A CORPUS-BASED STUDY OF ACADEMIC COLLOCATIONS USED IN JOURNAL ARTICLES

DUANGTHIP OCHAROEN

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR MASTER DEGREE OF ARTS
IN ENGLISH FOR COMMUNICATION
FACULTY OF HUMANITIES AND SOCIAL SCIENCES
BURAPHA UNIVERSITY
2025

ดวงทิพย์ โอเจริญ

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรศิลปศาสตรมหาบัณฑิต
สาขาวิชาภาษาอังกฤษเพื่อการสื่อสาร
คณะมนุษยศาสตร์และสังคมศาสตร์ มหาวิทยาลัยบูรพา
2568

A CORPUS-BASED STUDY OF ACADEMIC COLLOCATIONS USED IN JOURNAL ARTICLES

DUANGTHIP OCHAROEN

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR MASTER DEGREE OF ARTS
IN ENGLISH FOR COMMUNICATION
FACULTY OF HUMANITIES AND SOCIAL SCIENCES
BURAPHA UNIVERSITY
2025

The Thesis of Duangthip Ocharoen has been approved by the examining committee to be partial fulfillment of the requirements for the Master Degree of Arts in English for Communication of Burapha University

Advisory Committee

Principal advisor

.....

(Dr. Sutraphorn Tantiniranat)

Examining Committee

..... Principal examiner
(Assistant Professor Dr. Khomduen Phothisuwan)

..... Member
(Dr. Nattapat Pattana)

..... Member
(Dr. Sutraphorn Tantiniranat)

..... Dean of the Faculty of Humanities and Social Sciences
(Associate Professor Dr. Suchada Pongkittiwiboon)
.....

This Thesis has been approved by Graduate School Burapha University to be partial fulfillment of the requirements for the Master Degree of Arts in English for Communication of Burapha University

..... Dean of Graduate School
(Associate Professor Dr. Witawat Jangiam)
.....

63920205: MAJOR: ENGLISH FOR COMMUNICATION; M.A. (ENGLISH FOR COMMUNICATION)
KEYWORDS: Nouns, Nouns collocations, Collocations, Corpus, Journal articles

DUANGTHIP OCHAROEN : A CORPUS-BASED STUDY OF ACADEMIC COLLOCATIONS USED IN JOURNAL ARTICLES. ADVISORY COMMITTEE: SUTRAPHORN TANTINIRANAT, 2025.

This study explores how nouns are commonly used together in academic articles in the field of language and linguistics. The data comes from three high-quality academic journals: *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*, published between 2020 and 2021. The goal is to find the ten most frequent nouns in each journal and examine how these nouns are typically combined with other types of words, such as adjectives, verbs, and prepositions. The study uses a program called AntConc to identify the top ten nouns and their common collocations. These collocations are grouped based on how they are used. Some are fixed expressions with clear meanings, while others are more flexible. The results indicate that some nouns, like *language*, *study*, and *participants*, appear often across all three journals. However, the way these nouns are used with other words differs depending on each journal's focus. The findings of this study can be useful for English language learning, especially for students who use English as a second or foreign language. Learning these common word combinations can help students write more clearly and naturally in academic English.

ACKNOWLEDGEMENTS

This thesis would not have been possible without the counsel of my professors and the endless support from my family members.

Firstly, I would like to express my most sincere gratitude to my advisor, Dr. On-Usa Phimsawat, for guiding me from the initial step of this research. Her insightful feedback, motivating spirit, and practical counsel were sheer necessities during the entire course of writing this thesis.

I would also like to extend my sincerest appreciation to the chairperson of my examination committee, Dr. Khomduen Phothisuwan, and other members of the examination committee, Dr. Sutraphorn Tantiniranat and Dr. Nattapat Pattana, for their useful comments and recommendations, which contributed to making this thesis what it is now.

My deepest gratitude I owe towards my family for their unconditional encouragement and moral support. I am especially grateful to my older sister whose counselling and advice were instrumental in the progress of this work.

Duangthip Ocharoen

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1
INTRODUCTION

The first chapter provides a general overview of the research, covering several important aspects, including the research history conducted, the function of a research problem, the relevance of the study, research aims, research questions, and definitions of terms.

1.1 Research background

Corpus linguistics, as defined by McEnery and Wilson (2001), is the study of language based on real-world instances of usage. Baker (2010) describes it as a relatively recent field within linguistics that has grown in popularity, particularly with the rise of personal computing technologies in the 1990s.

The term corpus originates from Latin, where it denotes 'a body,' as explained by Baker (2010), who also notes that its plural form is corpora. Crystal (2003) expands on this definition, describing a corpus as a large repository of linguistic data, such as written texts or speech transcriptions. These stores serve as raw material for linguistic analysis and theory testing. Dash (2008) emphasizes the empirical nature of language corpora, these are useful in estimating elements in a particular language and hence can be regarded as control measures. Most often consisting of texts, corpora might also include recordings, video files, or both as per Dash (2008). The scope of what constitutes a corpus is to include as much linguistic data as possible with respect to the particular geographical area in question (Dash, 2008; Baker, 2010). Furthermore, in support of this view, Bennett (2010) notes that corpora can provide information on other important aspects of language, including frequency, register and language.

Lindquist (2009) asserts that corpus findings are commonly presented in two main formats: concordances and frequency statistics. Expanding on this, Baker (2010) defines concordances as tables that list every occurrence of a specific linguistic item within a corpus, along with its surrounding contexts. As Zufferey (2020) explains,

concordancers offer an excellent tool for retrieving instances of a term and observing how it functions in different contexts, typically presenting results in a sequential, line-by-line format within a single query. Additionally, Baker (2010) describes frequency—the recurrence of a linguistic form within a text or corpus—as a key metric in language analysis.

Baker (2010) and Szudarski (2018) highlight frequency analysis as the foundation of corpus analysis, describing it as the most basic method for examining linguistic patterns. Indeed, many studies employ frequency analysis to explore various aspects of academic vocabulary. For example, researchers, such as Chen and Ge (2007), Mozaffari and Moini (2014), and Shabani and Tazik (2014), use word frequency to assess the prevalence of specific terms within academic language. Similarly, studies by Vongpumivitch et al. (2009), Khani and Tazik (2013), and Liu and Han (2015) utilize frequency analysis to develop comprehensive word lists for future research.

The study of academic collocations from a corpus linguistic perspective reveals how recurrent word combinations contribute to the structure and style of academic discourse. Such insights are particularly valuable for language learners and researchers, as mastering these patterns can greatly enhance clarity and appropriateness in academic writing. This study addresses a gap in corpus research by focusing specifically on academic collocations in research articles, offering practical guidance for improving academic language use.

Moreover, corpora present researchers with a significant advantage in lexicon research by facilitating the identification of common word sequences, known as collocations (Baker, 2010). Hill (2000) is keen to highlight the scale of the English language, underlining the millions of words it encompasses and the vast number of combinations they form. This linguistic diversity highlights the richness of individual collocations, which are a vital component of effective language use.

The following section discusses the significance and sophistication of writing, describing its essence and the issues involved.

1.2 Problem statement and significance of the study

The English language, because of its complex grammatical system, allows sophisticated sentence constructions, which are particularly prevalent in academic writing. Yakhontova (2003) delineates four fundamental facets characterizing English academic style: formality, precision, utilization of academic lexicon, and respect for the grammar norms. Kirub (2014), moreover, highlights the utmost importance of being able to express opinions, views, and arguments clearly and in simply articulated words within the context of research work, claiming this to be the most useful in education and among other competencies.

According to Szudarski (2018), vocabulary is a fundamental component of efficient language use. Many scholars have emphasized its significance, particularly in terms of language mastery and reading comprehension (Meara, 1992; Schmitt, 2010; Schmitt et al., 2011). In fact, as pointed out by researchers (Mallillin & Castillo, 2016; Stæhr, 2008; Viera, 2016), vocabulary knowledge is a component which connects all the four language skills, namely reading, listening, speaking and writing. Furthermore, Viera (2016) dedicates more attention to providing an insight into what vocabulary learning actually entails, while it cannot be understood as simply memorizing words and their meanings. Besides increasing reading comprehension, extensive vocabulary also allows a person to make sense of unknown words within a piece of written text by making use of the context.

Vocabulary usage in academic writing, especially in noun collocations, is fundamental for expressing subtle concepts. In research contexts, mastering such collocations is essential for achieving precision of language use and communicative clarity in academic communication, benefiting a wide spectrum of learners, particularly learners of English as a Foreign Language (EFL). According to Stærh's (2008), by studying about the vocabulary size of EFL learners and its relations to their listening, reading and writing skills, language proficiency has a direct and significant correlation with overall language outcomes. As pointed out by McCarthy, O'Keeffe, et al. (2010), the importance of vocabulary range is highlighted in writing skills. Gilquin and Paquot (2008) identify that the learners tend to utilize the spoken-to-written idioms in academic writing, a phenomenon attested to by McCarthy, et al.

(2010), which identifies that students are likely to 'genre switch' across stylistic levels in academic language.

The significance of vocabulary is not limited to writing, but it also affects all academic discourse, particularly research writing. University students in particular have difficulties with the sophisticated distinction of academic terms required in scholarly writing (Shaw, 1991). Both foreign and native students are sometimes faced with vocabulary-related problems when dealing with semi-technical terms and the questioning of the appropriateness or otherwise of certain words for some write-ups, saying nothing of maintaining uniformity in sentence construction. Mozaffari and Moini (2014) further highlight the detrimental impact induced by the meager vocabulary on EFL learners' acquisition of academic debates. Reiterating views of Szudarski (2018) on the pivotal role, a huge vocabulary plays for achieving success in language teaching and communication.

Collocations, being a part of vocabulary, create immense challenges for English as a Foreign Language (EFL) learners. There have been several studies investigating the use of collocations among EFL learners, always revealing significant challenges in using collocations appropriately (Boonraksa & Naisena, 2021; Mongkolchai, 2008; Ridha & Riyahi, 2011; Tungyai & Rakpa, 2021; Yumanee & Phoocharoensil, 2013). This shortage is mostly attributed to the influence of the mother languages of the learners. To illustrate, Yumanee and Phoocharoensil (2013), observe that Thai learners opt for the adjective 'thick' when combined with the noun 'traffic.' This may be because the Thai translation of 'thick' carries a more direct implication than the adjective 'heavy.'

Among the various types of collocations, noun-based collocations are particularly essential for scholarly writing. This is because nouns represent the most commonly occurring word class in scholarly discourse and often serve as the central carriers of meaning in academic texts (Jeffries, 2006; Trinant & Yodkamlue, 2019). Academic writing is typically highly nominalized with concepts, processes, and entities, commonly conveyed through noun phrases. Consequently, gaining insight into how nouns are combined with other lexical items, such as adjectives, verbs, or prepositions, not only reveals important lexical patterns, but also enhances explicitness, specificity, and fluency in academic communication. Emphasizing noun

collocations offers a targeted and pedagogically valuable approach to addressing vocabulary challenges among EFL learners.

Despite the huge contribution by research pieces, such as Baker (2010) and Szudarski (2018), which speak to collocations in general, there remains a very big void concerning noun collocations alone in scholarly writing. This study seeks to bridge the gap in existing literature by focusing exclusively on noun collocations in academic writing, mainly within research articles in the field of language and linguistics. This research intends to further establish a more thorough picture of the use of collocations by examining these tendencies, using empirical data to guide scholars and students of academic English on how to improve their skills in this area.

Lewis (2000) notes that while the complexity of collocationsbreaks down collocations into single words, selecting words together in a manner that creates normal and idiomatic collocations is a very challenging job. This emphasizes the intricacy of language learning where learners are expected to direct not only word meanings, but also their contextual subtleties and acceptable collocational pairings.

1.3 Objectives

The primary aims of this study are:

1. To identify the top ten most frequently occurring nouns in academic journal articles, related to language and linguistics topics.

2. To analyze the most frequently used noun collocations and their patterns, such as adjective and noun, verb and noun, and noun and preposition within those journal articles.

1.4 Research questions

This study aims to answer the following research questions:

1. What are the top ten nouns that mostly appear in each journal?

2. What are the most frequently used noun collocations and their patterns in journal articles?

1.5 Definition of terms

This section explains the terminology, utilized within or pertinent to this research.

Journals: The top three journals in the field of Language and Linguistics as per the SJR Q1 ranking include *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*.

Corpus: A corpus is a large, structured set of texts collected for linguistic analysis.

Collocation: A natural pairing of words that regularly appear together in a language

Academic Vocabulary: This term denotes content words, specifically nouns that frequently appear in journal articles within the academic domain.

Noun Collocation: Noun collocations refer to words that naturally co-occur in journal articles. The focus lies on noun collocations.

CHAPTER 2
LITERATURE REVIEW

This chapter provides an overview of corpus theory, various types of vocabulary, including the Academic Word List (AWL), collocations, genres in research articles, a summary of the selected journals for this study, and a review of previous research in the field.

2.1 Corpus Linguistics

A corpus is a deliberately gathered collection of texts to be analyzed for linguistics. Corpus linguistics is a research discipline that utilizes computer facilities to undertake studies of language patterns, substantiating hypotheses, and testing language differences in diverse situations. It involves the use of large samples of real language material (corpora) to facilitate detailed examination of language. With such systematic examination, corpus linguistics helps linguists, language students, and translators to learn how language is used in real contexts, which leads to language changes and fresh linguistics theories.

Corpus linguistics offers a departure from traditional theoretical frameworks by presenting language with a new horizon for discovery revitalization. Among the remarkable aspects of corpora is their ability to accurately reflect the stylistic tendencies of individual writers (Dash, 2008). Chen et al. (2009) noted the wide-ranging impact of corpus linguistics on language teaching and learning is occurred because of the abundance of authentic data that entails actual use of language. The abundant data facilitate the acquisition of knowledge and comprehension of content. Language learners are advantaged by the employment of corpora, since it allows them to adjust the appropriateness of their word selection and to accept the validity of specific linguistic forms. As noted by Kennedy (2016), corpus linguistics, which investigates language use in a variety of contexts, provides evidence concerning linguistic analysis and language variation.

A corpus is a collection of a great many examples in which texts are brought together and examined collectively in an attempt to identify how language is being employed across a range of different environments (Baker, 2010; Dash, 2008;

Kennedy, 2016). Dash (2008) encapsulates the definition and describes its essential features as follows:

C: Compatible to computer

O: Operational in research and application

R: Representative of the source language

P: Processable by both man and machine

U: Unlimited in the amount of language data

S: Systematic in formation and text representation

However, the availability of processing vast data is limited by the vast amount of time needed to engage human analysts or groups manually wade through the contents. Indeed, searching such the vast corpus manually presents undeniable difficulties in terms of ensuring error-free outcomes (McEnery & Hardie, 2012). Just like how researchers require specialized instruments to examine the human body, corpus linguists require specialized instruments to perform corpus analysis (Baker, 2010). These tools enable the collection of large volumes of text in the form of a corpus, using natural language and computer technologies, which are then investigated through databases by using well-defined methodologies akin to those, employed in mathematics and statistics (Dash, 2008). The specifics of these tools are discussed in the subsequent section.

2.1.1 Corpus-based studies

Corpus-based studies is an approach to studying language by using a corpus, a systematically compiled collection of texts, often in electronic form. This approach emphasizes quantitative analysis, such as examining the frequency and distribution patterns of words and phrases, as well as studying quantitative relationships, or association patterns, in linguistic data (Biber et al., 1998). In addition, corpus-based studies make it easy to the analyze the contexts of use of longer and more sophisticated constructions with help of specialized tools, like Concordance Software.

2.1.2 Concordance software

Corpus linguistics owes much of its success to concordance software, as it allows for the extensive examination of language data. AntConc, WordsSmith Tools, and Sketch Engine are some of the tools that aid in analysis of word frequencies, collocations, and language patterns. For instance, AntConc is simple and in turn has

become popular among academics and teachers (Anthony, 2005). Details on its specific use in this study are provided in Section 3.3.

2.2 Academic vocabulary

Academic vocabulary forms the core of scholarly communication and enables writers and learners to share ideas accurately and economically across the board. Beck et al. (2013) classify vocabulary into three categories: general, technical, and academic. General and technical vocabulary serve very specific purposes, yet scholarly vocabulary plays very significant roles in scholarly communication.

Academic vocabulary, often considered the most critical category, comprises words that are often used in overall academic discourses in various disciplines according to Hyland and Tse (2007), and is a key ingredient to academic success, as Nation (2001) emphasizes its role in academic communication and comprehension. A crucial tool that formalizes academic vocabulary is the Academic Word List (AWL), which is discussed in detail in Section 2.3.

2.3 Academic Word List

Vocabulary is typically divided into general vocabulary lists, two of which are the General Service List (GSL) and the Academic Word List (AWL) (Coxhead, 2000). The General Service List (GSL) is a broad vocabulary list, derived from five million words, dividing them based on frequency and salience. These words are deemed suitable and necessary for language learners.

On the other hand, the Academic Word List (AWL) is created for use in academic settings and includes words that are commonly encountered in academic settings. From a corpus of 3.5 million academic writings, the AWL identifies words that university students most probably encounter in their studies of various areas of academic study. Therefore, the AWL is a useful tool in language classes to determine vocabulary goals, advising students through their studies, and influencing course syllabi and materials. Coxhead (2000) is committed to the central role that academic word lists are supposed to assume in such educational contexts.

To produce the list, Coxhead (2011) used a corpus of 3.5 million running words of published academic texts. The corpus was divided into four disciplinary

categories, each with approximately 87,500 running words. Disciplinary categories were subject areas, such as art, business, law, and science. The sample comprised 414 texts, divided equally in terms of length to include a range of academic materials, such as textbooks, essays, book chapters, and laboratory manuals.

In the Academic Word List (AWL), there are a total of 570 different word families, categorized into 10 distinct sublists. The sublists are also ranked in order of frequency of use with the highest frequency words in the first sublist and the lowest frequency in the tenth sublist. The first sublist is the most frequent word families and the tenth sublist is the least frequent. The application of the AWL is for all students in their respective studies because it encompasses words that are common to different disciplines (Coxhead, 2000).

2.4 Collocations

Collocations, as emphasized by Hill (2000), Lewis (2000), and Mustafaoglu and Allans (2020), denote the natural combinations of words within a language. While these pairings may seem intuitive to native English speakers, they frequently present difficulties for English learners due to their idiosyncratic nature (McCarthy, 2017). Based on the works of Hill (2000), McCarthy (2017) and Mustafaoglu and Allans (2020), the following nine aspects highlight the crucial roles of collocation in language acquisition and use:

1. Lexicon structure and non-arbitrariness

Language follows certain collocation patterns that are not random. For example, when verb to have is used in the context of drinking, it is normally followed by common beverages, such as tea, coffee, or milk. If it is used with something that is not usually consumed, like motor oil or sulfuric acid, it sounds unnatural because it does not follow typical patterns of word use in English.

2. Predictability

There are some word combinations in a language that do not happen by chance but are based on recurring patterns. These patterns are helpful for learners in knowing, learning, and memorizing how words tend to combine.

3. Size of the phrasal mental lexicon

Due to its predictability, collocation is a highly significant element in the use of language. It is the reason behind many of the naturally occurring phrases in spoken and written common language.

4. Role of memory

Word recall occurs when readers are repeatedly exposed to certain words and are able to retrieve them from their mental memory. However, the most important factor in helping learners acquire new vocabulary is how frequently they encounter and understand the words in meaningful contexts.

5. Fluency development

Collocations allow native speakers to be more fluent because they already know the common groupings of words, and they can understand and speak more quickly. Learners, however, are not used to these groups of words, so their reading and listening can be slowed down or blocked.

6. Lexical depiction of complex ideas

Intermediate learners frequently use basic language to express both basic and complex concepts, which can result in ineffective communication. However, the key to clearly communicating complicated concepts lies not in using complicated grammar but in having a sufficiently rich and appropriate vocabulary.

7. Cognitive ease through collocation

Collocations help us think and express more easily difficult concepts because we do not have to spend mental energy to choose individual words or to build new sentences from scratch.

8. Pronunciation in collocational learning

Pronunciation is critical, especially for learners who construct their speech primarily from words. Consequently, mastering numerous collocations and longer phrases offers the additional advantage of enhancing learners' stress patterns and tone.

9. Recognizing chunks for language acquisition

If the students are unable to determine which words normally go together, they tend to either memorize them in the wrong manner or not memorize them at all, which prevents them from applying these word combinations effectively in real-life communication.

2.5 Types of collocations

Collocations have been described in various ways by researchers, depending on the field of inquiry whether syntactic, lexical, or functional. These groupings help highlight how different kinds of words naturally co-occur across both written and spoken language use,. Probably the most commonly cited groupings are McCarthy et al. (2010), McCarthy (2017), India (2018), and Lewis (2000), whose respective works collectively show both syntactic and functional insight into collocation.

McCarthy et al. (2010) categorize collocations into seven structural patterns: (1) Verb and noun, (2) Noun and verb, (3) Noun and noun, (4) Adjective and noun, (5) Adverb and adjective, (6) Verb and adverb or Prepositional phrase, and (7) More Complex Collocations. This classification, as illustrated in Table 1, highlights grammatical constructions that are frequently seen in both scholarly and common language.

Table 1. Types of collocation categorized by McCarthy et al., (2010)

Collocations pattern	Example
Verb and noun	drew up a contract
Noun and verb	opportunity arose
Noun and noun	a barrage of questions
Adjective and noun	idle threat
Adverb and adjective	intensely personal
Verb and adverb or prepositional phrase	failed miserably
More complex collocations	taking it easy for a while

Later, McCarthy (2017) and India (2018) propose a slightly more condensed version comprising six categories: (1) Adjectives and nouns, (2) Nouns and verbs, (3) Nouns and nouns, (4) Verbs and phrases with prepositions, (5) Verbs and adverbs, and (6) Adverbs and adjectives (see Table 2). Although the overall structure is similar, the later classification merges some of McCarthy et al.'s original distinctions and omits

"More Complex Collocations." Therefore, while both frameworks identify similar core patterns, they vary in the degree of specificity and category scope.

Table 2. Types of collocation categorized by McCarthy (2017) and India (2018)

Collocations pattern	Example
Adjectives and Nouns	Fast car
Nouns and verbs	Car crashed
Nouns and nouns	a sense of achievement
Verbs and phrases with prepositions	spurred into action
Verbs and adverbs	Drive carefully
Adverbs and adjectives	Totally honest

Contrarily, Lewis (2000) offers another perspective by distinguishing between lexical and grammatical collocations. Lexical collocations consist of two content words of approximately equal weight, e.g., verbs, nouns, adjectives, and adverbs (see Table 3), while grammatical collocations consist of one content word accompanied by a grammatical item, typically a preposition (see Table 4). This distinction is not so much syntactically focused as the co-occurrence of words semantically and functionally in units of meaning.

Table 3. Types of lexical collocation categorized by Lewis (2000)

Collocations pattern	Example
Adjectives and nouns	a difficult decision
Verbs and nouns	submit a report
Nouns and nouns	radio station
Nouns and verbs	the fog closed in
Verbs and adverbs	examine thoroughly
Adverbs and adjectives	extremely inconvenient

Table 4. Types of grammatical collocation categorized by Lewis (2000)

Collocations pattern	Example
Adjective and preposition	aware of
Verb and preposition	engage in
Noun and preposition	emphasis on

This study synthesizes classifications from multiple scholars to establish a tailored typology, focusing specifically on noun-based collocations. McCarthy et al. (2010), McCarthy (2017), and India (2018) propose structurally oriented patterns, such as adjective and noun and verb and noun collocations, while Lewis (2000) introduces a functional distinction between lexical and grammatical collocations, particularly emphasizing noun and preposition collocations. Drawing on these frameworks, three collocation structures (adjective and noun, verb and noun, and noun and preposition) are adopted for analysis (see Table 7). These were prioritized due to their high frequency and functional salience in academic discourses, especially in noun-heavy genres, such as research articles. Adjective and noun, as well as verb and noun combinations, represent the most commonly investigated lexical patterns across previous studies. The inclusion of noun and preposition collocations is further justified by the observation that, in the present corpus, prepositions are the second most frequently occurring word class after nouns. Therefore, the current study does not rely on a single pre-existing classification system, but it devises a hybridized framework tailored to the specific goal of analyzing academic noun collocations in corpus-based research.

2.6 Classification of Collocations

The classification of collocations is central to predicting the words that are used in combination. While Section 2.5 discussed collocations in structural terms, this section focuses on the classification of collocations based on their degree of fixedness and semantic transparency, as proposed by Howarth (1996) and Cowie (1998). Scholars have classified collocations into four main types, based on their

characteristics: free collocations, restricted collocations, figurative idioms, and pure idioms (Howarth,1996). Cowie (1998) also studied this area and modified the typology by reducing the types of collocations to three: free combinations, restricted collocations, and idioms.

Free collocations are more variable and flexible with word choice and have less regularized combinations. Restricted collocations, by contrast, are word pairs that are very predictable and therefore the choice of one word heavily restricts the options with others on semantic or contextual grounds.

To distinguish collocations in this study, four analytical criteria were adapted primarily from Howarth (1996) and supported by Cowie (1998). These criteria include (1) co-occurrence frequency, or how often two words appear together in the corpus; (2) substitutability, which considers whether one element can be replaced without altering the naturalness or meaning of the phrase; (3) semantic specialization, referring to whether the phrase carries a field-specific or idiomatic meaning; and (4) fixedness, or the regularity with which the combination appears in academic writing. Howarth's framework provides the structural support through ideas of commutability and semantic unity, while Cowie's addition supports such aspects by connecting them with evidence from corpora and phraseological behavior. The criteria constitute the working platform for the classification and identification of noun-based collocations in academic writing.

Several studies have examined the abilities of EFL learners, with findings indicating that the majority mostly struggled with verbs and nouns, as well as adjectives and nouns (Alotaibi, 2014; Dukali, 2018; Ridha & Riyahi, 2011). Verbs and nouns have been extensively studied (Bazzaz, 2013; Bazzaz & Samad, 2011; Holtz, 2007; Ordem & Bada, 2016; Putra & Suhardijanto, 2019; Sanguannam, 2017; Uçar & Yükselir, 2015). But, particularly in research articles, adjectives and nouns have gotten less attention (Brett et al., 2021; Bueraheng et al., 2014; Ghaniabadi et al., 2015; Takač & Lukač, 2013).

Following these observations, this study aims at noun collocations, focusing on three important combinations: adjectives and nouns, verbs and nouns, and nouns and prepositions. Restricted and free collocations are both examined in this study, with a focus on their patterns and characteristics in academic writing. Finally,

classifying collocations according to their degree of fixedness from free to idiomatic provides a glimpse into their predictability and processing in academic writing. This study applies these categories to continue the investigation of the use of noun-based collocations in academic writing.

2.7 Previous studies

Previous studies had used participants' vocabulary proficiency, and more specifically the academic one, as a main concern to English learners. Academic vocabulary has been extensively studied in the majority of fields, including agriculture (Martínez et al., 2009; Muñoz, 2015), medical (Chen & Ge, 2007), education (Mozaffari & Moini, 2014), environmental science (Liu & Han, 2015), and applied linguistics (Khani & Tazik, 2013; Vongpumivitch et al., 2009).

2.7.1 Academic vocabulary coverage in research articles

Within the field of applied linguistics, between 2000 and 2013, research significantly added to the understanding of academic vocabulary coverage, as indicated in Table 5 below. Vongpumivitch et al. (2009) conducted word frequency analysis that would be useful to teachers within the field of academic English by using both the Academic Word List (AWL) and non-AWL words. Their study utilized a corpus, comprising 200 research papers, sourced from five international journals within the discipline of Applied Linguistics. The results showed that AWL occupied only 11.17% which is greater than the 9.3% found by Coxhead (2000) in the area of Arts. Conversely, Khani and Tazik (2013) quoted limitations in the corpus. Vongpumivitch et al. (2009) constructed with respect to its representativeness of applied linguistics research articles. To this end, they constructed a corpus of academic vocabulary specific to applied linguistics research articles, maximizing representativeness and conformity to academic words specific to the field. Their corpus, comprised 1,553,450 running words, extracted from 12 Applied Linguistics journals, published between 2000 and 2009, demonstrated a comparable size to that of previous studies, with similar percentage coverage as depicted in Table 5. The evidence also backs the claims made by Coxhead (2000), who posited that there is a high level of academic language usage in the texts.

Table 5. AWL coverage studies in applied linguistics research articles

Author	Corpus	Running words	Percent coverage
Vongpumivitch, Huang, and Chang (2009)	applied linguistics research articles	1.5 million	11.17%
Khani and Tazik (2013)	applied linguistics research articles published between 2000 and 2009	1,553,450	11.96%

In other specialized disciplines, such as chemistry and environmental science, researchers have developed field-specific academic word lists to enhance the accuracy of vocabulary coverage analysis. Valipouri and Nassaji (2013) made a corpus analysis of 1,185 writings, consisting of more than 4 million words, to establish coverage and develop an academic vocabulary list for chemistry EFL students. They compared the Academic Word List (AWL) and the General Service List (GSL). The findings showed that AWL coverage was as high as 9.96%, which was the same as Chen and Ge (2007) discovered, despite the huge difference in word size. Similarly, Liu and Han (2015) developed the Environmental Academic Word List (EAWL) after analyzing word list creation and discipline-specific academic word list validity testing requirements. Their work, which came from 20 environmental science articles, published between 2010 and 2013, covered 12.82% of the environmental academic word list. However, the EAWL covered 15.43%. Comparison revealed that the EAWL has more word families, a greater range, occurs more often, and offers a better approximation of the lexical features of environmental science.

In the field of education, several studies have examined the application of AWL to what extent in academic writing. According to Mozaffari and Moini (2014), they examined how often AWL words were used in education. They employed a corpus that included 239 research articles from five well-established journals between 2002 and 2010. The result showed only about 4.94 percent of the total comprised AWL terms. The analysis revealed that AWL terms accounted for only 4.94 percent of the total. Coxhead (2000) reported 9.3% AWL keywords in the Arts sub-corpus, which includes history, education, linguistics, politics, philosophy, and sociology, in

contrast to this. Thus, the findings suggest that AWL word forms are less dominant in education research journals (Mozaffari & Moini, 2014). The following Table 6 presents the coverage of the AWL in different research articles.

Table 6. AWL coverage studies in other research articles

Author	Corpus	Running words	Percent coverage
Chen and Ge (2007)	Medical research articles	190,425	10.07%
Valipouri and Nassaji (2013)	Chemistry research articles between 2003 and 2009	4 million	9.96%
Mozaffari and Moini (2014)	Education research articles during 2002 until 2010	1.7 million	4.94%
Liu and Han (2015)	Environmental science research articles between 2010 and 2013	862,242	12.82%

Numerous studies have emphasized the dominance of lexical words, particularly nouns, in academic writing. For instance, Chanasattru and Tangkiengsirisin (2016) compiled a high-frequency content word list from social science articles and found that “community,” a noun, was the most frequent term. Nilsson (2019) similarly reported that scientific research articles contained more nouns and domain-specific terms than popular science writing. In the nursing domain, Trinant and Yodkamlue (2019) found that nouns constituted 63.51% of lexical items in research articles, supporting Jeffries’ (2006) assertion that nouns are among the most common words in English academic discourse.

In addition to the general dominance of nouns, several studies have specifically investigated adjective and noun collocations, particularly in the context of EFL learners. Takač and Lukač (2013) compared learner-produced essays with native corpora and found that while some patterns were similar, others reflected L1 transfer. Ghaniabadi et al. (2015) also examined the frequency and abstractness of adjective-

noun collocations, used by Iranian learners, by noting a tendency toward abstract noun pairings. Dukali (2018) analyzed Libyan EFL students' use of both adjective and noun and verb and noun collocations tofind significant difficulties, brought on by a lack of collocational awareness and native-like usage. Alotaibi (2014) and Bueraheng and Laohawiriyanon (2014) further supported these findings by stating that there were challenges in EFL learners' application of adjective and noun collocations in which international students outperformed English majors in controlled tests.

Although there has been extensive research on academic vocabulary and collocations, previous studies have predominantly focused on general coverage or certain patterns. Nevertheless, there is little research addressing adjective and noun, verb and noun, and noun and preposition. In this study, language and linguistics journals refer to peer-reviewed Q1 journals, listed in the Scimago Journal Ranking (SJR), which include *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*. This study seeks to fill this gap by examining the frequency, patterns, and distribution of these specific collocations in English-related academic publications.

2.7.2 Collocation studies in EFL and academic writing

Recent studies have also pointed out difficulties that EFL learners face in using collocations appropriately, mostly in academic writing contexts. Boonraksa and Naisena (2021) investigated the collocation errors of Thai university students and found high error rates across all proficiency levels. The most problematic patterns involved adjective and noun and verb and preposition collocations. They identified three main causes of these errors: L1 transfer, synonym misapplication, and a lack of collocational competence. Similarly, Harta et al. (2021) analyzed lexical collocation errors in students' writing and classified them into five major categories: verb and noun/pronoun, adjective and noun, adverb and adjective, noun and noun, and verb and adverb. Their findings emphasized that students frequently misused collocations due to insufficient exposure, overgeneralization, and the influence of native language patterns.

From a pedagogical standpoint, Phiwma (2023) demonstrated that the use of blended learning with game-based activities significantly improved university

students' language skills for formal presentations. This supports the notion that vocabulary and collocations are more effectively acquired when embedded in meaningful contexts. In line with this, Boonphoie and Bhoomkhokrak (2024) found that integrating Content and Language Integrated Learning (CLIL) with Project-Based Learning (PBL) improved pupils' usage of academic terminology and comprehension.

In another study, Nampanya and Wangmo (2020) found that Thai EFL learners struggled with phrasal verb collocations, primarily due to direct translation from their first language. The results indicate the general challenge that learners experience in understanding multi-word expressions that are not directly translated in languages.

The studies collectively reveal key problems that still have an impact on EFL learners' acquisition of collocational knowledge and provide the conceptual beginning point for the analysis of noun collocations in this research.

The present study, therefore, focuses on examining the trends and frequency of noun-based collocations that frequently appear in language and linguistics journals. Table 7 summarizes the principal noun collocation patterns that are investigated in this research.

Table 7. Noun collocation patterns analyzed in this study

Collocations pattern	Example
Adjectives and nouns	foreign language
Verbs and nouns	Perceive message
Noun and preposition	learners with

These three noun collocation patterns were selected since they are common in academic texts and their function in communicating precise and professional meaning. Other collocational structures were excluded from the analysis to maintain a clear research focus and correspond with the goals of the study.

CHAPTER 3
METHODOLOGY

This chapter provides an overview of the research procedures and methods, employed in this study. The overall purpose of the study is to examine the most frequent noun collocations and collocation patterns, applied in journal articles, to evaluate their use, and to contrast the similarities and differences in the noun collocations, used in each journal.

3.1 Research design

This study used a corpus-based quantitative research design to examine how academic vocabulary and noun collocations appear in journal articles. A corpus-based approach is suitable for studying large amounts of real language use, especially when looking at word frequency and how words are used together. This is a method that enables language pattern observation as naturally occurring and measurement and comparison of the use of collocations in various academic texts.

The first step in the research process was to collect articles from three Q1-ranked journals in the field of Language and Linguistics. They are Q1-ranked according to the SCImago Journal Rank (SJR), reflecting their high academic quality and international recognitions. The articles were gathered, cleaned, and ready for examination by using corpus analysis tools. The study focused on common academic noun collocations, especially adjective and noun, verb and noun, and noun and preposition combinations. These types of collocations are extremely frequent in academic writing and play an important role in making clear and precise meaning.

The objectives of this study were as follows:

1) To identify the top ten nouns that mostly appeared frequently in each studied academic journal articles, related to language and linguistics.

2) To find the most commonly used noun collocations and to understand their three types patterns: adjective and noun, verb and noun, and noun and preposition combinations in the selected journal articles.

To do this, the analysis was done in two main phases. In the first stage, corpus software was used to generate a list of the most frequent academic nouns found in the journal articles. This helped identify which nouns were most often used. In the second stage, the study examined how these nouns were employed together with other words. The focus was on the three target patterns: adjective and noun, verb and noun, and noun and preposition collocations. Part-of-speech (POS) tagging and collocation analysis tools were applied to learn these patterns in more detail.

3.2 Corpus creation and sampling

The corpus was created through a step-by-step process. First, three Q1-ranked journals were initially selected in Language and Linguistics from the SCImago Journal Rank (SJR), which are *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*.

The following were the selection criteria for the journals:

(1) With a focus on the language and linguistics modules

(2) Being able to access full-text articles online.

(3) Being known to be prestigious and prominent on the field.

These journals were chosen because they have been ranked in the top group (Q1) of the SCImago Journal Rank, which shows that they are well-known and highly respected in academic circles. Each journal focuses on a different aspect of language and linguistics, including teaching languages, language theory, and communication. This allows the study to compare how collocations are used in different types of academic writing, while still staying within the same overall academic field.

The articles, used in this study were published between 2020 and 2021. This time frame was selected because it provided recent and relevant academic writing samples. It also helps limit the dataset's size, increasing the analysis's focused and controllable, while still supplying sufficient data for meaningful results.

Each of the selected journals serves a distinct disciplinary focus. *Applied Linguistics* functions as a forum for the publication of cross-disciplinary research in linguistic theory and application. *The Modern Language Journal* centers on second and foreign language acquisition, emphasizing language pedagogy and learner

development. Meanwhile, *Communication Monographs* advances our theoretical and methodological knowledge of how individuals converse in a variety of social settings.

Next, articles published between 2020 and 2021 were then retrieved from the corresponding official websites of the journals. While most articles were accessible on these prominent journal websites, some were additionally downloaded from ResearchGate for full-text purposes. Then, the PDF versions were downloaded as .docx format in Microsoft Word, and only the major textual components (e.g., introduction, methodology, discussion) were taken out and utilized for analysis, and tables, references, and appendices were excluded. After that, the cleaned files were stored into categorized folders, based on the journal titles. Lastly, the files were saved in plain text (.txt) format for compatibility with the tools of corpus analysis.

3.3 Research instruments

In studying the frequency of academic words and noun collocations, this study was corpus-based, hence requiring specific software. AntConc, developed by Laurence Anthony, became a leading corpus analysis tool since its introduction in 2002. This lightweight and user-friendly software has proved highly valuable in technical writing courses, offering essential tools for corpus analysis alongside an intuitive interface and a freeware license (Anthony, 2005). Figure 1 displays the interface of AntConc, the software used for collocation and frequency analysis.

