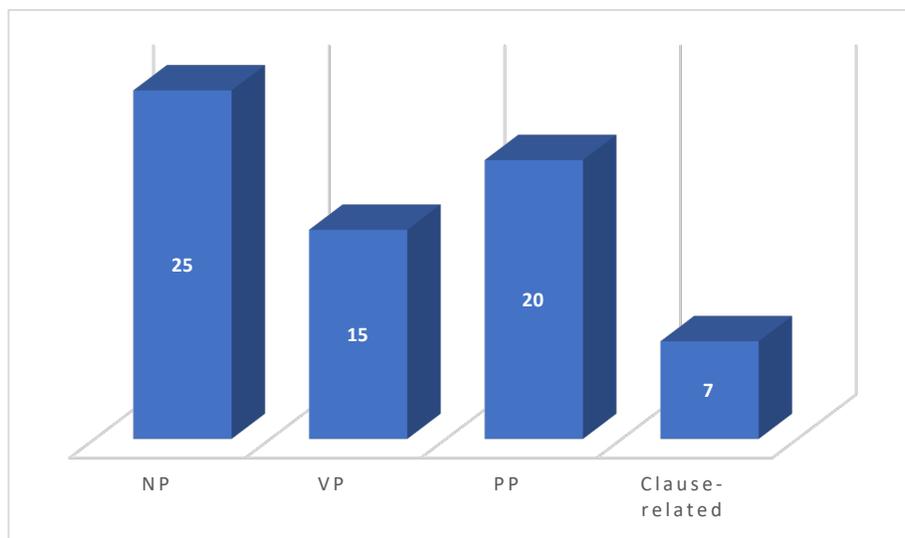


FIGURE 1. Distribution of Lexical Bundle Types Based on Their Structural Groups in the COBN

Examining the 67 lexical bundles extracted from the COBN, their grammatical structures and subcategories were identified based on Biber et al. (2004). The frequency of these bundles was analyzed, as were their grammatical structures, and samples from the corpus are shown in Table 2.

TABLE 2. Proportional Distribution of Lexical Bundles across the Structural Categories in the COBN

PATTERNS	SUBCATEGORY	FREQ	PERCENT	EXAMPLE BUNDLES
NP-based (25)	Noun phrase expression	7	10.5	<i>the world's largest, the global trade war</i>
	Noun + of-phrase fragment	10	14.9	<i>the rest of, the vast majority of</i>
	Noun + post-modifier	8	11.9	<i>prices as low as, the first time in</i>
PP-based (20)	Prepositional phrase	20	29.8	<i>during his first term, in the first quarter</i>
VP-based (15)	Pronoun + verb phrase	4	6.0	<i>they're going to, we're going to</i>
	Active voice VP	10	14.9	<i>said in a statement, to impose tariffs on</i>
	Copular be + complement	1	1.5	<i>is one of the</i>
Clause-related (7)	Dependent clause fragment	7	10.5	<i>when it comes to, he said adding that</i>
	Total	67	100.0	

The results show that the NP-based structure was the most common grammatical structure of all the syntactic types identified, accounting for 25 out of 67 instances (37.3 %). The most frequently recurring NP-based bundles were NP with *of* fragments, constituting 10 out of 67 instances (14.9 %), e.g., *the vast majority of, the cost of tariffs, and the head of the*. NP with post-modifier fragments, e.g., *tariffs on imports from, a tax on imports, and a deal with the*, were the second most frequent, with 8 out of 67 instances (11.9 %). NP noun phrase expressions, e.g., *a global trade war, a truth social post, and the first three months*, were the least common NP-based bundles (10.5%).

Turning to VP-based bundles, the most frequently occurring type emerging from the analysis was VP with active voice, with 10 out of 67 instances (14.9 %), e.g., *said in a statement, lead to higher prices, and wrote in a note*). Person pronouns plus VP occurred in 4 out of 67 instances (6.0 %), while the copula be + NP/AdjectiveP appeared in only 1 out of 67 instances (1.5 %). The following extracts demonstrate the person pronoun + VP and the copula be +NP/AdjectiveP, respectively.

Excerpt	
1	Some people on Wall Street say that we're going to have the greatest economy in history. Markets are going to go up and they're going to go down, but you know what, we have to rebuild our country, he told reporters at the White House.
2	Burgundy is one of the most prestigious wine regions in France, and the US is its biggest export market.

