



AN ANALYSIS OF LEXICAL COHESION TOOLS
USED IN INTERNATIONAL RESEARCH ABSTRACTS AND LOCAL
RESEARCH ABSTRACT: A COMPARATIVE STUDY

تحليل أدوات التماسك اللغوي المستخدمة في ملخصات البحوث الغير محلية وملخصات البحوث المحلية:
دراسة مقارنة

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الملخص

تهدف هذه الدراسة إلى استكشاف كيفية استخدام أدوات التماسك اللغوي المتمثلة في العلاقات الدلالية بين المفردات و العبارات المستخدمة في المقالات البحثية من قبل الكتاب الأكاديميين المحليين و الغير محليين ، حيث يساهم الاستخدام الفعال لهذه الأدوات في تحسين اتساق الكتابة الأكاديمية. تم اختيار ثلاثون مقالة من مجلتين في مجال علم اللغة النظري، تضم خمسة عشر مقالة من المجلات المحلية في ليبيا وخمسة عشر من مجلات دولية ذات سمعة جيدة. أظهرت نتائج التحليل أن الباحثين المحليين قد استخدموا بعض أدوات التماسك اللغوي بشكل أكثر تواترًا من نظرائهم الغير محليين. و على وجه التحديد، استخدم الكتاب المحليون علاقات دلالية (كالمرادفات و التنوع او التفرع من

الأصل والجزء من الكل و التكرار) أكثر و بانتظام، بينما اعتمد الباحثين الغير محليين على العلاقات الدلالية التضادية بشكل أكثر تواتراً. كما ان كلا المجموعتين استخدمتا التجانس بشكل متساوٍ تقريباً.

Abstract

This study investigates the utilization of lexical cohesion (LC) in research articles (RAs) by academic writers, as well as the types of LC employed, given that the effective use of LC enhances the coherence of academic writing. A total of thirty articles were selected from two journals in the field of theoretical linguistics, comprising fifteen articles from local Libyan journals and fifteen from a reputable international journal.

The results of the analysis showed that local scholars used lexical cohesion tools more frequently than their international counterparts. Specifically, local scholars utilized synonymy, hyponymy, and meronymy more often. Interestingly, both groups used collocation almost equally.

Key words: *lexical cohesion, discourse analysis, abstracts.*

1.1 Introduction

Academic writing is a complex and challenging task that requires writers to effectively communicate their ideas and research findings to a specific audience. One of the key elements that contribute to the coherence and clarity of academic writing is lexical cohesion (LC), which refers to the use of lexical items to create connections between sentences and paragraphs. Understanding how academic writers use LC in research articles (RAs) is crucial for enhancing the readability and coherence of academic papers.

1.2 Aims of the Study

This research aims to investigate how academic writers use LC in RAs and what types of LC they use. Specifically, the study focuses on two different journals in theoretical linguistics, local Libyan journals and nonlocal journals. By analyzing the use of LC in

30 articles (15 from each journal), this research provides an insight into the patterns and strategies that academic writers employ to create cohesive and coherent RAs.

1.3 Importance of the Study

The present study is important because it can help to shed light on the cultural and linguistic factors that influence the use of lexical cohesion tools in academic writing. By comparing the usage patterns of local and international scholars, the study may reveal differences in the norms and conventions of academic writing across different cultures and languages.

1.4 Literature Review

Lexical cohesion refers to the way in which words and phrases are used to create connections between different parts of a text. In academic writing, lexical cohesion is particularly important for creating cohesive and coherent texts that are easy to understand and follow. Various types of lexical cohesion tools, such as repetition, synonymy, antonymy, hyponymy, meronymy, and collocation, can be used to achieve this goal. (Jin,2001)

Several studies have investigated the use of lexical cohesion tools in academic writing, including research abstracts. For example, in a study by Li and Thompson (1989), the authors analyzed the use of lexical cohesion in the abstracts of research articles in psychology. They found that repetition was the most commonly used type of lexical cohesion, followed by synonymy, hyponymy, antonymy, and meronymy. (Jin,2001)

Similarly, in a study by Durrani and Khan (2022), the authors analyzed the use of lexical cohesion in the abstracts of research articles in linguistics. They found that repetition was the most frequently used type of lexical cohesion, followed by synonymy, collocation, and antonymy.