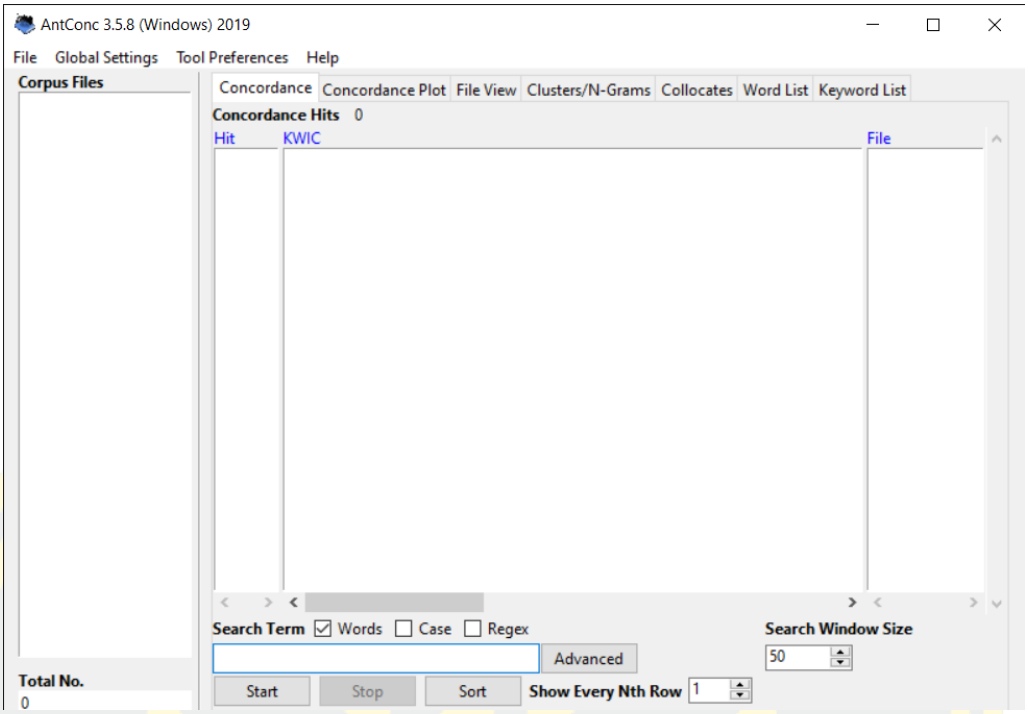


Figure 1 The interface of AntConc version 3.5.8

Besides, TagAnt, a part-of-speech (POS) tagging tool, developed by Laurence Anthony, was employed to verify word types and automatically assign words with tags. This tool was particularly useful in locating noun occurrences across all articles, which were the focus of the collocation analysis. TagAnt increases the precision of linguistic annotation by tagging every word with part of speech, say NN for singular nouns or NNS for plural nouns. Figure 2 demonstrates the user interface of TagAnt used in this research.

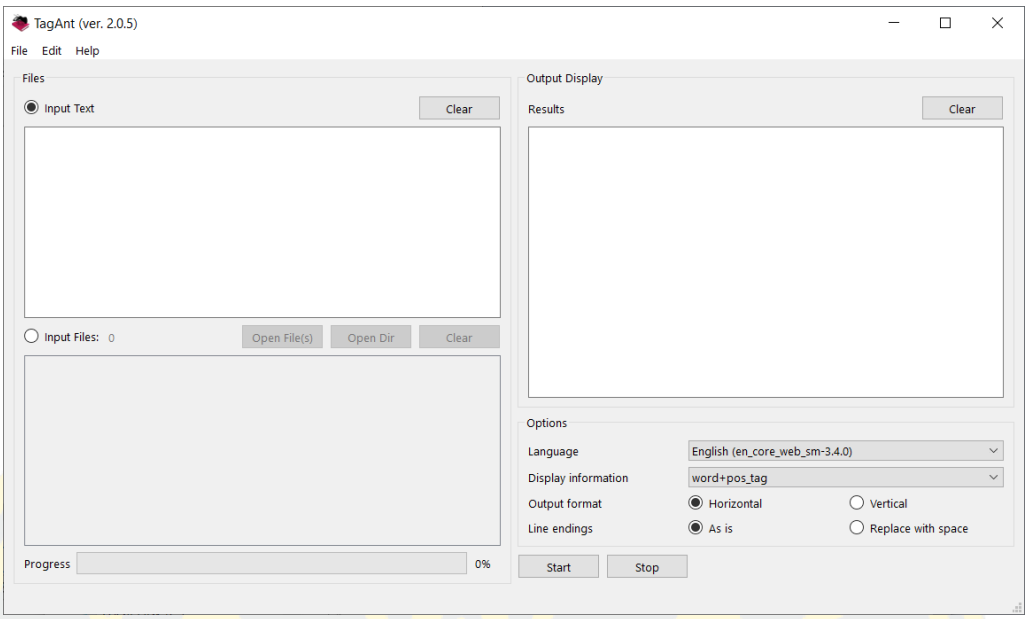


Figure 2 The interface of TagAnt version 2.0.5

3.4 Data collection and data processing

Articles for research were selected by first identifying internationally ranked journals in the area of language and communication. There is no specific category for language and communication in the SCImago Journal Rank website, however, it offers similar ones, such as language and linguistics. After subjecting the journals that would be taken for consideration, articles from each of the journals were compiled in text files, formatted for analysis with the software of choice.

A total of 60 research articles (20 from each journal) were compiled into separate folders, resulting in three categorized corpora. Microsoft Word was employed to convert PDF files to Word files (.docx) for proper word count. Subsequently, the documents were converted to text (.txt) format for compatibility with corpus analysis software.

The final corpus consisted of 1,009,016 words in total. This comprised 308,490 words from *Applied Linguistics*, 372,015 words from *The Modern Language Journal*, and 328,511 words from *Communication Monographs*. The documents were converted from PDF to .docx format by using Microsoft Word in terms of word count

verification and then saved in plain text (.txt) format for use with corpus analysis software.

3.5 Data analysis

The TagAnt program was employed to classify words into grammatical categories, followed by the use of AntConc to identify all nouns, occurring in the 60 selected articles, which amounted to 1,009,016 word tokens. Upon examination, a total of 132,393 noun tokens were identified. To guarantee precise portrayal, both singular and plural forms (e.g., *student/students*, *language/languages*) were grouped and counted together as single lexical items.

Subsequently, the top ten most frequent nouns were extracted separately from each of the three journal corpora, resulting in a total of thirty nouns, selected for analysis. Each journal's dataset was independently sorted, and categorization was performed for each of the ten nouns.

From the ten most frequent nouns, identified per journal (RQ1), the top three nouns were selected for detailed collocational analysis (RQ2). These nouns were selected on the grounds of frequency and relevance to academic discourse. Each noun was analyzed for its most frequent collocational patterns, with a focus on adjective and noun, verb and noun, and noun and preposition combinations.

Collocational analysis was conducted by using AntConc. The Concordance tool was used to determine the frequency of each of the top ten nouns across the dataset. To answer the second research question, the Collocates function was implemented to examine the lexical items occurring immediately before and after each selected noun. This allowed for the identification of the most common and relevant collocation patterns in academic writing.

To distinguish between free and restricted collocations in the selected data, this study employed four analytical criteria, derived from Howarth (1996) and Cowie (1998), as well as additional operational interpretations, based on corpus linguistic practices. These criteria include:

1) Co-occurrence frequency: how often two words come together in the corpus. In this study, frequency was determined by sorting the collocates, based on raw frequency counts from AntConc.

2) Substitutability: whether one word in the pair can be replaced with another similar word without changing the meaning or making the phrase sound unnatural. This was examined by comparing concordance lines to see whether other words of similar function or meaning could naturally occur in place of the original collocate.

3) Semantic specialization: whether the combination has a specific meaning in professional or scholarly settings. Specialized uses were identified, based on the immediate linguistic environment in the concordance lines, especially when the meaning extended beyond the surface meaning or reflected discipline-specific usage.

4) Fixedness: how regularly the combination is used in academic writing, and whether it follows a typical or expected pattern. Collocations were considered fixed when they repeatedly appeared in the same structural form across concordance lines or matched widely used academic phrases.

Collocations that satisfied at least three of the four criteria were classified as restricted, while those exhibiting more flexibility and general use were considered free. In addition to these categories, this study also acknowledged the presence of semi-restricted collocations, which did not fully meet the criteria for restricted collocations but exhibited more fixedness and co-occurrence frequency than typical free combinations. These collocations were frequently employed in academic settings and exhibited a semi-fixed usage pattern, with considerable substitutability. This intermediate category helps account for the gradience and difficulty found in real-world academic writing.

3.5.1 Word Criteria

To align with the methodology of Coxhead's (2000) Academic Word List (AWL), this study adopted a corpus-based approach for word selection with domain-specific adjustments. The key criteria for selecting words in this study, compared with those of the AWL, are presented in Table 8. For the purpose of comparison, the

term ALAWL (Applied Linguistics Academic Word List) is used in this study to represent the adapted criteria from the AWL for this specific field.

Table 8. Comparison of criteria between AWL and the current study

Criteria	AWL (Coxhead, 2000)	ALAWL (Current Study)
Corpus size	3.5 million tokens	1.0 million tokens
Special occurrences	Excluding West's (1953) GSL	Excluding GSL and non-Applied Linguistics-specific terms
Frequency	100 times on the whole corpus	50 times on the whole corpus

CHAPTER 4
RESULTS

This chapter presents the results of the corpus-based analysis in response to the research questions, outlined in Chapter 1. Section 4.1 reports the ten most frequent nouns, found in each of the three selected journals. Section 4.2 explores the collocational patterns of selected nouns, focusing on adjective and noun, verb and noun, and noun and preposition combinations.

Two research questions are addressed in this chapter:

1. What are the top ten nouns that mostly appear in each journal?

2. What are the most frequently used noun collocations and their patterns in journal articles?

4.1 Top ten nouns appearing the most in each journal

This section presents the ten most frequently occurring nouns in each of the three selected journal corpora: *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*. The frequencies were calculated, based on the combined counts of singular and plural forms to represent each lexical item more accurately.

4.1.1 *Applied Linguistics*

The most frequently occurring nouns in the *Applied Linguistics* corpus (presented in Figure 3) include *language*/*languages*, appearing 1,261 times, *student*/*students* (746 times), and *English*/*Englishes* (498 times). These most frequent nouns reflect typical themes, covered by the journal's publications of scholarly interest, i.e., language acquisition, learners, and participants in research. Other frequent appearances of words, such as *study*, *participants*, and *group,* also reflect a heavy dependence on empirical, participant-focused research. Additionally, the terms like *research*, *data*, and *linguistics* shows that the journal's content is grounded in evidence-based inquiry and theoretical discussion. The overall lexical pattern

highlights its cross-disciplinary focus, bridging linguistic theory with applied research methodologies in educational and sociolinguistic contexts.

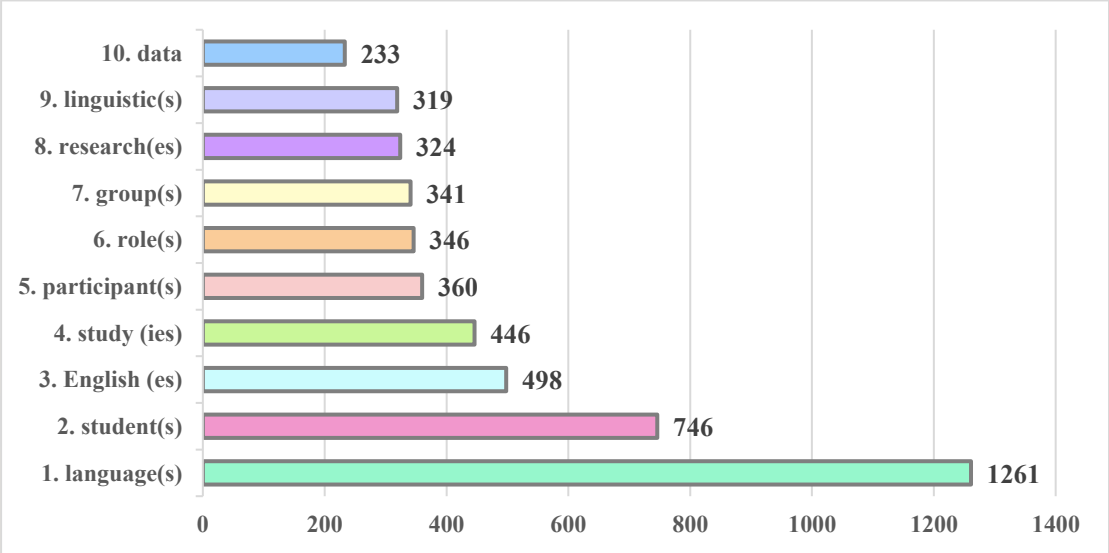


Figure 3 Top ten most frequent nouns identified in *Applied Linguistics*

4.1.2 *The Modern Language journal*

The top ten most frequently occurring nouns in the Modern Language Journal corpus, as displayed in Figure 4, include *language/languages*, appearing 1,399 times, followed by *study/studies* (1,000) and *learners/learner* (889). These nouns highlight the journal's clear pedagogical orientation, particularly in relation to language acquisition, classroom-based studies, and learner identity.

Other frequently occurring nouns include *students*/*student* (827), *learning* (792), and *English* (793), reflecting a strong emphasis on second language acquisition and English as a foreign or second language. Additionally, terms, such as *measures*, *proficiency*, and *level,* reflect a focus on assessment and the evaluation of learning outcomes—recurring themes in applied language education research.

The high frequency of learner-related and teaching words indicates that this journal corpus is strongly interested in the construction of effective pedagogies and exploration of learning processes in institutional learning environments.

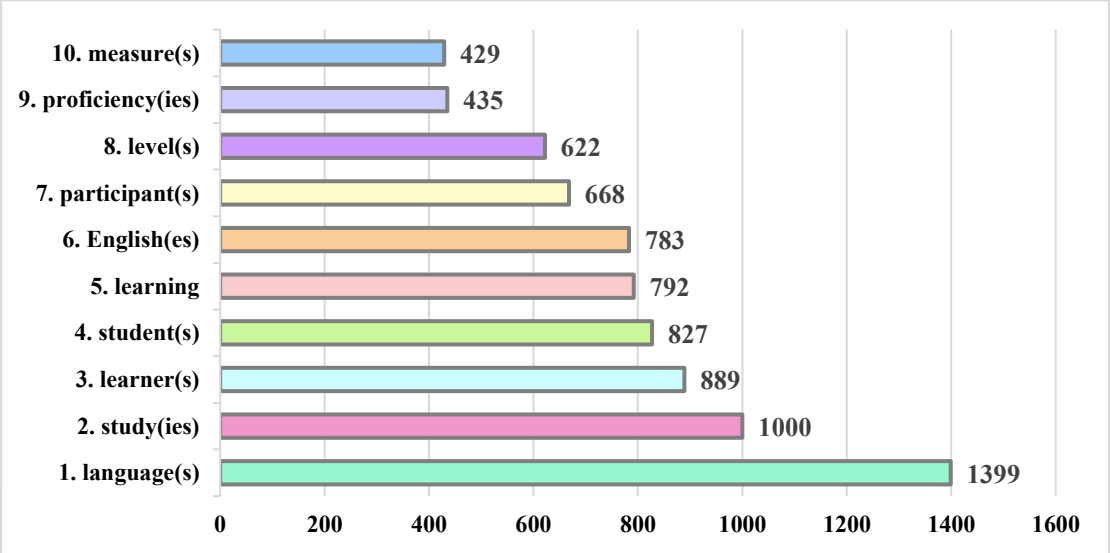


Figure 4 Top ten most frequent nouns identified in The Modern Language Journal

4.1.3 *Communication Monographs*

The Communication Monographs corpus presents the top ten most frequently occurring nouns as *message/messages*, appearing 720 times, followed closely by *study/studies* (710) and *information* (546) as shown in Figure 5. These terms are closely aligned with the journal's disciplinary emphasis on message construction, transmission, and interpretation inside communication contexts.

Other high-frequency nouns, such as *participants*, *social*, *media*, and *communication,* further reflect the journal's focus on human interaction, media discourse, and the societal dimensions of communication. Notably, terms like *advice*, *role*, and *research* also point to the analytical and often interpersonal nature of the communication field where both theory and applied studies intersect.

Overall, the dominant nouns in this corpus suggest a strong alignment with the theoretical and empirical research of communication practices, media influence and the effectiveness of the message in a variety of social and cultural contexts.

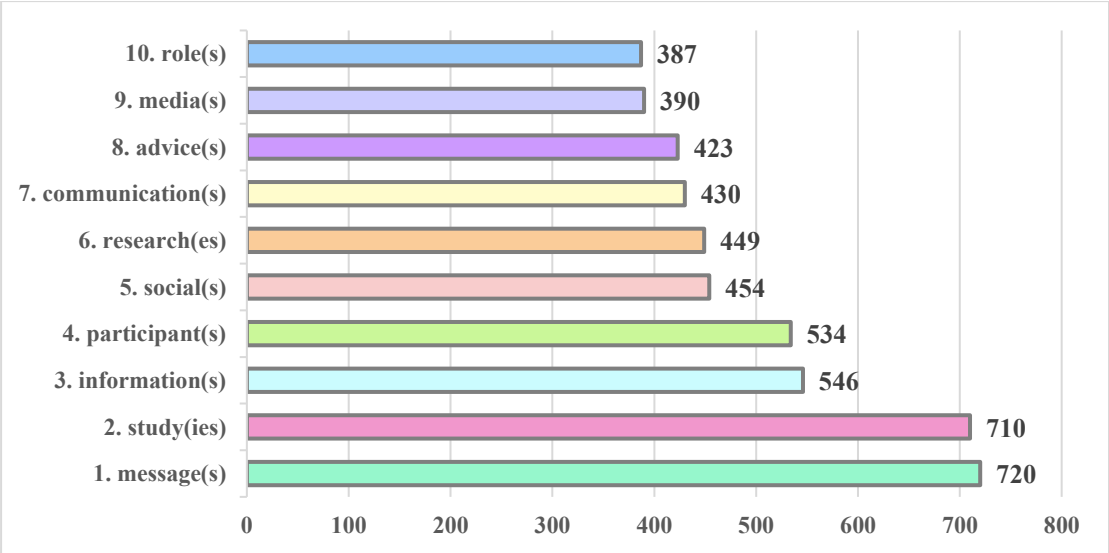


Figure 5 Top ten most frequent nouns identified in *Communication Monographs*

4.1.4 Cross-Journal Comparison and Summary

This section compares the ten most frequent nouns across the three journal corpora and summarizes the observed lexical patterns. Several terms, such as *study/studies* and *participants/participant* were found in all three journals, indicating their broad relevance to empirical research practices in applied linguistics, language education, and communication studies.

Terms like *language*, *students*, and *English* appeared in both *Applied Linguistics* and *The Modern Language Journal*, highlighting these journals' shared focus on language learning and teaching. In contrast, words, such as *media*, *message*, *advice*, and *communication,* were unique to *Communication Monographs*, reflecting its disciplinary orientation toward media studies, interpersonal communication, and social influence.

The Modern Language Journal displayed a learner-centered emphasis, as evidenced by the appearance of learners, learning, proficiency, and level, recommending an emphasis on the results of language acquisition and pedagogical assessment. *Applied Linguistics*, meanwhile, included terms like *linguistics*, *group*, and *data*, being consistent with its empirical, theory-driven approach.

In terms of academic vocabulary, several of the most frequent nouns, such as *participants* (Sublist 2), *research* (Sublist 1), *data* (Sublist 1), and *communication*

(Sublist 4), are included in Coxhead's (2000) Academic Word List (AWL), reaffirming the formal and scholarly nature of the analyzed journal texts.

Additionally, some nouns can also be categorized as field-specific or technical. For example, linguistics and proficiency are typically associated with language assessment and theoretical linguistics, while message and media pertain to the core of communication studies. Their prominence in the respective corpora suggests that each journal corpus reflects its field's key conceptual concerns.

In summary, although there is overlap in the high-frequency nouns across journals, the variations reflect each journal's disciplinary identity and research priorities.

4.2 The most frequently used noun collocations and their patterns in journal articles

This section presents the results addressing the second research question, which explores the most frequently used noun collocations and their patterns across the three selected journal corpora. From the top ten most frequent nouns, identified in each journal (Section 4.1), three high-frequency nouns were selected from each corpus for further analysis.

As outlined in Section 2.5, the analysis focuses on three common collocation structures: adjective and noun, verb and noun, and noun and preposition. However, not all three patterns appeared with equal prominence for each noun. Consequently, the discussion emphasizes only the most frequently occurring or most meaningful pattern(s) for each case, while less frequent patterns are briefly mentioned or excluded for clarity.

Collocational data were extracted using AntConc's Collocates and Concordance tools, and the part-of-speech information was verified by using TagAnt. The analysis also categorizes each collocation as either free or restricted, based on its degree of fixedness and typicality, following Howarth (1996) and Cowie (1998). The findings are organized by journal, with each subsection examining three selected nouns from that journal.

4.2.1 *Applied Linguistics*

This section presents the collocational behavior of the three most frequent nouns found in the *Applied Linguistics* corpus: *language/languages* (1,261 occurrences), *students/student* (746), and *English/Englishes* (498). Each noun was analyzed in terms of its grammatical collocation patterns, semantic functions, and degree of collocational restriction. The analysis also examines how these patterns align with the journal's thematic focus. Subsections 4.2.1.1 to 4.2.1.3 provide detailed discussions of each noun in descending order of frequency.

4.2.1.1 *language/languages*

The nouns language and languages occurred 1,004 and 257 times respectively in the *Applied Linguistics* corpus. An analysis of their collocation patterns revealed that the adjective and noun structure was the most prominent for both forms. For *language*, this structure accounted for 271 occurrences (26.99%), compared to 121 verb and noun (12.05%) and 89 noun and preposition (8.87%) combinations. For *languages*, the adjective and noun pattern appeared 78 times (30.35%), followed by noun and preposition at 54 times (21.01%), and verb and noun at 24 times (9.34%).

These findings suggest that both *language* and *languages* tend to be most frequently modified by adjectives, though *languages* show a relatively higher proportion of noun and preposition structures, possibly reflecting its use in plural academic or sociocultural contexts. The prominence of the adjective and noun structure in both forms highlights the importance of specification in academic discourse, especially in distinguishing types or domains of language use.

In the adjective and noun structure, which was the most frequent collocation pattern, the top three adjective collocates for *language* were *English* (41 occurrences), *second* (27), and *foreign* (13). These combinations, which form collocations, such as *English language*, *second language*, and *foreign language*, reflect key concepts in applied linguistics, including English as a medium of instruction, second language acquisition, and language status in international contexts (see Figure 6).

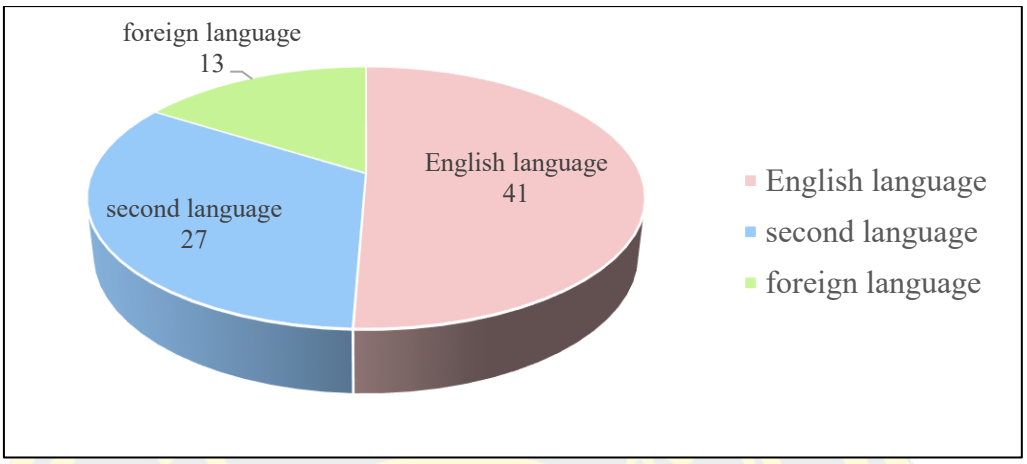


Figure 6 Top three adjective and noun collocates with *language* in *Applied Linguistics* corpus

For *languages*, the four most frequently used adjective collocates were *different* (12 occurrences), *other* (8), *South African* (5), and *foreign* (5). These collocates appear in combinations, such as *different languages*, *other languages*, *African languages*, and *foreign languages*. They highlight themes of linguistic diversity, comparative language use, and geographical or cultural language classification within the journal articles (see Figure 7).

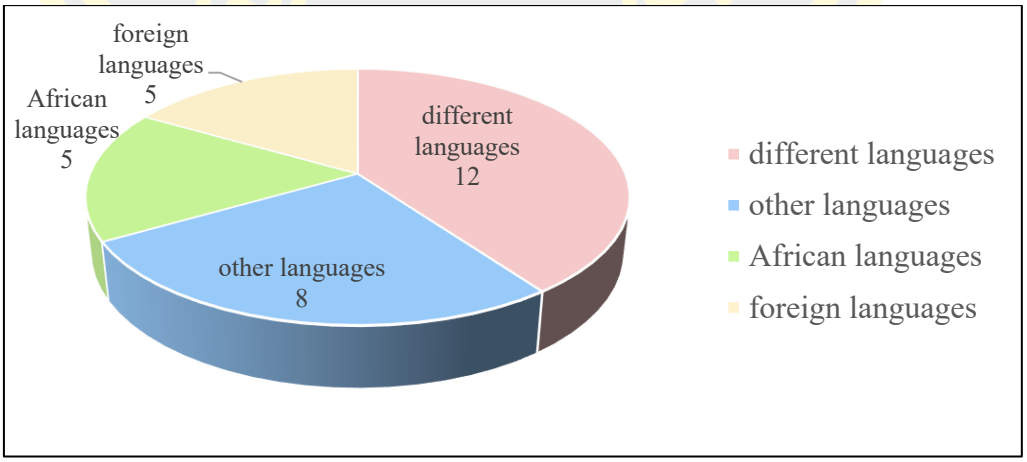


Figure 7 Top three adjective and noun collocates with *languages* in *Applied Linguistics* corpus

The adjective and noun combinations, identified in this corpus, exhibit varying levels of lexical restriction. Specifically, *English language* and *second language* fulfill the criteria of restricted collocations. Both phrases are highly frequent, semantically specific within academic discourse, and exhibit low substitutability and strong structural fixity. For example, *English language* consistently appears in combinations, such as "*English language* learners" and "*English language* education," while *second language* is central to established terms in SLA research, such as "*second language* acquisition" and "*second language* learner."

These examples illustrate how restricted collocations are realized in real academic contexts. Concordance lines, for example:

"*English language* proficiency level of upper…"

"studies in *second language* acquisition…"

"Chinese as a *foreign language* class"

demonstrate high frequency and structural fixity in their use.

In contrast, combinations, such as *different languages* and *other languages,* show more flexibility and generality in meaning. These phrases are used in diverse sociolinguistic and comparative contexts and are more easily replaceable without significant semantic shift, indicating their classification as free collocations.

For instance, concordance lines like:

"they speak *different languages* in the home."

"using *other languages* besides English"

exemplify how these collocations operate in more fluid and interchangeable ways, being consistent with the characteristics of free collocations.

Finally, while *foreign languages* and *South African languages* both appeared with relatively limited frequency, concordance data revealed clear differences in fixedness and contextual specificity. *South African languages* occurred consistently in structurally fixed forms, such as "the interconnectedness of South African languages" and "speak... South African languages," with no variation in adjective choice. These uses reflected cultural specificity and low substitutability, indicating a high degree of fixedness and specialized meaning; thus, the collocation was classified as **restricted**. In contrast, *foreign languages* appeared in more varied contexts, "teaching of foreign languages," "foreign languages have been spoken," or "UK's most studied foreign

languages", demonstrating broader application and partial flexibility in meaning. Although it maintained relevance to educational discourses, its comparatively greater substitutability and contextual variation led to its classification as semi-restricted. These distinctions are detailed in Table 9, presenting data on various aspects which include the frequency of occurrence (Freq.), the ability to substitute other words in the phrase (Substitut.), the presence of a specific meaning in academic contexts (Specialized semantic field), the level of consistency in usage (Fix.), and the classification of the collocation patterns (Classif.).

The collocations, involving *language* and *languages* in this corpus, perform different semantic roles, including indicating language proficiency (e.g., English language proficiency), learner identity (English language learners), and educational context (language education, second language acquisition). These functions reflect the core academic concerns of Applied Linguistics, such as teaching, language development, and the sociocultural implications of multilingualism. The frequent references to different types of languages, such as *foreign*, second, and *English*, demonstrate the journal's emphasis on linguistic diversity, language policy, and applied pedagogical strategies.

Table 9. Classification of *language* and *languages* related collocations in *Applied Linguistics* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
English language	41	Low	Clearly used in language education context	Fixed	Restricted
second language	27	Moderate	Applied linguistics / language acquisition	Fixed	Restricted
foreign language	13	Moderate	Common in language teaching and policy	Fixed	Restricted
different languages	12	High	General and non-specialized	Not fixed	Free
other languages	8	High	Broad and context-dependent	Not fixed	Free
African languages	5	Low	Culturally and geographically	Fixed	Restricted

foreign languages	5	Moderate	specific Used in cross-cultural or educational contexts	Fixed	Semi-restricted

4.2.1.2 *students/student*

The noun *students* appeared 607 times, while *student* occurred 139 times in the *Applied Linguistics* corpus, totaling 746 instances. Among the three collocation patterns, the verb and noun structure were the most frequent for *students*, occurring 110 times (18.12%), followed by adjective and noun (92 occurrences, 15.16%) and noun and preposition (82 occurrences, 13.51%). For *student*, the adjective and noun pattern appeared 19 times (13.67%), followed by verb and noun (13 occurrences, 9.35%) and noun and preposition (6 occurrences, 4.32%).

In the verb and noun structure, the most frequent verb collocates with *students* were *allow* (10 occurrences), *help* (7), and *see* (4). These verbs reflect the typical roles of students as recipients of instruction or support. For *student*, the top adjective collocates included *individual* (4 occurrences), *diverse* (2), and *doctoral* (2), emphasizing individual characteristics and academic levels. These collocational patterns are illustrated in Figure 8 and Figure 9.

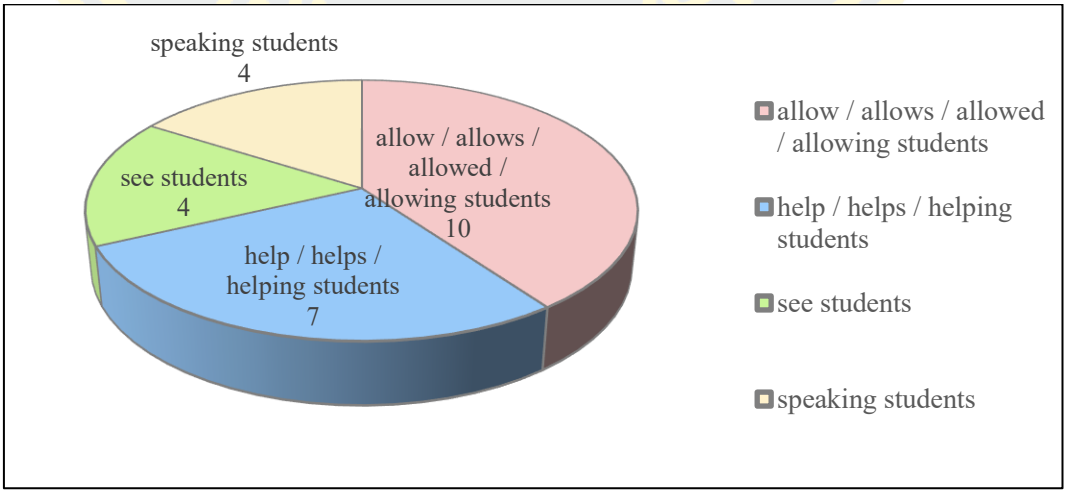


Figure 8 Top three verb and noun collocate with *students* in *Applied Linguistics* corpus

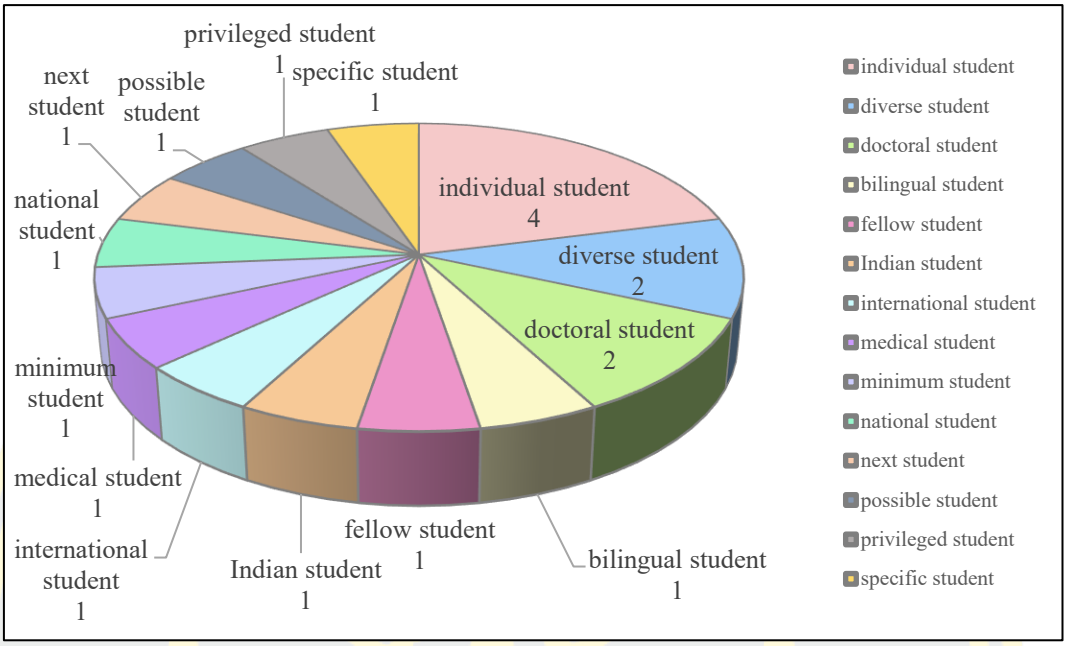


Figure 9 Top three adjective-noun collocates with *student* in *Applied Linguistics* corpus

The analysis of verb and noun and adjective and noun collocations, involving *students* and *student,* revealed both restricted and free combinations. Among the verb and noun patterns, *allow students* and *help students* demonstrated characteristics of restricted collocations. These phrases frequently appeared in educational contexts, exhibited structural regularity, and carried semantically specific functions, such as granting permission or providing academic support. While some lexical substitutions might be possible (e.g., *permit*, *assist*), these have implications for tone or register, reinforcing their semi-fixed status within academic conversation. For example:

"It is advisable to *allow students* to use it"

"It *helps students* to develop an awareness…"

In contrast, *see students* functioned as a free collocation due to its literal meaning and wide contextual variability. *Speaking students*, although partially fixed in compound structures like *Spanish speaking students*, was classified as a restricted collocation due to its descriptive but semi-fixed function in academic writing.

For the singular noun *student*, combinations, such as *individual student* and *diverse student,* were classified as free collocations. These pairs were not only low in frequency, but they are also semantically general, with high substitutability (e.g., *a single student*, *multicultural student*) and limited structural stability. In comparison, *doctoral student* was categorized as a restricted collocation. Despite its relatively low frequency in the corpus, the phrase displayed strong lexical cohesion, low substitutability, and specialized meaning tied to academic status in postgraduate education. For example, concordance lines, such as "in English as a doctoral student" and "when he was a doctoral student", reflect stable grammatical framing and institutional usage. The consistent use of this phrase in institutional contexts further supported its semi-fixed nature in academic writing. An overview of these patterns appears in Table 10.

The collocations, involving *students* and *student* in the *Applied Linguistics* corpus, convey a range of semantic functions, particularly those related to learner identity, educational processes, and academic participation. Verb and noun combinations, such as *allow students* and *help students,* comment on actions that are most often implemented for instructional assistance and pedagogical intent. These verbs often co-occur with *students* in contexts that highlight autonomy, guidance, and learning facilitation. Similarly, the noun phrase *doctoral student* carries a specific academic role and institutional significance, reflecting advanced educational engagement within postgraduate settings. On the other hand, adjective and noun combinations like *individual student* or *diverse student* function to emphasize learner variation, identity, and inclusion, topics that connect with the larger conversation in applied linguistics. Collectively, these collocational patterns reflect the journal's thematic orientation toward language education, learner-centered research, and sociocultural perspectives on learning.

Table 10. Classification of *students* and *student* related collocations in *Applied Linguistics* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
allow/–s/–ed/–ing students	10	Moderate	Clearly educational (permission, support in learning)	Fixed	restricted
help/–s/–ing students	7	Moderate	Learning support / academic assistance	Fixed	restricted
see students	4	High	Literal/observational meaning (non-specialized)	Not fixed	free
speaking students	4	Low	Language identity (compound adjective)	Fixed	restricted
individual student	4	Moderate	Personalized learning / individual attention	Not fixed	free
diverse student	2	High	Sociocultural diversity in education	Not fixed	free
doctoral student	2	Low	Academic status / higher education context	Fixed	restricted

4.2.1.3 *English/Englishes*

The word *English* appeared 488 times in the *Applied Linguistics* corpus, while its plural form *Englishes* occurred 10 times. Among the three grammatical patterns analyzed, the verb and noun structure were the most frequent for *English*, accounting for 94 occurrences (19.26%), followed by the noun and preposition structure with 73 instances (14.96%) and the adjective and noun pattern with 66 occurrences (13.52%).

In contrast, *Englishes* was used infrequently, appearing only 10 times, with minimal variation in structure. Only the adjective and noun pattern were observed, and even then, only two instances involved the adjective *non-native* (e.g., *non-native Englishes*).