As seen in Table 2, prepositional phrase (PP)-based expressions accounted for 20 out of 67 instances (29.8 %). Examples of this type are *as a result of, at the same time, and during his first term*. Some illustrative excerpts are given below.

Excerpt	
3	It's not simply what's happening with tariffs, it's what's happening with growth and all the other things as a result of these broad changes in economic policy, not just tariffs, Powell said.
4	The stock has had a turbulent run in the first quarter of the year, battered by rising competition, weak EV demand and worries

around CEO Elon Musk's political involvement taking away focus
 from the business.

Concerning clause-related expressions, these bundles appeared less frequently than other stances (8 out of 67, or 10.5 %). Person pronoun + dependent clause fragments, e.g., *I don't think* and *it's not clear*; WH-clause fragments, i.e., *when it comes to*; and reduced that-clause fragments, e.g., *goods coming into the* and *(source)familiar with the matter*, were found, as can be seen in the following examples.

Excerpt	
5	He added: I don't think they're planning to take a one-size-fits-all hammer approach to this, but I think early on, in the beginning at least right now, I do think what the president is saying... [is] both of those countries [Canada and Mexico] are abusing their relationship with the US and we're going to do something about it.
6	Ross, known in the business world to many as the king of bankruptcy for his ability to acquire virtually defunct businesses and transform them into profitable enterprises that he'd later sell off, said Trump means business all the time when it comes to threats he makes.

Overall, the distribution reflects a strong tendency toward structurally simple yet semantically rich lexical bundles, particularly those rooted in noun and prepositional phrases, characteristic of informative and report-oriented writing styles in business news.

FUNCTIONAL TAXONOMIES

Turning to RQ2, *What rhetorical functions do these bundles perform in shaping business news reports?*, 67 lexical bundles were categorized based on their shared functions. To ensure the reliability of each bundle, the researcher referred to the concordance line for context. Then, to determine the discourse function of each bundle group, the researcher followed Biber et al.'s (2004) functional taxonomy framework. The analysis of the lexical bundles followed four major functional taxonomies, namely stance, discourse organizers, referential expressions, and special conversational functions. The functions of the bundles were calculated as percentages and are presented in Table 3.

TABLE 3. Functional Categorization of Lexical Bundles in the COBN

FUNCTION	SUBCATEGORY	FREQ	PERCENT	BUNDLE
Referential Expressions	Identification / Focus	14	20.9	<i>the vast majority of, 1. the world's largest</i>
	Quantity Specification	2	2.9	<i>of billions of dollars, the rest of the</i>
	Tangible Framing	13	19.5	<i>in the form of, the value of the</i>
	Attributes			
	Intangible Framing	5	7.5	<i>as a result of, as part of a</i>
	Attributes			
	Time / Place / Text	14	20.9	<i>during his first term, for the first time</i>
Stance Bundles	Deixis			
	Multi-functional	3	4.5	<i>at the end of, at the same time</i>
	Reference			
	Epistemic (Uncertainty)	2	2.9	<i>I don't think, it's not clear</i>
	Attitudinal / Modality	7	10.5	<i>we're going to, they're going to</i>

Discourse Organizers	Topic Introduction / Focus	2	2.9	<i>when it comes to, in the face of</i>
Special Conversational Reference	Reporting	5	7.5	<i>he said adding that, said in a statement</i>
	Total	67	100	

The findings, presented in Table 3, reveal a range of functional taxonomies, with a strong emphasis on referential expressions and stance functions. In this study, stance expressions accounted for a combined 9 out of 67 bundles (13.4 %). Within the epistemic stance category, impersonal expressions, i.e., it's not clear, and personal reference, i.e., I don't think), appeared in 2 out of 67 bundles (2.9 %). In terms of attitudinal stance expressing intention or prediction, impersonal forms such as it's going to and personal forms like we're going to were more prevalent than bundles with epistemic stances, at 7 out of 67 (10.5 %). The following excerpts are samples of stance expressions.

Excerpt	
7	And it's not clear whether the specifics in the executive order can be accomplished through a stroke of his pen alone.
8	It's going to be a major issue if all exports are suspended, said a Chinese ethane importer, who sought anonymity because he is not authorized to speak to media.