However, these studies focused on the use of lexical cohesion in a specific discipline, and did not compare the use of lexical cohesion tools between local and international

scholars. Therefore, the present study aims to fill this gap by comparing the use of lexical cohesion tools in the abstracts of research articles written by local and international scholars across different disciplines.

1.4.1 Lexical Cohesion

Lexical cohesion is the way words and phrases connect within an article, which contributes to its overall coherence. There are several types of lexical cohesion that can be identified in a text. To begin, there is reiteration; which is the recurrence of a word or phrase throughout a text to create a sense of unity and consistency. Reiteration can be defined as the repeated use of a specific term, such as "tree" in a forestry document, or the recurrence of a significant phrase, such as "climate change" in an environmental text. Second, there is synonymy, which is the usage of synonyms or near-synonyms to build coherence between words and phrases. For example, in a cooking text, the synonyms "chop" and "dice" may be used to refer to the same activity, generating cohesiveness between these two words. Following that, Antonymy; this entails using antonyms, or words with opposite meanings, to establish cohesiveness between words and phrases. For example, in political literature, the terms "left-wing" and "right-wing" may be used to characterize competing political ideas. Following that, collocation: This is the use of words that frequently appear together to build cohesiveness between words and phrases. In English, for example, we frequently combine the adjective "strong" with the noun "coffee" to describe a certain type of coffee. Afterwards, hyponymy: the use of more particular terms to build cohesiveness with more generic phrases. For example, "dog" is a hyponym for the more broad term "animal." Furthermore, repetition; this is the use of the same words or phrases throughout the text to reinforce essential themes and create a unified framework. Moreover, the entire context of the text is a crucial aspect of lexical coherence. The usage of relevant vocabulary and terminology to the topic and audience aids in the creation of a logical and understandable writing. Lastly, Meronymy; this involves the use of words that are closely associated with other words to create cohesion

between words and phrases. For example, the word "White House" is often used as a metonym for the US government. (Sidabutar,2021)

Lexical coherence refers to the relationship between words in a text that helps to produce meaning and improves the general coherence of the text. The following are important aspects of lexical coherence. Lexical chains are groups of words connected by their meanings, such as synonyms, antonyms, hyponyms, and meronyms.

Lexical chains contribute to the text's cohesive flow of ideas. In addition, collocations are terms that regularly appear together and have a strong association, such as "strong coffee" or "heavy rain." Collocations improve text coherence by establishing a clear and consistent meaning. Subsequently, there are referential expressions, which include pronouns, definite and indefinite articles, and demonstratives that refer to previously expressed words or ideas. Referential phrases help to connect distinct sections of the text and keep the focus consistent (Halliday, 2014).

1.4.2 Techniques of Lexical Cohesion

Fragment (consider revising)

Discourse analysts employ a range of techniques to find and assess lexical cohesiveness in a text. One technique is by looking for repeated words or phrases that recur throughout the text, as well as, synonyms, antonyms, and other forms of word associations that generate cohesiveness between words and phrases is a typical strategy. Another method is to look for lexical chains, which are groups of linked words that appear in a text. Lexical chains can be used to detect the relationships between distinct parts of a text and to track the development of a specific theme or notion throughout the text. In addition to discovering lexical cohesion, discourse analysts may investigate how lexical cohesion is employed to achieve specific communicative goals. A speaker, for example, may employ repetition or other forms of lexical cohesion to highlight a specific point, generate a sense of urgency, or set a specific tone or mood.(Morris, 1991)

In general, lexical cohesion is a key aspect of discourse analysis, as it helps to create coherence and meaning within a text, and can provide insights into the ways in which language is used to achieve particular communicative goals. (ibid)

1.4.3 Importance of lexical cohesion in academic writing

Halliday and Hasan's concept of lexical cohesion is an important aspect of academic writing. According to their theory, lexical cohesion refers to the way in which the vocabulary of a text is linked together and how this contributes to the overall coherence of the text.