Within the verb and noun collocation pattern for *English*, the most frequent verb collocates included *use/using* (18 occurrences), *speak/speaks/spoke/spoken* (14 occurrences), and *support/supported* (7 occurrences). These combinations typically reflect communicative functions, language proficiency, and institutional contexts. For

example, common phrases include "*using English* for academic purposes," "students who *speak English*," and "She use sign *supported English*." These collocations are shown in Figure 10.

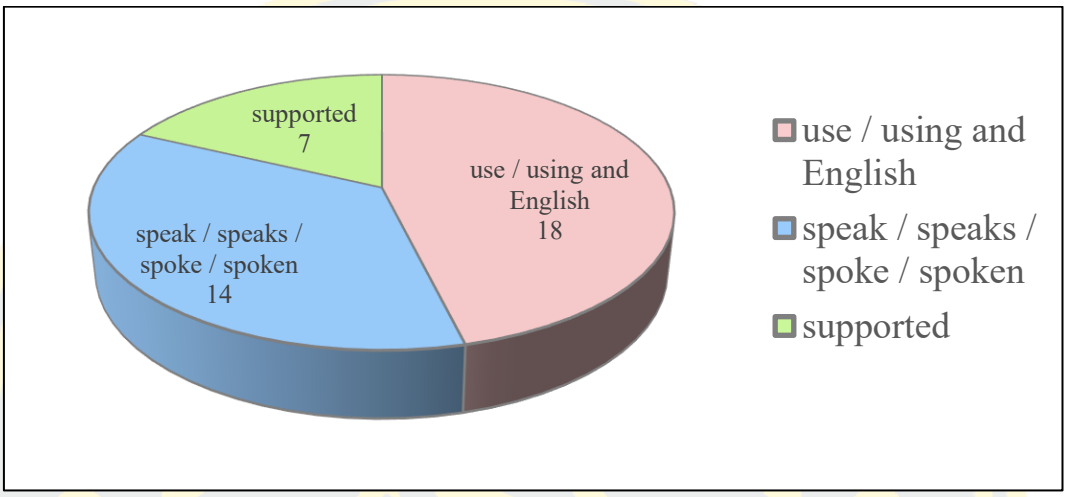


Figure 10 Top three verb and noun collocates with *English* in *Applied Linguistics* corpus

The collocational behavior of *English* and *Englishes* in the *Applied Linguistics* corpus demonstrates a tendency toward restricted usage. For *English*, verb and noun patterns, such as *use English*, *speak English*, and *supported English,* were frequently observed. Among these, *use English* and *speak English* function as restricted collocations due to their high co-occurrence frequency, limited substitutability, and semantic specificity. They commonly appear in educational and institutional contexts, reflecting fixed expressions within discussions of language use and language learning. Similarly, *supported English* will also occur in the specialized phrase "sign-supported English", which carries technical meaning in studies, related to bilingual education and deaf communities. This phrase shows a high degree of semantic specialization and fixedness, justifying its status as a restricted collocation as well. For instance, it appears in lines as follows:

"She used sign *supported English* in the interpretation..."

"...sign-*supported English*, or SEE-sign:"

"...combine sign *supported English* with Spanish…"

In the case of *Englishes*, the only attested collocation was *non-native Englishes*, an adjective and noun combination with low frequency ,yet high semantic specialization. Even though it is not used often, the collocation is a recognized expression in studies of World Englishes and linguistic variation. Its technical meaning and formal usage in academic discourses suggest itsfunctions as a restricted collocation. Taken together, the observed combinations for both *English* and *Englishes* are semantically marked, structurally fixed, and context-dependent, fulfilling the criteria for restricted collocations.

The collocations, involving *English* and *Englishes* in the Applied Linguistics corpus, fulfill a range of semantic functions, primarily centered on communication, instruction, and linguistic identity. Phrases, such as *use English* and *speak English,* reflect the role of English as a medium for communication and a marker of communicative competence, often appearing in relation to language selection, bilingualism, and classroom interaction. These collocations highlight how English functions both as a practical linguistic tool and as a sociocultural resource in academic and public settings. Similarly, the phrase sign *supported English* emphasizes English as a pedagogical medium adapted for inclusive education, mostly in the context of learners with hearing difficulties. Despite its low frequency, the phrase *non-native Englishes* reflects themes found in studies of World Englishes, including diversity in language use and the identities of non-native speakers. These patterns are summarized in Table 11.

These semantic functions are in line with the core themes of the journal *Applied Linguistics*, which explores real-world language issues, language teaching and learning, multilingualism, and sociolinguistic phenomena. The emphasis on English usage, variation, and accommodation across multiple educational and cultural domains mirrors the journal's focus on applied and socially relevant linguistic inquiry.

Table 11. Classification of *English* and *Englishes* related collocations in *Applied Linguistics* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
use/-ing English	18	Moderate	Language use in academic, identity, and communication	Semi-fixed	Restricted
speak/-s/spoke/spoken English	14	Moderate	Language ability, fluency, communicative function	Fixed	Restricted
supported English	7	Low	Inclusive education, deaf studies, pedagogy	Highly fixed	Restricted
Non-native Englishes	2	Low	World Englishes, sociolinguistics	Fixed	Restricted

4.2.2 *The Modern Language Journal*

This section explores the collocational patterns of the three most frequent nouns in *The Modern Language Journal* corpus: *language/languages* (1,399 occurrences), *study/studies* (1,000), and *learners/learner* (889). The analysis focuses on the grammatical structures in which these nouns typically occur and identify frequent collocates, and consider the semantic roles these collocations play within academic discourse. Attention is also given to the degree of collocational restriction and how these patterns reflect the thematic focus of the journal. Subsections 4.2.2.1 to 4.2.2.3 offer detailed analysis of each noun in order of frequency.

4.2.2.1 *language/languages*

The nouns language and languages occurred 1,127 and 272 times respectively in *The Modern Language Journal* corpus. An analysis of their grammatical collocation patterns revealed that the adjective and noun structure was the most prominent for both forms. For language, this pattern appeared 240 times (21.29%), compared to 109 verb and noun (9.67%) and 75 noun and preposition (6.65%) combinations. Similarly, for languages, the adjective and noun structure occurred 69 times (25.37%), followed by 37 noun and preposition (13.60%) and 26 verb and noun (9.56%) instances.

These findings suggest that both language and languages are most frequently modified by adjectives in *The Modern Language Journal*, reflecting the journal's emphasis on describing and distinguishing language-related phenomena in educational, cultural, and multilingual contexts.

In the adjective and noun pattern, which was the most frequent structure for both nouns, the top three adjective collocates for *language* were *foreign* (37 occurrences), *second* (30), and *English* and *first* (14 each). For *languages*, the most common adjective collocates were *other* (12), *additional* (9), and *common* (7). These combinations highlight the journal's recurring focus on second/foreign language education, multilingualism, and comparative language studies. Figure 11 shows the top adjective collocates with *language*, while Figure 12 presents those with *languages*.

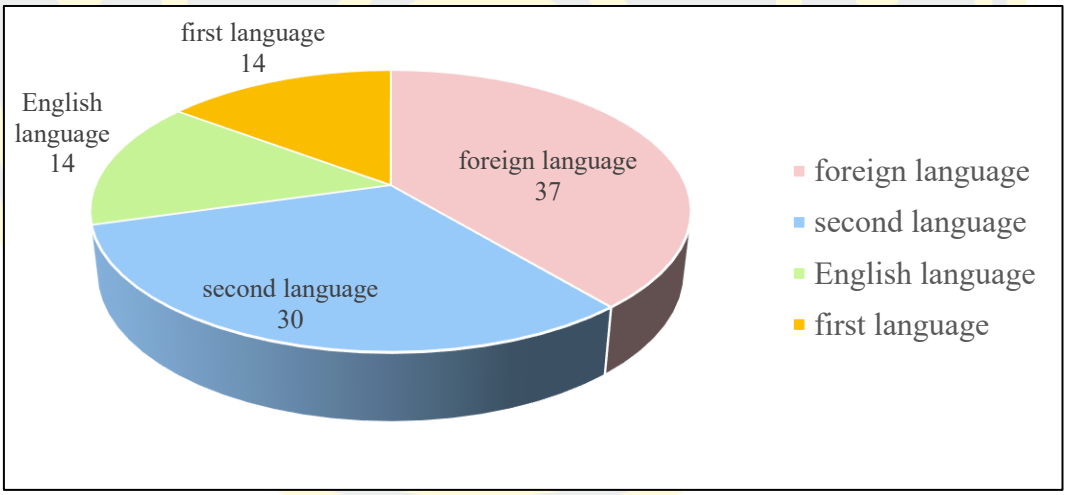


Figure 11 Top three adjective and noun collocates with *language* in *The Modern Language Journal* corpus

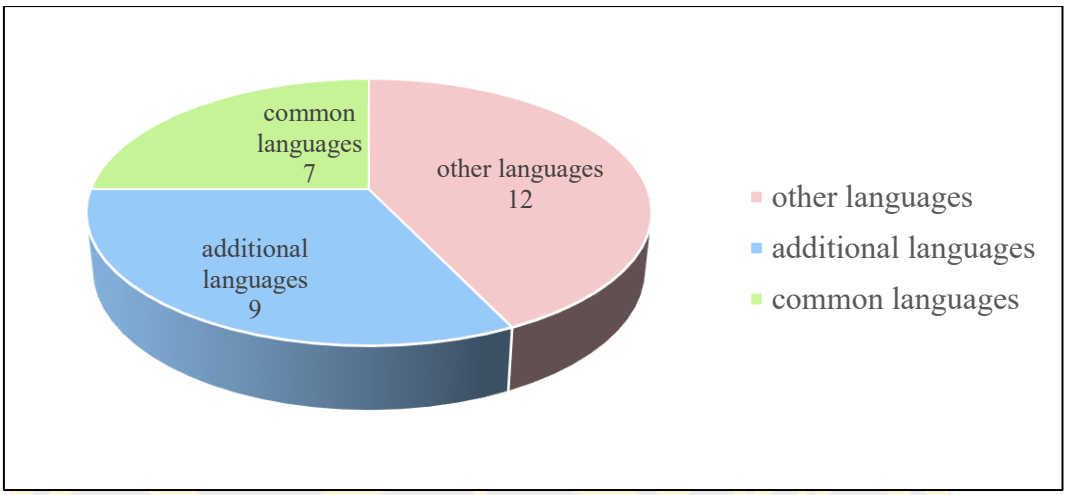


Figure 12 Top three adjective and noun collocates with *languages* in *The Modern Language Journal* corpus

An evaluation of the adjective and noun collocates showed different degrees of fixedness across the seven frequently occurring combinations. Four collocations *foreign language*, *second language*, *English language*, and *first language* exhibited characteristics of restricted collocations, as evidenced by their high co-occurrence frequency, low substitutability, high semantic specificity, and stable structural patterns. In particular, the collocations foreign language, second language, and first language consistently exhibited restricted behavior, based on all four analytical criteria. These phrases appeared frequently in contexts, relating to language instruction, learning, and identity, indicated semantic specialization and institutional usage. For example, foreign language occurred in phrases, such as “foreign language teaching,” “foreign language education,” and “foreign language learning,” all of which are structurally fixed and pedagogically specific. Likewise, second language frequently appeared in established terms, such as “second language acquisition,” and “second language identity,” demonstrating high co-occurrence frequency and conceptual specificity within SLA research. Similarly, first language was used in expressions like “first language can lead to...,” “first language background,” and “use of their first language,” highlighting its central role in bilingual and multilingual education discourse.

The repeated appearance of these collocations in stable syntactic frames, with low substitutability and clear disciplinary meanings, provides strong evidence of their restricted status in academic writing. These patterns reflect the institutionalized terminology of applied linguistics and the journal's emphasis on formal language education, identity, and cross-linguistic influence.

In contrast, *other languages*, *additional languages*, and *common languages* showed characteristics of restricted collocations to a lesser extent. Although these phrases fairly often appeared and were used in academic contexts, such as multilingual education and language policy, they showed more variation in word choice and were used in a wider range of sentence patterns (see Table 12 for frequency and classification).

These combinations are well-established in applied linguistics literature, frequently appearing in discussions of acquisition, identity, pedagogy, and language use. Notably, *other languages* and *additional languages* often functioned descriptively rather than institutionalized terms, and *common languages* was predominantly used in the expression *less common languages*, which might indicate pragmatic usage more than terminological status.

As a whole, the prominence of restricted collocations reflects the journal's focus on formal language learning and applied linguistic theory, whereas the semi-restricted combinations point to an expanding interest in multilingualism, inclusivity, and learner diversity within global educational settings.

Table 12. Classification of *language* and *languages* related collocations in *The Modern Language Journal* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
foreign language	37	Low	Language education / language policy	Fixed	Restricted
second language	30	Low	Applied linguistics / SLA	Fixed	Restricted
English language	14	Low	English language teaching (ELT)	Highly fixed	Restricted
first language	14	Low	Bilingualism / L1 transfer	Fixed	Restricted
other languages	12	Moderate	Multilingual education / comparative studies	Semi-fixed	Semi-restricted
additional languages	9	Moderate	Multilingualism / L3 learning	Semi-fixed	Semi-restricted
common languages	7	Moderate	Language availability / educational planning	Semi-fixed	Semi-restricted

4.2.2.2 *study*/*studies*

The nouns study and studies occurred 662 and 338 times respectively in the Modern Language Journal corpus. Among the three examined grammatical patterns, the adjective and noun structure were the most prominent for both forms. For *study*, this pattern appeared 219 times (33.09%), while verb and noun and noun and preposition patterns occurred 4 times (0.60%) and 53 times (8.01%), respectively. Similarly, studies followed the same trend, with 110 occurrences of adjective and noun (32.54%), compared to 15 verb and noun (4.44%) and 75 noun and preposition (22.19%) instances.

In the adjective and noun pattern, the top three adjective collocates for *study* were *present* (108 occurrences), *current* (59), and both *first* and *recent* (7 each). These adjectives were primarily used to position the study, being discussed in terms of its time frame or originality (see Figure 13). For *studies*, the most common adjective collocates were *previous* (31 occurrences), *few* (12), and *future* (8) (see Figure 14), which typically served to categorize or contrast the research in terms of sequence, quantity, or projection. These combinations reflect academic writers' tendency to

situate their work within a broader research timeline, emphasizing novelty, continuity, or contribution.

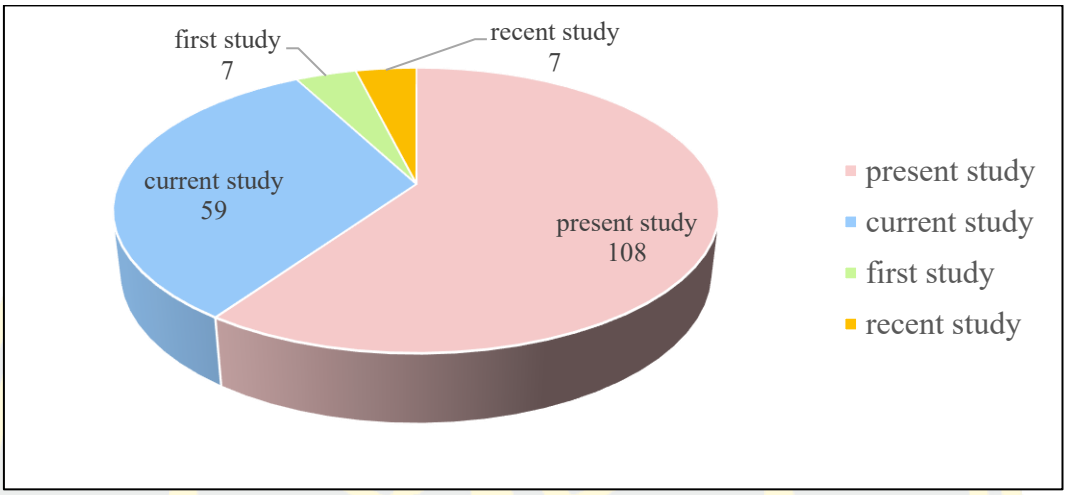


Figure 13 Top three adjective and noun collocates with *studies* in *The Modern Language Journal* corpus

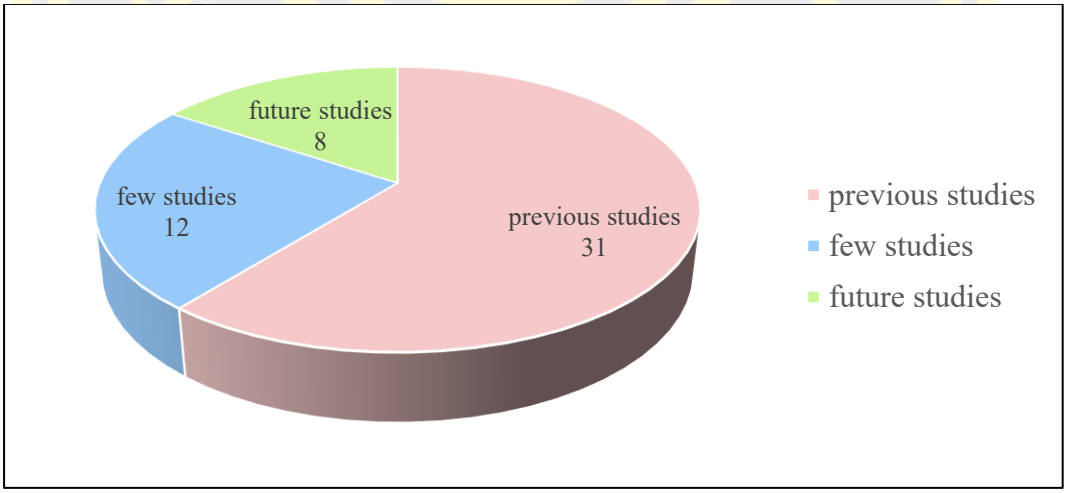


Figure 14 Top three adjective and noun collocates with *study* in *The Modern Language Journal* corpus

The analysis of adjective and noun collocations for *study* and *studies* in the *Modern Language Journal* revealed a range of lexical associations, from highly conventionalized to moderately flexible. Among the most frequent collocations, *present study* (108 occurrences) and *current study* (59) stood out as strongly institutionalized phrases, used to reference the authors' own research. For example, present study appeared in concordance lines, such as "the present study explored…", "the present study investigated…", and "participants in the present study," all of which demonstrate structurally consistent and semantically specialized usage in academic contexts. These collocations showed high fixedness, low substitutability, and clear semantic roles within the discourse structure of academic writing, qualifying them as restricted collocations (see Table 13).

Similarly, *previous studies* (30 occurrences) and *future studies* (8) served key rhetorical functions in academic argumentation, citing established literature and proposing future directions, respectively. Both appeared in consistent syntactic frames and had low lexical variability, further supporting their classification as restricted collocations.

In contrast, *first study* (7), *recent study* (7), and *few studies* (12) exhibited a greater degree of variability in structure and lexical substitution, such as the presence of modifiers (*very few*, *only a few*) or interchangeable adjectives (*recent* with *latest* or *contemporary*). These were therefore categorized as semi-restricted collocations, as they retained academic relevance while allowing more flexibility in form.

The frequent use of collocations, such as *present study*, *current study*, and *previous studies,* reflects their essential role in structuring academic discourse. These combinations help writers clarify the temporal scope, authorship, and relevance of research, serving both referential and rhetorical purposes. For instance, *present study* and *current study* typically signal self-reference and methodological framing, while *previous studies* and *few studies* functions to justify the research gap or highlight underexplored areas. Meanwhile, *future studies* look forward to potential directions for future research, typically as a connection between findings and implications.

The prevalence of such collocations in the *Modern Language Journal* also aligns with the journal's sharp emphasis on empirical research, methodology, and relevance to language acquisition and multilingual education as a discipline.

Table 13. Classification of *study* and *studies* related collocations in *The Modern Language Journal* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
present study	108	Low	Self-reference in academic research writing	Fixed	restricted
current study	59	Low–Moderate	Self-reference / research contribution	Fixed	restricted
first study	7	Moderate	Research sequencing / experimental research	Semi-fixed	Semi-restricted
recent study	14	Moderate	Academic citation / literature review	Semi-fixed	Semi-restricted
previous studies	31	Low	Literature review / research synthesis	Fixed	Restricted
few studies	12	Moderate	Research gap identification	Semi-fixed	Semi-restricted
future studies	8	Moderate	Research recommendation	Fixed	Restricted

4.2.2.3 *learners/learner*

The nouns learners and learner occurred 695 and 194 times respectively in *The Modern Language Journal* corpus. Among the three examined grammatical patterns, the verb and noun structure were the most prominent overall. For learners, this pattern appeared 112 times (16.12%), followed by noun and preposition with 118 instances (16.98%), and adjective and noun with 56 occurrences (8.06%). For learner, verb and noun structures appeared 31 times (15.98%), followed by adjective and noun (22 occurrences, 11.34%) and noun and preposition (18 occurrences, 9.28%).

In the noun and preposition structure, which was the most frequent grammatical pattern for *learners*, the top three prepositional collocates were *with* (38 occurrences), *in* (22), and *of* (13). These noun and preposition collocations with *learners* are shown in Figure 15. These combinations frequently occurred in contexts describing learner identity, educational settings, and needs. These collocations reflect the journal's pedagogical orientation, where the learner is positioned as the central subject of inquiry and support.

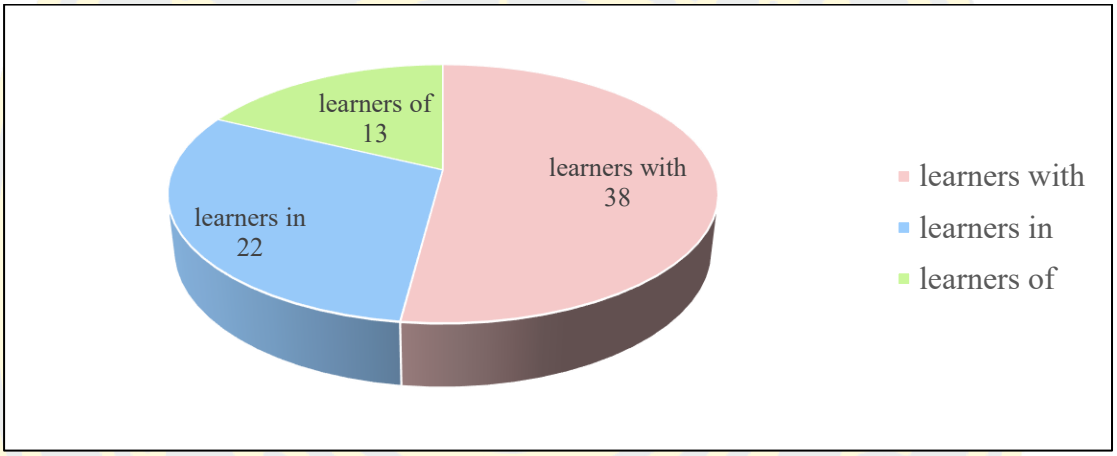


Figure 15 Top three noun and preposition collocates with *learners* in *The Modern Language Journal* corpus

In the verb and noun pattern, the most frequent verb collocates for *learner* were *facilitate* (3 occurrences), *predict*/*predicted*/*predicting* (3), and *assess*/*assessing* (2) (see Figure 16). These combinations typically appear in academic contexts, discussing instructional effectiveness, learner characteristics, or research methodology (e.g., *facilitate learner* autonomy, *predict learner* behavior, *assessing learner* progress). Due to the wider distribution and variety of verbs in learners, the analysis focuses on the most stable combinations within learner, which show clearer patterns of academic usage.

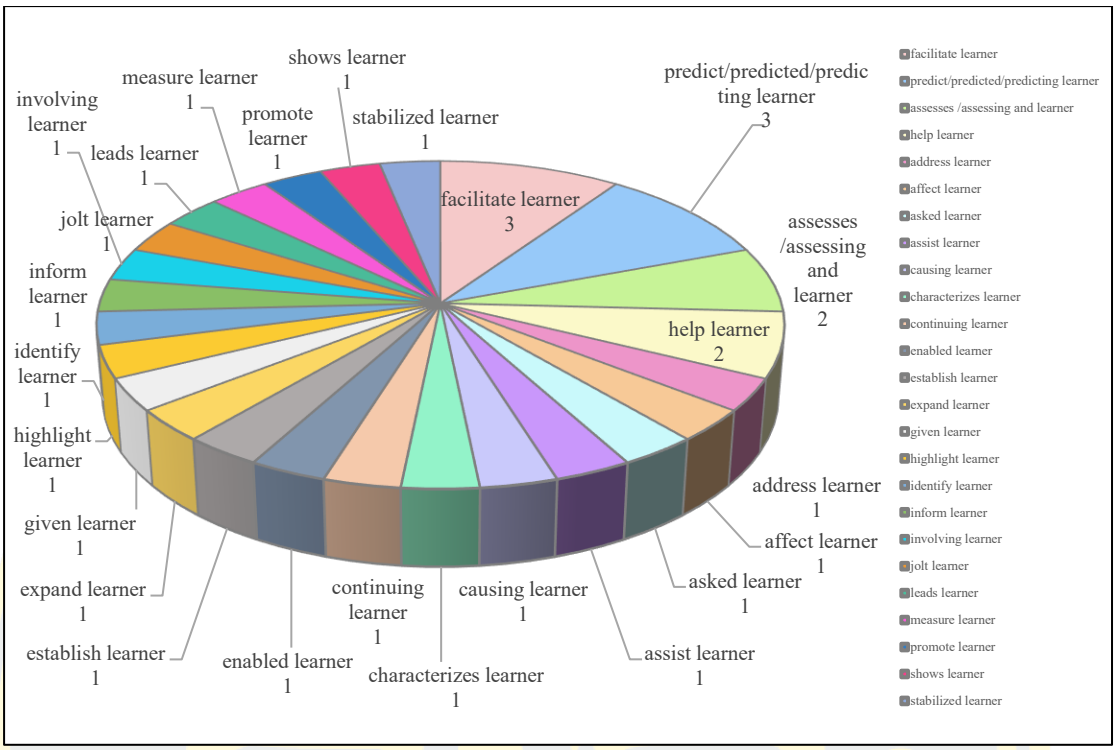


Figure 16 Top three verb and noun collocate with *learner* in *The Modern Language Journal* corpus

The analysis of verb and preposition collocates associated with *learners* and *learner* in *The Modern Language Journal* corpus revealed a predominance of restricted collocations. Combinations, such as *learners with*, *learners in*, *learners of*, *facilitate learner*, *predict learner*, and *assess learner,* displayed characteristics of restricted collocations. These collocations occurred repeatedly across articles, often in pedagogical or research-oriented contexts, and exhibited low substitutability and high semantic specificity. For example, *facilitate learner autonomy* and *predict learner proficiency* are academically embedded phrases with specialized meanings that are difficult to replace without altering the conceptual intent. Similarly, *learners with* and *learners in* were consistently used to describe learner characteristics and educational settings, which were commonly described by using fixed and recurrent syntactic structures. The patterns are summarized in Table 14.

In contrast, *help learner* demonstrated characteristics of a semi-restricted collocation. While it appeared in instructional contexts and followed a recurring syntactic structure, it allowed slightly more lexical flexibility and did not carry the same degree of terminological specificity as other collocates. Overall, the collocational behavior of *learners* and *learner* in this journal points to the institutionalization of learner-centered terminology in applied linguistics research, with restricted collocations, reflecting consistent thematic and methodological focus.

The collocates of *learners* and *learner* predominantly functioned to describe learner characteristics, proficiencies, and pedagogical needs in diverse educational settings. Prepositional phrases, such as *learners with* and *learners in,* were used to denote learners' personal attributes (e.g., proficiency levels, literacy status) and their situational contexts (e.g., classroom environments, stages of acquisition). These combinations foreground the learner as the central subject of observation, assessment, and support within empirical research. Verb and noun collocations like *facilitate learner*, *assess learner*, and *predict learner* further reinforce the active role of instruction and research in developing, measuring, or projecting learner outcomes in line with applied linguistics' emphasis on how well teaching and learning procedures work.

These collocations strongly reflect the core concerns of *The Modern Language Journal*, which emphasizes empirical inquiry into second language acquisition, learner variation, instructional intervention, and inclusive pedagogy. The consistent appearance of restricted collocations associated with *learners* and *learner* suggests the journal's commitment to learner-centered research and to understanding how individual differences and learning conditions shape language development. Meanwhile, semi-restricted collocations like *help learner* indicate an openness to flexible instructional strategies that support learners across a range of abilities and learning environments.

Table 14. Classification of *learners* and *learner* related collocations in *The Modern Language Journal* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
learners with	38	Moderate	Learner profile / linguistic ability	Fixed	Restricted
learners in	22	Moderate	Group context / study settings	Fixed	Restricted
learners of	13	Moderate	Target language specification	Fixed	Restricted
facilitate learner	3	Low	Learner autonomy / instructional scaffolding	Semi-fixed	Restricted
predict/-ed/-ing learner	3	Low	Language assessment / proficiency	Semi-fixed	Restricted
assesses/-ing learner	2	Low	Language testing / performance assessment	Semi-fixed	Restricted
help learner	2	Moderate	Instructional support / language development	Semi-fixed	Semi-restricted

4.2.3 Communication Monographs

This section investigates the collocational behavior of the three most frequent nouns in the Communication Monographs corpus: *message/messages* (720 occurrences), *study/studies* (710), and *information/informations* (546). The analysis identifies the dominant grammatical patterns for each noun, examining their most frequent collocates, and discussing the semantic functions of these combinations within the context of academic communication research. It also considers the degree of fixedness or flexibility in their collocations and how these patterns correspond with the journal's central themes. Subsections 4.2.3.1 to 4.2.3.3 present detailed discussions of these nouns in order of descending frequency.

4.2.3.1 *message*/*messages*

The singular form *message* occurred 490 times, while the plural form *messages* appeared 230 times in the *Communication Monographs* corpus. An analysis of their grammatical collocation patterns revealed that the verb and noun structure was the most prominent for both forms. For *message*, this structure occurred 101 times (20.61%), followed by the adjective and noun structure at 78 occurrences (15.92%), and noun and preposition structure at 23 instances (4.69%). Similarly,

messages appeared 86 times (37.39%) in the verb and noun pattern, followed by 51 instances each in the adjective and noun (22.17%) and noun and preposition (22.17%) patterns.

These findings indicate that *message/messages* frequently function as objects of verbs in discourse-oriented or psychological contexts, which is consistent with the journal's emphasis on communication behavior, message processing, and audience responses.

In the verb and noun pattern, *message* most frequently co-occurred with *perceive/perceived* (53 occurrences), which reflects a core concern in communication research: how individuals process, interpret, and mentally register information. Other verb collocates that appeared three times each included *drive/drives*, *judge/judging*, *matched*, and *reduce/reduced*. These verbs reflect a range of message functions shaping behavior, prompting evaluation, aligning with expectations, and minimizing negative reactions. Additional verbs that occurred twice were *consider/considered*, *evaluate*, *follow*, *included/including*, *predict/predicts*, *process/processing*, and *retaining* (see Figure 17). In addition to verb and noun combinations, adjective and noun collocations were also common. These included targeted messages (37 occurrences), matched messages (7), and threatening messages (4), reflecting themes of audience focus, message alignment, and perceived risk. These collocations are shown in Figure 18. Though less frequent, these combinations underscore cognitive, behavioral, and strategic dimensions of message reception and interpretation in interpersonal and persuasive communication contexts.

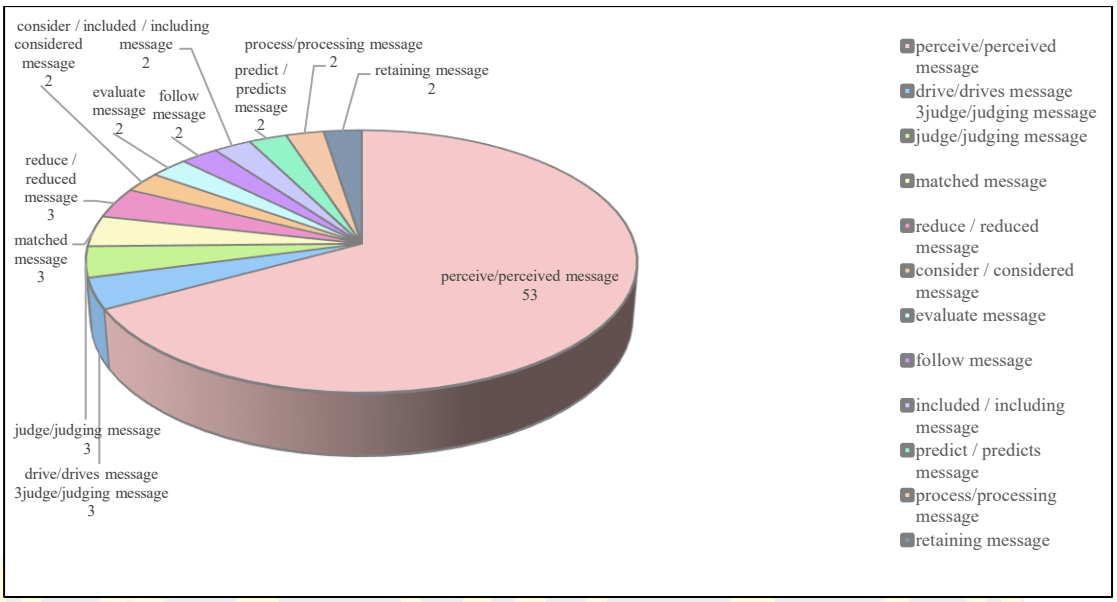


Figure 17 Top three verb and noun collocates with *message* in *Communication Monographs* corpus

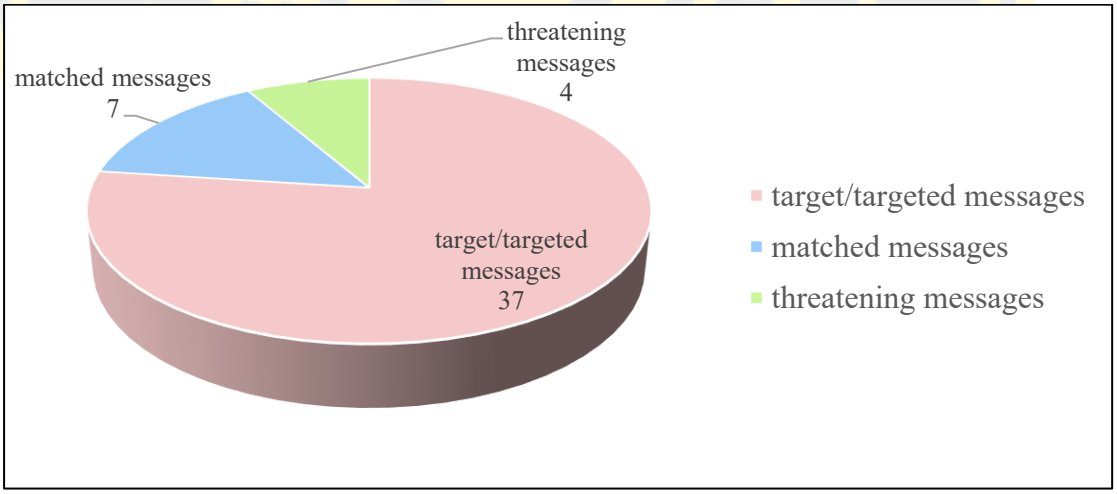


Figure 18 Top three verb and noun collocates with *messages* in *Communication Monographs* corpus

The verb *perceive/perceived* co-occurred with *message*, forming combinations, such as *perceived message content*, *perceived message quality*, and *perceived message relevance*. These combinations consistently appeared in studies of message design, audience interpretation, and persuasive communication. With their high frequency, field-specific meaning, low substitutability, and stable syntactic patterns, they are clearly restricted collocations.

Other verbs collocating with *message,* such as *drive*, *judge*, *matched*, and *reduce* (3 times each), also occurred in academic contexts, including attitude change and message evaluation. Despite their lower frequency, the predictable meanings and recurring structures suggest that they fall within the semi-restricted to restricted category.

Infrequent collocates, such as *consider*, *evaluate*, *follow*, *included*, *predict*, *process*, and *retaining* (each 2 times), were used in broader and more procedural discourse contexts. These collocations exhibited greater lexical flexibility and lower degrees of institutionalization, thus are more appropriately classified as free or semi-restricted collocations.

The collocation *targeted messages* appeared 37 times and was consistently used in experimental and persuasive communication contexts, especially in reference to personalized messaging strategies. Its high co-occurrence frequency, specialized function, and fixed syntactic structure mark it as a restricted collocation. *Matched messages* (7 occurrences) and *threatening messages* (4 occurrences) also occurred in specialized discourse on message design and persuasion theory. These combinations carried specific academic meanings and occurred in limited syntactic patterns, making them restricted collocations as well. These patterns are summarized in Table 15.

The collocations, involving *message* and *messages,* primarily served to represent key concepts in message processing, evaluation, and design. In the case of *message*, frequent combinations, such as *perceived message*, *matched message*, and message relevance, reflected recurring analytical focus on how individuals interpret and respond to communication stimuli. These phrases were often situated in studies,

examining persuasive effects, suggesting that *message* is commonly used to signal theoretical constructs, related to audience perception and psychological impact.

On the other hand, the plural form *messages* tended to appear in discussions of message types and communication strategies, particularly in collocations, such as *targeted messages*, *matched messages*, and *threatening messages*. These collocations were typically used to categorize messages, based on their intended function, audience, or emotional valence, aligning with research on personalization, resistance, and message effectiveness.

Taken together, the use of these collocations illustrates the journal's emphasis on empirical analysis of communication content and its reception. The focus on message attributes, audience interpretation, and behavioral outcomes aligns closely with *Communication Monographs*' interest in the mechanisms and outcomes of human communication across interpersonal, media, and strategic contexts.