Regarding discourse organizers, they rarely occurred in the COBN. They were represented by two topic-introducing bundles, *when it comes to* and *in the face of*, comprising 2.9 % of all bundles, as in the following:

Excerpt	
9	When it comes to aluminium, brewers and makers of fizzy drinks, such as Coca-Cola, have also warned the move will add costs and could lead to higher prices for customers.

Referential expressions were the most common function category in the COBN, at 76.2 %. Of these stances, identification/focus bundles are a prevalent form of referential expressions, i.e., *the world's largest*, as are time/place/text deixis references, which attained the highest frequency, at 20.9 % each. The findings also reveal that tangible framing attributes, i.e., *in the form of*, constituted the third highest proportion, at 19.5 %. The following excerpts demonstrate two framing attribute references and a time reference, respectively.

Excerpt	
10	The US is the world's largest importer of steel, counting Canada, Brazil and Mexico as its top three suppliers.
11	Minutes from the U.S. Fed's latest policy meeting released on Wednesday indicated that policymakers felt they could face "difficult tradeoffs" in coming months in the form of rising inflation alongside rising unemployment.
12	At the same time , all the extra due diligence might not matter with so few answers available on whether previously noncompliant USMCA imports would face a 25% tariff or not.

As shown in Table 3, intangible framing attributes, followed by multi-functional references, were the two least frequent bundle types, with frequencies of 5 out of 67 (7.5 %), and 3 out of 67 (4.5 %), respectively. The two excerpts below show intangible framing and multiple references in an authentic context.

Excerpt	
13	It is an important milestone, but at the end of the day , it doesn't completely really clear out all the uncertainties that potentially still remain, Kourkafas said.
14	But the response in much of the rest of the market was muted, reflecting questions about how serious Trump is about his plans, given his track record of postponing tariffs, or negotiating exemptions to the rules.

Finally, special conversational functions, specifically reporting bundles, comprised 7.5 % (5 out of 67) of all identified bundles. The phrase *said in a statement* was the most frequent lexical bundle in the dataset, underscoring the journalistic nature of the corpus, as in:

Excerpt	
15	It is important to rein in burdensome regulations to the benefit of hard-working American taxpayers and small businesses, U.S. Treasury Secretary Scott Bessent said in a statement .

In conclusion, the results indicate that referential functions primarily drive the use of lexical bundles in the corpus, with reporting and stance bundles also playing important roles. The higher occurrence of impersonal over personal forms in both epistemic and attitudinal stances may reflect the objective tone typical of business or news discourse.

DISCUSSION AND IMPLICATIONS

The findings from the Corpus of Online Business News (COBN), which comprises 450 news articles published between January and May 2025, showed that noun phrase (NP)-based lexical bundles, especially those containing the “NP + of” structure, were the most common pattern. This dominance closely matches results from previous research (Metang & Narathakoon, 2025; Biber, et al., 2004; De Cock & Granger, 2021). Most NP-based bundles display significant syntactic features, particularly in formal, printed texts like business reports and academic articles. Their structural complexity grows with the level of formality in the genre (Wan, et al., 2019). The interaction between structural patterns and functional taxonomies indicates that most referential bundles are made up of NP-based patterns, which are the most frequent in the present study.

This aligns with Biber et al. (2004), who suggest that informational written discourse, such as academic writing and news reporting, usually favors referential bundles, especially those structured as noun phrases. Although the prevalence of referential bundles in written business genres can be seen in a substantial number of studies, studies investigating different types and modes of business news vary in their use of functional taxonomies. For instance, De Cock and Granger (2021) compared two corpora of press releases and business news. The results showed a distinction between the two corpora, illustrating that press releases tended to incorporate more stance-related language bundles than business news reports.

Prepositional phrase (PP)-based bundles, such as in the first quarter or at the same time, were also widely used. These bundles primarily serve referential functions, including framing temporal or locational contexts, which are both essential for reporting business events. In this study, PP-based patterns were the second most common word units in the COBN. As a matter of fact, these structural patterns are integral components of a multi-word unit (Lindstromberg, 2010), and two-thirds of the common NP-based bundles in academic writing tended to be equipped with PP segments (Chen & Baker, 2010). The high frequency use of PP-lexical bundles can also be seen in Chen and Baker's study (2016). In this study, they reported that non-native speakers (NNS) and native speakers (NS) differed in terms of bundle use. It was found that the NS had a tendency to incorporate PP-based bundles, while the NNS were likely to employ discourse organizers and VP-based bundles. In the same vein, Yunjung (2025) also reported that NNS student writers favored more discourse organizers and stance expressions than NS student writers. Although both groups showed no significant difference in the frequency of prepositional phrases, the NNS group exhibited slightly higher rates, and the NS group used a greater variety of types of PP in their writing.