In academic writing, the use of appropriate and effective lexical cohesion is essential for conveying complex ideas and arguments clearly and coherently. Through the use of cohesive devices such as repetition, synonyms, antonyms, and pronouns, writers can create a logical and cohesive flow of ideas within their texts.

Furthermore, the use of lexical cohesion can also help writers to establish their credibility and authority within their fields of study. By using specific terminology and vocabulary that is relevant to their area of expertise, writers can demonstrate their knowledge and understanding of the topic they are writing about.

1.4.4. The Effect of L1 and L2 on lexical cohesion

Sidabutar's research on the effect of L1 and L2 (2021) on lexical cohesion in writing suggests that there are significant differences in the way that native speakers and non-native speakers use cohesive devices in their writing.

In particular, Sidabutar(2021) found that native speakers tend to use more varied and sophisticated forms of lexical cohesion, such as metaphorical extensions and semantic associations, while non-native speakers rely more heavily on simpler forms of cohesion, such as repetition and synonymy.

Sidabutar also found that the use of cohesive⁷³³ devices in L2 writing is influenced by the writers' L1 background. For example, writers from languages with a high degree of

inflection tend to use fewer pronouns and more repetition, while writers from languages with a more analytic structure tend to use more pronouns and fewer repetitions.

1.4.5. The Role of Lexical Cohesion in Text Comprehension

Morris and Hirst's research (1991) on the role of lexical cohesion in text comprehension suggests that cohesive ties between words play a critical role in facilitating readers' understanding of a text.

According to their theory, readers use cohesive ties to form mental representations of the text, which help them to create a coherent and meaningful interpretation of the information presented. The presence of cohesive ties between words helps to signal the relationships between ideas in the text, which in turn helps readers to construct a mental model of the text's meaning.

Morris and Hirst also found that readers' ability to recognize and use cohesive ties is influenced by a variety of factors, including their level of reading proficiency, their familiarity with the topic, and the complexity of the text. Readers with higher levels of reading proficiency are better able to recognize and use cohesive ties to construct an accurate mental representation of the text, while less proficient readers may struggle to do so.

1.5 Research Questions

The research questions are as follows:

- (1) What are the features of LC used in the whole RAs?
- (2) What are the features of LC mostly used in the abstract of RAs?

1.6 Methodology

When comparing two discourses, discourse analysis can help identify similarities and differences in language use, as well as the ways in which language is used to construct meaning and shape social reality. By examining the language, discourse analysts can gain

insights into the values, beliefs, and assumptions that underpin a particular discourse, and can compare these with those of another discourse to highlight similarities and differences. As a result, this study adopts qualitative method of research that focuses on analyzing language use in communication, including spoken or written texts, to uncover underlying meanings, assumptions, and ideologies.

1.6.1 Data Collection

To collect data for this study, the researcher conducted a search of online databases and collected published abstracts. Specifically, fifteen published abstracts online and collected an additional fifteen published abstracts from the Benghazi region. The research was conducted using the following keywords “lexical cohesion papers, linguistics papers, applied linguistics papers”, and the inclusion criteria were “according to availability, subject researched, authorization”. The collected abstracts were then screened for relevance to the research question and included in the analysis.

1.6.2 Data Analysis

The thirty abstracts collected for this study were analyzed and compared according to their lexical cohesion features. Of these, fifteen were international and fifteen were local in nature. The analysis was conducted using manual method.