Table 15. Classification of *message* and *messages* related collocations in *Communication Monographs* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
perceive/-ed message	3	Low	Communication research / message reception	Fixed	Restricted
drive/-s message	3	Moderate	Message processing / persuasion	Semi-fixed	Semi-restricted
judge/-ing message	3	Moderate	Message evaluation / receiver response	Semi-fixed	Semi-restricted
matched message	3	Low	Functional matching / persuasive communication	Fixed	Restricted
reduce/-ed message	3	Moderate	Message effectiveness / reactance	Semi-fixed	Semi-restricted
consider/-ed message	2	Moderate	Attitudinal processing / reception	Not fixed	Semi-restricted
evaluate message	2	Moderate	Persuasion / message quality assessment	Semi-fixed	Semi-restricted
follow message	2	High	Message recommendation /	Not	Free

			persuasive intent	fixed	
included/-ing message	2	High	Experimental reporting / general academic writing	Not fixed	Free
predict/-s message	2	Moderate	Statistical modeling / outcome prediction	Semi-fixed	Semi-restricted
process/-ing message	2	Moderate	Cognitive processing / communication models	Semi-fixed	Semi-restricted
retaining message	2	High	Message structure / target distinction	Not fixed	Semi-restricted
target/-ed messages	37	Low	Audience design / persuasion / media effects	Fixed	Restricted
matched messages	7	Low	Functional matching / message design	Fixed	Restricted
threatening messages	4	Moderate	Reactance theory / message resistance	Semi-fixed	Restricted

4.2.3.2 *study*/*studies*

The nouns *study* and *studies* occurred 484 and 226 times respectively in the *Communication Monographs* corpus. Among the three grammatical patterns examined, the adjective and noun structure were the most frequent for both forms. For *study*, this pattern appeared 97 times (20.04%), followed by 36 noun and preposition combinations (7.44%) and 20 verb and noun combinations (4.13%). Likewise, for *studies*, the adjective and noun structure occurred 103 times (45.58%), with 46 noun and preposition instances (20.35%) and 7 verb and noun instances (3.10%). These figures indicate that *study/studies* are most commonly modified by adjectives in this journal, a trend consistent with the academic genre's emphasis on research type, temporal framing, and methodological orientation.

In the adjective and noun pattern, the most frequent adjective collocates for *study* were present (35 occurrences), current (20), and primary (17). For *studies*, the top adjective collocates were primary (33 occurrences), future (13), and other (8). These combinations highlight the communicative function of *study/studies* as central units of analysis, categorized by time reference, methodological hierarchy, or comparison within broader academic conversations. These adjective and noun collocations are shown in Figure 19 (*study*) and Figure 20 (*studies*).

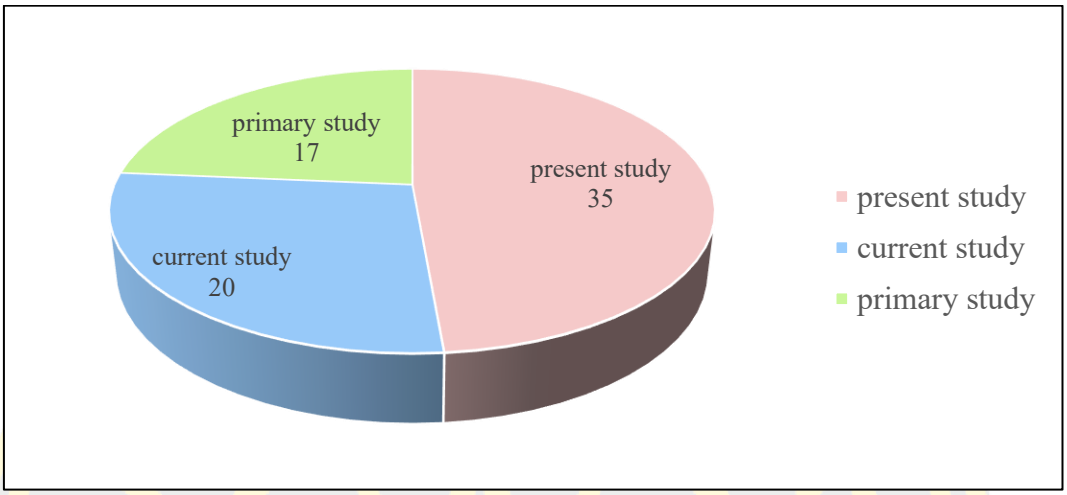


Figure 19 Top three adjective and noun collocates with *study* in *Communication Monographs* corpus

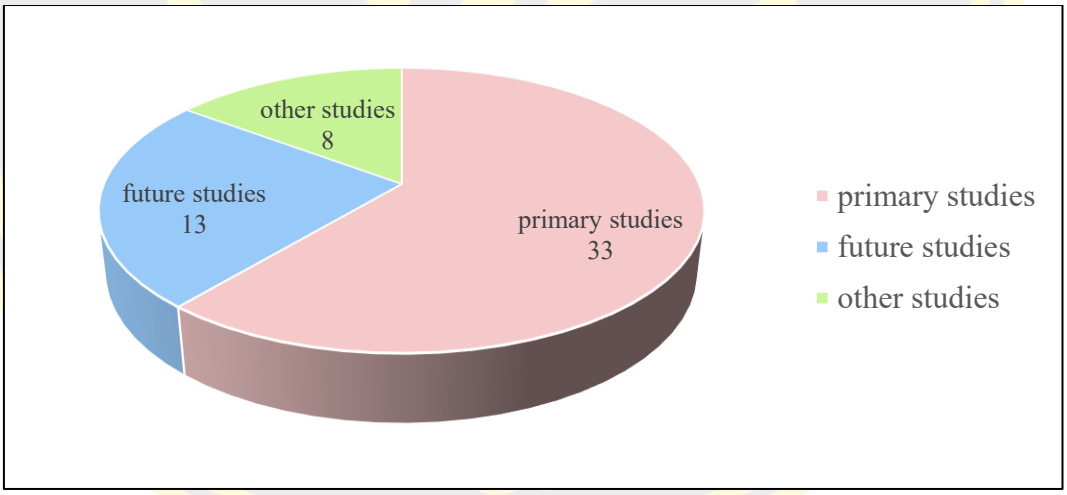


Figure 20 Top three adjective and noun collocates with *studies* in *Communication Monographs* corpus

Among the adjective and noun combinations, *present study*, *current study*, and *primary study* were the most frequent collocates of study, while *primary studies*, *future studies*, and *other studies* were the most common with studies. These collocates exhibited varying degrees of lexical restriction.

The expressions *present study*, *current study*, and *primary study* occurred frequently and consistently across the corpus. Each exhibited high co-occurrence frequency and semantic specificity in academic research writing, often used to refer to the authors' own work or core components of research design. Their substitutability was limited, as replacing them with alternatives like *recent study* or *main study* could shift nuance or formality. Their syntactic patterns were also relatively fixed, appearing in similar structural environments throughout the corpus. Therefore, they were classified as restricted collocations (see Table 18 for collocation types and frequency data).

Primary studies also showed restricted tendencies due to its repeated use in the context of meta-analysis and methodological reporting, typically with precise, discipline-specific meanings.

By contrast, *future studies* allowed more variability in use and substitution. While it occurred regularly in academic suggestion or implication contexts, it lacked the same degree of fixedness and field-specific meaning as the restricted items. Thus, it was categorized as a semi-restricted collocation.

Other studies functioned primarily as a general referencing device and appeared in more diverse grammatical and topical contexts. It showed high substitutability and flexible usage patterns, suggesting that it operates as a free or weakly semi-restricted collocation.

The collocations, involving *study/studies,* reflect the communicative and research-oriented nature of the journal *Communication Monographs*. Phrases, such as *present study*, *current study*, and *primary study/studies,* serve as discourse markers that signal the scope, design, or status of the research being presented. They often occur in methodological and results sections, helping frame the contribution of the work in relation to prior literature.

In particular, *present study* and *current study* are often used to highlight that the research being discussed is new or happening now. These phrases usually appear when the writer is explaining the goals, scope, or method of the research. On the other hand, *primary study* or *primary studies* are often found in review articles or meta-

analyses. They are used to talk about original research that forms the basis for later summaries or comparisons.

By contrast, combinations, such as *future studies* and *other studies,* serve more evaluative and projective functions, pointing toward research implications, gaps, or alternative perspectives. These collocations highlight how the journal not only reports findings, but it also engages with broader scholarly dialogues, encouraging future research directions and comparisons across contexts.

Overall, these collocations function as part of the academic Meta discourse that positions *Communication Monographs* as a journal grounded in empirical communication research, while also promoting theoretical expansion, methodological rigor, and critical reflection on past and future scholarship.

Table 16. Classification of *study* and *studies* related collocations in *Communication Monographs* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
present study	35	Low	Academic research / empirical studies	Fixed	Restricted
current study	20	Low	Academic writing / research design	Fixed	Restricted
primary study	17	Low	Meta-analysis / systematic review	Fixed	Restricted
primary studies	33	Low	Meta-analysis / quantitative research	Fixed	Restricted
future studies	13	Moderate	Research implications / discussion	Semi-fixed	Semi-restricted
other studies	8	Moderate	Literature review / related research	Semi-fixed	Semi-restricted

4.2.3.3 *information*/*informations*

The noun *information* appeared 546 times in the *Communication Monographs* corpus, while its plural form, *informations,* did not occur at all. Among the three main grammatical collocation patterns, the adjective and noun structure were the most

frequent, occurring 117 times, which accounted for 21.43% of all instances. The pattern of verb and noun came next with 105 occurrences (19.23%), and the noun and preposition structure with 86 instances (15.75%). This distribution indicates that information is most commonly used as a head noun modified by adjectives, reflecting the journal's focus on conceptual precision, media framing, and audience interpretation—areas where specific types or qualities of information are regularly discussed.

In the adjective and noun pattern, which was the most frequent grammatical structure for *information*, the top three adjective collocates were *social* (17 occurrences), *less* (8), and both *more* and *personal* (6 each) (see Figure 21). These pairings reveal some of the key areas of interest in communication studies. *Social information* commonly relates to interpersonal interactions and shared knowledge, while *less* and *more information* are often discussed in contexts of message processing or information overload. *Personal information* typically appears in conversations about privacy, disclosure, or identity in mediated communication.

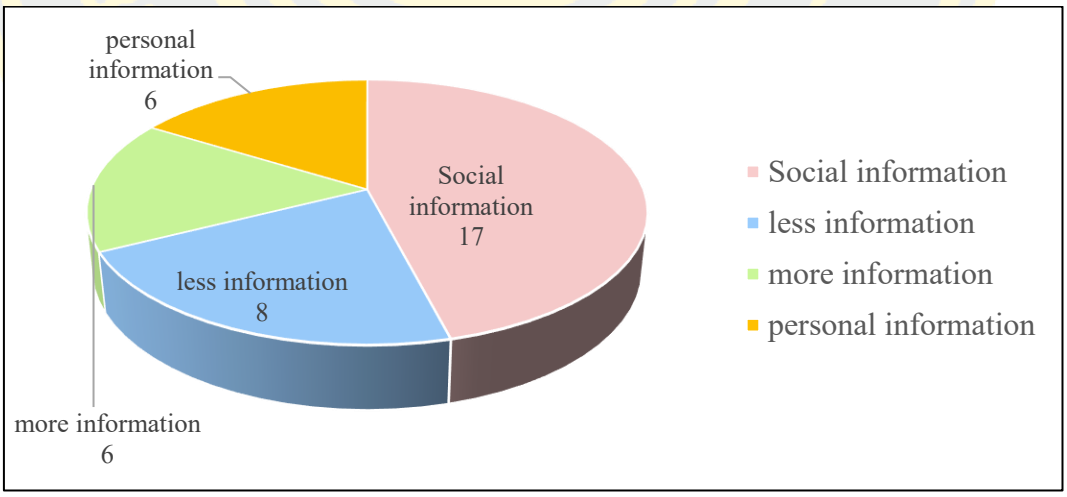


Figure 21 Top three adjective and noun collocates with *information* in *Communication Monographs* corpus

The analysis of adjective and noun collocations involving the term *information* revealed varying degrees of lexical association. Among the four most frequent combinations, *social information* and *personal information* were classified as restricted collocations. Both were highly context-specific, consistently used within communication-related research (e.g., disclosure, privacy, online behavior),and were low on substitutability since they were fixed in theoretical or technical uses.

In contrast, *less information* showed moderate fixedness and domain relevance, but more lexical flexibility, and therefore, it is categorized as a semi-restricted collocation. Meanwhile, *more information*, despite its relatively high frequency, functioned in a broader, more general sense across various discourse contexts, making substitution simple and requiring few structural restrictions to qualify as a free collocation. A summary of these patterns is provided in Table 17.

These differences display the journal's blend of technical focus and regular correspondence. While some collocations represent precise theoretical constructs, others support more general descriptions of communicative behavior and cognition.

The term *information* was frequently employed in the *Communication Monographs* corpus to discuss various aspects of communication processes, including message content, social disclosure, and cognitive load. Collocations, such as *social information* and *personal information,* pointed to recurrent themes of interpersonal relations, privacy, and the formation of identity core issues in interpersonal and mediated communication research. Meanwhile, combinations like *more information* and *less information* often appeared in contexts pertaining to information processing, persuasive message effects, or decision-making, highlighting the role of quantity and accessibility of data in forming communicative outcomes.

The thematic focus of the journal on communication as a socially situated, message-centered activity is closely aligned with these collocational patterns. They stress the significance of the way information comes to be framed, exchanged, and evaluated in interpersonal, organizational, and media contexts, resonating with the journal's interest in both theory-building and communicative action in daily life.

Table 17. Classification of *information* related collocations in *Communication Monographs* using four criteria

Collocation	Freq.	Substitut.	Specialized semantic field	Fix.	Classif.
Social information	17	Low	CMC / Communication research	Fixed	Restricted
less information	8	Moderate	Information control / media exposure	Semi-fixed	Semi-restricted
more information	6	High	General use / online info seeking	Not fixed	Free
personal information	6	Low	Privacy / data protection / digital communication	Fixed	Restricted

4.2.4 Cross-collocational pattern analysis and journal-based insights

The collocational patterns found among the ten target nouns from the three chosen publications are summarized in this section. Finding more general linguistic forms and disciplinary differences that are reflected in academic journal writing is the aim of the analysis, which compares structural preferences, collocational kinds, and semantic functions.

4.2.4.1 Collocation structure comparison

This subsection presents a comparative analysis of the predominant collocational structures identified across three representative nouns selected from each of the three academic journals: *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*. The examined collocational structures include adjective and noun, verb and noun, and noun and preposition combinations. The purpose of this comparison is to explore structural preferences and to study how these patterns reflect the linguistic preference and research focus of each journal.

In both *Applied Linguistics* and *The Modern Language Journal*, the adjective and noun structure emerged as the most frequent collocational pattern. For instance, in *Applied Linguistics*, the noun *language* co-occurred with adjectives such as *English*, *second*, and *foreign*, accounting for 271 instances. Likewise, in *The Modern Language Journal*, the noun *study* frequently appeared in adjective and noun

combinations, such as *present study*, *current study*, and *first study*, with over 200 occurrences. These adjective and noun structures do more than simply describe; they often serve categorizing, specifying, or evaluative functions within academic writing. For example, English language, second language, and foreign language, all found in the Applied Linguistics corpus, reflect categorization and specification, while present study and first study in *The Modern Language Journal* help specify and contextualize the research being discussed. This reflects a disciplinary tendency to use nominal precision to clarify the scope and relevance of scholarly contributions.

Verb and noun collocations were also notably presented in *Applied Linguistics*, particularly with the noun *students*. Verbs, such as *allow*, *help*, and *see,* formed frequent combinations (e.g., *allow students*, *help students*), reflecting the journal's learner-centered orientation. These verb and noun collocations function communicatively by expressing acts, pedagogical interventions, and student engagement, key themes in language education research. For example, *allow students* often appears in contexts where learners are given self-direction, while *help students* conveys instructional support or facilitation. In *Communication Monographs*, the verb and noun structure appeared prominently with the noun *message* and its plural form *messages*, with combinations, such as *send message* and *receive messages*. These structures represent communicative actions and interactional processes, supporting the journal's focus on message transmission and meaning negotiation. Unlike adjective and noun collocations, which tend to describe or classify, these verb and noun combinations highlight dynamic processes central to the field of communication studies.

While *Communication Monographs* demonstrated a strong presence of verb and noun patterns with message-related terms, a broader overview reveals that the adjective and noun structure is actually more dominant across the journal's selected nouns. For example, the words *study*, *studies*, and *information* regularly appeared in collocations, such as *current study*, *primary studies*, and *social information*, totaling over 300 occurrences. This indicates that even in journals centered on communicative events, descriptive structures remain central to academic writing.

An additional structural variation is observed in *The Modern Language Journal*, where the noun *learners* was most frequently found in noun and preposition structures, including combinations like *learners with*, *learners in*, and *learners of*. These collocations do more than merely attach grammatical elements; they function communicatively to indicate scope, contextual associations, and conceptual characteristics. For example, in *learners in* classroom settings, which delineate educational context, *learners with* diverse backgrounds highlight inclusion and diversity, and *learners of* English specify target learning focus. This pattern reflects the journal's consistent emphasis on educational contexts and learner variation and shows how structural choices in collocation can signal thematic priorities in academic writing.

Overall, although the relative frequency of specific patterns may vary for any particularly targeted noun and the journal's thematic orientation, the adjective and noun structure consistently emerged as the most dominant across the three journals. This consistency highlights the structure's utility in facilitating specificity, clarity, and academic precision in scholarly writing.

4.2.4.2 Restricted vs. free collocation usage

This subsection looks at the degree of lexical restriction, found in the collocations of selected nouns across the three journals: *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*. The analysis distinguishes between restricted, semi-restricted, and free collocations, pointing out how various degrees of fixedness reflect the journals' disciplinary focus and preferred stylistic norms.

Restricted collocations, defined as combinations with high frequency, limited substitutability, and strong semantic associations, were prevalent across all three journals. In *Applied Linguistics*, examples, such as *English language*, *second language*, and *foreign language,* demonstrated high structural fixity, often used in standardized expressions like *second language acquisition* or *foreign language proficiency*. Similarly, verb and noun collocations, such as *allow students* and *help students,* appeared repeatedly in instructional and pedagogical contexts, indicating stable academic usage patterns.

The Modern Language Journal also displayed a strong tendency toward restricted collocations, particularly with research-oriented expressions. Phrases, such as *present study*, *current study*, and *future studies,* occurred with consistent semantic and syntactic patterns, reflecting conventional academic framing of research work. Additionally, noun and preposition combinations, such as *learners with*, *learners in*, and *learners of,* appeared frequently, notably in contexts describing learning environments, learner characteristics, or issues. Despite being marginally more adaptable than adjective and noun pairings, these collocations maintained their contextual specificity and functional consistency.

In contrast, *Communication Monographs* featured a larger number of semi-restricted collocations, particularly in relation to the noun *message*. While some expressions, such as *perceive message*, *judge message*, and *matched message,* were classified as restricted due to their recurrence and fixed interpretation, others like *evaluate message*, *consider message*, and *follow message* exhibited more variability in both usage and verb selection. These semi-restricted patterns suggest a more context-sensitive and interpretative style, characteristic of communication studies.

Free collocations were relatively limited across the three journals but appeared in certain descriptive or comparative contexts. For example, *different languages* and *other languages* in *Applied Linguistics* allowed greater lexical substitution, depending on sociolinguistic variables. Similarly, adjective and noun combinations, such as *individual student* and *diverse student,* demonstrated lower collocational fixity, often used to stress variation among learners.

Overall, then, the data indicates that *Applied Linguistics* and *The Modern Language Journal* favor more restricted collocational patterns, being consistent with their focus on formal linguistic theory and pedagogical research. *Communication Monographs*, in contrast, accommodates a broader spectrum of semi-restricted collocations, being consistent with the dynamic and context-driven nature of communication studies. This variation stresses the crossing of lexical patterning and disciplinary identity in academic writing.

4.2.4.3 Disciplinary focus reflected through collocations

Each of the selected journals represents a distinct disciplinary orientation, as previously outlined in Chapter 3. *Applied Linguistics* provides a platform for the publication of interdisciplinary articles on linguistic theory and application. *The Modern Language Journal* centers on second and foreign language acquisition, with a focus on language pedagogy and learner development. *Communication Monographs*, meanwhile, contributes to the theoretical and methodological knowledge of human communication in a variety of social settings.

These disciplinary focuses are clearly reflected in the collocation patterns found in the journal texts. In *Applied Linguistics*, the frequent use of collocations, such as *second language*, *foreign language*, *English language learners*, and *helping students,* underscores its focus on student identification and language instruction. These expressions are central to applied linguistic discourse and highlight the journal's concern with classroom practice, language acquisition, and policy-oriented research.

In *The Modern Language Journal*, collocations, such as *present study*, *current study*, *learners with*, and *additional languages,* reinforce the journal's empirical and learner-centered approach. The prevalence of adjective and noun combinations describing research (e.g., *present study*, *future studies*) indicates a significant emphasis on methodology and inquiry. Furthermore, the variety of prepositional collocates with *learners* (e.g., *learners in*, *learners of*) indicates an indirect reference to learner experience, educational environments, and sociocultural positioning.

Communication Monographs, on the other hand, exhibits a distinct pattern aligned with their disciplinary interest in interaction and meaning-making. Collocations, such as *perceived message*, *judge message*, *evaluate message*, and *social information,* reveal an analytical approach to the construction, interpretation, and acceptance of messages. These patterns show a theoretical orientation, based on discourse analysis, media studies, and interpersonal communication with an emphasis on the interpretative and dynamic use of language as social context.

By and large, the collocational choices in each journal not only mirror its academic domain but also support its disciplinary voice. Whether via organized pedagogical terms in *Applied Linguistics*, research-driven expressions in *The Modern Language Journal*, or interpretive constructs in *Communication Monographs*, the collocations analyzed reflect and replicate the principles of knowledge and communicative priorities of each publication.

4.3 Summary

Based on a corpus collected from three prestigious journals: *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*,this chapter has conducted a comprehensive examination of the academic noun collocations. The investigation was divided into two main sections: an overview of the most frequent nouns found in each journal and an in-depth examination of their collocational patterns.

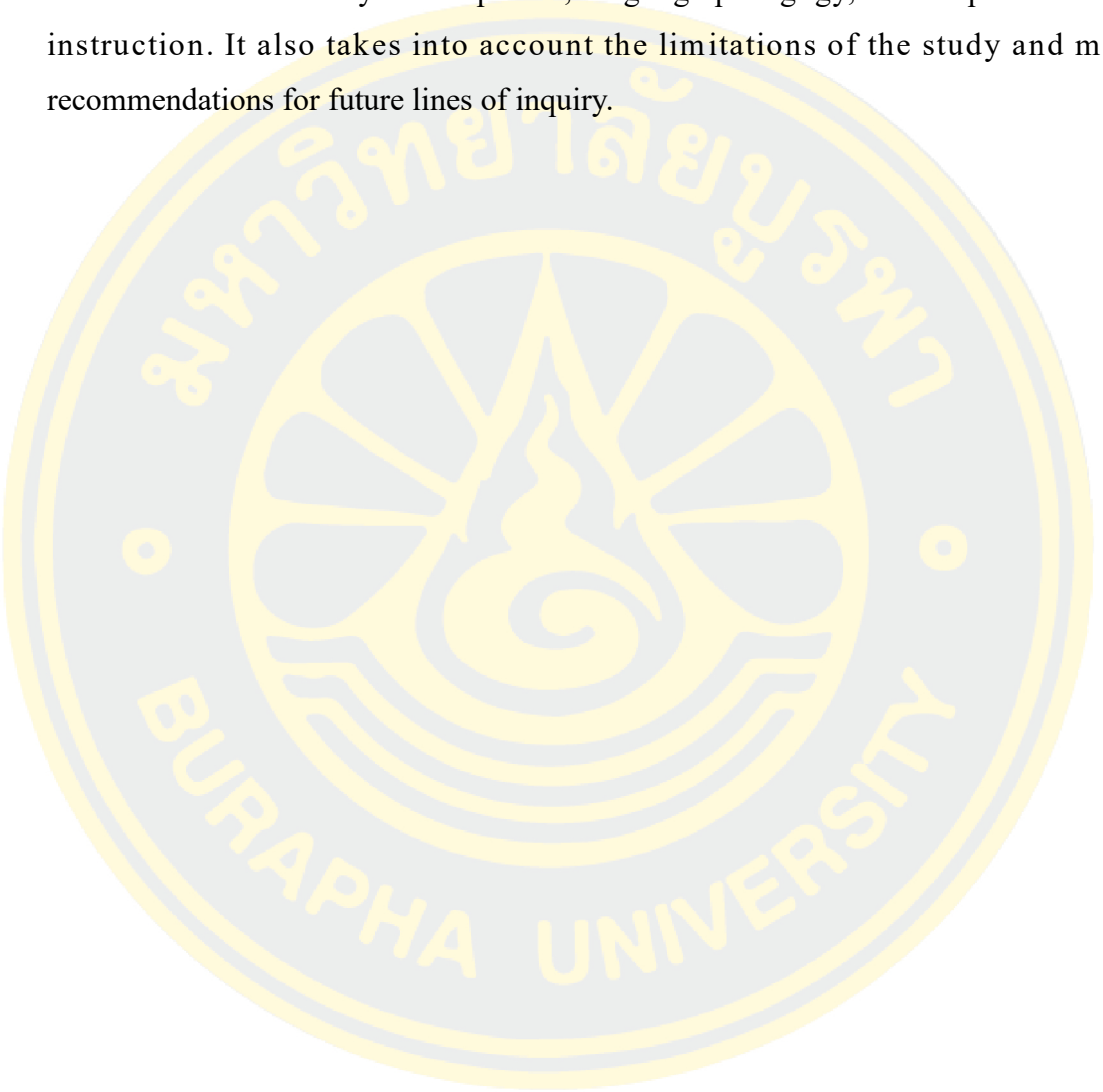
The first part of the chapter identified the top ten most frequent nouns from each journal, revealing both overlapping and distinct lexical. While some nouns, such as *language*, *study*, and *participants,* appeared across all three publications, others were more discipline-specific, indicating the unique thematic concern of the journal.

The second part analyzed three representative nouns from each journal to explore their dominant collocational structures. The results showed that the adjective and noun pattern was the most frequently used among all journals, especially in academic expressions like *second language* and *current study*. Verb and noun and noun and preposition structures also played important roles, depending on the discourse style of each journal. Additionally, the analysis distinguished between restricted and free collocations, highlighting how fixed academic phrases contrasted with more flexible or context-dependent combinations.

Finally, a synthesis of the collocational patterns confirmed that each journal's linguistic choices are proportionate to its disciplinary identity. *Applied Linguistics* leaned toward pedagogical and learner-oriented collocations, *The Modern Language Journal* emphasized empirical research and language learning contexts, while

Communication Monographs featured systematic and explanatory collocations typical of discourse and communication studies.

The following chapter discusses the consequences of these findings in relation to academic vocabulary development, language pedagogy, and corpus-informed instruction. It also takes into account the limitations of the study and make recommendations for future lines of inquiry.



CHAPTER 5
DISCUSSIONS AND CONCLUSION

The study's primary conclusions, which were derived from an examination of scholastic word collocations in journal papers, are explained in this chapter. It begins by looking at how often important academic nouns, such as *language*, *study*, and *participants*, appear in the texts. These nouns were commonly found in all three journals. The chapter then looks at how these nouns are used together with other words in different patterns, including adjective and noun, verb and noun, and noun and preposition combinations. These formats help make academic writing more lucidly and more precise.

The chapter also compares the three journals and shows that even though they belong to the same general field, they choose different types of collocations. This is likely because each journal has a different focus and writing style. The chapter also discusses how teaching common collocations can help EFL students improve their fluency and write more naturally in academic English. The study's contributions to the fields of corpus linguistics and academic vocabulary research are also discussed, especially how it compares word use across journals and offers a system for classifying collocations more clearly.

Finally, this chapter points out some limitations of the study. These include using only three journals, focusing on a limited number of collocation types, and depending on the researcher's judgment when grouping the collocations. Based on these constraints, the study suggests directions for forthcoming research. These include looking at journals from other academic fields, studying more types of collocations, and analyzing writing from language learners. These future studies could help teachers and researchers better understand how collocations work and how to support students in academic writing.

5.1 Frequently occurring academic nouns

The analysis of the most frequently used nouns in the three academic journals shows that certain words, such as *language*, *study*, and *participants*, appear very often. These nouns are important in academic writing because they help express ideas clearly and professionally. This result supports earlier research that found academic texts often use many nouns because they help writers discuss non-physical issues, research protocols, and persons who participate in research (Jeffries, 2006; Trinant & Yodkamlue, 2019).

Several studies, based on language data, have also pointed out how common nouns are in academic writing. For example, Chanasattru and Tangkiengsirisin (2016) found that *community* was the most frequent content word in social science articles, while Nilsson (2019) found a much higher density of nouns in scientific research articles compared to popular science texts. In nursing, Trinant and Yodkamlue (2019) found that nouns made up 63.51% of all words, highlighting the importance of using nouns for academic precision and brevity.

In addition, many of the most common nouns identified in this study, such as *research*, *data*, and *participants*, are also included in Coxhead's (2000) Academic Word List (AWL), especially within the first sublist till the forth sublist. This emphasizes the claim of Coxhead that a number of high-frequency academic words appear in numerous fields of study and function as obligatory words of academic communication. Vongpumivitch et al. (2009) also reported that academic texts in applied linguistics contain about 11.17% AWL words, showing how widespread academic vocabulary is.

However, there was variation in the frequency and types of nouns across the journals. For example, while *language* and *students* were commonly used in *Applied Linguistics*, *study* was more common in *The Modern Language Journal*, and *message* and *information* were used more often in *Communication Monographs*. This shows that while some academic nouns are widely used across fields, others are specific to the journal and topic (Hyland & Tse, 2007; Khani & Tazik, 2013).

These findings highlight the importance of academic nouns not just as words, but also as key indicators of how different academic fields use language. Their frequency, patterns of use, and meaning in different contexts show how essential they are in academic writing and provide a basis for further study into how they work in word combinations.

5.2 Collocational patterns

The analysis of collocation patterns in the three academic journals showed that there are three main types of noun-based combinations: adjective and noun, verb and noun, and noun and preposition. These results match earlier studies by India (2018), McCarthy (2017), and McCarthy et al. (2010), who also discovered that both academic and casual writing frequently employ these patterns. Among the three types, adjective and noun combinations were the most common in all three journals. Examples include *second language*, *foreign language*, and *present study*.

One reason why adjective and noun combinations are used so often is that they help make writing more specific and clearer. According to Lewis (2000), these combinations allow writers to capture elaborate ideas in a short and simple way. Hill (2000) also pointed out that these patterns help shape the way experienced users of English store and remember words. In this study, adjective and noun pairs not only showed key academic ideas (such as "*second language* acquisition" and "*current study*") but also matched the focus of each journal. These combinations served multiple communicative functions. For instance, pairs like *English language*, *foreign language*, and *second language* were frequently used in *Applied Linguistics* to categorize types of language under discussion, whereas collocations, such as *present study* and *first study* in *The Modern Language Journal,* functioned to specify the position and relevance of the current research. In addition, some adjective and noun patterns carried evaluative meaning, such as *individual student* or *diverse student*, which reflected attention to learner variation and complexity. Overall, adjective and noun collocations in academic writing go beyond mere description. They help

organize ideas, identify thematic focus, and articulate scholarly stance with clarity and precision.

Although verb and noun collocations were used less often, they still played an important role in showing research actions and steps. Common examples include *help students*, *use English*, and *judge messages*, especially in articles from *Communication Monographs*. These combinations show how in academic writing one is likely to introduce actions of explaining, evaluating, or supporting something. As McCarthy (2017) and Lewis (2000) explained, these patterns are part of common word groups that help writing flow more naturally. In the present study, verb and noun combinations were found to perform essential communicative functions, particularly in highlighting actions, processes, or research outcomes. For example, *allow students* and *help students*, which occurred frequently in *Applied Linguistics*, represent pedagogical interventions that reflect learner-centered approaches, where the emphasis is on empowering or supporting learners. These patterns illustrate typical instructional actions and are often used to describe teaching practices or institutional strategies. In *Communication Monographs*, the noun *message* frequently co-occurred with verbs, such as *perceive*, *judge*, *match*, and *reduce*. These combinations conveyed how messages are cognitively and socially processed. For example, *perceived messages*, *judged messages*, and *matched messages* illustrate evaluative and interpretive functions that are central to communication studies. Similarly, the plural noun *messages* appeared in combinations, such as *target messages* and *threatening messages*, which not only describe message types but also imply communicative intentions and effects. These verb and noun patterns reveal how academic writers describe dynamic processes of interpretation, targeting, or threat perception, which correspond to the journal's focus on interaction and meaning-making. Overall, verb and noun collocations contribute to the textual representation of research processes, helping academic writers present their methodological and conceptual activities clearly and concisely.

The study also found noun and preposition combinations, such as *learners with*, *learners in*, and *learners of*, particularly in *The Modern Language Journal*. These collocations match Lewis's (2000) idea of grammatical collocations, which

involve fixed patterns between a noun and preposition. More importantly, these combinations serve distinct communicative functions. For example, *learners in* classroom settings expresses the scope or contextual boundary of research, while *learners with* diverse backgrounds emphasizes individual attributes and highlight issues of inclusion. Similarly, *learners of* English specify the object of learning, clarifying the focus of instruction. Through these noun and preposition patterns, writers are able to signal relationships between entities, specify thematic areas, and attribute characteristics to subjects of study. These functions closely correspond to the journal's pedagogical and sociolinguistic orientation, where learner identity and contextual factors are key components. As such, noun and preposition collocations contribute to organizing scholarly communication by clarifying conceptual relationships and anchoring content within specific educational frameworks.

Different journals showed different patterns. Both *Applied Linguistics* and *The Modern Language Journal* often used adjective and noun pairs to describe learners and studies, such as *second language*, *individual students*, and *present study*. In general, these patterns were typically used for categorization, specification, and sometimes evaluation, demonstrating a propensity for precision and conceptual clarity. *Communication Monographs* also employed many adjective and noun combinations, especially with words like study and information (e.g., *current study*, *social information*), but it stood out by exhibiting a higher proportion of verb and noun collocations, involving the noun message. Examples, such as *perceived message*, *target messages*, and *judged message,* exemplify how language in this journal is used to represent interpretive processes, evaluative judgments, and communicative functions, which is consistent with its disciplinary emphasis on interaction and meaning-making. Additionally, *The Modern Language Journal* made greater use of noun and preposition structures with the noun *learners*, such as *learners with*, *learners in*, and *learners of*. These patterns signaled contextual scope, learner attributes, and focus of learning, further reflecting the journal's concern with pedagogical context and heterogeneity. These findings support Hyland's (2004) observation that disciplinary communities use language in varied ways to serve different rhetorical purposes. The variation in collocational preferences observed in

this study reflects patterns of language use help construct disciplinary identity, organize knowledge, and highlight what each field values in academic discourses.

In closing, the collocation patterns found in this study support what earlier researchers have suggested. The results also show that scholarly authors seek to utilize such fixed word combinations to make their writing clear and effective. Understanding how these patterns work can be especially helpful for learners of English for Academic Purposes (EAP), because knowing how to use collocations well can improve fluency, accuracy, and the ability to write in an academic style.

5.3 Differences in collocational use across disciplines

The study found clear differences in how collocations are used in the three academic journals. The differences reflect each journal's focus and the way it uses language to build meaning in its own field. Even though all three journals rely on many of the same high-frequency academic nouns, such as *language*, *study*, and *participants*, the way these nouns are combined with other words is different in terms of both structure and purpose.

Applied Linguistics and *The Modern Language Journal* showed a strong use of adjective and noun combinations. Examples like *foreign language*, *second language*, *present study*, and *current study* often appeared in these two journals. These collocations match the journals' focus on teaching and learning languages, especially in areas like second language acquisition and learner identity. This supports previous research by Hyland and Tse (2007), which implies that academic word choices frequently align with the common objectives and principles of each discipline.

In contrast, while *Communication Monographs* also used many adjective and noun combinations, especially with words like *study* and *information*, it had more verb and noun patterns with the word *message*. Common examples included *perceived message*, *judge message*, and *evaluate message*. These show that writing in this journal focuses more on actions, meaning-making, and interaction. This is different from the other two journals, which focus more on describing ideas and categories. These differences reflect Hyland's (2004) theory that, based on their

objective and the target audience, academic disciplines employ many methods for leveraging language to advance knowledge.

The variations in collocation types also show how fixed or flexible the word combinations are. In *Applied Linguistics* and *The Modern Language Journal*, combinations like *second language* and *present study* are more fixed in form and meaning. In *Communication Monographs*, on the other hand, verb and noun patterns like *perceive message* or *evaluate message* allow for more variation in verb choice. This shows a style of writing that is more concentrated on actions and processes.

These results show that academic writing is not the same in every field. Each discipline has its own way of using words to reach its goals and communicate with readers. Knowing about these differences is important not only for language researchers but also for designing academic writing courses. Students must be instructed in the specialist words and word combinations of their own disciplines.

Generally, these patterns show that the use of collocations is stylistically and purposively determined by the journals. Language teaching journals, for example, employ more adjective and noun collocations like *foreign language* or *current study*, especially in explaining educational concepts. In *Communication Monographs*, verb and noun patterns are common with words like *message*, but for other words like *study* and *information*, adjective-noun patterns are still used more frequently.

This means that academic writing in different fields follows different styles. These styles affect how writers choose words, form sentences, and use fixed or flexible word combinations. Both scholars and students can improve their scholarly writing by becoming conscious of these styles.

5.4 Pedagogical implications

The results of this study offer several useful ideas for teaching English as a Foreign Language (EFL), especially in higher education. The analysis showed that high-frequency academic nouns, such as *language*, *study*, and *participants,* often appear together with specific words, creating common collocations across different

fields. These include adjective and noun combinations like *second language* and *present study*, and verb and noun combinations like *help students* and *perceive messages*. As Hill (2000) and Lewis (2000) pointed out, these collocations are not only common in academic writing, but they also help make clearer and more natural meanings.

However, many studies have found that EFL learners often have trouble using collocations correctly (Alotaibi, 2014; Boonraksa & Naisena, 2021; Dukali, 2018). In particular, adjective and noun and verb and noun pairs are challenging because learners might not have enough exposure, and they might be affected by their native language, or might not know the typical word pairings in English. McCarthy (2017) also noted that collocational knowledge is often not taught well in official classroom settings, even though it plays an important role in fluency.

This study suggests that EFL students benefit from being taught academic collocations directly, especially those that include high-frequency nouns from Coxhead's (2000) Academic Word List. Teaching these collocations in real contexts, rather than as separate word lists, can help learners realize how the words are used and improve their ability to use them in writing. Lewis (2000) explained that collocations are "chunks" of meaning that are remembered and used as whole units, which can make learners more fluent and confident.