In addition to PP-based bundles, Yunjung's (2025) study found that verb phrase (VP)-based bundles were the third most common. Notably, among the VP-based patterns, active voice constructions were more common than passive ones. The results of this study are in contrast to VP-structural patterns commonly used in other formal written contexts, as can be seen in academic writing. In Chen and Baker (2016), the analysis of academic written essays indicates that the anticipatory *it* + VP and passive verb + PP fragments occurred more frequently than in VP with active verb. Unlike in academic writing, with its prevalent usage of the passive voice structure, business news reporting requires the clear attribution of actions to agents, such as companies, governments, or markets, which lends itself to active voice usage, e.g., to get ahead of, to impose tariffs on.

The findings of the present study are similar to those of Jiang (2015), in that verbs in active voice are commonly used in business writing, especially in writing business letters. In addition to the active voice VP found in the COBN, pronoun + VP was ranked the second highest VP fragment occurring in online business news. Most pronoun + VP fragments typically function as stance bundles, whether attitudinal or modality. However, the outcomes of the present study differ from some previous studies. Fernebring (2014) examined the extent to which Swedish journalists used the modal auxiliaries *will* and *shall* and the semi-modal *to be going to* when they wrote for Swedish newspapers in English. The results of the study revealed that the core modal *will* was the most frequently used, while the semi-modal was commonly found in blogs. However, further analysis of this study pointed out that the Swedish writers seemed to use the modals differently from how they are used in British and American varieties of English.

Finally, clause-based bundles (e.g., *it is important to*, *said in a statement*) emerged as the least frequent grammatical type in the COBN. This finding aligns with previous studies' finding that clause-related structural patterns are less likely to be used in news reporting. Since news reports require conciseness and timeliness, sentences in reporting news tend to be shorter than in other registers (Jiang, 2015). This finding is expected, as clause-related bundles are more typical of evaluative or argumentative discourse, which is minimized in objective news reporting. Their limited presence in business news likely reflects the reduced role of overt stance-taking and interpersonal engagement, consistent with the genre's commitment to factual reporting (Cortes, 2004; Chen & Baker, 2016).

Turning to the present study's outcomes, useful pedagogical practices can be developed. Since NP-based and PP-based lexical bundles are the most common, instructors are advised to prioritize these structural patterns in classroom instruction. To help students become familiar with these high frequency multi-word units, students should be provided with repeated exposure to these word groups. Furthermore, the findings indicate that NP-based and PP-based lexical bundles tend to co-occur frequently. Therefore, these two structural types can be taught simultaneously. This allows students to observe how they function together in authentic context. In addition, to engage students in learning the target lexical bundles, instructors should raise their awareness of the target bundles by encouraging them to notice and record ones sourced from authentic news materials.

Teaching lexical bundles with an inductive approach or through indirect application (Hyland, 2024) involves helping students to discover and understand patterns through exposure and guided exploration. This approach can work well, especially when students frequently encounter bundles in real or instructional materials. When teaching novice students, emphasizing explicit instruction with input enhancement, such as embedded prepositions, is also important. This effectively directs students' attention to the sequences of the target bundle patterns (Kang, et al., 2024). Moreover, explicit teaching can be suitable for short-term purposes when the students have difficulties mastering the target expressions. Some useful activities that can be derived from the study of lexical bundles include colligation drills, lexical bundle identification and completion tasks, and colligation sorting exercises (Dahunsi & Ewata, 2022). Finally, Cortes (2006) suggests that incorporating corpus-based materials into teaching assists students with developing more effective strategies for using expressions more accurately and with greater frequency.