First, the abstracts were manually coded for lexical cohesion features using a coding scheme. This involved identifying and coding instances of repetition, synonymy, and other types of lexical relationships within and between sentences. (R, S, A, H, M, C.)

For illustration(1):

The Typology of Pharyngealization in Arabic Dialects Focusing on a Rural Jordanian Variety

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Abstract

Pharyngealization, also known as emphasis, is phonologically a very productive process in most Arabic varieties. This study first overviews the typology of pharyngealization in Arabic dialects and then focuses on the analysis of pharyngealization (i.e., emphasis spread) in a subvariety of rural Jordanian Arabic, which differs considerably from other dialects. The preferred structure in this subvariety of Jordanian Arabic is the emphatic syllable (the domain of emphasis) which is the driving force behind the spread of emphasis from underlying emphatics to other segments. This study also offers an Optimality-Theoretic analysis of ES in this Jordanian subvariety, where EMPHATIC- σ is an undominated constraint whose hierarchical interaction with other high ranked and lower ranked constraints always favors candidates with an emphatic syllable over other candidates. Keywords: rural Jordanian Arabic, pharyngealization, emphasis spread, syllable, Optimality Theory

The analysis:

Repetition:

- "pharyngealization" is repeated several times in the article, as is "emphasis" and "emphatic."
- "Jordanian Arabic" is also repeated throughout the article.

Synonymy:

- "emphasis spread" and "pharyngealization" are used as synonyms in the article.

Hyponymy:

- "rural Jordanian Arabic" is a hyponym of "Arabic dialects."
- "emphatic syllable" is a hyponym of "emphasis."

Collocation:

- "Optimality Theory" is a collocated term that refers to a specific linguistic theory used in the study.
- "undominated constraint" is a collocated term that refers to a specific type of constraint within the Optimality-Theoretic framework.
- "driving force" is a collocated term that refers to the primary factor that influences the spread of emphasis in the subvariety of Jordanian Arabic being studied.

Final code "R2, S1, H2, C3"

For illustration (2):

**TEACHING PRONUNCIATION BY WRITING PHONETIC SYMBOLS FOR
PRONUNCIATION 1 CLASS (A CASE STUDY AT THE EMINENCE
ENGLISH COURSE)**

Abstract

The aim of this study is to describe the process of teaching pronunciation by writing phonetic symbols at The Eminence English Course Pare. Those are including of: the process of teaching pronunciation by writing phonetic symbols at The Eminence, the students' response toward the process of teaching pronunciation, and tutor solution of the problems which are faced by students. Qualitative was selected as a research approach; observation was used to collect some information about pronunciation program. The instrument used for collecting documents which is related to pronunciation program was documentation, it was kind of module book. The questionnaire was used to get students' perception in teaching learning process at pronunciation program. The result of this study showed that the⁷³⁷process of teaching phonetic symbols at The Eminence had been supported by syllabus and lesson plan although it was

not written yet structurally, the material was taken from module book, the media is using whiteboard, speaker, and Oxford dictionary. The method which was used was direct or natural method, the technique which was applied in the class was reading aloud technique. The evaluation of this program was taken on Sunday at the second week by giving written test. From the result about the students' perception was known that students had problems in pronunciation. It is word connection. Tutor solves this problem by giving word connection material. Key word: phonetic symbols, pronunciation, teaching pronunciation.

Repetition:

- "Teaching pronunciation" is repeated throughout the text.
- "The Eminence" is repeated throughout the text.
- "Pronunciation program" is repeated throughout the text.
- "Students" is repeated throughout the text.

Synonymy:

- "Teaching learning process" is used as a synonym for "teaching pronunciation" in the last sentence.

Hyponymy:

- "Qualitative approach" is a hyponym of "research approach" in the second sentence.
- "Observation," "documentation," and "questionnaire" are hyponyms of "instrument" in the second sentence.