In addition, using tools that show real examples of language, e.g., corpus software and concordance lines, teachers and students can investigate collocations better. For instance, looking at phrases, such as *learners with* disabilities, *second language* acquisition, or *evaluate messages* in real texts, can encourage pupils to notice common patterns. Recent studies (Boonphoie & Bhoomkhokrak, 2024; Phiwma, 2023) also suggest that using tasks and projects in a blended learning format can support students' growth in collocation skills and develop their scholarly lexicon.

Finally, course designers and textbook writers can use the findings from this study to choose useful vocabulary and collocations to include in academic English lessons. By focusing on collocations that are common in each specific subject,

students will be better placed to write and conduct research within their own subject fields.

5.5 Research Contributions

Unlike earlier studies that mostly focused on how often academic words appear (such as Vongpumvitch et al., 2009) or created word lists for certain academic fields (such as Mozaffari and Moini, 2014), this study is different because it looks at how academic words are used together in patterns, especially noun collocations. It also adds something new by comparing research articles from three top-ranked journals in the same field. This helps show how word use can be different even within related areas. The study also uses a basic system to group collocations into three types: restricted, semi-restricted, and free, based on real examples. This makes the study helpful for both language researchers and teachers, since detailed analysis like this is still quite rare in academic research.

This study contributes to the field of applied linguistics and research by using language data in several useful ways. First of all, it provides a detailed, data-based analysis of commonly used academic noun collocations across three respected journals: *Applied Linguistics*, *The Modern Language Journal*, and *Communication Monographs*. While many earlier studies looked at how often academic words are used in certain fields (e.g., Khani & Tazik, 2013; Mozaffari & Moini, 2014; Vongpumvitch et al., 2009), few addressed whether and how those words really co-occur with other words in actual scholarly writing. This study helps fill that gap by showing not only which nouns are used often, but also indicating how they appear in specific patterns in real academic texts.

Second of all, the research sheds light on how fixed and variable collocations operate in academic writing. By dividing collocations, based on how fixed or flexible they are, it builds on ideas from Howarth (1996) and Cowie (1998), and shows how these types actually appear in real journal articles. While some earlier studies addressed these types generally, few have applied them to specifics across a set of journals.

Third of all, this research highlights differences within the same field by comparing collocation patterns in three Q1-ranked journals, all of which focus on language and linguistics. Even though these journals are in the same general area, their goals and writing styles are different. This leads to different choices in how collocations are used. The contrast helps us better hold on to how scientific language can be different depending on purpose and context.

Fourth of all, the findings can be used to support English for Academic Purposes (EAP) teaching. In that through frequent and important collocations, especially those that EFL learners often deal with, the study provides useful information for teachers, course designers, and material developers. The focus on real examples from actual texts also supports current teaching methods that use data to help students learn words in situation, rather than merely learning word lists.

Lastly, the study shows how language may be studied in an understandable and useful manner by using corpus techniques like AntConc. As Anthony (2005) noted, these tools are easy to use and give teachers and researchers a helpful way to look at real language use in detail.

To sum up, this study provides a wealth of theoretical and instructional motivation. It enables us to see how academic collocations work in terms of frequency, composition, and application, and demonstrates how this kind of knowledge can be transferred for the benefit of support EFL learners and academic writing instruction.

5.6 Conclusion

The study's key conclusions have been compiled in this chapter, together with a justification for their importance for academic writing and language acquisition. The results, based on real data, showed that academic writing regularly uses certain high-frequency nouns, such as *language*, *study*, and *participants*. These nouns regularly show in patterns with other words. The most common patterns were adjective and noun and verb and noun combinations. These structures are important because they

facilitate the professional and unambiguous expression of ideas on individuals, research, and abstract concepts.

Although belonging to the same basic topic of language and linguistics, the three journals in the study displayed varying preferences in their word usage. Journals that concentrate more on instructing and learners used more adjective and noun patterns. Journals that focus more on communication used more verb and noun patterns. These distinctions show that the way of academic words is different based on the purpose and style of each journal.

The findings also highlight how important it is to teach collocations as meaningful language chunks. For learners of English, especially those in academic environments, knowing how words are commonly used together can improve writing fluency and create their own writing better suited to academic backgrounds. Learners can improvement from understanding single words to employing natural word combinations more skillfully by using real-world examples from linguistic data, concordance tools, and vocabulary in passage.

In general, this study adds to the growing research in corpus linguistics and academic vocabulary. It provides new insights into how common nouns are used in structured patterns. It also shows the value of studying not just word frequency, but also how the words are paired together in purposeful ways that reflect different academic fields. These insights are useful for both researchers and teachers in English for Academic Purposes (EAP).

The results of this study also clearly answer the two research objectives. First, the study found the most common academic nouns used in journal articles. Second, it explored how those nouns are used in collocations. The findings show not only which words are frequently used, but also their applications in different styles and types of academic writing. This means the research questions in Chapter 1 have been answered, and the study offers useful ideas for improving the understanding and teaching of academic language.

5.7 Limitations of the study

Although this study offers useful insights into how scholarly noun collocations are used in selected journals, there are some limitations that should be mentioned. First, the study looked at only three top-ranked journals in the field of language and linguistics. While this helped keep the focus clear and allowed for a detailed analysis within one area, the findings may not apply to other academic fields, for example, science, business, or law. Future research could include journals from a wider range of disciplines to compare how academic vocabulary is used in different fields.

Second, the study focused only on noun-based collocations, including adjective and noun, verb and noun, and noun and preposition patterns. This not only made it possible to examine these particular structures in greater detail, but it also meant that other types of collocations, like adverb and adjective or verb and adverb combinations, were not included. Including more types of collocations in future studies could give a more complete picture of how words are used together in academic writing.

Third, the study grouped collocations into three categories: restricted, semi-restricted, and free. This was done based on the researcher's interpretation, supported by examples from the data. While this method follows ideas from earlier research (Cowie, 1998; Howarth, 1996), the line between the groups can sometimes be unclear and may depend on how the data is interpreted. Future studies could use a broader dataset and involve more than one rater to make the classification more objective.

Finally, the study used data from published journal articles, which are professionally written and carefully edited. Because of this, the results may not reflect how students or less experienced writers use collocations. Future research could compare writing from professional writers and novice writers to see how collocational ability develops over time.

Even with these limitations, the study has practical significance for teaching English for Academic Purposes (EAP) and offers a solid basis for future research, especially in assisting students in developing their educational vocabulary.

5.8 Suggestions for future research

There are several potential routes for further research based on the limitations mentioned above.

One suggestion is to expand the focus beyond language and linguistics journals. Future studies can apply other disciplines' academic books, such as science, business, or social sciences. Comparing different subject areas may help researchers understand how collocations are used differently depending on the writing style and each field's communication objectives.

Second, future research could include a wider variety of collocation types. Instead of focusing only on noun-based patterns, studies could look at other combinations, such as adverb and adjective, verb and adverb, or longer multi-word expressions. This would give a more complete picture of how words are commonly used together in academic writing and show more about the range of structures used across changed types of texts.

Third, researchers could study how collocations are used by students, who are learning English as a foreign or second language. Comparing student writing with expert academic texts could show where students have difficulties and help teachers develop more effective lessons. Long-term studies that follow students over time would also be useful to see how their use of collocations improves with experience.

Fourth, future studies could also improve the way collocations are analyzed. For example, it would be more dependable to use multiple raters to verify the classification of collocations. Using larger and more balanced sets of texts would also help make the findings more general and allow for stronger comparisons.

Finally, with new technology, researchers now have better tools for studying language. Advanced programs can help automatically identify word types, examining sentence construction, and even identifying collocations by using artificial intelligence. With the assistance of these technologies, the researchers may inspect collocation patterns in greater detail than they could with human analysis.

In summary, future research that includes more subject areas, more types of collocations, student writing, and better research methods will increase our comprehension of academic language and progress our ability to instruct academic terminology.

REFERENCES

Alotaibi, A. (2014). The Comprehension of English Lexical Collocates by Kuwahiti EFL Learners. *International Journal of English Language and Linguistics Research*, *2*(3), 1-12. https://www.eajournals.org/wp-content/uploads/The-comprehension-of-English-lexical-collocations-by-Kuwaiti-EFL-learners.pdf

Anthony, L. (2005). *AntConc: Design and development of a freeware corpus analysis toolkit for the technical writing classroom* IEEE International Professional Communication Conference (IPCC), https://doi.org/10.1109/IPCC.2005.1494244

Anthony, L. (2022). *TagAnt (Version 2.0.5) [Computer Software]*. In Waseda University. Available from https://www.laurenceanthony.net/software

Baker, P. (2010). *Sociolinguistics and corpus linguistics*. Edinburgh University Press Edinburgh. http://site.ebrary.com/id/10391765

Bazzaz, F. E. (2013). Verb-Noun Collocation Proficiency and Academic Years. *International Journal of Applied Linguistics & English Literature*, *3*(1), 152-162. https://doi.org/10.7575/aiac.ijalel.v.3n.1p.152

Bazzaz, F. E., & Samad, A. (2011). The Use of Verb Noun Collocations in Writing Stories among Iranian EFL Learners. *English Language Teaching*, *4*(3). https://doi.org/10.5539/elt.v4n3p158

Beck, I. L., McKeown, M. G., & Kucan, L. (2013). *Bringing words to life : robust vocabulary instruction*. The Guilford Press. http://public.eblib.com/choice/publicfullrecord.aspx?p=1115202

Bennett, G. R. (2010). *Using Corpora in the Language Learning Classroom: Corpus Linguistics for Teachers*. The University of Michigan Press. https://doi.org/https://doi.org/10.3998/mpub.371534

Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics : investigating language structure and use*. Cambridge University Press.

Boonphoie, P., & Bhoomkhokrak, P. (2024). Integrating CLIL and Project-Based Learning to Enhance Sixth Graders' English Reading Achievement. *Academic Journal of Management Technology*, *5*(1), 16-28. https://doi.org/10.14456/ajmt.2024.2

Boonraksa, T., & Naisena, S. (2021). A Study on English Collocation Errors of Thai EFL Students. *English Language Teaching*, *15*(1), 164-177. https://doi.org/10.5539/elt.v15n1p164

Brett, D., Loranc-Paszylk, B., & Pinna, A. (2021). A corpus-driven analysis of adjective/noun collocations in travel journalism in English, Italian and Polish. *MonTI. Monografías de Traducción e Interpretación*, *13*, 114-147. https://doi.org/10.6035/MonTI.2021.13.04

Bueraheng, N., & Laohawiriyanon, C. (2014). Does learners' degree of exposure to English language influence their collocational knowledge? introduction. *International Journal of English and Literature (IJEL)*, *4*(3), 1-10.

Chanasattru, S., & Tangkiengsirisin, S. (2016). Developing of a High Frequency Word List in Social Sciences. *Journal of Studies in the English Language*, *11*. retrieved from https://so04.tci-thaijo.org/index.php/jsel/article/view/73309

Chen, P. C., Hu, K. C., & Ho, J. Y. (2009). A study of academic vocabulary used in the abstracts of business and management journals. *Taiwan International ESP*

Journal, *1*(1), 51-75. https://doi.org/10.6706/TIESPJ.2009.1.1.3

Chen, Q., & Ge, G.-C. (2007). A corpus-based lexical study on frequency and distribution of Coxhead's AWL word families in medical research articles (RAs). *English for Specific Purposes*, *26*(4), 502-514. https://doi.org/10.1016/j.esp.2007.04.003

Cowie, A. P. (1998). *Phraseology: Theory, Analysis, and Applications*. Oxford Academic. https://books.google.co.th/books?id=Df-iQpNMLcgC

Coxhead, A. (2000). A New Academic Word List. *TESOL Quarterly*, *34*(2), 213-238.

Coxhead, A. (2011). The Academic Word List 10 Years On: Research and Teaching Implications. *TESOL Quarterly*, *45*(2), 355-362. https://doi.org/10.5054/tq.2011.254528

Crystal, D. (2003). *English as a global language* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/CBO9780511486999

Dash, N. S. (2008). *Corpus Linguistics: An Introduction*. Pearson Longman. https://books.google.co.th/books?id=ikOZWjkkxzEC

Dukali, A. A. (2018). An Error Analysis of the Use of Lexical Collocations in the Academic Writing of Libyan EFL University Students. *Journal of Second Language Teaching and Research*, *6*(2), 55-91.

Ghaniabadi, S., Marjane, E., & Zareian, G. (2015). The Use of Adjective+noun Collocations by Iranian EFL Learners Based on Noun Abstractness. *International Journal of Linguistics*, *7*(5), 86. https://doi.org/10.5296/ijl.v7i5.8143

Gilquin, G., & Paquot, M. (2008). Too chatty: Learner academic writing and register variation. *English Text Construction*, *1*(1), 41-61. https://doi.org/10.1075/etc.1.1.05gil

Harta, I., Bay, I. W., & Ali, S. (2021). An Analysis of Lexical Collocation Errors in Students' Writing. *TRANS-KATA: Journal of Language, Literature, Culture and Education*, *2*(1), 15-25. https://doi.org/10.54923/transkata.v2i1.18

Hill, J. (2000). Revising priorities: from grammatical failure to collocationalsucce. In M. Lewis (Ed.), *Teaching collocation: Further developments in the lexical approach* (pp. 47-67). Oxford University Press.

Holtz, M. (2007). Corpus-based analysis of verb/noun collocations in interdisciplinary registers. In M. Davies, P. Rayson, S. Hunston, & P. Danielsson (Eds.), *Corpus Linguistics Conference 2007* (pp. 1-12). UCREL. http://ucrel.lancs.ac.uk/publications/CL2007/paper/14_paper.pdf

Howarth, P. A. (1996). *Phraseology in English Academic Writing: Some Implications for Language Learning and Dictionary Making*. Walter de Gruyter GmbH. https://books.google.co.th/books?id=uFq6AAAAIAAJ

Hyland, K., & Tse, P. (2007). Is There an "Academic Vocabulary"? *TESOL Quarterly*, *41*(2), 235-253. https://doi.org/10.1002/j.1545-7249.2007.tb00058.x

India, P. T. (2018). *The Pep Dictionary of English Collocations*.

Jeffries, L. (2006). *Discovering Language: The Structure of Modern English*. Bloomsbury Publishing.

Kennedy, G. (2016). *An Introduction to Corpus Linguistics* (1st ed.). Routledge.

Khani, R., & Tazik, K. (2013). Towards the development of an academic word list for applied linguistics research articles. *RELC Journal*, *44*(2), 209-232. https://doi.org/10.1177/0033688213488432

Kirub, A. (2014). *Essentials of Scientific Writing*. Ethiopian Institute of Agricultural Research (EIAR).

Lewis, M. (2000). *Teaching collocation : further developments in the lexical approach*. Language Teaching Publications.

Lindquist, H. (2009). *Corpus Linguistics and the Description of English*. Edingurgh University Press.

Liu, J., & Han, L. (2015). A corpus-based environmental academic word list building and its validity test. *English for Specific Purposes*, *39*. https://doi.org/10.1016/j.esp.2015.03.001

Mallillin, L. L., & Castillo, R. C. (2016). Level of Language Proficiency of Gulf College Students. *IOSR Journal of Humanities and Social Science*, *21*(9), 45-52. https://doi.org/10.9790/0837-2109044552

Martínez, I. A., Beck, S. C., & Panza, C. B. (2009). Academic vocabulary in agriculture research articles: A corpus-based study. *English for Specific Purposes*, *28*(3), 183-198. https://doi.org/10.1016/j.esp.2009.04.003

McCarthy, M. (2017). *English Collocations in Use. Intermediate* (2nd ed.). Klett Sprachen GmbH.

McCarthy, M., O'Keeffe, A., & Walsh, S. (2010). *Vocabulary Matrix: Understanding, Learning, Teaching*. Jason Mann.

McEnery, T., & Hardie, A. (2012). *Corpus Linguistics: Method, Theory and Practice*. Cambridge University Press. https://doi.org/10.1017/CBO9780511981395

McEnery, T., & Wilson, A. (2001). *Corpus linguistics : an introduction* (2nd ed.). Edinburgh University Press.

Meara, P. (1992). *EFL Vocabulary Tests* (2nd ed.). Centre for Applied Language Studies, University of Wales, Swansea.

Mongkolchai, A. (2008). *A Study of Undergraduate English Major Students' Ability in Using English Collocations* [Master's thesis, Srinakharinwirot University]. Integrated Thesis & Research Management System. Retrieved from http://thesis.swu.ac.th/swuthesis/Eng(M.A.)/Angkana_M.pdf

Mozaffari, A., & Moini, R. (2014). Academic Words in Education Research Articles: A Corpus Study. *Procedia - Social and Behavioral Sciences*, *98*, 1290-1296. https://doi.org/https://doi.org/10.1016/j.sbspro.2014.03.545

Muñoz, V. L. (2015). The vocabulary of agriculture semi-popularization articles in English: A corpus-based study. *English for Specific Purposes*, *39*, 26-44. https://doi.org/10.1016/j.esp.2015.04.001

Mustafaoglu, A., & Allans, R. (2020). *Advanced English Collocations & Phrases in Dialogues: Master English Collocations with the Aid of Functional Dialogues Once and for All*. Amazon Digital Services LLC - Kdp.

Nampanya, R., & Wangmo, N. (2020). The awareness of phrasal verb collocations of third year (EIC) major students at Rajamangala University of Technology Isan, Surin Campus. *Academic Journal of Management Technology*, *1*(1), 120-128. https://so03.tci-thaijo.org/index.php/jomt/article/view/246613

Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge University Press. https://doi.org/10.1017/CBO9781139524759

Nilsson, F. (2019). *A comparative analysis of word use in popular science and research articles in the natural sciences : A corpus linguistic investigation* [Bachelor's thesis, MäLardalen University. http://mdh.diva-

portal.org/smash/get/diva2:1330702/FULLTEXT01.pdf
Ordem, E., & Bada, E. (2016). Lexical collocations (verb + noun) across written academic genres in English. *European Journal of Education Studies*, *1*(3), 20-37. https://doi.org/10.5281/zenodo.51567
Phiwma, N. (2023). Effects of blended Game-based Learning in enhancing learning achievements in vocabulary, grammar, and idioms for formal presentations in "English for Presentations" course of computer science students at Suan Dusit University. *Academic Journal of Management Technology*, *4*(2), 84-96. https://doi.org/10.14456/ajmt.2023.6
Putra, D., & Suhardijanto, T. (2019). *The use of verb + noun collocations by English learners of Indonesian* Proceeding of The 4th International Seminar on Linguistics (ISOL-4) (pp. 25–33), Retrieved from https://www.researchgate.net/publication/338278740_The_Use_of_Verb_Noun_Collocations_by_English_Learners_of_Indonesian
Ridha, N. A., & Riyahi, A. A. (2011). Lexical collocational errors in the writings of Iraqi EFL learners. *Journal of the College of Arts. University of Basrah*, *58*, 24-51.
Sanguannam, S. (2017). A study on "Delexical Verb+Noun" collocation errors of Thai EFL intermediate and advanced learners. *A Journal of Liberal Arts*, *17*(2), 59-84.
Schmitt, N. (2010). *Researching vocabulary : a vocabulary research manual*. Palgrave Macmillan. https://doi.org/10.1057/9780230293977
Schmitt, N., Jiang, X., & Grabe, W. (2011). The Percentage of Words Known in a Text and Reading Comprehension. *The Modern Language Journal*, *95*(1), 26-43. https://doi.org/10.1111/j.1540-4781.2011.01146.x
SCImago, n. d. *SJR — SCImago Journal & Country Rank* Retrieved from http://www.scimagojr.com
Shabani, M. B., & Tazik, K. (2014). Coxhead's AWL across ESP and Asian EFL Journal Research Articles (RAs): a corpus-based lexical study. *Procedia - Social and Behavioral Sciences*, *98*, 1722-1728. https://doi.org/10.1016/j.sbspro.2014.03.599
Shaw, P. (1991). Science research students' composing process. *English for Specific Purposes*, *10*(3), 189-206. https://doi.org/10.1016/0889-4906(91)90024-Q
Stæhr, L. S. (2008). Vocabulary size and the skills of listening, reading and writing. *The Language Learning Journal*, *36*(2), 139-152. https://doi.org/10.1080/09571730802389975
Szudarski, P. (2018). Corpus linguistics for vocabulary : a guide for research. *Routledge*. https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1606450
Takač, V. P., & Lukač, M. (2013). How word choice matters: An analysis of adjective-noun collocations in a corpus of learner essays. *Jezikoslovlje*, *14*(2-3), 385-402.
Trinant, K., & Yodkamlue, B. (2019). Lexical Collocations in a Sample Corpus of Nursing Research Articles (SCNRA). *Suranaree journal of social science*, *13*(1), 45-72.
Tungyai, S., & Rakpa, S. (2021). Collocation Competence : A Case Study of Undergraduate Students. *Journal of MCU Humanities Review*, *7*(1), 331–346. https://so03.tci-thaijo.org/index.php/human/article/view/252738
Uçar, S., & Yükselir, C. (2015). The effect of corpus-based activities on verb-noun collocations in EFL classes. *Turkish Online Journal of Educational Technology*,

14(2), 195-205.

Valipouri, L., & Nassaji, H. (2013). A corpus-based study of academic vocabulary in chemistry research articles. *Journal of English for Academic Purposes*, *12*(4), 248-263. https://doi.org/https://doi.org/10.1016/j.jeap.2013.07.001

Viera, R. T. (2016). The importance of vocabulary knowledge in the production of written texts: a case study on EFL language learners. *Revista Tecnológica ESPOL – RTE*, *30*(3), 89-105.

Vongpumivitch, V., Huang, J.-y., & Chang, Y.-C. (2009). Frequency analysis of the words in the Academic Word List (AWL) and non-AWL content words in applied linguistics research papers. *English for Specific Purposes*, *28*(1), 33-41. https://doi.org/10.1016/j.esp.2008.08.003

Yakhontova, T. V. (2003). *English Academic Writing for Students and Researchers* (2nd ed.). PAIS. https://www.researchgate.net/publication/279995442_English_Academic_Writing_for_Students_and_Researchers

Yumanee, C., & Phoocharoensil, S. (2013). Analysis of Collocational Errors of Thai EFL Students. *LEARN Journal: Language Education and Acquisition Research Network*, *6*(1), 88-98. Retrieved from https://so04.tci-thaijo.org/index.php/LEARN/article/view/102723

Zufferey, S. (2020). *Introduction to Corpus Linguistics*. Wiley-ISTE. https://doi.org/10.1002/9781119779728

APPENDIX

APPENDIX 1

Concordance line from *Applied Linguistics*

Table 18. Concordance line adjective and *language* in *Applied Linguistics*

1	_CC reflective_JJ essays_NNS ,_, to_IN the_DT	English_JJ language_NN of_IN applied_VBN linguistic_JJ
2	_VBP insight_NN into_IN how_WRB the_DT	English_JJ language_NN is_VBZ viewed_VBN as_IN
3	_JJS way_NN to_TO access_VB the_DT	English_JJ language_NN ._. She_PRP stated_VBD :_: ‘_`` Using_VBG
4	_IN English_NNP :_: ‘_`` I_PRP know_VBP the_DT	English_JJ language_NN very_RB well_RB and_CC
5	_RB and_CC I_PRP love_VBP the_DT	English_JJ language_NN ._.’_'' She_PRP wanted_VBD her_PRP
6	_TO come_VB to_TO ‘_`` appreciate_VB the_DT	English_JJ language_NN ’_'' as_IN she_PRP did_VBD ._.
7	_VBZ been_VBN an_DT ‘_`` increase_NN in_IN	English_JJ language_NN requirements_NNS to_TO obtain_VB
8	_NN is_VBZ closely_RB tied_VBN to_IN	English_JJ language_NN ability_NN ,_, with_IN a_DT
9	TO connect_VB a_DT lack_NN of_IN	English_JJ language_NN skills_NNS with_IN social_JJ
10	IN the_DT British_JJ government_NN introduced_VBD	English_JJ language_NN testing_NN for_IN spousal_NN
11	_IN a_DT growing_VBG conflation_NN of_IN	English_JJ language_NN proficiency_NN with_IN community_NN
12	_WDT ,_, participants_NNS reported_VBD having_VBG	English_JJ language_NN role_NN models_NNS ,_, and_CC
13	_NNS with_IN our_PRP$ discussion_NN of_IN	English_JJ language_NN learner_NN role_NN models_NNS (_-
14	_VBP participants_NNS value_NN in_IN their_PRP$	English_JJ language_NN role_NN models_NNS ?_. METHODS_NNP
15	for_IN this_DT study_NN were_VBD 8,472_CD	English_JJ language_NN learners_NNS from_IN 155_CD L1_
16	- self_NN -_HYPH reported_VBN having_VBG an_DT	English_JJ language_NN proficiency_NN level_NN of_IN
17	_NN of_IN participants_NNS who_WP were_VBD	English_JJ language_NN teachers_NNS (_-LRB- N_NN ¼_NN 1,189/14.0_
18	_VBN if_IN they_PRP had_VBD an_DT	English_JJ language_NN learning_VBG role_NN model_NN ,_,
19	_PRP to_TO think_VB about_IN your_PRP$	English_JJ language_NN role_NN model_NN :_: it_PRP
20	, either_CC regarding_VBG their_PRP$ existing_VBG	English_JJ language_NN role_NN model(s_NNP)_-RRB-
21	_NNS highlighted_VBN as_IN important_JJ by_IN	English_JJ language_NN learners_NNS (_-LRB- Adolphs_NNP et_

22	WRB common_JJ is_VBZ having_VBG an_DT	English_JJ language_NN learning_VBG role_NN model_NN ?_.
23	CD participants_NNS reported_VBD having_VBG an_DT	English_JJ language_NN role_NN model_NN ,_, a_DT
24	,_, 2,582_CD also_RB described_VBD a_DT second_JJ	English_JJ language_NN learning_VBG role_NN model_NN ,_,
25	_NNP ._. While_IN the_DT proportion_NN of_IN	English_JJ language_NN learners_NNS with_IN role_NN
26	_NN of_IN participants_NNS and_CC their_PRP$	English_JJ language_NN role_NN models_NNS ,_, with_IN
27	_IN popular_JJ celebrity_NN culture_NN for_IN	English_JJ language_NN role_NN models_NNS)_-RRB-,_, our_
28	_VBP participants_NNS value_NN in_IN their_PRP$	English_JJ language_NN role_NN models_NNS ?_. In_IN
29	_VBD were_VBD important_JJ in_IN their_PRP$	English_JJ language_NN role_NN models_NNS ._. A_DT
30	_NN to_TO publish_VB in_IN prestigious_JJ	English_JJ language_NN journals_NNS ._. The_DT rhetorical_JJ
31	NN tie_NN with_IN a_DT local_JJ	English_JJ language_NN professional_JJ and_CC only_RB
32	)_-RRB-._. Nor_CC have_VB advances_NNS in_IN	English_JJ language_NN education_NN in_IN China_NNP
33	_DT first_JJ to_TO adopt_VB the_DT	English_JJ language_NN ,_, preferring_VBG to_TO send_VB
34	_WRB he_PRP was_VBD in_IN an_DT	English_JJ language_NN class_NN for_IN tourism_NN
35	_JJ social_JJ mobility_NN ,_, depends_VBZ on_IN	English_JJ language_NN proficiency_NN (_-LRB- Klapwijk_NNP and_
36	_DT high_JJ status_NN that_WDT the_DT	English_JJ language_NN has_VBZ been_VBN accorded_VBN
37	_NN of_IN proficiency_NN in_IN the_DT	English_JJ language_NN ,_, many_JJ students_NNS who_WP
38	_DT reason_NN being_VBG that_IN the_DT	English_JJ language_NN acts_VBZ as_IN a_DT
39	_PRP$ own_JJ experience_NN with_IN the_DT	English_JJ language_NN ._. Tumi_NNP acknowledges_VBZ that_IN
40	_VB the_DT content_NN in_IN the_DT	English_JJ language_NN which_WDT is_VBZ the_DT
41	_DT monolithic_JJ use_NN of_IN the_DT	English_JJ language_NN for_IN pedagogical_JJ purposes_NNS ._.
42	NN on_IN English_NNP as_IN a_DT	second_JJ language_NN of_IN deaf_JJ people_NNS
43	CC sign_VB language_NN as_IN a_DT	second_JJ language_NN of_IN hearing_VBG mothers_NNS
44	_RB neglected_VBN in_IN the_DT broader_JJR	second_JJ language_NN learner_NN narrative_NN and_CC
45	,_, Fernanda_NNP expressed_VBD ,_, in_IN her_PRP$	second_JJ language_NN ,_, Spanish_NNP ,_, that_IN she_PRP
46	_RB used_VBN term_NN ,_, followed_VBN by_IN ‘_``	second_JJ language_NN ’_'' and_CC ‘_`` Language_NNP /_SYM s_
47	_VBN around_IN Mandarin_NNP as_IN a_DT	second_JJ language_NN –_: rather_RB than_IN Bahasa_NNP –_:
48	_NN ,_, plus_CC Tamil_NNP as_IN a_DT	second_JJ language_NN ._. They_PRP explained_VBD ’_'' I_PRP

49	PRP is_VBZ acquired_VBN as_IN a_DT	second_JJ language_NN , _, for_IN the_DT purposes_NNS
50	_DT critical_JJ role_NN in_IN understanding_VBG	second_JJ language_NN (_-LRB- L2)1_NN production_NN using_
51	_NNP and_CC Collins_NNP 2009_CD) _-RRB- . _. In_IN	second_JJ language_NN acquisition_NN (_-LRB- SLA_NNP) _-RRB-
52	_NN , _, even_RB one_CD constructed_VBN from_IN	second_JJ language_NN learner_NN speech_NN , _, is_VBZ
53	NP 2008_CD) _-RRB- , _, and_CC processes_NNS of_IN	second_JJ language_NN socialization_NN are_VBP also_RB
54	_IN the_DT rest_NN were_VBD Spanish_JJ	second_JJ language_NN (_-LRB- L2_NN) _-RRB- learners_NNS . _.
55	research_NN . _. Applied_JJ linguistics_NNS and_CC	second_JJ language_NN education_NN were_VBD relatively_RB
56	_NN . _. Thus_RB , _, instead_RB of_IN the_DT	second_JJ language_NN interfering_VBG with_IN the_DT
57	_DT hierarchical_JJ order_NN of_IN first_JJ , _,	second_JJ language_NN (_-LRB- i.e._FW L1_NN
58	TO be_VB their_PRP$ first_JJ or_CC	second_JJ language_NN . _. Due_IN to_IN interaction_NN
59	_PRP to_TO write_VB in_IN the_DT	second_JJ language_NN because_IN they_PRP would_MD
60	past_JJ 30_CD years_NNS or_CC so_RB , _,	second_JJ language_NN acquisition_NN scholars_NNS have_VBP
61	- _JJ native_JJ speakers_NNS acquiring_VBG a_DT	second_JJ language_NN (_-LRB- L2_NNP) _-RRB- , _, but_CC
62	_WDT approach_VBP Italian_JJ as_IN a_DT	second_JJ language_NN is_VBZ still_RB missing_VBG . _.
63	_NNS of_IN Italian_JJ as_IN a_DT	second_JJ language_NN (_-LRB- L2_NN group_NN) _-RRB- . _.
64	_VBD a_DT new_JJ model_NN for_IN	second_JJ language_NN education_NN that_WDT was_VBD
65	_NN may_MD exclude_VB less_RBR competent_JJ	second_JJ language_NN students_NNS who_WP are_VBP
66	- SES_NNS levels_NNS) _-RRB- perform_VBP in_IN	second_JJ language_NN achievement_NN tests_NNS (_-LRB- English_
67	erently_RB , _, learning_VBG a_DT foreign_JJ / _SYM	second_NN language_NN involves_VBZ fine_RB - _HYPH grained_
68	rklau_NNP 2000_CD) _-RRB- . _. Literature_NN in_IN	Second_NNP Language_NNP Acquisition_NNP (_-LRB- SLA_NNP) _-RRB- , _,
69	IN a_DT Chinese_NNP as_IN a_DT	foreign_JJ language_NN class_NN to_TO illustrate_VB
70	- _JJ native_JJ learners_NNS of_IN a_DT	foreign_JJ language_NN , _, and_CC between_IN language_NN
71	reasingly_RB prevalent_JJ characteristic_NN of_IN	foreign_JJ language_NN teaching_VBG itself_PRP in_IN
72	_IN high_JJ schools_NNS offered_VBD a_DT	foreign_JJ language_NN in_IN 2008_CD , _, less_JJR than_
73	_NNS ‘ _`` are_VBP proficient_JJ in_IN a_DT	foreign_JJ language_NN that_WDT they_PRP studied_VBD
74	_NN of_IN students_NNS learning_VBG a_DT	foreign_JJ language_NN in_IN year_NN 12_CD ’ _" . _. The_
75	_NNS obstructing_VBG the_DT study_NN of_IN	foreign_JJ language_NN ’ _" . _. In_IN more_RBR recent_JJ

76	_NN supervisor_NN because_IN the_DT only_JJ	foreign_JJ language_NN he_PRP had_VBD learnt_VBN
77	NNS ’_" L1_NNP ,_, learners_NNS ’_POS second/_CD	foreign_JJ language_NN ,_, and_CC learners_NNS ’_POS target_
78	_IN an_DT alternative_NN to_TO mainstream_VB	foreign_JJ language_NN programmes_NNS that_WDT were_VBD
79	model_NN that_WDT supplemented_VBD mainstream_JJ	foreign_JJ language_NN programmes_NNS in_IN many_JJ
80	_JJ language_NN and_CC literature_NN ,_, first_JJ	foreign_JJ language_NN (_-LRB- English_NNP)_-RRB- ,_, mathematics_NN
81	_IN the_DT total_JJ score_NN ._. First_JJ	foreign_JJ language_NN :_: English_NNP Students_NNS were_VBD

Table 19. Concordance line adjective and *languages* in *Applied Linguistics*

1	JJ language_NN instructors_NNS teaching_VBG 17_CD	different_JJ languages_NNS at_IN a_DT University_NNP
2	_JJ cultures_NNS not_RB only_RB speak_VB	different_JJ languages_NNS ,_, but_CC what_WP is_VBZ
3	_NNP ,_, even_RB when_WRB they_PRP speak_VBP	different_JJ languages_NNS in_IN the_DT home_NN ._.
4	_VBG the_DT relative_JJ status_NN of_IN	different_JJ languages_NNS in_IN contexts_NNP where_WRB
5	_JJ value_NN of_IN Malaysia_NNP ’s_DT	different_JJ languages_NNS in_IN the_DT interests_NNS
6	NNS most_RBS commonly_RB identified_VBN where_WRB	different_JJ languages_NNS are_VBP actively_RB used_VBN
7	_NN experience_NN ,_, their_PRP$ use_NN of_IN	different_JJ languages_NNS ,_, and_CC their_PRP$ progress_NN
8	_DT narratives_NNS were_VBD read_VBN in_IN	different_JJ languages_NNS and_CC presented_VBD in_IN
9	_DT texts_NNS ._. Question_NN :_: Did_VBD the_DT	different_JJ languages_NNS spoken_VBN by_IN you_PRP
10	_IN to_IN the_DT use_NN of_IN	different_JJ languages_NNS in_IN the_DT groups_NNS ._.
11	_NN of_IN concepts_NNS using_VBG the_DT	different_JJ languages_NNS around_IN her_PRP ._. Wei_NNP (_-
12	_NNS for_IN vocabulary_JJ knowledge_NN in_IN	different_JJ languages_NNS ._. Developing_VBG LexITA_NNP following_VBG
13	_WRB mothers_NNS are_VBP speakers_NNS of_IN	other_JJ languages_NNS how_WRB does_VBZ this_DT
14	_DT population_NN who_WP can_MD speak_VB	other_JJ languages_NNS and_CC engage_VB with_IN
15	_NN renders_VBZ the_DT learning_NN of_IN	other_JJ languages_NNS obsolete_JJ in_IN the_DT
16	_IN the_DT capital_NN associated_VBN with_IN	other_JJ languages_NNS to_TO find_VB power_NN
17	_IN the_DT excitement_NN about_IN using_VBG	other_JJ languages_NNS besides_IN English_NNP during_IN

18	DT academic_JJ material_NN in_IN seven_CD	other_JJ languages_NNS . . In_IN fact_NN , , Tsepo_NNP
19	P , , number_NN of_IN (-LRB- eventual_JJ) -RRB-	other_JJ languages_NNS spoken_VBN , , level_NN of_IN
20	_IN all_PDT the_DT research_NN in_IN	other_JJ languages_NNS showing_VBG that_IN scores_NNS
21	_NNS . . This_DT resulted_VBD in_IN South_JJ	African_JJ languages_NNS being_VBG relegated_VBN to_IN
22	_NNS to_TO prove_VB that_IN South_JJ	African_JJ languages_NNS are_VBP not_RB separate_JJ
23	-RRB- the_DT interconnectedness_NN of_IN South_JJ	African_JJ languages_NNS (-LRB- Ubuntu_NNP) -RRB- . . The_DT
24	speak_VBP 7_CD of_IN the_DT South_JJ	African_JJ languages_NNS so_RB for_IN nna_NNP [
25	N . . The_DT interconnectedness_NN of_IN South_JJ	African_JJ languages_NNS (-LRB- Ubuntu_NNP) -RRB- . . It_PRP
26	NN to_IN the_DT teaching_NN of_IN	foreign_JJ languages_NNS . . Diversity_NN and_CC difference_NN
27	. . As_IN shown_VBN in_IN Table_NNP 2_CD , , ‘ ``	foreign_JJ languages_NNS ’ '' is_VBZ the_DT most_RBS
28	JJ use_NN of_IN the_DT term_NN ‘ ``	foreign_JJ languages_NNS ’ '' despite_IN it_PRP not_RB
29	_NN , , ignoring_VBG the_DT fact_NN that_IN ‘ ``	foreign_JJ languages_NNS ’ '' have_VBP been_VBN spoken_VBN
30	_DT UK_NNP ’s_POS most_RBS studied_VBN	foreign_JJ languages_NNS (-LRB- and_CC development_NN in_