According to the outcomes of the present study, VP-based lexical bundles are among the most recurrent linguistic patterns in online business news; therefore, data-riven learning (DDL) tasks are suggested as an effective instructional method for teaching such bundles. Through DDL activities, instructors can effectively facilitate the acquisition of business news bundles. Taking the VP-based said in a statement as an example, the instruction begins with concordance observation. The instructor presents ten lines of the target bundle from the COBN, encouraging students to pay attention to words surrounding the target bundle. Structurally, the instructor can highlight that the target bundle functions as an active voice verb phrase fragment. Following this step of creating structural awareness, the lesson shifts to functional identification. Students are taught that said in a statement is categorized as a reporting function aimed at journalistic sourcing. This is a vital rhetorical tool for business students to learn in order to know how to distance themselves from a claim.

CONCLUSION

This study examined four-word lexical bundles in online business news, focusing on their structural patterns and functional *taxonomies*. The results reveal that NP-based lexical bundles, specifically "NP + of" fragment-based bundles, were the most common word units, followed by PP-based and VP-based patterns. Clause-related bundles were the least common patterns found in the COBN. This distribution confirms that online business news articles, as an informative genre, tend to rely on referential expressions more than other functional types. This reflects their emphasis on objectivity, factual presentation, and accurate information transfer.

Functionally, time and place deixis and material framing features were the most frequent subcategories, indicating that business news discourse focuses on situating events in a concrete context. In contrast, stance expressions, especially those related to prediction and intention, as well as discourse organizers and specialized report talk expressions, were less frequent. Overall, the outcomes of this study extend existing lexical bundle research by demonstrating how structural preferences and functional taxonomies exist in online business news, providing a corpus-based foundation for pedagogical applications in Business English instruction.

While this study reveals the structural and functional taxonomies of lexical bundles in online business news, such as the most frequently used lexical bundles, their grammatical patterns and functional taxonomies, and their role in enhancing discourse coherence, several limitations should be recognized. First, the corpus was limited to 450 news articles from only three international news agencies, namely BBC, CNN, and Reuters, published over five months. This narrow timeframe and selection of sources may not fully capture the diversity of business news language across different regions, media outlets, or periods. Future research could explore cross-linguistic or cross-register differences in lexical bundle use, as well as longitudinal changes in online business discourse in response to global economic shifts. Furthermore, while the current study used a corpus compiled from three major news agencies, it mainly reports overall linguistic features. Lexical bundles across the three agencies were not examined. It is recommended that future studies should consider a comparative analysis in order to examine regional differences between the news agencies.

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REFERENCES

- Alasmay, A. (2024). Sustaining vocabulary knowledge growth through corpus-generated lists of lexical bundles and keywords in the law of contracts. *Heliyon*, 10(9). <https://doi.org/10.1016/j.heliyon.2024.e29944>
- Anthony, L. (2024). AntConc (Version 4.3.1) [Computer Software]. Tokyo, Japan: Waseda University. <https://www.laurenceanthony.net/software/AntConc>
- Basturkmen, H. (2022). Current trends in ESP research in the Asia Pacific region. *World Englishes*, 41(4), 512-522. <https://doi.org/10.1111/weng.12601>
- Biber, D., & Barbieri, F. (2007). Lexical bundles in university spoken and written registers. *English for Specific Purposes*, 26(3), 263–286. <https://doi.org/10.1016/j.esp.2006.08.003>
- Biber, D., Conrad, S., & Cortes, V. (2004). If you look at...: Lexical bundles in university teaching and textbooks. *Applied linguistics*, 25(3), 371-405. <https://doi.org/10.1093/applin/25.3.371>
- Chen, Y.-H., & Baker, P. (2010). Lexical bundles in L1 and L2 academic writing. *Language Learning & Technology*, 14(2), 30–49.
- Chen, Y.-H., Baker, P. (2016). Investigating criterial discourse features across second language development: lexical bundles in rated learner essays, CEFR B1, B2 and C1. *Applied Linguistics*, 37(6), 849–880. <https://doi.org/10.1093/applin/amu065>
- Cortes, V. (2004). Lexical bundles in published and student disciplinary writing: Examples from history and biology. *English for Specific Purposes*, 23(4), 397-423. <https://doi.org/10.1016/j.esp.2003.12.001>
- Cortes, V. (2006). Teaching lexical bundles in the disciplines: An example from a writing intensive history class. *Linguistics and Education*, 17(4), 391-406. <https://doi.org/10.1016/j.linged.2007.02.001>