Meronymy:

- "Syllabus," "lesson plan," "module book," "whiteboard," "speaker," and "Oxford dictionary" are meronyms of "teaching process" in the fourth sentence.
- "Written test" is a meronym of "program evaluation" in the fifth sentence.

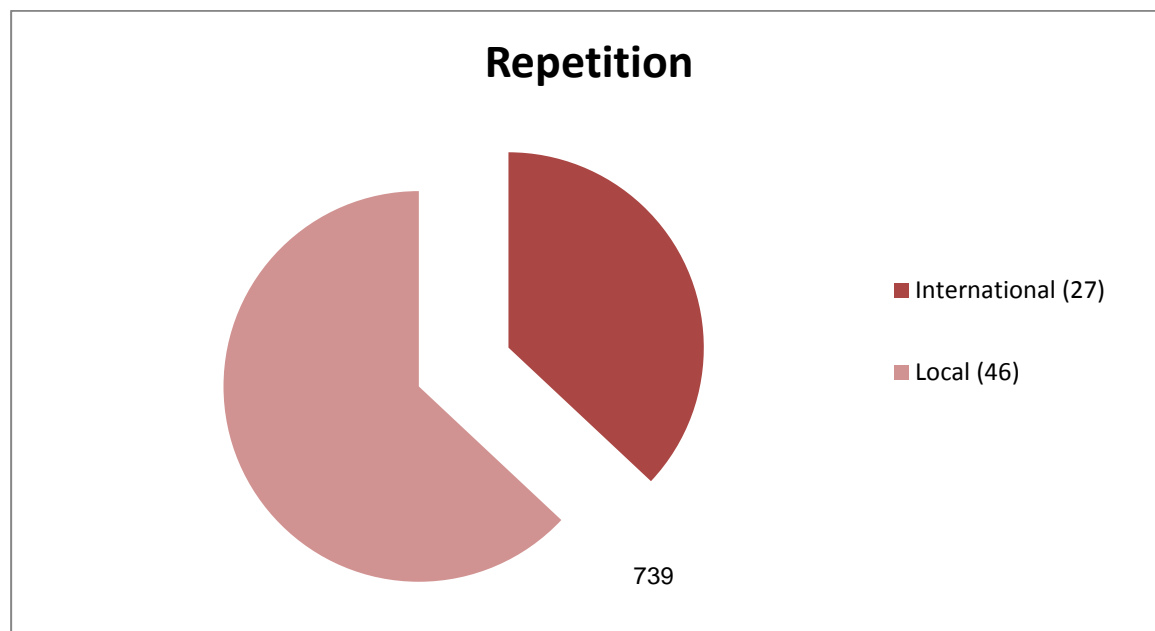
Collocation:

- "Pronunciation program" is a collocation used in the first sentence.
- "Module book" is a collocation used in the third and fourth sentences.
- "Reading aloud technique" is a collocation used in the fourth sentence.