Table 20. Concordance line verb and *students* in *Applied Linguistics*

1	IN their_PRP$ students_NNS , , they_PRP should_MD	allow_VB students_NNS ’ POS repertoires_NNS to_TO enter_
2	_RB it_PRP is_VBZ advisable_JJ to_TO	allow_VB students_NNS to_TO use_VB it_PRP . .
3	DT translanguaging_JJ space_NN where_WRB they_PRP	allow_VBP students_NNS to_TO use_VB language_NN
4	VB Latino_NNP health_NN . . This_DT assignment_NN	allowed_VBD students_NNS to_TO propose_VB a_DT
5	_NN in_IN their_PRP$ teaching_NN . . This_DT	allowed_VBD students_NNS to_TO utilize_VB their_PRP$
6	_VBD issues_NNS of_IN health_NN equity_NN , ,	allowing_VBG students_NNS to_TO explore_VB the_DT
7	_CC secondary_JJ school_NN level_NN by_IN	allowing_VBG students_NNS to_TO utilize_VB all_PDT
8	, , specific_JJ instruction_NN was_VBD given_VBN	allowing_VBG students_NNS to_TO use_VB all_PDT
9	_DT can_MD significantly_RB materialize_VB by_IN	allowing_VBG students_NNS from_IN diverse_JJ linguistic_JJ
10	T critical_JJ pedagogical_JJ approach_NN that_WDT	allows_VBZ students_NNS to_TO question_VB widely_RB
11	_NNS . . For_IN example_NN , , they_PRP may_MD	help_VB students_NNS to_TO build_VB links_NNS

12	_NN of_IN classroom_NN instructors_NNS ,_, to_TO	help_VB students_NNS make_VB linguistic_JJ choices_NNS
13	_IN a_DT good_JJ position_NN to_TO	help_VB students_NNS to_TO broaden_VB their_PRP$
14	embrace_VB multilingualism_NN work_NN towards_IN	helping_VBG students_NNS to_TO benefit_VB during_IN
15	earners_NNS ’_POS linguistic_JJ decisions_NNS ._.	Helping_VBG students_NNS acquire_VB this_DT knowledge_NN
16	_NNS and_CC mental_JJ agility_NN ’_" ._. It_PRP	helps_VBZ students_NNS to_TO develop_VB ‘_`` an_DT
17	)_-RRB- the_DT research_NN manager_NN who_WP	helps_VBZ students_NNS plan_VB research_NN and_CC
18	_NNS ._. First_RB ,_, they_PRP need_VBP to_TO	see_VB students_NNS ’_POS work_VB to_TO be_
19	_NN ,_, she_PRP was_VBD gratified_VBN to_TO	see_VB the_DT students_NNS solve_VB real_JJ -_
20	_NNP ,_, from_IN where_WRB she_PRP can_MD	see_VB the_DT students_NNS ’_POS task_NN sheet
21	_IN this_DT position_NN ,_, she_PRP can_MD	see_VB the_DT students_NNS being_VBG in_IN
22	_TO illustrate_VB for_IN American_NNP English_NNP	speaking_VBG students_NNS the_DT use_NN of_IN
23	to_IN requests_NNS for_IN Spanish_NNP -_HYPH	speaking_VBG students_NNS ._. In_IN addition_NN ,_, the_DT
24	d_VBN among_IN predominantly_RB isiZulu_NN -_HYPH	speaking_VBG students_NNS ._. Besides_IN translanguaging_VBG helping_VB
25	2018_CD)_-RRB- ._. Native_JJ Italian_NNP -_HYPH	speaking_VBG students_NNS can_MD be_VB assessed_VBN

Table 21. Concordance line adjective and *student* in *Applied Linguistics*

1	-_HYPH related_VBN assistance_NN to_IN an_DT	individual_JJ student_NN ,_, group_NN ,_, or_CC the_DT
2	_IN the_DT teacher_NN and_CC an_DT	individual_JJ student_NN or_CC a_DT small_JJ
3	_NN ,_, directing_VBG it_PRP to_IN an_DT	individual_JJ student_NN ,_, group_NN ,_, or_CC the_DT
4	_PRP manage_VBP relations_NNS between_IN an_DT	individual_JJ student_NN and_CC the_DT cohort_NN
5	_IN recognizing_VBG the_DT value_NN of_IN	diverse_JJ student_NN backgrounds_NNS and_CC skill_NN
6	_CC the_DT competence_NN of_IN socially_RB	diverse_JJ student_NN populations_NNS ._. In_IN order_NN
7	_NN in_IN English_NNP as_IN a_DT	doctoral_JJ student_NN ,_, she_PRP did_VBD not_RB
8	_PRP when_WRB he_PRP was_VBD a_DT	doctoral_JJ student_NN ._. However_RB ,_, the_DT collaborator_NN ’

Table 22. Concordance line verb and *English* in *Applied Linguistics*

1	_IN they_PRP all_DT reported_VBD to_TO	use_VB English_NNP , _, and_CC either_CC Chinese_NNP
2	- _JJ Malays_NNP especially_RB sought_VBD to_TO	use_VB English_NNP for_IN the_DT construction_NN
3	_IN the_DT students_NNS reported_VBD to_TO	use_VB English_NNP online_NN , _, they_PRP may_MD
4	_NNPS explained_VBD they_PRP prefer_VBP to_TO	use_VB English_NNP in_IN interethnic_JJ talk_NN
5	and_CC Chinese_NNPS] _-RRB- prefer_VBP to_TO	use_VB English_NNP because_IN it_PRP 's_VBZ
6	_NN , _, Usman_NNP 's_NN aspirations_NNS to_TO	use_VB English_NNP were_VBD unexpectedly_RB called_VBN
7	_NNS for_IN Pakistani_JJ Muslims_NNPS to_TO	use_VB English_NNP in_IN public_NN . _. However_RB , _,
8	_PRP 're_VBP telling_VBG him_PRP to_TO	use_VB English_NNP but_CC then_RB you_PRP '
9	_MD also_RB be_VB able_JJ to_TO	use_VB ' _`` slang_FW ' _" English_NNP , _, the_DT implied_VBN
10	_DT interviews_NNS on_IN why_WRB they_PRP	use_VBP English_JJ online_NN , _, but_CC it_PRP
11	_DT unanimous_JJ response_NN that_IN they_PRP	use_VBP English_NNP in_IN university_NN lectures_NNS
12	_JJ as_IN where_WRB Cantonese_JJ speakers_NNS	use_VBP English_NNP online_RB to_TO express_VB
13	_NN by_IN explaining_VBG that_IN they_PRP	use_VBP English_NNP with_IN them_PRP ' _" beyond_IN
14	_RB that_DT 's_RB why_WRB I_PRP	use_VBP English_NNP ... _: er_UH I_PRP wo_MD
15	_JJ Malay_JJ identity_NN . _. Alternatively_RB , _,	using_VBG English_NNP may_MD simply_RB represent_VB
16	_DT educators_NNS have_VBP deferred_VBN to_IN	using_VBG English_NNP as_IN the_DT language_NN
17	understand_VB she_PRP sought_VBD clarification_NN	using_VBG English_NNP . _. In_IN this_DT sense_NN , _,
18	_VBD that_IN those_DT CLIL_NNP strands_VBZ	using_VBG English_NNP as_IN a_DT vehicular_JJ
19	_IN Malay_NNP youths_NNS prefer_VBP to_TO	speak_VB English_NNP rather_RB than_IN Bahasa_NNP
20	do_VBP n't_RB want_VB to_TO	speak_VB English_NNP with_IN someone_NN who_WP
21	Mandarin_NNP] _-RRB- , _, then_RB I_PRP will_MD	speak_VB English_NNP to_IN her_PRP . _. If_IN
22	Asian_JJ residents_NNS ' _POS inability_NN to_TO	speak_VB English_NNP whereas_IN contemporary_JJ research_NN
23	_NN . _. The_DT man_NN does_VBZ not_RB	speak_VB English_NNP . _. The_DT guide_NN works_VBZ
24	_NN , _, there_EX are_VBP students_NNS who_WP	speak_VBP English_NNP only_RB and_CC none_NN
25	_JJ feels_VBZ misunderstood_NN when_WRB she_PRP	speaks_VBZ English_NNP . _. At_IN some_DT time_NN

26	_IN the_DT mothers_NNS who_WP all_DT	spoke_VBD English_NNP fluently_RB (_-LRB- except_IN Fernanda_
27	_VBD me_PRP that_IN he_PRP uses_VBZ	spoken_VBN English_JJ words_NNS occasionally_RB with_IN
28	al_NNP ._NNP 1996_CD)_-RRB- . _. Access_NN to_IN	spoken_VBN English_NNP through_IN technological_JJ aids_NNS
29	_VBN signs_NNS that_WDT correspond_VBP to_IN	spoken_VBN English_NNP grammar_NN . _. Sometimes_RB this_DT
30	_NNP , _, Mother_NNP Gloria_NNP used_VBD both_DT	spoken_VBN English_NNP and_CC Spanish_JJ alongside_IN
31	_VB what_WP she_PRP wanted_VBD in_IN	spoken_VBN English_NNP or_CC Spanish_NNP , _, she_PRP
32	en_NNS ‘_`` drop_NN signs_NNS , _, ’_'' acquire_VB	spoken_VBN English_NNP , _, and_CC are_VBP mainstreamed_VBN
33	_CC SEE_NNP sign_NN , _, or_CC sign_NN	supported_VBD English_NNP , _, as_IN ‘_`` equally_RB valid_JJ ’_''
34	BD interpretation_NN . _. She_PRP used_VBD sign_NN	supported_VBD English_NNP in_IN the_DT interpretation_NN (_-
35	JJ sense_NN to_TO combine_VB sign_NN	supported_VBD English_NNP with_IN Spanish_NNP)_-RRB- , _, just_
36	_IN ASL_NNP , _, or_CC even_RB sign_NN	supported_VBD English_NNP . _. Children_NNS from_IN Latino_NNP
37	_NNP Sign_NNP Language_NNP , _, and_CC sign_NN	supported_VBN English_NNP)_-RRB- , _, navigate_VBP these_DT cultural_
38	_IN communication_NN is_VBZ called_VBN sign_NN	supported_VBN English_NNP , _, as_IN the_DT objective_NN
39	JJ -_JJ bilingual_JJ method_NN , _, sign_NN -_HYPH	supported_VBN English_NNP , _, or_CC SEE_NNP -_HYPH sign_

Table 23. Concordance line adjective and *Englishes* in *Applied Linguistics*

1	multifactorial_JJ studies_NNS of_IN non_JJ -_JJ	native_JJ Englishes_NNP (_-LRB- Deshors_NNP 2016_CD)_-RRB- and_
2	across_IN native_JJ and_CC non_JJ -_JJ	native_JJ Englishes_NNPS . _. Verbs_NNS denoting_VBG abstract_JJ

APPENDIX 2

Concordance line from *The Modern Language Journal*

Table 24. Concordance line adjective and *language* in *The Modern Language Journal*

1	_NN of_IN English_NNP as_IN a_DT	foreign_JJ language_NN (_-LRB- EFL_NNP)_-RRB- curricula_NN
2	)_-RRB- pointed_VBD out_RP ,_, second_JJ and_CC	foreign_JJ language_NN teachers_NNS who_WP engage_VBP
3	_NN examines_VBZ the_DT situation_NN of_IN	foreign_JJ language_NN learners_NNS with_IN a_DT
4	_IN their_PRP$ equal_JJ rights_NNS in_IN	foreign_JJ language_NN education_NN by_IN exploring_VBG
5	_NN in_IN English_NNP as_IN a_DT	foreign_JJ language_NN (_-LRB- EFL_NNP)_-RRB-._. Through_IN
6	_VBZ like_IN to_TO learn_VB a_DT	foreign_JJ language_NN one_NN does_VBZ not_RB
7	_NN is_VBZ particularly_RB relevant_JJ in_IN	foreign_JJ language_NN teaching_NN ,_, which_WDT by_IN
8	_JJ study_NN ,_, English_NNP is_VBZ a_DT	foreign_JJ language_NN ,_, an_DT L3_NNS that_WDT
9	_VBD to_TO have_VB experience_NN in_IN	foreign_JJ language_NN learning_NN ._. The_DT survey_NN
10	_IN me_PRP to_TO learn_VB a_DT	foreign_JJ language_NN ._. 2_LS ._LS Instrumentality_NN (_-LRB- 4_CD
11	_JJ value_NN of_IN knowing_VBG a_DT	foreign_JJ language_NN ._. Example_NN :_: Deaf_NNP people_NNS
12	_CC approaches_NNS are_VBP preferred_VBN in_IN	foreign_JJ language_NN learning_NN by_IN deaf_JJ
13	_NNS who_WP are_VBP learning_VBG a_DT	foreign_JJ language_NN in_IN order_NN to_TO
14	_MD play_VB in_IN using_VBG the_DT	foreign_JJ language_NN per_IN se_FW ._. It_PRP
15	_NNS sign_NN languages_NNS play_VBP in_IN	foreign_JJ language_NN learning_NN for_IN deaf_JJ
16	_NN to_TO take_VB part_NN in_IN	foreign_JJ language_NN education_NN whether_IN they_PRP
17	severely_RB hard_RB -_HYPH of_RB hearing_VBG	foreign_JJ language_NN learners_NNS ._. At_IN micro_JJ
18	_DT solid_JJ L1_NN throughout_IN their_PRP$	foreign_JJ language_NN learning_NN career_NN ._. Deaf_NNP
19	RP$ participants_NNS ,_, functions_NNS as_IN a_DT	foreign_JJ language_NN ,_, and_CC using_VBG it_PRP
20	_RB hard_JJ -_HYPH of_IN -_HYPH hearing_VBG	foreign_JJ language_NN learners_NNS than_IN meets_VBZ
21	exts_NNS investigated_VBN ._. Teaching_VBG the_DT	foreign_JJ language_NN should_MD be_VB coupled_VBN

22	_VBG practices_NNS in_IN second_JJ and_CC	foreign_JJ language_NN learning_NN contexts_NNS as_IN
23	_VBG down_RP the_DT barriers_NNS between_IN	foreign_JJ language_NN education_NN and_CC bilingual_JJ
24	_NNS of_IN English_NNP as_IN a_DT	foreign_JJ language_NN (_-LRB- EFL_NNP)_-RRB- ._. Motivated_VBN
25	_RB and_CC effectively_RB in_IN a_DT	foreign_JJ language_NN ”_" (_-LRB- p._NN 13_CD)_-RRB- ._. Thus_
26	_VBG taught_VBN English_NNP as_IN a_DT	foreign_JJ language_NN (_-LRB- TEFL_NNP)_-RRB- at_IN
27	_IN choosing_VBG to_TO specialize_VB in_IN	foreign_JJ language_NN study_NN at_IN university_NN ,_,
28	_JJ one_CD who_WP has_VBZ a_DT	foreign_JJ language_NN ._. More_RBR usually_RB ,_, participants_NNS
29	_NNS of_IN Spanish_NNP as_IN a_DT	foreign_JJ language_NN who_WP used_VBD a_DT
30	)_-RRB- ,_, or_CC prior_JJ experience_NN with_IN	foreign_JJ language_NN instruction_NN ._. As_IN a_DT
31	WRB learning_VBG more_JJR than_IN one_CD	foreign_JJ language_NN simultaneously_RB ._. A_DT special_JJ
32	-_HYPH old_JJ students_NNS learning_VBG a_DT	foreign_JJ language_NN in_IN the_DT Hungarian_JJ
33	_NNP as_IN the_DT most_RBS important_JJ	foreign_JJ language_NN but_CC also_RB as_IN
34	want_VBP to_TO use_VB [_-LRB- a_DT	foreign_JJ language_NN]_-RRB- and_CC have_VB a_
35	_NN labeled_VBN wanting_VBG to_TO use_VB	foreign_JJ language_NN skills_NNS in_IN future_JJ
36	_VBP developed_VBN and_CC validated_VBD a_DT	foreign_JJ language_NN boredom_NN scale_NN ,_, providing_VBG
37	ion_NNP ,_, 2017_CD)_-RRB- ._. Research_NN on_IN	foreign_JJ language_NN (_-LRB- FL_NNP)_-RRB- acquisition_NN ,_,
38	_VBG in_IN the_DT misinterpretation_NN of_IN	second_JJ language_NN (_-LRB- L2_NNP)_-RRB- learners_NNS ’_
39	_NN ._. Spoken_JJ communication_NN in_IN a_DT	second_JJ language_NN (_-LRB- L2_NNP)_-RRB- therefore_RB
40	_NNS for_IN both_DT first_JJ and_CC	second_JJ language_NN (_-LRB- L2_NN)_-RRB- readers_NNS (_-
41	_NNP ON_IN THE_DT topic_NN of_IN	second_JJ language_NN learning_NN (_-LRB- L2_NNP)_-RRB-
42	)_-RRB- ,_, but_CC only_RB recently_RB have_VBP	second_JJ language_NN acquisition_NN (_-LRB- SLA_NNP)_-RRB-
43	hallenged_VBN monolingual_JJ ideologies_NNS in_IN	second_JJ language_NN (_-LRB- L2_NN)_-RRB- learning_VBG
44	riticized_VBD monolingual_JJ ideologies_NNS in_IN	second_JJ language_NN acquisition_NN (_-LRB- SLA_NNP)_-RRB-
45	_IN a_DT reliable_JJ measure_NN for_IN	second_JJ language_NN (_-LRB- L2_NN)_-RRB- writing_VBG
46	_NN Chinese_JJ English_NNP as_IN a_DT	second_JJ language_NN (_-LRB- ESL_NNP)_-RRB- students_NNS
47	_NN teaching_NN are_VBP devoted_VBN to_IN	second_JJ language_NN (_-LRB- L2_NNP)_-RRB- vocabulary_JJ
48	_NNS in_IN the_DT literature_NN include_VBP	second_JJ language_NN identity_NN (_-LRB- Benson_NNP et_

49	(_-LRB- 2013 _CD) _-RRB- proposed _VBD that _IN “ _``	second _JJ language _NN identity _NN refers _VBZ to _IN
50	_NN or _CC use _NN of _IN a _DT	second _JJ language _NN ” _" (_-LRB- p. _NN 28 _CD) _-RRB- . _. Fuller _
51	_NNS in _IN an _DT additional _JJ or _CC	second _JJ language _NN . _. Lyster _NNP (_-LRB- 2007 _CD) _-RRB- conclud
52	BP offered _VBN comprehensive _JJ reviews _NNS of _IN	second _JJ language _NN (_-LRB- L2 _NNP) _-RRB- research _NN (_-
53	D) _-RRB- employed _VBD the _DT ‘ _`` instructed _VBN	second _JJ language _NN vocabulary _NN learning _NN ’ _" label _NN , _,
54	_IN the _DT fact _NN that _IN instructed _VBD	second _JJ language _NN acquisition _NN (_-LRB- ISLA _NNP) _-RRB-
55	_JJ lack _NN of _IN research _NN on _IN	second _JJ language _NN (_-LRB- L2 _NNP) _-RRB- acquisition _NN
56	_NN of _IN English _NNP as _IN a _DT	second _JJ language _NN (_-LRB- L2 _NN) _-RRB- and _CC
57	: Ortega _NNP , _, 2013 _CD) _-RRB- turns _VBZ in _IN	second _JJ language _NN acquisition _NN (_-LRB- SLA _NNP) _-RRB-
58	_NN to _TO analyze _VB how _WRB a _DT	second _JJ language _NN (_-LRB- L2 _NN) _-RRB- and _CC
59	_NN in _IN emotion _NN research _NN in _IN	second _JJ language _NN (_-LRB- L2 _NN) _-RRB- learning _NN
60	_IN research _NN on _IN emotions _NNS and _CC	second _JJ language _NN acquisition _NN (_-LRB- SLA _NNP) _-RRB-
61	._NNP ,_, 2010 _CD) _-RRB- ._. BOREDOM _NNP AND _CC	SECOND _JJ LANGUAGE _NN LEARNING _NN The _DT prevalence _NN
62	_IN grammatical _JJ development _NN of _IN a _DT	second _JJ language _NN or _CC FL _NNP (_-LRB- French _
63	_VBN on _IN the _DT experiences _NNS and _CC	second _JJ language _NN (_-LRB- L2 _NNP) _-RRB- development _NN
64	_IN research _NN studies _NNS focussing _VBG on _IN	second _JJ language _NN (_-LRB- L2 _NNP) _-RRB- spoken _VBD
65	les _NNS , _, including _VBG coordinators _NNS for _IN	second _JJ language _NN acquisition _NN , _, EBLs _NNPS , _, world _NN
66	_DT tertiary _JJ level _NN . _. EMOTIONS _NNS IN _IN	SECOND _JJ LANGUAGE _NNP ACQUISITION _NN There _EX has _VBZ
67	surement _NN is _VBZ necessary _JJ . _. MEASURING _VBG	SECOND _JJ LANGUAGE _NNP TASK _NNP - _HYPH BASED _VBN PERFORMANCE _
68	_IN Education _NNP for _IN use _NN as _IN	English _JJ language _NN teaching _NN materials _NNS in _IN
69	des _NNS 1 _CD , _, 2 _CD , _, and _CC 12 _CD because _IN	English _JJ language _NN courses _NNS are _VBP optional _JJ
70	learners _NNS ’ _" attitudes _NNS toward _IN the _DT	English _JJ language _NN and _CC English _NNP - _HYPH speaking _
71	_NN in _IN English _NNP , _, and _CC access _NN	English _JJ language _NN information _NN on _IN the _DT
72	of _IN - _HYPH hearing _NN students _NNS gain _VB	English _JJ language _NN skills _NNS they _PRP can _MD
73	mobility _NN programs _NNS without _IN effective _JJ	English _JJ language _NN education _NN and _CC may _MD
74	_VBD their _PRP$ beliefs _NNS about _IN the _DT	English _JJ language _NN , _, how _WRB it _PRP should _MD

75	had_VBD completed_VBN 4_CD years_NNS of_IN	English_JJ language_NN education_NN at_IN the_DT
76	_DT home_NN culture_NN , _ , and_CC on_IN	English_JJ language_NN practices_NNS could_MD provide_VB
77	- _JJ immersion_JJ peers_NNS in_IN their_PRP$	English_JJ language_NN skills_NNS and_CC mathematics_NNS (_ -
78	_NNS of_IN programs_NNS in_IN supporting_VBG	English_JJ language_NN development_NN of_IN students_NNS
79	_IN in_IN many_JJ Asian_JJ countries_NNS , _ ,	English_JJ language_NN instruction_NN for_IN child_NN
80	_WP was_VBD incorrectly_RB labeled_VBN an_DT	English_JJ language_NN learner_NN despite_IN being_VBG
81	VBN methods_NNS for_IN demonstrating_VBG world_NN	language_NN and_CC English_JJ language_NN proficiency_NN (_ -
82	_VBN undertaken_VBN more_RBR widely_RB by_IN	first_JJ language_NN (_-LRB- L1_NNP) _-RRB- studies_NNS
83	tonen_NN , _ , 2018_CD) _-RRB- suggests_VBZ that_IN	first_JJ language_NN (_-LRB- L1_NNP) _-RRB- and_CC
84	an_NNP , _ , the_DT respondents_NNS ’ _ " shared_VBD	first_JJ language_NN . _ . Interviews_NNS lasted_VBD over_IN 60
85	_VBN linguistic_JJ system_NN in_IN a_DT	first_JJ language_NN (_-LRB- L1_NNP) _-RRB- . _ . Svartholm_NNP (_ -
86	B- 1994_CD) _-RRB- argues_VBZ that_IN the_DT “ _ ``	first_JJ language_NN must_MD be_VB a_DT
87	(_-LRB- 2001_CD) _-RRB- point_NN out_RP , _ , a_DT	first_JJ language_NN can_MD not_RB be_VB
88	_NNS ’s_POS use_NN of_IN their_PRP$	first_JJ language_NN can_MD lead_VB to_IN
89	_IN (_-LRB- i.e._FW , _ , English_NNP , _ , her_PRP$	first_JJ language_NN [_XX L1_NN] _-RRB-) _-RRB- . _ . However_
90	) _-RRB- across_IN learners_NNS from_IN various_JJ	first_JJ language_NN (_-LRB- L1_NNP) _-RRB- backgrounds_NNS . _ .
91	due_IN to_IN adult_NN learners_NNS ’_POS	first_JJ language_NN (_-LRB- L1_NNP) _-RRB- , _ , cognitive_JJ
92	_DT focal_JJ phrase_NN into_IN his_PRP$	first_JJ language_NN and_CC to_TO save_VB
93	_VB its_PRP$ meaning_NN in_IN his_PRP$	first_JJ language_NN (_-LRB- Excerpt_NNP 2_CD) _-RRB- . _ . The_
94	_IN the_DT participating_VBG children_NNS ’s_POS	first_JJ language_NN (_-LRB- L1)—thus_NNP more_JJR
95	_NNS completing_VBG tasks_NNS in_IN their_PRP$	first_JJ language_NN (_-LRB- L1_NNP) _-RRB- and_CC

Table 25. Concordance line adjective and *languages* in *The Modern Language Journal*

1	, Ukrainian_NNP , _ , Uzbek_NNP , _ , and_CC seven_CD	other_JJ languages_NNS . _ . None_NN of_IN the_DT
2	_JJ that_IN they_PRP also_RB knew_VBD	other_JJ languages_NNS such_JJ as_IN French_NNP , _ ,
3	_JJ or_CC linguistic_JJ studies_NNS , _ , or_CC	other_JJ languages_NNS (_ -LRB- e.g._RB , _ , German_NNP) _ -
4	) _ -RRB- I_PRP feel_VBP that_IN speaking_VBG	other_JJ languages_NNS makes_VBZ me_PRP unique_JJ , _ ,
5	_CC no_DT knowledge_NN of_IN any_DT	other_JJ languages_NNS (_ -LRB- see_VB threshold_NN described_
6	_JJ and_CC school_NN knowledge_NN of_IN	other_JJ languages_NNS is_VBZ virtually_RB inevitable_JJ
7	IN accidentally_RB borrowed_VBN words_NNS from_IN	other_JJ languages_NNS . _ . However_RB , _ , since_IN there_EX
8	_NN on_IN the_DT learning_NN of_IN	other_JJ languages_NNS by_IN secondary_JJ school_NN
9	_NNS for_IN both_CC English_NNP and_CC	other_JJ languages_NNS emerge_VBP and_CC form_VB
10	_VBG English_NNP to_IN speakers_NNS of_IN	other_JJ languages_NNS (_ -LRB- TESOL_NN) _ -RRB- . _ . The_DT
11	_IN instruction_NN in_IN schools_NNS , _ , and_CC	other_JJ languages_NNS are_VBP not_RB consistently_RB
12	NN of_IN the_DT SoBL_NNP to_IN	other_JJ languages_NNS , _ , students_NNS and_CC families_NNS
13	) _ -RRB- had_VBD no_DT knowledge_NN of_IN	additional_JJ languages_NNS other_JJ than_IN their_PRP$
14	_VBD studied_VBN one_CD or_CC more_RBR	additional_JJ languages_NNS including_VBG French_JJ , _ , Russian_JJ , _ ,
15	_NN of_IN one_CD or_CC more_RBR	additional_JJ languages_NNS , _ , and_CC an_DT associated_JJ
16	_NNS learning_VBG English_NNP and_CC other_JJ	additional_JJ languages_NNS (_ -LRB- Henry_NNP , _ , 2011_CD) _ -RRB- , _ , Hen
17	_TO learn_VB or_CC further_RB develop_VB	additional_JJ languages_NNS . _ . These_DT ranged_VBD from_IN
18	_JJ to_TO learn_VB and_CC use_VB	additional_JJ languages_NNS , _ , so_IN as_IN to_TO
19	_RB involve_VB two_CD new_JJ or_CC	additional_JJ languages_NNS rather_RB than_IN one_CD . _ .
20	_NNS from_IN diverse_JJ backgrounds_NNS learn_VBP	additional_JJ languages_NNS and_CC make_VB sense_NN
21	shows_VBZ that_IN multilinguals_NNS acquiring_VBG	additional_JJ languages_NNS tend_VBP to_TO draw_VB
22	_NNS and_CC speakers_NNS of_IN less_JJR	common_JJ languages_NNS , _ , this_DT study_NN probes_VBZ
23	NNPS — _ : particularly_RB users_NNS of_IN less_RBR	common_JJ languages_NNS — _ : had_VBD access_NN to_IN
24	_IN SoBL_NNP implementation_NN for_IN less_RBR	common_JJ languages_NNS . _ . In_IN Walsh_NNP and_CC
25	_IN a_DT small_JJ subset_NN of_IN	common_JJ languages_NNS . _ . For_IN Walsh_NNP , _ , the_DT

26	_PRP for_IN those_DT really_RB less_RBR	common_JJ languages_NNS ._. (_-LRB- Interview_NNP ,_, 8_CD June_NNP 2
27	_IN designing_VBG assessments_NNS for_IN less_RBR	common_JJ languages_NNS and_CC partnering_NN to_TO
28	-_HYPH based_VBN assessments_NNS in_IN less_RBR	common_JJ languages_NNS ,_, collaborating_VBG with_IN state_NN

Table 26. Concordance line adjective and *study* in *The Modern Language Journal*

1	_RB the_DT EIT_NNP measures_NNS ,_, the_DT	present_JJ study_NN aimed_VBN to_TO explore_VB
2	_DT EIT_NNP used_VBN in_IN the_DT	present_JJ study_NN (_-LRB- Serafini_NNP and_CC Sanz_
3	_RB the_DT EIT_NNP measures_NNS ,_, the_DT	present_JJ study_NN explored_VBD the_DT predictive_JJ
4	_IN and_CC participated_VBD in_IN the_DT	present_JJ study_NN ._. At_IN the_DT time_NN
5	_NNP also_RB participated_VBD in_IN the_DT	present_JJ study_NN and_CC were_VBD included_VBN
6	level_NN increases_NNS ._. DISCUSSION_UH The_DT	present_JJ study_NN investigated_VBD the_DT relative_JJ
7	_TO note_VB that_IN ,_, in_IN the_DT	present_JJ study_NN ,_, accuracy_NN (_-LRB- i.e._FW ,_,
8	_NN ,_, respectively_RB ._. Overall_RB ,_, the_DT	present_JJ study_NN is_VBZ consistent_JJ with_IN
9	_NNS AND_CC FUTURE_JJ DIRECTIONS_NNS The_DT	present_JJ study_NN investigated_VBD the_DT relative_JJ
10	_NNS ._. The_DT results_NNS of_IN the_DT	present_JJ study_NN also_RB encourage_VBP future_JJ
11	B-_, ,_, among_IN others_NNS ._. Although_IN the_DT	present_JJ study_NN explored_VBD the_DT overarching_JJ
12	_DT questions_NNS posed_VBN in_IN the_DT	present_JJ study_NN using_VBG different_JJ methodological_JJ
13	proficiency_NN ._. In_IN particular_JJ ,_, the_DT	present_JJ study_NN 's_POS inclusion_NN of_IN
14	VBN performance_NN ._. Nevertheless_RB ,_, the_DT	present_JJ study_NN ,_, like_IN Kim_NNP et_UH
15	_RB beginner_NN L2_NN learners_NNS ._. THE_DT	PRESENT_JJ STUDY_NN The_DT present_JJ study_NN
16	_NNS ._. THE_DT PRESENT_JJ STUDY_NN The_DT	present_JJ study_NN advances_VBZ previous_JJ L2_NNP
17	-RRB-._. The_DT difference_NN between_IN the_DT	present_JJ study_NN and_CC Wang_NNP et_NNP
18	_NNP speakers_NNS tested_VBN in_IN the_DT	present_JJ study_NN with_IN over_IN 140_CD hours_
19	_VBD not_RB observed_VBN in_IN the_DT	present_JJ study_NN ,_, we_PRP see_VBP no_DT
20	IN results_NNS ._. In_IN conclusion_NN ,_, the_DT	present_JJ study_NN demonstrated_VBD that_IN explicit_JJ
21	_NNS that_WDT participants_NNS in_IN the_DT	present_JJ study_NN mentioned_VBN as_IN contributing_VBG

22	_NN learning_VBG to_TO happen_VB . _. The_DT	present_JJ study_NN has_VBZ been_VBN a_DT
23	_VBP the_DT context_NN of_IN the_DT	present_JJ study_NN , _, English_NNP is_VBZ a_DT
24	_NNP . _. The_DT research_NN questions_VBZ the_DT	present_JJ study_NN aims_VBZ to_TO answer_VB
25	_RB , _, the_DT findings_NNS of_IN the_DT	present_JJ study_NN contribute_VB to_IN our_PRP$
26	G a_DT sociocultural_JJ perspective_NN , _, the_DT	present_JJ study_NN introduces_VBZ the_DT concept_NN
27	_IN dynamic_JJ glosses_NNS in_IN the_DT	present_JJ study_NN has_VBZ been_VBN operationalized_VBN
28	bulary_JJ learning_NN . _. Therefore_RB , _, the_DT	present_JJ study_NN contributes_VBZ to_IN the_DT
29	_DT major_JJ aim_NN of_IN the_DT	present_JJ study_NN is_VBZ to_TO investigate_VB
30	IN dynamic_JJ glosses_NNS in_IN the_DT	present_JJ study_NN is_VBZ based_VBN on_IN
31	_NNS . _. With_IN regard_NN to_IN the_DT	present_JJ study_NN , _, dynamic_JJ glosses_NNS are_VBP
32	NNPS As_IN mentioned_VBN previously_RB , _, the_DT	present_JJ study_NN extends_VBZ the_DT application_NN
33	NNP through_IN mobile_JJ technology_NN . _. The_DT	present_JJ study_NN is_VBZ an_DT attempt_NN
34	bulary_NN . _. More_RBR specifically_RB , _, the_DT	present_JJ study_NN intends_VBZ to_TO offer_VB
35	) _-RRB- is_VBZ used_VBN in_IN the_DT	present_JJ study_NN to_TO represent_VB the_DT
36	) _-RRB- is_VBZ used_VBN in_IN the_DT	present_JJ study_NN to_TO refer_VB to_IN
37	_IN mobile_JJ technology_NN in_IN the_DT	present_JJ study_NN was_VBD implemented_VBN as_IN
38	_VBG research_NN questions_NNS guide_VBP the_DT	present_JJ study_NN : _: RQ1_NNP . _. Does_VBZ mobile_NN -_
39	_VBD the_DT participants_NNS for_IN the_DT	present_JJ study_NN included_VBD 56_CD students_NNS among_
40	_VBN DG_NNP sessions_NNS . _. Design_NN The_DT	present_JJ study_NN adopted_VBD an_DT experimental_JJ
41	_TO choose_VB from_IN in_IN the_DT	present_JJ study_NN to_TO eliminate_VB any_DT
42	et_NN al_NNP . _NNP , _, 2015_CD) _-RRB- , _, the_DT	present_JJ study_NN used_VBD a_DT human_JJ
43	_VBG exchanges_NNS retrieved_VBN from_IN the_DT	present_JJ study_NN database_NN indicate_VBP how_WRB
44	_NN was_VBD operationalized_VBN in_IN the_DT	present_JJ study_NN : _: EXCERPT_NNP 1_CD Learner_NN : _: [_ -LRB-
45	_NN was_VBD operationalized_VBN in_IN the_DT	present_JJ study_NN . _. The_DT Nondynamic_NNP Glossing_NNP
46	ventional_JJ testing_NN . _. DISCUSSION_UH The_DT	present_JJ study_NN aimed_VBN at_IN investigating_VBG
47	_NNP as_IN operationalized_VBN in_IN the_DT	present_JJ study_NN in_IN line_NN with_IN
48	instruments_NNS . _. Similarly_RB , _, in_IN the_DT	present_JJ study_NN , _, learners_NNS ’_POS vocabulary_NN learning_

49	_JJ . _ . The_DT results_NNS of_IN the_DT	present_JJ study_NN are_VBP thus_RB consistent_JJ
50	_VBG the_DT results_NNS of_IN the_DT	present_JJ study_NN is_VBZ why_WRB dynamic_JJ
51	_NNS as_IN shown_VBN in_IN the_DT	present_JJ study_NN can_MD be_VB attributed_VBN
52	_DT dynamic_JJ glosses_NNS in_IN the_DT	present_JJ study_NN stimulated_VBN learners_NNS ’_POS developmenta
53	_IN the_DT results_NNS of_IN the_DT	present_JJ study_NN provide_VBP evidence_NN that_IN
54	_NNP as_IN operationalized_VBN in_IN the_DT	present_JJ study_NN requires_VBZ more_JJR time_NN
55	_WDT the_DT results_NNS of_IN the_DT	present_JJ study_NN can_MD be_VB justified_VBN
56	practical_JJ values_NNS . _ . However_RB , _ , the_DT	present_JJ study_NN utilized_VBD a_DT social_JJ
57	MD argue_VB that_IN since_IN the_DT	present_JJ study_NN did_VBD not_RB implement_VB
58	DT methodology_NN used_VBN in_IN the_DT	present_JJ study_NN makes_VBZ it_PRP possible_JJ
59	age_NN classrooms_NNS . _ . Therefore_RB , _ , the_DT	present_JJ study_NN suggested_VBD a_DT framework_NN
60	_NNS The_DT results_NNS of_IN the_DT	present_JJ study_NN revealed_VBD that_IN mobile_NN -_
61	_RB , _ , the_DT results_NNS of_IN the_DT	present_JJ study_NN have_VBP several_JJ implications_NNS
62	_NN . _ . Another_DT limitation_NN of_IN the_DT	present_JJ study_NN is_VBZ that_IN only_RB
63	_NN is_VBZ to_TO replicate_VB the_DT	present_JJ study_NN and_CC to_TO design_VB
64	_NN AND_CC RESEARCH_NNP QUESTIONS_NNS The_DT	present_JJ study_NN contributes_VBZ to_IN existing_VBG
65	_DT whole_NN . _ . Data_NNS for_IN the_DT	present_JJ study_NN were_VBD obtained_VBN from_IN
66	NP &_CC Malone_NNP , _ , 2018_CD) _-RRB- . _ . The_DT	present_JJ study_NN capitalizes_NNS on_IN the_DT
67	tantial_JJ enrollment_NN increases_NNS . _ . The_DT	present_JJ study_NN found_VBD that_IN DLI_NNP
68	_NN outcomes_NNS . _ . Findings_NNS from_IN the_DT	present_JJ study_NN suggest_VBP that_IN students_NNS ’_
69	_NN learning_NN ’ " label_NN , _ , in_IN the_DT	present_JJ study_NN we_PRP employ_VBP ‘ `` L2_VB
70	al_NNP . _NNP , _ , 2020_CD) _-RRB- . _ . In_IN the_DT	present_JJ study_NN , _ , Nation_NNP ’s_POS framework_NN
71	_NN of_IN vocabulary_NN in_IN the_DT	present_JJ study_NN . _ . Experimental_JJ Designs_NNPS and_CC
72	_JJ designs_NNS , _ , which_WDT in_IN the_DT	present_JJ study_NN subsumes_NNS switching_VBG replications_NNS (_
73	-_HYPH TCom_NNP gss_VBD in_IN the_DT	present_JJ study_NN was_VBD .33_NNP , _ , .62_CD , _ , and_CC .97_
74	_IN Phase_NNP II_CD of_IN the_DT	present_JJ study_NN were_VBD primarily_RB concerned_JJ
75	_DT effect_NN sizes_NNS in_IN the_DT	present_JJ study_NN (_-LRB- see_VB Table_NNP 7_CD) _-