- Crosthwaite, P., Ningrum, S., & Schweinberger, M. (2023). Research trends in corpus linguistics A bibliometric analysis of two decades of Scopus-indexed corpus linguistics research in arts and humanities. *International Journal of Corpus Linguistics*, 28(3), 344–377. <https://doi.org/10.1075/ijcl.21072.cro>
- Dahunsi, T. N., & Ewata, T. O. (2022). An exploration of the structural and colligational characteristics of lexical bundles in L1–L2 corpora for English language teaching. *Language Teaching Research*, 29(2), 472–488. <https://doi.org/10.1177/13621688211066572>
- De Cock, S. & Granger, S. (2021). Stance in press releases versus business news: a lexical bundle approach. *Text & Talk*, 41(5-6), 691–713. <https://doi.org/10.1515/text-2020-0040>
- Durrant, P., & Brenchley, M. (2023). Development of noun phrase complexity across genres in children's writing. *Applied Linguistics*, 44(2), 239–264. <https://doi.org/10.1093/applin/amac032>
- Fernebring, F. (2014). Exploring a recent grammatical change : A corpus-based investigation of the core modals will and shall and the semi-modal BE going to in newspapers and blogs written by Swedes [Bachelor's dissertation, Linnaeus University, Sweden]. Diva Portal. <https://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-31860>
- Gong, H., Le, T. N. P., & Buckingham, L. (2025). Lexical bundles across IMRD-structured Medicine research article sections: A within-register perspective. *Journal of English for Academic Purposes*, 74, 101487. <https://doi.org/10.1016/j.jeap.2025.101487>
- Ha, H. T. (2022). Lexical profile of newspapers revisited: A corpus-based analysis. *Frontiers in Psychology*, 13, 800983. <https://doi.org/10.3389/fpsyg.2022.800983>
- Hooi, C. M., Tan, H., Lee, G. I., & Danarajan, S. S. V. (2020). Texts with metadiscourse features are more engaging: A fact or a myth? *3L, Language, Linguistics, Literature*, 26(4). <http://doi.org/10.17576/3L-2020-2604-05>
- Hyland, K. (2008). As can be seen: Lexical bundles and disciplinary variation. *English for Specific Purposes*, 27(1), 4–21. <https://doi.org/10.1016/j.esp.2007.06.001>
- Hyland, K. (2024). Genre-based instruction and corpora. *Tesol Quarterly*, 58(3), 1227–1234. <https://doi.org/10.1002/tesq.3273>
- Hyland, K., & Jiang, F. (2018). Academic lexical bundles: How are they changing?. *International Journal of Corpus Linguistics*, 23(4), 383–407. <https://doi.org/10.1075/ijcl.17080.hyl>
- Ihlström, C., & Lundberg, J. (2003). The Online News Genre through the User Perspective. *Proceedings of the 36th Annual Hawaii International Conference on System Sciences*, 1–10. <https://doi.org/10.1109/HICSS.2003.1174241>
- Işık, E. E. (2023). A corpus-based genre analysis of promotional-informational discourse in online painting exhibition overviews. *English for Specific Purposes*, 70, 44–56. <https://doi.org/10.1016/j.esp.2022.11.002>
- Jiang, Y. (2015). Study of language features of business English. *Higher Education of Social Science*, 8(5), 29–35. <http://dx.doi.org/10.3968/6939>
- Kang, S., Shin, Y. K., & Yoo, I. W. (2024). Using lexical bundles to teach prepositions to Korean EFL students: Corpus-based instructed SLA. *Journal of Second Language Studies*, 7(1), 75–98. <https://doi.org/10.1075/jsls.00022.kan>
- Kim, S., & Kessler, M. (2022). Examining L2 English university students' uses of lexical bundles and their relationship to writing quality. *Assessing Writing*, 51. <https://doi.org/10.1016/j.asw.2021.100589>
- Larsson, T., Kim, T., & Egbert, J. (2025). Introducing and comparing two techniques for key lexical bundles analysis. *Research Methods in Applied Linguistics*, 4(3), 100245.
- Leelasetakul, M. (2025). " Dead at the Scene" and More: Lexical Bundles in Accident News. *LEARN Journal: Language Education and Acquisition Research Network*, 18(2), 78–107. <https://doi.org/10.70730/EUQT4958>
- Lindstromberg, S., 2010. English prepositions explained. John Benjamins.
- Liu, S., & Zhang, J. (2021). Using metadiscourse to enhance persuasiveness in corporate press releases: A corpus-based study. *Sage Open*, 11(3). <https://doi.org/10.1177/21582440211032165>
- Liu, X., Shuangling, L. I., Fan, W., & Dang, Q. (2023). Corpus-based bundle analysis to disciplinary variations: Relocating the role of bundle extraction criteria. *English for Specific Purposes*, 70, 151–163. <https://doi.org/10.1016/j.esp.2022.12.004>
- Metang, P., & Narathakoon, A. (2025). A corpus-based study of lexical collocations of keywords found in online news articles. *THAITESOL Journal*, 38(1), 1–21. <https://doi.org/10.61508/refl.v32i2.282437>
- Narkprom, N., & Phoocharoensil, S. (2022). Lexical bundles in native English speakers' and Thai writers' dissertations. *GEMA Online Journal of Language Studies*, 22(3), 43–62. <https://doi.org/10.17576/gema-2022-2203-03>