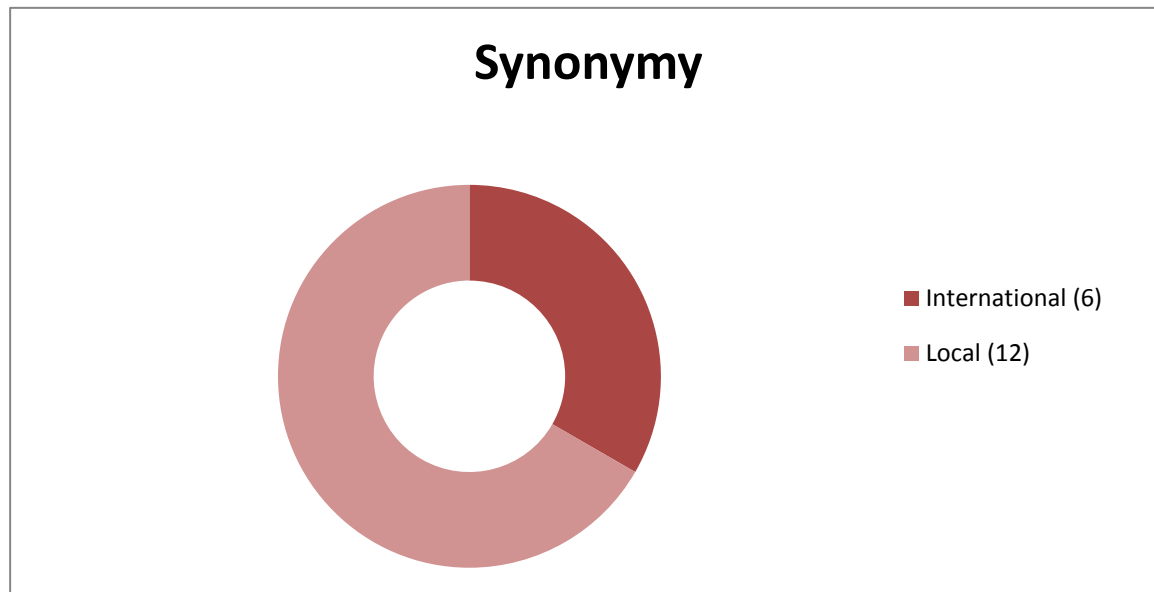
Final code: "R4, S1, H2, M2, C3."

Consequently, the coded data and output were compared and analyzed statistically to identify similarities and differences between the universal and local abstracts with respect to their lexical cohesion features.

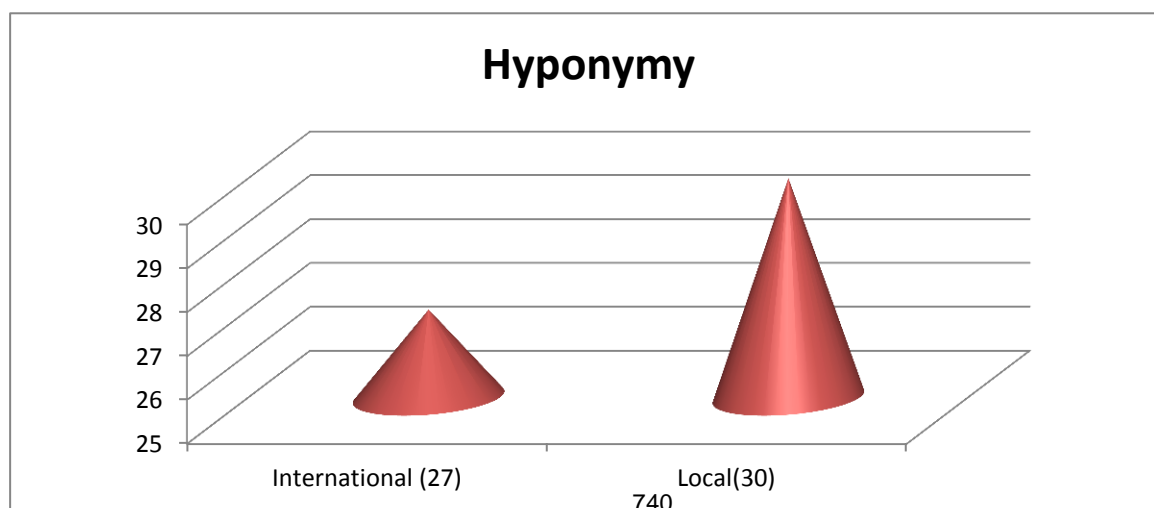
To begin, Repetition is one of the most widely used tools of cohesion. However, the analysis showed that local scholars used repetition more often than the foreign scholars.



Therefore, while not as commonly used as repetition, synonymy is still an important aspect of lexical cohesion. According to the analysis, local scholars employed synonymy twice as much as their international counterparts. This suggests that there may be cultural and linguistic factors that influence the use of lexical cohesion in academic writing.