76	_NNP The_DT findings_NNS of_IN the_DT	present_JJ study_NN indicate_VBP that_IN future_JJ
77	_VBG those_DT presented_VBN in_IN the_DT	present_JJ study_NN ,_, are_VBP somewhat_RB influenced_VBN
78	_DT pedagogical_JJ implications_NNS of_IN the_DT	present_JJ study_NN relate_NN to_IN theory_NN
79	_IN our_PRP$ best_JJS intentions_NNS ,_, the_DT	present_JJ study_NN is_VBZ not_RB without_IN
80	,_, and_CC clustering_JJ ._. First_RB ,_, the_DT	present_JJ study_NN focused_VBD on_IN L2_NNP
81	_IN the_DT study_NN ._. CONCLUSION_NN The_DT	present_JJ study_NN involved_VBD a_DT two_CD -_
82	_RB explicitly_RB quantified_VBN in_IN the_DT	present_JJ study_NN —_: allowed_VBD each_DT learner_NN
83	trol_NN conditions_NNS ._. CONCLUSIONS_NNS The_DT	present_JJ study_NN proposes_VBZ a_DT novel_JJ
84	RB ,_, the_DT findings_NNS of_IN the_DT	present_JJ study_NN highlight_VB the_DT need_NN
85	_VBN in_IN L3_NNP motivation_NN ,_, the_DT	present_JJ study_NN begins_VBZ by_IN expanding_VBG
86	_NNP research_NN ._. In_IN response_NN ,_, the_DT	present_JJ study_NN attempts_NNS to_TO explore_VB
87	-LRB- including_VBG boredom_NN)_-RRB- ,_, the_DT	present_JJ study_NN sets_VBZ out_RP to_TO
88	_DT theoretical_JJ foundation_NN for_IN the_DT	present_JJ study_NN ._. THE_DT CONTROL_NNP –_: VALUE_NN
89	al_NNP ._NNP ,_, 2018_CD)_-RRB- ._. In_IN the_DT	present_JJ study_NN ,_, boredom_NN was_VBD conceptualized_VBN
90	_NNP ,_, AND_CC HYPOTHESES_NNS OF_IN THE_DT	PRESENT_JJ STUDY_NN The_DT bulk_NN of_IN
91	)_-RRB- ._. Highly_RB germane_NN to_IN the_DT	present_JJ study_NN ,_, to_IN my_PRP$ best_JJS
92	_NNS in_IN previous_JJ literature_NN ,_, the_DT	present_JJ study_NN ,_, based_VBN on_IN the_DT
93	ant_JJ pedagogical_JJ implications_NNS ._. The_DT	present_JJ study_NN was_VBD guided_VBN by_IN
94	_NNP academic_JJ context_NN in_IN the_DT	present_JJ study_NN ._. An_DT example_NN item_NN
95	_VBD good_JJ reliability_NN in_IN the_DT	present_JJ study_NN (_-LRB- Cronbach_NNP 's_CD α_
96	_IN English_NNP learning_NN in_IN the_DT	present_JJ study_NN ._. An_DT example_NN item_NN
97	JJ data_NNS sources_NNS in_IN the_DT	present_JJ study_NN ,_, thus_RB avoiding_VBG common_JJ
98	._. Despite_IN the_DT limitations_NNS ,_, the_DT	present_JJ study_NN has_VBZ its_PRP$ theoretical_NN
99	contributions_NNS ._. Theoretically_RB ,_, the_DT	present_JJ study_NN is_VBZ one_CD of_IN
100	_DT qualitative_JJ findings_NNS in_IN the_DT	present_JJ study_NN clearly_RB suggest_VBP a_DT
101	NN jointly_RB ._. Methodologically_NNP ,_, the_DT	present_JJ study_NN adopted_VBD a_DT mixed_JJ
102	_CC qualitative_JJ findings_NNS in_IN the_DT	present_JJ study_NN indicate_VBP that_DT control_NN –_:

103	_NN merits_NNS discussion_NN . _. In_IN the_DT	present_JJ study_NN , _, the_DT two_CD tests_NNS
104	stingly_RB , _, cluster_VB together_RB . _. THE_DT	PRESENT_JJ STUDY_NN Participants_NNS and_CC Setting_VBG
105	10_CD minutes_NNS for_IN this_DT . _. The_DT	present_JJ study_NN focusses_NNS only_RB on_IN
106	_DT main_JJ focus_NN of_IN the_DT	present_JJ study_NN , _, using_VBG cluster_NN analysis_NN , _,
107	_DT research_NN design_NN of_IN the_DT	present_JJ study_NN becomes_VBZ relevant_JJ . _. We_PRP
108	NP Elicited_NNP Imitation_NNP Task_NNP . _. The_DT	current_JJ study_NN employed_VBD the_DT version_NN
109	) _-RRB- was_VBD found_VBN in_IN the_DT	current_JJ study_NN , _, in_IN part_NN due_IN
110	_DT role_NN of_IN PSTM_NNP . _. The_DT	current_JJ study_NN also_RB explored_VBD whether_IN
111	_RB than_IN PSTM_NNP capacity_NN , _, the_DT	current_JJ study_NN confirms_VBZ the_DT reconstructive_JJ
112	DT of_IN the_DT gaps_NNS the_DT	current_JJ study_NN aims_VBZ to_TO help_VB
113	_IN the_DT scope_NN of_IN the_DT	current_JJ study_NN would_MD not_RB allow_VB
114	_DT prime_JJ aim_NN of_IN the_DT	current_JJ study_NN is_VBZ to_TO explore_VB
115	_DT study_NN . _. Proficiency_NN in_IN the_DT	current_JJ study_NN is_VBZ represented_VBN by_IN
116	_IN the_DT purpose_NN of_IN the_DT	current_JJ study_NN , _, we_PRP distinguish_VBP between_IN
117	_VBZ an_DT important_JJ contribution_NN the_DT	current_JJ study_NN is_VBZ aiming_VBG to_TO
118	_IN this_DT section_NN . _. DISCUSSION_UH The_DT	current_JJ study_NN set_VBN out_RP to_TO
119	_NNS The_DT findings_NNS of_IN the_DT	current_JJ study_NN have_VBP important_JJ implications_NNS
120	_NN . _. In_IN this_DT regard_NN , _, the_DT	current_JJ study_NN has_VBZ revealed_VBN interesting_JJ
121	_JJS , _, the_DT findings_NNS of_IN the_DT	current_JJ study_NN have_VBP important_JJ implications_NNS
122	_NN gaps_NNS in_IN mind_NN , _, the_DT	current_JJ study_NN aims_VBZ to_TO systematically_RB
123	_DT methodology_NN used_VBN in_IN the_DT	current_JJ study_NN will_MD help_VB inform_VB
124	DT primary_JJ goal_NN of_IN the_DT	current_JJ study_NN is_VBZ to_TO profile_VB
125	_DT data_NNS used_VBN in_IN the_DT	current_JJ study_NN consist_NN of_IN a_DT
126	_JJ limitations_NNS exist_VBP in_IN the_DT	current_JJ study_NN . _. First_RB , _, we_PRP focused_VBD
127	Freeman_NNP , _, 2019_CD) _-RRB- . _. In_IN the_DT	current_JJ study_NN , _, we_PRP propose_VBP a_DT
128	domaingeneral_JJ dimensions_NNS , _, in_IN the_DT	current_JJ study_NN we_PRP adopt_VBP a_DT
129	_DT six_CD participants_NNS of_IN the_DT	current_JJ study_NN . _. Instruments_NNS were_VBD then_RB

130	_NN of_IN these_DT issues_NNS ,_, the_DT	current_JJ study_NN investigates_VBZ multidialectal_NN and_CC
131	_IN the_DT context_NN of_IN the_DT	current_JJ study_NN (_-LRB- i.e._FW ,_, conversations_NNS -_
132	_NN learners_NNS as_IN in_IN the_DT	current_JJ study_NN ._. Accordingly_RB ,_, this_DT study_NN
133	for_IN -_HYPH learning_NN in_IN the_DT	current_JJ study_NN are_VBP best_RBS considered_VBN
134	_NNS presented_VBN so_RB far_RB ,_, the_DT	current_JJ study_NN explores_VBZ multidialectal_NN and_CC
135	_IN the_DT context_NN of_IN the_DT	current_JJ study_NN ._. CONTEXTS_NNP ,_, DATA_NNP ,_, AND_CC
136	_IN the_DT context_NN of_IN the_DT	current_JJ study_NN ._. In_IN the_DT excerpts_NNS ,_,
137	_IN the_DT one_CD in_IN the_DT	current_JJ study_NN ._. After_RB all_RB ,_, the_DT
138	DT two_CD production_NN modes_NNS ._. The_DT	current_JJ study_NN attempts_NNS to_TO address_VB
139	N early_JJ syntactic_JJ development_NN ._. The_DT	current_JJ study_NN addresses_VBZ these_DT research_NN
140	_NN to_TO complete_VB each_DT task_NN ._.	CURRENT_JJ STUDY_NN :_: RESEARCH_NNP QUESTIONS_NNS AND_CC
141	_VBG research_NN questions_NNS in_IN the_DT	current_JJ study_NN :_: RQ1_NNP ._. Are_VBP there_EX
142	ts_NNS ’_POS sentence_NN production_NN ,_, the_DT	current_JJ study_NN conducted_VBD a_DT corpus_NN -_
143	_IN child_NN L2_NNP acquisition_NN ._. The_DT	current_JJ study_NN provides_VBZ novel_JJ evidence_NN
144	_JJ definitions_NNS at_IN once_RB ._. The_DT	current_JJ study_NN also_RB makes_VBZ use_NN
145	_NN was_VBD operationalized_VBN in_IN the_DT	current_JJ study_NN from_IN both_CC cognitive_JJ
146	_NN ._. The_DT results_NNS of_IN the_DT	current_JJ study_NN are_VBP therefore_RB consistent_JJ
147	nchronous_JJ manner_NN ._. Moreover_RB ,_, the_DT	current_JJ study_NN used_VBD mobile_JJ technology_NN
148	_IN mobile_JJ technology_NN in_IN the_DT	current_JJ study_NN did_VBD not_RB address_VB
149	_IN the_DT scope_NN of_IN the_DT	current_JJ study_NN ,_, in_IN contrast_NN to_IN
150	_IN other_JJ empirical_JJ studies_NNS ,_, the_DT	current_JJ study_NN also_RB suffers_VBZ from_IN
151	_NNS were_VBD absent_JJ in_IN the_DT	current_JJ study_NN ._. In_IN sum_NN ,_, this_DT
152	_VB but_CC a_DT few_JJ ._. The_DT	current_JJ study_NN fits_VBZ into_IN this_DT
153	_IN informed_JJ sample_NN sizes_NNS ._. THE_DT	CURRENT_JJ STUDY_NN The_DT current_JJ study_NN ’
154	_NNS ._. THE_DT CURRENT_JJ STUDY_NN The_DT	current_JJ study_NN ’s_NN aim_NN was_VBD
155	_VBN categorization_NN scheme_NN of_IN this_DT	current_JJ study_NN appears_VBZ to_TO be_VB
156	_IN Phase_NNP II_CD of_IN the_DT	current_JJ study_NN ._. PHASE_NNP II_CD :_: POWER_NN

157	_IN an_DT ongoing_JJ basis_NN . _. The_DT	current_JJ study_NN expands_VBZ on_IN this_DT
158	Wieling_NNP , _, 2016_CD) _-RRB- . _. In_IN the_DT	current_JJ study_NN , _, GAMM_NNP was_VBD performed_VBN
159	T random_JJ effects_NNS . _. DISCUSSION_UH The_DT	current_JJ study_NN corroborates_VBZ the_DT feasibility_NN
160	_NN . _. Considering_VBG that_IN , _, in_IN the_DT	current_JJ study_NN , _, global_JJ levels_NNS of_IN
161	values_NNS and_CC beliefs_NNS) _-RRB- . _. The_DT	current_JJ study_NN aims_VBZ to_TO fill_VB
162	_IN the_DT participants_NNS in_IN the_DT	current_JJ study_NN . _. From_IN these_DT open_JJ -_
163	_NNS . _. Interview_NN questions_NNS for_IN the_DT	current_JJ study_NN were_VBD constructed_VBN to_TO
164	_NNS agreed_VBD to_TO support_VB the_DT	current_JJ study_NN . _. Then_RB , _, the_DT students_NNS
165	section_NN . _. RESEARCH_NNP QUESTIONS_VBZ The_DT	current_JJ study_NN is_VBZ concerned_VBN with_IN
166	NN performance_NN . _. Motivation_NN for_IN the_DT	Current_JJ Study_NNP To_TO inform_VB the_DT
167	_PRP$ knowledge_NN , _, this_DT is_VBZ the_DT	first_JJ study_NN examining_VBG filled_VBN and_CC
168	_NN as_IN this_DT is_VBZ the_DT	first_JJ study_NN examining_VBG fluency_NN across_IN
169	_PRP$ knowledge_NN , _, this_DT is_VBZ the_DT	first_JJ study_NN that_WDT compares_VBZ the_DT
170	_VBZ on_IN two_CD studies_NNS . _. The_DT	first_JJ study_NN examined_VBD the_DT role_NN
171	_DT input_NN conditions_NNS in_IN the_DT	first_JJ study_NN did_VBD not_RB result_VB
172	_DT second_JJ study_NN replicated_VBD the_DT	first_JJ study_NN , _, except_IN that_IN the_DT
173	_DT second_JJ study_NN replicated_VBD the_DT	first_JJ study_NN and_CC examined_VBD whether_IN
174	_IN L2_NN development_NN . _. In_IN a_DT	recent_JJ study_NN , _, Segalowitz_NNP , _, French_NNP , _, and_CC
175	Greenfield_NNP , _, 2004_CD) _-RRB- . _. In_IN a_DT	recent_JJ study_NN , _, Jin_NNP and_CC Lu_NNP (_ -
176	et_NN al_NNP ._NNP , _, 2018_CD) _-RRB- . _. A_DT	recent_JJ study_NN of_IN English_JJ -_HYPH proficient_
177	, _, 2012_CD) _-RRB- . _. According_VBG to_IN a_DT	recent_JJ study_NN (_-LRB- Cox_NNP &_CC Malone_NNP , _, 2018_
178	Brysbaert_NNP , _, 2019_CD) _-RRB- . _. In_IN a_DT	recent_JJ study_NN , _, Tseng_NNP et_NNP al_NNP . _. (_ -
179	2004_CD) _-RRB- . _. However_RB , _, a_DT more_RBR	recent_JJ study_NN showed_VBD a_DT change_NN
180	_VBN made_VBN , _, however_RB . _. In_IN a_DT	recent_JJ study_NN , _, Artamonova_NNP &_CC Androutsopoulos_NNP (_

Table 27. Concordance line adjective and *studies* in *The Modern Language Journal*

1	analysis_NN on_IN this_DT topic_NN)_-RRB- . .	Previous_JJ studies_NNS support_VBP that_IN PSTM_NNP
2	_DT at_IN clause_NN boundaries_NNS because_IN	previous_JJ studies_NNS have_VBP shown_VBN that_IN
3	(_-LRB- RQ2_NNP)_-RRB- . . Consistent_JJ with_IN	previous_JJ studies_NNS that_WDT have_VBP explored_VBN
4	_DT investigation_NN was_VBD motivated_VBN by_IN	previous_JJ studies_NNS that_WDT have_VBP reported_VBN
5	_NNS of_IN a_DT number_NN of_IN	previous_JJ studies_NNS that_WDT have_VBP found_VBN
6	,_, the_DT DELE_NNP)_-RRB- improved_VBD upon_IN	previous_JJ studies_NNS that_WDT have_VBP explored_VBN
7	_NN is_VBZ not_RB inconsistent_JJ with_IN	previous_JJ studies_NNS on_IN generating_VBG vocabulary_JJ
8	_RB confirm_VBP the_DT findings_NNS of_IN	previous_JJ studies_NNS in_IN which_WDT intrinsic_JJ
9	_VBZ necessary_JJ to_TO know_VB English_NNP . .	Previous_JJ studies_NNS on_IN deaf_JJ and_CC
10	2_NN learners_NNS investigated_VBN in_IN the_DT	previous_JJ studies_NNS ,_, and_CC children_NNS typically_RB
11	_VBN as_RB significant_JJ in_IN the_DT	previous_JJ studies_NNS and_CC to_TO drop_VB
12	_NN ,_, the_DT learners_NNS in_IN the_DT	previous_JJ studies_NNS differed_VBN from_IN our_PRP$
13	_DT area_NN largely_RB ignored_VBN by_IN	previous_JJ studies_NNS on_IN L2_NN production_NN . .
14	_NNP ,_, 1999_CD)_-RRB- . . A_DT number_NN of_IN	previous_JJ studies_NNS have_VBP indicated_VBN that_IN
15	)_-RRB- . . One_CD common_JJ feature_NN of_IN	previous_JJ studies_NNS that_WDT examined_VBD the_DT
16	_NN for_IN a_DT long_JJ time_NN . .	Previous_JJ studies_NNS have_VBP mostly_RB investigated_VBN
17	VBN by_IN Poehner_NNP (_-LRB- 2018_CD)_-RRB- ,_,	previous_JJ studies_NNS of_IN DA_NNP either_CC
18	_NN to_IN a_DT number_NN of_IN	previous_JJ studies_NNS that_WDT made_VBD use_NN
19	_NN . . While_IN a_DT number_NN of_IN	previous_JJ studies_NNS have_VBP investigated_VBN different_JJ
20	_VBZ its_PRP$ own_JJ drawbacks_NNS . . As_IN	previous_JJ studies_NNS suggest_VBP (_-LRB- e.g._RB ,_,
21	C Collier_NNP ,_, 2002_CD ,_, 2010_CD)_-RRB- . .	Previous_JJ studies_NNS also_RB suggest_VBP that_IN
22	_TO be_VB estimated_VBN based_VBN on_IN	previous_JJ studies_NNS ’_POS data_NNS ,_, such_JJ as_
23	_NN referencing_VBG effect_NN sizes_NNS from_IN	previous_JJ studies_NNS . . Caution_NN should_MD be_VB
24	_TO consider_VB effect_NN sizes_NNS from_IN	previous_JJ studies_NNS and_CC to_TO power_VB
25	_NN ,_, such_JJ as_IN data_NNS from_IN	previous_JJ studies_NNS . . In_IN Bayesian_NNP analyses_NNS ,_,

26	1_NNP community_NN in_IN later_JJ life_NN ._.	Previous_JJ studies_NNS of_IN third_JJ -_HYPH age_
27	IN INTERACTION_NN AND_CC LANGUAGE_NNP LEARNING_NN	Previous_JJ studies_NNS on_IN smartphone_NN use_NN
28	nson_NNP &_CC Johnson_NNP ,_, 2015_CD)_-RRB- ._.	Previous_JJ studies_NNS of_IN language_NN policy_NN
29	LRB- Honig_NNP ,_, 2006_CD)_-RRB- ._. Whereas_IN	previous_JJ studies_NNS demonstrated_VBD this_DT bottom_NN -_
30	_NN districts_NNS ,_, as_IN this_DT and_CC	previous_JJ studies_NNS have_VBP focused_VBN on_IN
31	_NNS across_IN more_JJR languages_NNS and_CC	studies_NNS ._. Previous_JJ studies_NNS have_VBP all_DT
32	NNP ,_, 2020_CD)_-RRB- ,_, there_EX are_VBP a_DT	few_JJ studies_NNS available_JJ that_WDT can_MD
33	son_NNP &_CC Harrison_NNP ,_, 2014_CD)_-RRB- ._.	Few_JJ studies_NNS have_VBP explored_VBN multilingual_JJ
34	RB- and_CC Kasper_NNP (_-LRB- 2004_CD)_-RRB- ,_,	few_JJ studies_NNS have_VBP considered_VBN multilingual_JJ
35	)_-RRB- ._. So_RB far_RB ,_, only_RB a_DT	few_JJ studies_NNS have_VBP compared_VBN syntactic_JJ
36	_NNS of_IN the_DT two_CD modalities_NNS ,_,	few_JJ studies_NNS have_VBP investigated_VBN how_WRB
37	_TO note_VB that_IN only_RB a_DT	few_JJ studies_NNS in_IN the_DT United_NNP
38	k_NNP ,_, 2015_CD)_-RRB- ._. Additionally_RB ,_,	few_JJ studies_NNS to_IN date_NN have_VBP
39	_, 2009_CD ;_: Mercer_NNP ,_, 2011_CD)_-RRB- ,_,	few_JJ studies_NNS have_VBP incorporated_VBN multiple_JJ
40	academic_JJ emotions_NNS —_: although_IN very_RB	few_JJ studies_NNS have_VBP adopted_VBN the_DT
41	_NNS ._. Empirical_JJ findings_NNS from_IN the_DT	few_JJ studies_NNS conducted_VBN to_IN date_NN
42	of_IN research_NN topic_NN (_-LRB- very_RB	few_JJ studies_NNS on_IN boredom_NN in_IN
43	_VBZ one_CD of_IN the_DT very_RB	few_JJ studies_NNS adopting_VBG the_DT CVT_NNP
44	ne_NNP et_NN al_NNP ._NNP ,_, 2011_CD)_-RRB- ._.	Future_JJ studies_NNS will_MD need_VB to_TO
45	_DT combination_NN of_IN the_DT factors_NNS ._.	Future_JJ studies_NNS will_MD need_VB to_TO
46	_JJ study_NN will_MD help_VB inform_VB	future_JJ studies_NNS with_IN similar_JJ goals_NNS
47	involved_VBD a_DT conversation_NN ._. Thus_RB ,_,	future_JJ studies_NNS need_VBP to_TO control_VB
48	_VBN and_CC spoken_JJ production_NN ._. In_IN	future_JJ studies_NNS ,_, researchers_NNS should_MD consider_VB
49	_VBG activities_NNS ._. We_PRP expect_VBP that_IN	future_JJ studies_NNS using_VBG more_RBR rigorously_RB
50	_IN fluctuations_NNS across_IN timescales_NNS ._.	Future_JJ studies_NNS can_MD help_VB shed_VB
51	of_IN control_NN –_: value_NN antecedents_NNS ._.	Future_JJ studies_NNS using_VBG lab_NN and_CC

Table 28. Concordance line preposition and *learners* in *The Modern Language Journal*

1	_NN of_IN NWR_NNP scores_NNS for_IN	learners_NNS with_IN the_DT lowest_JJS experience_NN
2	_IN the_DT case_NN of_IN L2_NN	learners_NNS with_IN the_DT lowest_JJS experience_NN
3	_RB conditions_VBZ EIT_VBN performance_NN of_IN	learners_NNS with_IN varying_VBG experience_NN levels_NNS . _ .
4	he_DT authors_NNS simultaneously_RB presented_VBD	learners_NNS with_IN the_DT visual_JJ F0_NNP
5	_DT situation_NN of_IN foreign_JJ language_NN	learners_NNS with_IN a_DT profound_JJ or_CC
6	_DT conversations_NNS is_VBZ to_TO provide_VB	learners_NNS with_IN a_DT safe_JJ environment_NN
7	, _ , 1998_CD) -RRB- , _ , demonstrating_VBG that_DT	learners_NNS with_IN higher_JJR proficiency_NN tend_VBP
8	_DT way_NN that_WDT child_NN L2_VBP	learners_NNS with_IN beginning_NN - _HYPH level_NN proficiency_
9	_TO examine_VB data_NNS from_IN younger_JJR	learners_NNS with_IN lower_JJR proficiency_NN levels_NNS
10	_VBN data_NNS from_IN child_NN EFL_NNP	learners_NNS with_IN beginning_NN - _HYPH level_NN proficiency_
11	_VB our_PRP$ participant_JJ pool_NN to_IN	learners_NNS with_IN no_DT immersion_NN experience_NN . _ .
12	_VB this_DT relationship_NN by_IN including_VBG	learners_NNS with_IN different_JJ proficiency_NN levels_NNS
13	_IN reading_NN is_VBZ through_IN providing_VBG	learners_NNS with_IN different_JJ forms_NNS of_IN
14	_DT passive_JJ nature_NN of_IN presenting_VBG	learners_NNS with_IN the_DT glosses_NNS that_WDT
15	ers_NNS ’_POS development_NN by_IN presenting_VBG	learners_NNS with_IN appropriate_JJ mediation_NN in_IN
16	BG vocabulary_JJ learning_NN by_IN presenting_VBG	learners_NNS with_IN mediation_NN and_CC graduated_VBN
17	_NN instead_RB of_IN providing_VBG the_DT	learners_NNS with_IN the_DT correct_JJ definitions_NNS
18	_VB DG_NNP and_CC to_TO present_VB	learners_NNS with_IN dynamic_JJ glosses_NNS during_IN
19	_JJ technology_NN for_IN presenting_VBG L2_NN	learners_NNS with_IN glosses_NNS for_IN unfamiliar_JJ
20	_DT method_NN for_IN presenting_VBG L2_NN	learners_NNS with_IN mobile_NN - _HYPH mediated_VBN textual_
21	_NNP studies_NNS that_WDT presented_VBD the_DT	learners_NNS with_IN several_JJ options_NNS before_IN
22	_NN prompt_NN , _ , which_WDT provided_VBD the_DT	learners_NNS with_IN minimal_JJ mediation_NN (_ -LRB- i.
23	_IN other_JJ studies_NNS that_WDT provided_VBD	learners_NNS with_IN ZPD_NNP - _HYPH sensitive_JJ and_
24	_NNP in_IN terms_NNS of_IN providing_VBG	learners_NNS with_IN appropriate_JJ mediation_NN , _ , which_WDT
25	_DT findings_NNS imply_VBP that_IN presenting_VBG	learners_NNS with_IN glosses_NNS , _ , and_CC in_IN

26	_IN lexical_JJ richness_NN insofar_RB as_IN	learners_NNS with_IN years_NNS of_IN education_NN
27	_IN the_DT training_NN and_CC that_IN	learners_NNS with_IN low_JJ L1_NNP fluency_NN
28	_DT group_NN of_IN adult_NN L2_NN	learners_NNS with_IN emerging_VBG literacy_NN and_CC
29	_DT number_NN of_IN adult_NN L2_NN	learners_NNS with_IN emerging_VBG literacy_NN is_VBZ
30	_IN technology_NN by_IN adult_NN L2_NN	learners_NNS with_IN emerging_VBG literacy_NN has_VBZ
31	_DT importance_NN of_IN equipping_VBG L2_NN	learners_NNS with_IN methods_NNS for_IN producing_VBG
32	_VBZ known_VBN about_IN how_WRB L2_NN	learners_NNS with_IN emerging_VBG literacy_NN use_VBP
33	_NN . _. In_IN particular_JJ , _, for_IN L2_NN	learners_NNS with_IN emerging_VBG literacy_NN , _, the_DT
34	NN feature_NN is_VBZ supportive_JJ for_IN	learners_NNS with_IN emerging_VBG literacy_NN (_-LRB- see_
35	VBN institutionally_RB identified_VBN as_IN L2_NN	learners_NNS with_IN emerging_VBG literacy_NN . _. This_DT
36	_JJ competencies_NNS of_IN adult_NN L2_NN	learners_NNS with_IN emerging_VBG literacy_NN instead_RB
37	_DT teaching_NN is_VBZ to_TO equip_VB	learners_NNS with_IN competencies_NNS that_WDT are_VBP
38	Saiegh_NNP – _: Haddad_NNP , _, 2019_CD) _-RRB- . _.	Learners_NNS with_IN poor_JJ PA_NNP have_VB
39	straints_NNS for_IN tailoring_VBG mediation_NN to_	IN all_DT learners_NNS in_IN a_DT language_
40	and_CC spoken_VBN data_NNS produced_VBN by_	IN child_NN EFL_NNP learners_NNS in_IN the_
41	VBD these_DT inconsistent_JJ findings_NNS . _. For_	IN example_NN , _, the_DT learners_NNS in_IN the_
42	, _, a_DT rapidly_RB growing_VBG population_NN of_	IN FL_NNP learners_NNS in_IN the_DT world_
43	_JJ and_CC severely_RB hard_JJ -_HYPH of_	IN -_HYPH hearing_NN learners_NNS in_IN comparison_NN
44	17_CD ; _: Zhang_NNP , _, 2018_CD) _-RRB- . _. L2_NN	learners_NNS in_IN particular_JJ tend_VBP to_TO
45	_JJ to_TO examine_VB young_JJ L2_NN	learners_NNS in_IN the_DT initial_JJ stages_NNS
46	_NN , _, or_CC task_NN topic_NN . _. The_DT	learners_NNS in_IN this_DT study_NN , _, like_IN
47	/ _SYM T._NNP The_DT adult_NN L2_NN	learners_NNS in_IN Biber_NNP et_NN al_NNP . _. (_-
48	_NN . _. For_IN the_DT adolescent_JJ L2_NN	learners_NNS in_IN Kormos_NNP 's_POS (_-LRB- 2014_CD) _-
49	_DT previous_JJ findings_NNS , _, the_DT child_NN	learners_NNS in_IN our_PRP$ study_NN produced_VBD
50	_DT two_CD experimental_JJ groups_NNS , _, the_DT	learners_NNS in_IN the_DT non_JJ -_JJ DG_
51	non_JJ -_JJ DG_JJ group_NN , _, the_DT	learners_NNS in_IN the_DT control_NN condition_NN
52	speaking_VBG by_IN Grade_NNP 6_CD . _. Chinese_JJ	learners_NNS in_IN Grade_NNP 6_CD also_RB attained_

53	_NN measures_NNS , _, and_CC the_DT older_JJR	learners_NNS in_IN our_PRP$ sample_NN even_RB
54	_VBD to_TO support_VB the_DT L2_NN	learners_NNS in_IN finding_VBG ways_NNS to_TO
55	, _, there_EX is_VBZ great_JJ variability_NN in_	IN proficiency_NN among_IN learners_NNS in_IN the_
56	were_VBD not_RB provided_VBN) _-RRB- , _, whereas_	IN the_DT bilingual_JJ learners_NNS in_IN Kormos_
57	to_TO understand_VB the_DT experiences_NNS of_	IN the_DT language_NN learners_NNS in_IN more_
58	_NN , _, the_DT perturbation_NN experienced_VBN by_	IN the_DT learners_NNS in_IN the_DT form_
59	target_NN words_NNS were_VBD presented_VBN to_	IN the_DT learners_NNS in_IN the_DT first_
60	target_NN words_NNS were_VBD presented_VBN to_	IN the_DT learners_NNS in_IN the_DT second_
61	NS ? _. _METHOD_NNP Participants_NNS A_DT total_NN	of_IN 78_CD L2_NN learners_NNS of_IN Spanish
62	, _, deaf_JJ and_CC severely_RB hard_JJ - _HYPH	of_IN - _HYPH hearing_NN learners_NNS of_IN English_
63	_NNP performance_NN in_IN the_DT case_NN	of_IN L2_NN learners_NNS of_IN varying_VBG
64	by_IN beginning_NN - _HYPH level_NN child_NN	learners_NNS of_IN English_NNP as_IN a_DT
65	_NNP used_VBD data_NNS from_IN L2_NN	learners_NNS of_IN English_NNP (_-LRB- see_VB Granfeldt_
66	d_JJ upper_JJ - _HYPH intermediate_JJ Hungarian_JJ	learners_NNS of_IN English_NNP at_IN a_DT
67	Korean_JJ - _HYPH speaking_VBG child_NN L2_NN	learners_NNS of_IN English_NNP in_IN Seoul_NNP , _,
68	tuations_NNS of_IN 28_CD beginning_NN thirdage_NN	learners_NNS of_IN Spanish_NNP as_IN a_DT
69	_VBD piloted_VBN with_IN three_CD older_JJR	learners_NNS of_IN Spanish_NNP to_TO ensure_VB
70	unger_JJR adult_NN English_JJ - _HYPH speaking_VBG	learners_NNS of_IN German_NNP , _, reported_VBD a_DT
71	, _, 2019_CD) _-RRB- in_IN teenaged_JJ Chinese_JJ	learners_NNS of_IN English_NNP , _, Russian_JJ morphology_NN
72	_VBZ more_RBR similar_JJ to_IN L1_NNP	learners_NNS of_IN AL_NNP (_-LRB- than_IN to_
73	_DT group_NN of_IN L1_NN Turkish_JJ	learners_NNS of_IN L2_NNP Dutch_NNP . _. They_PRP

Table 29. Concordance line verb and *learner* in *The Modern Language Journal*

1	_VBN as_IN a_DT medium_NN to_TO	facilitate_VB learner_NN – _: mediator_NN dyadic_NN interactions_NNS . _.
2	_CC utilized_VBN mobile_NN technology_NN to_TO	facilitate_VB learner_NN – _: mediator_NN interaction_NN . _. Regarding_V
3	- _HYPH age_NN curriculums_NNS and_CC thereby_RB	facilitate_VB learner_NN autonomy_NN and_CC individualized_JJ

4	_JJ complexity_NN in_IN written_VBN production_NN	predict_VBP learner_NN proficiency_NN more_RBR reliably_RB
5	P , _ , CN_NNP / _SYM T_NNP) _-RRB- significantly_RB	predicted_VBD learner_NN proficiency_NN . _ . (_-LRB- This_DT index_
6	BN syntactic_JJ complexity_NN measures_NNS for_IN	predicting_VBG a_DT learner_NN 's_NN proficiency_NN
7	_DT same_JJ time_NN the_DT mediator_NN	assesses_VBZ the_DT learner_NN 's_POS abilities_NNS
8	_NN of_IN communicative_JJ ability_NN and_CC	assessing_VBG learner_NN proficiency_NN . _ . From_IN a_DT
9	_VB your_PRP$ sentence_NN please_UH , _ , to_TO	help_VB the_DT learner_NN revise_VB their_PRP$
10	_NN does_VBZ " _ `` everything_NN possible_JJ to_TO	help_VB the_DT learner_NN stretch_NN beyond_IN

APPENDIX 3

Concordance line from *Communication Monographs*

Table 30. Concordance line verb and *message* in *Communication Monographs*

1	) _-RRB- were_VBD more_RBR likely_JJ to_TO	perceive_VB the_DT message_NN as_IN containing_VBG
2	) _-RRB- were_VBD more_RBR likely_JJ to_TO	perceive_VB the_DT message_NN as_IN containing_VBG
3	_VBD significantly_RB more_RBR likely_JJ to_TO	perceive_VB the_DT message_NN as_IN containing_VBG
4	_NN were_VBD more_RBR likely_JJ to_TO	perceive_VB the_DT message_NN as_IN containing_VBG
5	ent_NN , _, perceived_VBN universalism_NN value_NN	message_NN content_NN , _, perceived_VBN message_NN relevance_NN , _,
6	- ._. Stated_VBN conventionally_RB : _: H4_NNP : _:	Message_NN recipients_NNS ’ _" perceived_VBN message_NN relevance_NN
7	perceived_VBN message_NN quality_NN ._. H5_NN : _:	Message_NN recipients_NNS ’ _" perceived_VBN message_NN quality_NN
8	_NN was_VBD tested_VBN in_IN which_WDT	perceived_VBD message_NN relevance_NN was_VBD removed_VBN
9	_NN was_VBD tested_VBN in_IN which_WDT	perceived_VBD message_NN relevance_NN was_VBD removed_VBN
10	_NN effect_NN is_VBZ mediated_VBN by_IN	perceived_VBN message_NN quality_NN (_-LRB- Lavine_NNP &_CC
11	_NN is_VBZ mediated_VBN by_IN both_DT	perceived_VBN message_NN relevance_NN and_CC perceived_VBN
12	_DT perceived_VBN message_NN relevance_NN and_CC	perceived_VBN message_NN quality_NN (_-LRB- Hullett_NNP , _, 2002_CD , _,
13	NNP ._NNP , _, 2013_CD) _-RRB- , _, such_JJ that_DT	perceived_VBN message_NN relevance_NN drives_VBZ message_NN
14	_VBN to_TO be_VB mediated_VBN by_IN	perceived_VBN message_NN quality_NN (_-LRB- Lavine_NNP &_CC
15	, 1998_CD) _-RRB- ._. Formally_RB defined_VBN , _,	perceived_VBN message_NN quality_NN refers_VBZ to_IN
16	_DT message_NN (_-LRB- i.e._FW , _, higher_JJR	perceived_VBN message_NN quality_NN) _-RRB- , _, and_CC these_
17	_JJR ._. Thus_RB , _, in_IN addition_NN to_IN	perceived_VBN message_NN quality_NN , _, the_DT functional_JJ
18	_NN might_MD be_VB mediated_VBN by_IN	perceived_VBN message_NN relevance_NN ._. Formally_RB defined_VBN , _,
19	e_NN relevance_NN ._. Formally_RB defined_VBN , _,	perceived_VBN message_NN relevance_NN refers_VBZ to_IN
20	_VB as_IN a_DT consequence_NN of_IN	perceived_VBN message_NN relevance_NN and_CC perceived_VBN
21	_IN perceived_VBN message_NN relevance_NN and_CC	perceived_VBN message_NN quality_NN ._. On_IN the_DT