- Qian, Y., Deng, X., Ye, Q., Ma, B., & Yuan, H. (2019). On detecting business event from the headlines and leads of massive online news articles. *Information Processing & Management*, 56(6). <https://doi.org/10.1016/j.ipm.2019.102086>
- Saadatara, A., Kiany, G., & Talebzadeh, H. (2023). Bundles to beat the band in high-stakes tests: Pedagogical applications of an exploratory investigation of lexical bundles across band scores of the IELTS writing component. *Journal of English for Academic Purposes*, 61. <https://doi.org/10.1016/j.jeap.2022.101208>
- Saeedi, M., Khany, R., & Tazik, K. (2023). Research themes and sub-themes in academic wordlist studies between 2000 and 2020: A systematic review. *Journal of Research in Applied Linguistics*, 14(1), 95-111. <https://doi.org/10.22055/RALS.2023.18070>
- Samraj, B. (2024). Disciplinary differences in lexical bundles use: A cautionary tale from methodological variations. *Journal of English for Academic Purposes*, 70. <https://doi.org/10.1016/j.jeap.2024.101399>
- Sukman, K., Triwatwaranon, W., Munkongdee, T., & Chumnumnawin, N. (2022). A corpus-based study of lexical collocations of keywords found in online business news articles. *European Journal of English Language Teaching*, 7(3). <https://doi.org/10.46827/ejel.v7i3.4275>
- Tosqui-Lucks, P., de Almeida Prado, M. C., Pacheco, A., de Moraes Garcia, A. C., & Monteiro, A. L. T. (2024). Challenges and possibilities in compiling Aeronautical English corpora: The case of the Aerocorpus. *Research Methods in Applied Linguistics*, 3(3). <https://doi.org/10.1016/j.rmal.2024.100135>
- Wan, M., Fang, A. C., & Huang, C. R. (2019). The discriminativeness of internal syntactic representations in automatic genre classification. *Journal of Quantitative Linguistics*, 28(2), 138-171. <https://doi.org/10.1080/09296174.2019.1663655>
- Wang, W., & Csomay, E. (2024). Constructing proximity in popularization discourse: Evidence from lexical bundles in TED talks. *English for Specific Purposes*, 73, 95-109. <https://doi.org/10.1016/j.esp.2023.10.003>
- Wen, Q., Gloor, P. A., Fronzetti Colladon, A., Tickoo, P., & Joshi, T. (2020). Finding top performers through email patterns analysis. *Journal of Information Science*, 46(4), 508-527. <https://doi.org/10.1177/0165551519849519>
- Wen, Z., Liu, M., & Huan, C. (2025). COVID-19 vaccines as a game-changing tool? A corpus-based study of vaccine communication in *People's Daily* and *The New York Times*. *Heliyon*, 11(2). <https://doi.org/10.1016/j.heliyon.2025.e42082>
- Yin, X., & Li, S. (2021). Lexical bundles as an intradisciplinary and interdisciplinary mark: A corpus-based study of research articles from business, biology, and applied linguistics. *Applied Corpus Linguistics*, 1(1). <https://doi.org/10.1016/j.acorp.2021.100006>
- Yunjung, K. (2025). A corpus analysis of prepositional phrase-lexical bundles in academic writing: L2 writers from Indo-European and Non-Indo-European languages. *Applied Corpus Linguistics*, 5(2). <https://doi.org/10.1016/j.acorp.2025.100128>

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