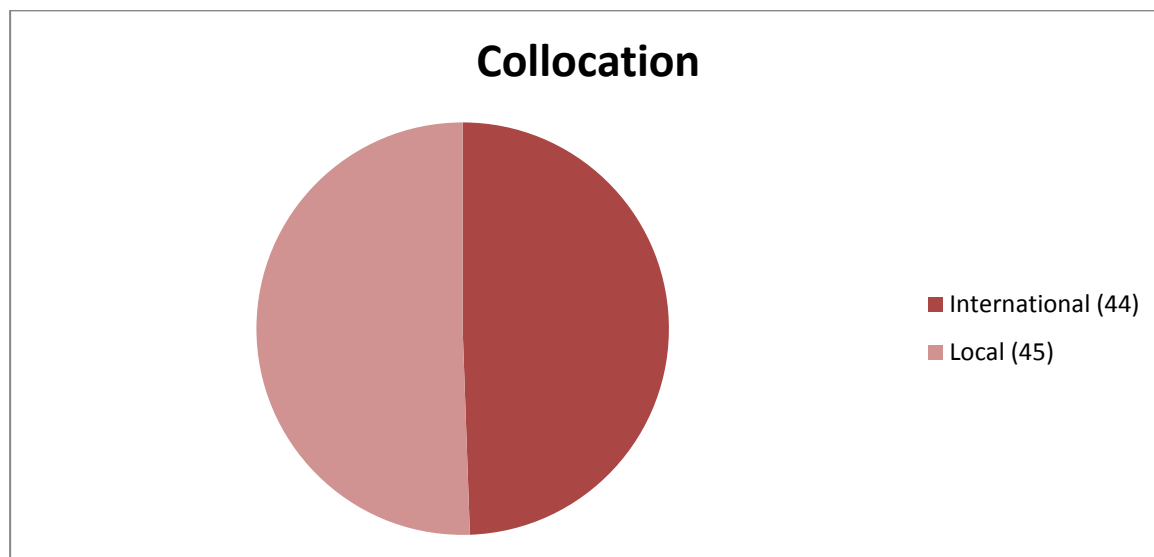


Furthermore, the analysis revealed that antonymy was rarely utilized in the thirty abstracts examined, with international scholars using it twice as often as local scholars who only used it once. On the other hand, hyponymy was frequently employed in the abstracts, but local scholars used it more often than their international counterparts.



Subsequently, the analysis assessed the usage of meronymy and found that there was no significant difference between the usage of local and international scholars. However, local scholars did use meronymy more frequently, ranging from two to seven instances.

Finally, the analysis revealed that collocation was the only type of lexical cohesion that both local and international scholars used equally. No significant difference was found between the frequency of collocation usage by either group.



1.5 Discussion

The present study compared the use of lexical cohesion tools in 30 academic abstracts, 15 authored by local scholars and 15 authored by international scholars. The results of the manual analysis revealed that local scholars used lexical cohesion tools more frequently than their international counterparts. In particular, local scholars used synonymy, hyponymy, and meronymy more often. Collocation was the only type of lexical cohesion that was used equally by both groups. Could you identify that on a new pie chart?

These findings suggest that cultural and linguistic factors may influence the use of lexical cohesion tools in academic writing. Local scholars may be more familiar with the norms and conventions of their own language and culture, and may therefore use certain types of lexical cohesion more frequently. International scholars, on the other hand, may be influenced by the norms and conventions of their own language and culture, which may differ from those of the language and culture in which they are writing.

The results of this study have implications for academic writing instruction and research. Educators and researchers may need to take into account the cultural and linguistic backgrounds of their students or participants when teaching or analyzing the use of lexical cohesion tools. Further research is needed to explore the factors that influence the use of lexical cohesion tools in academic writing, and to determine the extent to which these factors vary across different cultures and languages.

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