22	_VBZ , _ , it_PRP is_VBZ possible_JJ that_IN	perceived_VBN message_NN relevance_NN drives_VBZ message_NN
23	a_DT follow_NN - _HYPH up_NN . _ . Second_RB , _ ,	perceived_VBN message_NN relevance_NN and_CC perceived_VBN
24	, _ , perceived_VBN message_NN relevance_NN and_CC	perceived_VBN message_NN quality_NN are_VBP predicted_VBN
25	in_IN Figure_NNP 1_CD . _ . To_TO begin_VB , _ ,	perceived_VBN message_NN relevance_NN is_VBZ expected_VBN
26	_TO be_VB a_DT function_NN of_IN	perceived_VBN message_NN content_NN – _ : message_NN recipients_NNS ’ _ "
27	_NN value_NN message_NN content_NN and_CC	perceived_VBN message_NN relevance_NN . _ . H3b_NN : _ : Message_
28	_VBN utilitarian_JJ message_NN content_NN and_CC	perceived_VBN message_NN relevance_NN . _ . Subsequent_JJ to_IN
29	N . _ . Subsequent_JJ to_IN this_DT , _ , greater_JJR	perceived_VBN message_NN relevance_NN should_MD predict_VB
30	_NN relevance_NN should_MD predict_VB greater_JJR	perceived_VBN message_NN quality_NN . _ . This_DT expectation_NN
31	relevance_NN directly_RB predicts_VBZ their_PRP$	perceived_VBN message_NN quality_NN . _ . H5_NN : _ : Message_NN
32	_DT series_NN of_IN questions_NNS measuring_VBG	perceived_VBN message_NN content_NN , _ , message_NN relevance_NN , _ ,
33	- _HYPH tests_NNS was_VBD executed_VBN ; _ : the_DT	perceived_VBN message_NN content_NN measures_NNS are_VBP
34	_VBP on_IN associations_NNS with_IN these_DT	perceived_VBN message_NN content_NN variables_NNS . _ . Participants_NNS
35	NN in_IN order_NN to_TO measure_VB	perceived_VBN message_NN content_NN ; _ : these_DT items_NNS
36	_RB responded_VBD to_IN items_NNS measuring_VBG	perceived_VBN message_NN relevance_NN and_CC quality_NN , _ ,
37	llett_NNP &_CC Boster_NNP , _ , 2001_CD) _-RRB- . _ .	Perceived_VBN message_NN relevance_NN was_VBD measured_VBN
38	_JJ showers_NNS ” _ ") _-RRB- . _ . Similarly_RB , _ ,	perceived_VBN message_NN quality_NN was_VBD measured_VBN
39	NS moderate_VBP the_DT relationship_NN between_IN	perceived_VBN message_NN content_NN and_CC the_DT
40	_NN included_VBD the_DT interactions_NNS of_IN	perceived_VBN message_NN content_NN and_CC the_DT
41	NS moderate_VBP the_DT relationship_NN between_IN	perceived_VBN message_NN content_NN and_CC perceived_VBN
42	_IN perceived_VBN message_NN content_NN and_CC	perceived_VBN message_NN relevance_NN) _-RRB- , _ , two_CD orthogonalized
43	IN the_DT associations_NNS between_IN the_DT	perceived_VBN message_NN quality_NN and_CC baseline_NN
44	_VBD a_DT function_NN of_IN the_DT	perceived_VBN message_NN quality_NN scale_NN not_RB
45	NS moderate_VBP the_DT relationship_NN between_IN	perceived_VBN message_NN content_NN and_CC their_PRP$
46	_IN the_DT baseline_NN function_NN by_IN	perceived_VBN message_NN content_NN interactions_NNS were_VBD
47	_NN for_IN utilitarian_JJ content_NN and_CC	perceived_VBN message_NN quality_NN . _ . Global_JJ fit_NN
48	_DT path_NN analyses_NNS suggested_VBD that_IN	perceived_VBN message_NN relevance_NN predicts_NNS perceived_VBN

49	erceived_VBN message_NN relevance_NN predicts_NNS	perceived_VBN message_NN quality_NN , _ , which_WDT in_IN
50	_NNS of_IN message_NN quality_NN , _ , and_CC	perceived_VBN message_NN quality_NN directly_RB predicts_VBZ
51	; _ : biased_JJ processing_NN occurs_VBZ without_IN	perceived_VBN message_NN relevance_NN) _-RRB- . _ . It_PRP is_
52	_NN between_IN functional_JJ matching_NN and_CC	perceived_VBN message_NN relevance_NN , _ , or_CC that_IN
53	_NNS between_IN baseline_NN functions_NNS and_CC	perceived_VBN message_NN content_NN , _ , on_IN one_CD
54	_NNS in_IN which_WDT different_JJ functions_NNS	drive_VBP message_NN processing_NN and_CC effects_NNS (_ -
55	2013_CD) _-RRB- , _ , such_JJ that_DT perceived_VBN	message_NN relevance_NN drives_VBZ message_NN recipients_NNS ’ _ "
56	_PRP is_VBZ possible_JJ that_IN perceived_VBN	message_NN relevance_NN drives_VBZ message_NN recipients_NNS ’ _ "
57	NN should_MD lead_VB recipients_NNS to_TO	judge_VB the_DT message_NN as_IN relevant_JJ
58	P$ attitude_NN ; _ : the_DT more_JJR recipients_NNS	judge_VBP the_DT message_NN to_TO be_VB
59	_NN can_MD occur_VB without_IN participants_NNS	judging_VBG the_DT message_NN as_RB functionally_RB
60	_RB , _ , exposure_NN to_IN a_DT functionally_RB	matched_VBN message_NN results_NNS in_IN more_RBR
61	_WRB exposed_VBN to_IN a_DT functionally_RB	matched_VBN message_NN . _ . More_RBR precisely_RB , _ , the_DT
62	-RRB- . _ . Exposure_NN to_IN a_DT functionally_RB	matched_VBN message_NN should_MD lead_VB recipients_NNS
63	_NNS to_IN freedom_NN , _ , freedom_NN threats_NNS	reduce_VBP message_NN effectiveness_NN (_ -LRB- Dillard_NNP & _CC
64	rs_NNS) _-RRB- suggest_VBP freedom_NN threats_NNS	reduce_VBP message_NN effectiveness_NN (_ -LRB- Rains_NNP , _ , 2013_CD
65	_DT boomerang_NNP attitude_NN change_NN and_CC	reduced_VBN message_NN compliance_NN predicted_VBN by_IN
66	_VBN by_IN instructing_VBG participants_NNS to_TO	consider_VB the_DT message_NN and_CC indicate_VBP
67	_RB as_IN how_WRB realistic_JJ they_PRP	considered_VBD the_DT message_NN recommendations_NNS to_TO
68	_DT more_JJR they_PRP should_MD favorably_RB	evaluate_VB the_DT message_NN , _ , and_CC these_DT
69	VBG if_IN advisors_NNS and_CC recipients_NNS	evaluate_VBP message_NN features_NNS differently_RB . _ . Guntzviller_NN
70	_NN may_MD increase_VB intentions_NNS to_TO	follow_VB message_NN recommendations_NNS because_IN the_DT
71	_VBN with_IN lower_JJR intentions_NNS to_TO	follow_VB the_DT message_NN . _ . However_RB , _ , shameful_JJ
72	link_NN to_IN part_NN 2_CD , _ , which_WDT	included_VBD message_NN exposure_NN and_CC a_DT
73	hat_WDT influences_VBZ advice_NN outcomes_NNS , _ ,	including_VBG message_NN quality_NN evaluations_NNS and_CC
74	_NN function_NN interactions_NNS did_VBD not_RB	predict_VB message_NN relevance_NN . _ . The_DT following_VBG
75	C perceived_VBN message_NN quality_NN directly_RB	predicts_VBZ message_NN recipients_NNS ’ _ " attitudes_NNS . _ . The_DT

76	_NNS required_VBN and_CC allocated_VBN to_TO	process_VB the_DT message_NN ,_, compared_VBN to_IN
77	_MD have_VB an_DT easier_JJR time_NN	processing_VBG the_DT message_NN than_IN listeners_NNS
78	_NN and_CC nongame_NN streams_NNS while_IN	retaining_VBG the_DT message_NN target_NN distinction_NN ._.
79	_NN and_CC expertise_NN streams_NNS while_IN	retaining_VBG the_DT message_NN target_NN distinction_NN ._.

Table 31. Concordance line verb and *messages* in *Communication Monographs*

1	_VBN ,_, and_CC the_DT potential_NN to_TO	target_VB messages_NNS and_CC use_VB modal_NN
2	_POS username_NN ._. The_DT ability_NN to_TO	target_VB messages_NNS at_IN specific_JJ users_NNS
3	_NN -_HYPH targeted_VBN and_CC viewer_NN -_HYPH	targeted_VBN messages_NNS ._. It_PRP tests_VBZ a_DT
4	_NNS of_IN verbal_JJ immediacy_NN in_IN	targeted_VBN messages_NNS are_VBP a_DT strong_JJ
5	_IN Twitch_NNP ._. H1_NNP :_: Streamer_NNP -_HYPH	targeted_VBN messages_NNS from_IN the_DT chats_NNS
6	verbal_JJ immediacy_NN than_IN viewer_NN -_HYPH	targeted_VBN messages_NNS from_IN the_DT chats_NNS
7	_NN -_HYPH targeted_VBN and_CC viewer_NN -_HYPH	targeted_VBN messages_NNS when_WRB controlling_VBG for_IN
8	_NN target_NN ._. H2a_NNP :_: Streamer_NN -_HYPH	targeted_VBN messages_NNS from_IN the_DT chats_NNS
9	verbal_JJ immediacy_NN than_IN viewer_NN -_HYPH	targeted_VBN messages_NNS ._. H2b_NN :_: Streamer_NN -_HYPH
10	BN messages_NNS ._. H2b_NN :_: Streamer_NN -_HYPH	targeted_VBN messages_NNS and_CC viewer_NN -_HYPH targeted_
11	targeted_VBN messages_NNS and_CC viewer_NN -_HYPH	targeted_VBN messages_NNS from_IN the_DT chats_NNS
12	_NN -_HYPH targeted_VBN and_CC viewer_NN -_HYPH	targeted_VBN messages_NNS when_WRB controlling_VBG for_IN
13	_NN target_NN ._. H3a_RB :_: Streamer_NN -_HYPH	targeted_VBN messages_NNS from_IN the_DT chats_NNS
14	verbal_JJ immediacy_NN than_IN viewer_NN -_HYPH	targeted_VBN messages_NNS from_IN the_DT chats_NNS
15	_DT streams_NNS ._. H3b_NN :_: Streamer_NN -_HYPH	targeted_VBN messages_NNS and_CC viewer_NN -_HYPH targeted_
16	targeted_VBN messages_NNS and_CC viewer_NN -_HYPH	targeted_VBN messages_NNS from_IN the_DT chats_NNS
17	_WDT limits_VBZ the_DT data_NNS to_IN	targeted_VBN messages_NNS from_IN game_NN streams_NNS ._.
18	_NN -_HYPH targeted_VBN and_CC viewer_NN -_HYPH	targeted_VBN messages_NNS ._. For_IN H2_NNP ,_, the_DT
19	_NN -_HYPH targeted_VBN and_CC viewer_NN -_HYPH	targeted_VBN messages_NNS from_IN all_DT streams_NNS ._.

20	_NN - _HYPH targeted_VBN and_CC viewer_NN - _HYPH	targeted_VBN messages_NNS . _. Message_NN variance_NN was_VBD
21	ults_NNS indicated_VBD that_IN streamer_NN - _HYPH	targeted_VBN messages_NNS from_IN all_DT chats_NNS (_-
22	immediacy_NN score_NN than_IN viewer_NN - _HYPH	targeted_VBN messages_NNS (_-LRB- M_NN =_SYM −2.06_NNP ,_, SD_
23	ng_VBG messages_NNS between_IN streamer_NN - _HYPH	targeted_VBN messages_NNS and_CC viewer_NN - _HYPH targeted_
24	targeted_VBN messages_NNS and_CC viewer_NN - _HYPH	targeted_VBN messages_NNS . _. The_DT mixed_JJ - _HYPH model_
25	_RB - _HYPH targeted_VBN and_CC viewer_NN - _HYPH	targeted_VBN messages_NNS . _. The_DT test_NN of_IN
26	which_WDT posited_VBD that_IN streamer_NN - _HYPH	targeted_VBN messages_NNS (_-LRB- M_NNP =_NNP −1.13_NNP ,_, SD_
27	verbal_JJ immediacy_NN than_IN viewer_NN - _HYPH	targeted_VBN messages_NNS (_-LRB- M_NN =_SYM −2.06_NNP ,_, SD_
28	which_WDT posited_VBD that_IN streamer_NN - _HYPH	targeted_VBN messages_NNS (_-LRB- M_NNP =_FW −1.03_NNP ,_, SD_
29	verbal_JJ immediacy_NN than_IN viewer_NN - _HYPH	targeted_VBN messages_NNS (_-LRB- M_NN =_FW −1.97_NNP ,_, SD_
30	CD broad_JJ categories_NNS :_: streamer_NN - _HYPH	targeted_VBN messages_NNS produced_VBD greater_JJR verbal_JJ
31	mmediacy_NN scores_NNS from_IN streamer_NN - _HYPH	targeted_VBN messages_NNS were_VBD consistently_RB higher_JJR
32	the_DT scores_NNS from_IN viewer_NN - _HYPH	targeted_VBN messages_NNS . _. When_WRB the_DT analyses_NNS
33	_VB with_IN streamers_NNS through_IN their_PRP$	targeted_VBN messages_NNS in_IN more_RBR verbally_RB
34	findings_NNS . _. First_RB ,_, streamer_NN - _HYPH	targeted_VBN messages_NNS ,_, on_IN the_DT whole_NN ,_,
35	verbal_JJ immediacy_NN than_IN viewer_NN - _HYPH	targeted_VBN messages_NNS . _. This_DT can_MD be_VB
36	immediacy_NN score_NN for_IN streamer_NN - _HYPH	targeted_VBN messages_NNS ,_, across_IN all_DT conditions_NNS ,_,
37	_NNS than_IN when_WRB they_PRP are_VBP	targeting_VBG messages_NNS at_IN other_JJ viewers_NNS . _.
38	_IN people_NNS faced_VBN with_IN functionally_RB	matched_VBN messages_NNS engage_VBP in_IN biased_JJ
39	atching_NN process_NN Although_IN functionally_RB	matched_VBN messages_NNS are_VBP more_RBR influential_JJ
40	DT argument_NN is_VBZ that_IN functionally_RB	matched_VBN messages_NNS produce_VBP more_JJR favorable_JJ
41	nctional_JJ matching_NN hypothesis_NN expects_VBZ	matched_VBN messages_NNS (_-LRB- i.e._FW ,_, those_DT
42	_NNS are_VBP biased_VBN toward_IN viewing_VBG	matched_VBN messages_NNS as_IN high_JJ in_IN
43	_DT model_NN in_IN which_WDT functionally_RB	matched_VBN messages_NNS are_VBP viewed_VBN as_IN
44	_IN biased_JJ processing_NN occurs_VBZ because_IN	matched_VBN messages_NNS are_VBP perceived_VBN as_IN
45	people_NNS to_TO reject_VB freedom_NN - _HYPH	threatening_VBG messages_NNS (_-LRB- Rains_NNS ,_, 2013_CD)_-RRB- ._. How
46	(_-LRB- 2001_CD)_-RRB- found_VBD that_IN ego_NN	threatening_VBG messages_NNS produce_VBP resistance_NN to_IN

47	B- 2001_CD)_-RRB- findings_NNS showed_VBD ego_JJ	threatening_VBG messages_NNS promote_VBP unfavorable_JJ evaluations_NNS
48	_NN examined_VBD responses_NNS to_IN ego_JJ	threatening_VBG messages_NNS rather_RB than_IN messages_NNS

Table 32. Concordance line adjective and *study* in *Communication Monographs*

1	_NNS , _, since_IN listeners_NNS in_IN the_DT	present_JJ study_NN may_MD have_VB realized_VBN
2	_RB , _, both_DT speakers_NNS in_IN the_DT	present_JJ study_NN had_VBD relatively_RB strong_JJ
3	G female_JJ speakers_NNS . _. Fourth_RB , _, the_DT	present_JJ study_NN experimentally_RB controlled_VBN for_IN
4	_CC neonatal_JJ loss_NN . _. In_IN the_DT	present_JJ study_NN , _, we_PRP embolden_VBP narrative_JJ
5	_DT baby_NN . _. Before_IN explicating_VBG the_DT	present_JJ study_NN , _, in_IN the_DT following_VBG
6	JJ death_NN , _, we_PRP frame_VBP the_DT	present_JJ study_NN as_IN a_DT feminist_JJ
7	_IN baby_NN loss_NN , _, in_IN the_DT	present_JJ study_NN , _, our_PRP$ aim_NN is_VBZ
8	_VBG research_NN question_NN in_IN the_DT	present_JJ study_NN is_VBZ :_: RQ_NNP :_: How_WRB
9	awlins_NNPS , _, 2014_CD)_-RRB- . _. For_IN the_DT	present_JJ study_NN , _, this_DT meant_VBD observing_VBG
10	t_NN . _. Researcher_NN positionalities_NNS The_DT	present_JJ study_NN began_VBD as_IN part_NN
11	)_-RRB- . _. As_IN such_JJ , _, in_IN the_DT	present_JJ study_NN , _, we_PRP viewed_VBD both_CC
12	_DT research_NN question_NN guiding_VBG the_DT	present_JJ study_NN focused_VBD on_IN understanding_VBG
13	_DT are_VBP key_JJ in_IN the_DT	present_JJ study_NN , _, as_IN they_PRP turn_VBP
14	_NN grief_NN and_CC remembrance_NN , _, the_DT	present_JJ study_NN expands_VBZ the_DT work_NN
15	_NNS and_CC future_JJ directions_NNS The_DT	present_JJ study_NN is_VBZ not_RB without_IN
16	_RB , _, the_DT findings_NNS of_IN the_DT	present_JJ study_NN connect_NN with_IN Boje_NNP ’
17	_VBN this_DT call_NN in_IN the_DT	present_JJ study_NN , _, if_IN we_PRP are_VBP
18	previous_JJ two_CD studies_NNS)_-RRB- , _, the_DT	present_JJ study_NN also_RB demonstrated_VBD that_IN
19	_CD ; _: McEwan_NNP , _, 2013_CD)_-RRB- . _. The_DT	present_JJ study_NN measured_VBN energy_NN expenditure_NN
20	_IN a_DT lifetime_NN – _: but_CC the_DT	present_JJ study_NN suggests_VBZ being_VBG “_`` in_IN
21	, _, 2012_CD)_-RRB- . _. Accordingly_RB , _, the_DT	present_JJ study_NN uses_VBZ URT_NNP to_TO
22	_NN of_IN content_NN . _. In_IN the_DT	present_JJ study_NN , _, the_DT APIMoM_NN is_VBZ

23	et_NN al_NNP ._NNP , _, 2012_CD)_-RRB- ._. The_DT	present_JJ study_NN provides_VBZ an_DT initial_JJ
24	_CC not_RB for_IN others_NNS ._. The_DT	present_JJ study_NN sought_VBD to_TO probe_VB
25	N utilitarian_JJ message_NN content_NN ._. The_DT	present_JJ study_NN The_DT present_JJ study_NN
26	_NN ._. The_DT present_JJ study_NN The_DT	present_JJ study_NN examined_VBD the_DT functional_JJ
27	ost_JJ -_JJ exposure_JJ intentions_NNS ._. The_DT	present_JJ study_NN also_RB considered_VBD whether_IN
28	_NNP Procedure_NN and_CC participants_NNS The_DT	present_JJ study_NN used_VBD an_DT experimental_JJ
29	_DT messages_NNS tested_VBN in_IN the_DT	present_JJ study_NN revolved_VBN around_IN persuading_VBG
30	_VBN by_IN H3_NNP ._. Discussion_NN The_DT	present_JJ study_NN probed_VBD the_DT functional_JJ
31	NNP , _, 2012_CD)_-RRB- ;_: however_RB , _, the_DT	present_JJ study_NN did_VBD not_RB find_VB
32	essage_NN processing_NN constructs_NNS ._. The_DT	present_JJ study_NN examined_VBD a_DT model_NN
33	et_NN al_NNP ._NNP , _, 2013_CD)_-RRB- ._. The_DT	present_JJ study_NN attempted_VBN to_TO contribute_VB
34	)_-RRB- ._. The_DT purpose_NN of_IN the_DT	present_JJ study_NN is_VBZ to_TO analyze_VB
35	_PRP are_VBP bolstered_VBN by_IN the_DT	present_JJ study_NN 's_NN findings_NNS that_WDT
36	RB- ._. Against_IN this_DT backdrop_NN , _, the_DT	current_JJ study_NN has_VBZ several_JJ aims_NNS ._.
37	_IN hypothetical_JJ distance_NN in_IN the_DT	current_JJ study_NN ._. This_DT study_NN tests_VBZ
38	_NN of_IN the_DT two_CD ._. The_DT	current_JJ study_NN is_VBZ not_RB equipped_VBN
39	et_UH al_NNP ._NNP , _, 2012_CD)_-RRB- ._. The_DT	current_JJ study_NN underscores_VBZ the_DT potential_JJ
40	_PRP with_IN hope_NN ._. Conclusion_NN The_DT	current_JJ study_NN explored_VBD how_WRB the_DT
41	_VBG concepts_NNS relevant_JJ to_IN the_DT	current_JJ study_NN ._. In_IN the_DT interaction_NN , _,
42	._. Of_IN the_DT 198_CD dyads_NNS , _, the_DT	current_JJ study_NN only_RB includes_VBZ 130_CD dyads_
43	_NN The_DT purpose_NN of_IN the_DT	current_JJ study_NN was_VBD two_CD -_JJ fold
44	-LRB- McAllum_NNP , _, 2013_CD)_-RRB- , _, the_DT	current_JJ study_NN documented_VBN on_IN -_HYPH station_
45	_NN on_IN Facebook_NNP ._. Overall_RB , _, the_DT	current_JJ study_NN is_VBZ designed_VBN to_TO
46	_VBD not_RB significant_JJ in_IN the_DT	current_JJ study_NN because_IN the_DT outcome_NN , _,
47	_VBZ especially_RB germane_JJ to_IN the_DT	current_JJ study_NN because_IN it_PRP suggests_VBZ
48	_DT logic_NN of_IN URT_NNP , _, the_DT	current_JJ study_NN examines_VBZ whether_IN these_DT
49	_CC Richardson_NNP , _, 2000_CD)_-RRB- , _, the_DT	current_JJ study_NN tested_VBD whether_IN pre_JJ -_

50	l_NNP ._NNP ,_, 2007_CD)_-RRB- ,_, and_CC the_DT	current_JJ study_NN lends_VBZ support_NN to_IN
51	ark_NNP ,_, 2019_CD)_-RRB- ._. Because_IN the_DT	current_JJ study_NN is_VBZ concerned_VBN with_IN
52	functional_JJ content_NN ._. Fourth_RB ,_, the_DT	current_JJ study_NN sought_VBD to_TO directly_RB
53	C -_HYPH befriending_JJ strategies_NNS ._. The_DT	current_JJ study_NN With_IN few_JJ exceptions_NNS (_-
54	_VB it_PRP ._. Thus_RB ,_, overall_RB the_DT	current_JJ study_NN finds_VBZ a_DT great_JJ
55	tir_NNP ,_, 2017_CD)_-RRB- ._. Whereas_IN the_DT	current_JJ study_NN shows_VBZ support_NN for_IN
56	_VBD obtained_VBN for_IN coding_NN ._. One_CD	primary_JJ study_NN provided_VBD insufficient_JJ information_NN
57	_VBD to_TO ensure_VB that_IN each_DT	primary_JJ study_NN included_VBN in_IN the_DT
58	_VBN or_CC computed_VBN for_IN each_DT	primary_JJ study_NN in_IN the_DT form_NN
59	_NN and_CC health_NN for_IN each_DT	primary_JJ study_NN appears_VBZ in_IN Table_NNP 1
60	_RB one_CD effect_NN estimate_NN per_IN	primary_JJ study_NN was_VBD used_VBN in_IN
61	_DT weights_NNS assigned_VBN to_IN each_DT	primary_JJ study_NN involved_VBD the_DT inverse_NN
62	_NNS were_VBD retained_VBN from_IN each_DT	primary_JJ study_NN per_IN level_NN of_IN
63	_IN the_DT sample_NN for_IN each_DT	primary_JJ study_NN ._. In_IN primary_JJ studies_NNS
64	_NNS evaluated_VBD in_IN a_DT given_VBN	primary_JJ study_NN ._. A_DT random_JJ -_HYPH effects_
65	_VBN evaluated_VBN in_IN a_DT single_JJ	primary_JJ study_NN ,_, multiple_JJ estimates_NNS from_IN
66	_JJ estimates_NNS from_IN a_DT single_JJ	primary_JJ study_NN were_VBD included_VBN in_IN
67	_NN estimates_VBZ from_IN a_DT single_JJ	primary_JJ study_NN were_VBD used_VBN if_IN
68	_NN estimates_VBZ from_IN a_DT single_JJ	primary_JJ study_NN were_VBD again_RB used_VBN
69	_DT sample_NN for_IN a_DT given_VBN	primary_JJ study_NN was_VBD used_VBN to_TO
70	_JJ effect_NN estimate_NN for_IN each_DT	primary_JJ study_NN appears_VBZ on_IN the_DT
71	_DT standard_JJ error_NN of_IN a_DT	primary_JJ study_NN ._. This_DT correlation_NN was_VBD
72	_JJR generalizability_NN than_IN any_DT single_JJ	primary_JJ study_NN ._. This_DT study_NN represents_VBZ

Table 33. Concordance line adjective and *studies* in *Communication Monographs*

1	_NNP 1_CD . _. Table_NN 1_CD lists_VBZ the_DT	primary_JJ studies_NNS retained_VBN in_IN the_DT
2	studies_NNS)_-RRB- . _. Coding_NN Coding_NN of_IN	primary_JJ studies_NNS was_VBD conducted_VBN by_IN
3	orrelation_NN coefficients_NNS reported_VBN in_IN	primary_JJ studies_NNS or_CC beta_JJ coefficients_NNS
4	_TO effect_VB estimates_NNS extracted_VBN from_IN	primary_JJ studies_NNS . _. The_DT overall_JJ effect_NN
5	_VBP that_IN a_DT sample_NN of_IN	primary_JJ studies_NNS represent_VBP a_DT random_JJ
6	_PRP had_VBD at_RB least_RBS five_CD	primary_JJ studies_NNS . _. These_DT types_NNS were_VBD
7	_VBD an_DT insufficient_JJ number_NN of_IN	primary_JJ studies_NNS in_IN these_DT other_JJ
8	_NN were_VBD examined_VBN among_IN the_DT	primary_JJ studies_NNS in_IN the_DT sample_NN
9	_IN each_DT primary_JJ study_NN . _. In_IN	primary_JJ studies_NNS that_WDT reported_VBD results_NNS
10	_NNS were_VBD evaluated_VBN in_IN most_JJS	primary_JJ studies_NNS , _, an_DT aggregate_JJ effect_NN
11	each_DT of_IN the_DT 44_CD unique_JJ	primary_JJ studies_NNS in_IN the_DT sample_NN . _.
12	_VBN in_IN at_RB least_RBS five_CD	primary_JJ studies_NNS : _: mental_JJ well_RB -_HYPH being_
13	_VBD in_IN the_DT group_NN of_IN	primary_JJ studies_NNS focused_VBD on_IN trait_NN
14	_NN in_IN the_DT group_NN of_IN	primary_JJ studies_NNS evaluating_VBG expressed_VBD affection_NN , _,
15	_NN in_IN the_DT group_NN of_IN	primary_JJ studies_NNS evaluating_VBG received_VBD affection_NN , _,
16	_JJ communication_NN and_CC health_NN among_IN	primary_JJ studies_NNS evaluating_VBG shared_JJ affection_NN , _,
17	_VBD not_RB include_VB zero_CD . _. In_IN	primary_JJ studies_NNS focused_VBD on_IN shared_JJ
18	_VBP across_IN a_DT sample_NN of_IN	primary_JJ studies_NNS to_TO be_VB inflated_VBN (_-
19	_NN for_IN the_DT sample_NN of_IN	primary_JJ studies_NNS . _. The_DT shading_NN represents_VBZ
20	_NN bias_NN is_VBZ likely_JJ when_WRB	primary_JJ studies_NNS are_VBP absent_JJ from_IN
21	_RB , _, these_DT estimates_NNS are_VBP for_IN	primary_JJ studies_NNS that_WDT had_VBD smaller_JJR
22	mmetrical_JJ , _, however_RB , _, among_IN those_DT	primary_JJ studies_NNS with_IN smaller_JJR samples_NNS
23	iled_VBN =_NNP .048_CD , _, indicating_VBG that_IN	primary_JJ studies_NNS containing_VBG smaller_JJR samples_NNS
24	_IN the_DT standard_JJ error_NN for_IN	primary_JJ studies_NNS as_IN a_DT predictor_NN
25	_NN among_IN the_DT sample_NN of_IN	primary_JJ studies_NNS . _. The_DT implications_NNS of_IN

26	on_IN the_DT results_NNS of_IN 44_CD	primary_JJ studies_NNS with_IN 155_CD independent_JJ effect_
27	- _JJ step_JJ strategy_NN for_IN identifying_VBG	primary_JJ studies_NNS . _. Although_IN it_PRP is_VBZ
28	_NN as_IN feasible_JJ . _. Second_RB , _, the_DT	primary_JJ studies_NNS in_IN the_DT meta_NN -_
29	_VBN in_IN more_JJR than_IN two_CD	primary_JJ studies_NNS (_-LRB- which_WDT precluded_VBD exploring_
30	_IN an_DT insufficient_JJ number_NN of_IN	primary_JJ studies_NNS . _. For_IN instance_NN , _, some_DT
31	_DT notable_JJ proportion_NN of_IN the_DT	primary_JJ studies_NNS were_VBD conducted_VBN by_IN
32	_IN comparing_VBG the_DT estimates_NNS from_IN	primary_JJ studies_NNS in_IN which_WDT Professor_NNP
33	_MD have_VB been_VBN influenced_VBN by_IN	primary_JJ studies_NNS with_IN smaller_JJR samples_NNS , _,
34	dissatisfaction_NN and_CC discontinuation_NN . _.	Future_JJ studies_NNS should_MD directly_RB examine_VB
35	BN attainability_NN between_IN conditions_NNS . _.	Future_JJ studies_NNS should_MD include_VB a_DT
36	orceful_JJ language_NN and_CC imperatives_NNS . _.	Future_JJ studies_NNS could_MD potentially_RB combine_VB
37	_NNS of_IN the_DT status_NN quo_NN . _.	Future_JJ studies_NNS should_MD examine_VB whether_IN
38	_DT debate_NN persuasive_JJ . _. We_PRP urge_VBP	future_JJ studies_NNS to_TO pair_VB analysis_NN
39	_VBN with_IN any_DT foreign_JJ accent_NN , _,	future_JJ studies_NNS should_MD nonetheless_RB attempt_VB
40	listeners_NNS ’_POS language_NN attitudes_NNS . _.	Future_JJ studies_NNS should_MD investigate_VB this_DT
41	t_RB explicitly_RB measure_VB stereotypes_NNS ; _:	future_JJ studies_NNS should_MD address_VB this_DT . _.
42	_VBZ an_DT important_JJ avenue_NN for_IN	future_JJ studies_NNS . _. Finally_RB , _, although_IN the_DT
43	dentities_NNS experienced_VBD the_DT event_NN . _.	Future_JJ studies_NNS on_IN remembrance_NN events_NNS
44	illusions_NNS of_IN intimacy_NN . _. Conclusion_NN	Future_JJ studies_NNS can_MD conduct_VB a_DT
45	_DT area_NN of_IN interest_NN for_IN	future_JJ studies_NNS may_MD include_VB combining_VBG
46	IN this_DT type_NN of_IN modeling_NN . _.	Future_JJ studies_NNS should_MD also_RB attempt_VB
47	from_IN Ajzen_NNP (_-LRB- 2002_CD) _-RRB- that_IN	other_JJ studies_NNS have_VBP successfully_RB implemented_VBN (_-
48	the_DT target_NN) _-RRB- made_VBN in_IN	other_JJ studies_NNS utilizing_VBG perceptions_NNS of_IN
49	_JJ memory_NN for_IN the_DT information_NN , _,	other_JJ studies_NNS using_VBG 360_CD °__SP -video_NN
50	_CD or_CC two_CD videos_NNS of_IN	other_JJ studies_NNS on_IN the_DT topic_NN (_-
51	_DT message_NN source_NN . _. These_DT and_CC	other_JJ studies_NNS provide_VBP a_DT basis_NN
52	_CD) _-RRB- Trait_NNP Affection_NNP Scale_NNP . _.	Other_JJ studies_NNS measure_VBP the_DT amount_NN

53	P & _CC Floyd _NNP , _, 2020 _CD) _-RRB- . _. Still _RB	other _JJ studies _NNS , _, such _JJ as _IN Floyd _NNP
54	_IN measured _VBN or _CC manipulated _VBN . _. In _IN	other _JJ studies _NNS , _, the _DT focus _NN is _VBZ

Table 34. Concordance line adjective and *information* in *Communication Monographs*

1	_CC why _WRB strategies _NNS for _IN attaining _VBG	social _JJ information _NN on _IN SNSs _NNS differ _VBP
2	B distinct _JJ strategies _NNS for _IN acquiring _VBG	social _JJ information _NN differ _VBP in _IN regard _NN
3	_NN to _TO explain _VB how _WRB online _JJ	social _JJ information _NN acquisition _NN on _IN SNSs _NNPS
4	information _NN . _. Theoretical _JJ perspective _NN	Social _JJ information _NN seeking _VBG Social _JJ information _NN
5	rspective _NN Social _JJ information _NN seeking _VBG	Social _JJ information _NN is _VBZ personal _JJ or _CC
6	_NN seekers _NNS methods _NNS of _IN gathering _VBG	social _JJ information _NN that _WDT are _VBP not _RB
7	atforms _NNS . _. Strategies _NNS for _IN seeking _VBG	social _JJ information _NN online _RB have _VBP been _VBN
8	IN examining _VBG how _WRB individuals _NNS seek _VBP	social _JJ information _NN using _VBG CMC _NNP . _. Employing _VBG
9	s _IN accurate _JJ . _. Interactively _RB seeking _VBG	social _JJ information _NN could _MD yield _VB information _NN
10	different _JJ strategies _NNS for _IN obtaining _VBG	social _JJ information _NN result _NN in _IN information _NN
11	_IN the _DT strategies _NNS when _WRB seeking _VBG	social _JJ information _NN on _IN SNSs _NNS . _. Scholars _NNS
12	_IN IS _NNP . _. People _NNS perceived _VBD that _IN	social _JJ information _NN obtained _VBN through _IN all _DT
13	_NN like _IN Google _NNP to _TO seek _VB	social _JJ information _NN (_-LRB- Ramirez _NNP et _NN al
14	_DT direct _JJ relationship _NN between _IN how _WRB	social _JJ information _NN is _VBZ sought _VBN and _CC
15	_NN . _. Given _VBN the _DT amount _NN of _IN	social _JJ information _NN housed _VBN on _IN SNSs _NNS
16	_CC may _MD even _RB engage _VB in _IN	social _JJ information _NN seeking _VBG through _IN deeper _JJR
17	_NN is _VBZ similarly _RB proposed _VBN for _IN	social _JJ information _NN processing _NN theory _NN as _IN
18	H party _NN information _NN sources _NNS possess _VBP	less _JJR information _NN control _NN compared _VBN to _IN
19	_NN of _IN visiting _VBG more _RBR or _CC	less _JJR information _NN sources _NNS (_-LRB- M _NNP = _SYM 1.82
20	_MD be _VB perceived _VBN to _TO possess _VB	less _JJR information _NN , _, dissemination _NN , _, and _CC modification _N
21	_NNS were _VBD perceived _VBN to _TO entail _VB	less _JJR information _NN control _NN (_-LRB- third _JJ - _HYPH

22	_NNP was_VBD perceived_VBN to_TO possess_VB	less_JJR information_NN control_NN (_-LRB- b_NNP = _SYM −1.24_
23	_, active_JJ IS_NNP produced_VBN significantly_RB	less_JJR information_NN control_NN than_IN interactive_JJ (_-
24	_JJ IS_NNP also_RB resulted_VBN in_IN	less_JJR information_NN control_NN than_IN interactive_JJ
25	_JJR warranting_NN value_NN (_-LRB- i.e._FW , _,	less_JJR information_NN control_NN , _, modification_NN control_NN , _,
26	-RRB- , _, (_-LRB- c_NN) _-RRB- looking_VBG for_IN	more_JJR information_NN on_IN the_DT advised_VBN
27	_VBZ going_VBG to_TO give_VB them_PRP	more_JJR information_NN ” _" (_-LRB- #_$ 95_CD) _-RRB- . _. Mentors_NNS
28	_TO provide_VB the_DT seeker_NN with_IN	more_JJR information_NN , _, and_CC we_PRP wanted_VBD
29	_VBZ : _: Will_MD having_VBG access_NN to_IN	more_JJR information_NN in_IN the_DT form_NN
30	_MD benefit_VB from_IN exposure_NN to_IN	more_JJR information_NN via_IN a_DT potential_JJ
31	_RB try_VB to_TO find_VB out_RP	more_JJR information_NN than_IN what_WP I_PRP
32	_JJ measure_NN to_TO control_VB what_WDT	personal_JJ information_NN companies_NNS and_CC third_JJ
33	_VB ads_NNS based_VBN on_IN my_PRP$	personal_JJ information_NN ” _" ; _: (_-LRB- b_LS) _-RRB- “ _`` Allow_VB
34	_JJ types_NNS of_IN social_JJ or_CC	personal_JJ information_NN that_WDT vary_VBP in_IN
35	_NNP can_MD then_RB leverage_VB the_DT	personal_JJ information_NN shared_VBN on_IN Twitter_NNP
36	_VBZ through_IN the_DT disclosure_NN of_IN	personal_JJ information_NN of_IN varying_VBG breadth_NN
37	hat_IN partners_NNS systematically_RB uncover_VBP	personal_JJ information_NN about_IN each_DT other_JJ

BIOGRAPHY

NAME	Miss Duangthip Ocharoen
DATE OF BIRTH	10 April 1993
PLACE OF BIRTH	Bangkok
PRESENT ADDRESS	69/23 Muban Maneerin Greenpark Angsila Tumbon Samet Muang Chonburi 20000
EDUCATION	Bachelor's degree in Burapha University