

The Roles Of Formulaic Sequences And Discourse Markers In Academic Writing; Insights From Lecturers And Other Researchers

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Abstract

Formulaic sequences and discourse markers are consistently used in academic writing. This study offers a new dimension to the study of formulaic sequences in academic discourses, focusing mainly on the views of key stakeholders in academic writing, including university lecturers, non-academic staff of universities who are also academic writers, independent writers and journal editors. A total of 375 respondents were engaged in the study across the different stakeholders group. Data was collected with questionnaire, and analysis was done using relevant statistical tools. The study reveals that over 73% of the academic writing stakeholders accepted that formulaic sequences and discourse markers have become an indispensable component of academic writing. Also, over 53% of the academic stakeholders who rejected the claim that writers unconsciously deploy formulaic sequences and discourse markers in their studies. The result further indicates that almost 70% of the respondents accepted that the use of formulaic sequences has constrained writers in academic domain from being free in their choice of linguistic features in different contexts. In other words, although the writers are consciously making use of these formulaic sequences and discourse markers, they are constrained to use them in relation to the context and semantics of the discourse. The findings also show that over 78% affirm that writers chose certain formulaic sequences to suit their discourse without paying close attention to the functions, but the context determines the functions of these tools. Finally, over 87% of the academic writing

stakeholders generally accepted that academic writers also deploy discourse markers and formulaic sequences to create cohesion, embed style, avoid repetition and create contextual effects. It is thus concluded that formulaic sequences and discourse markers remain vital for academic writing, and writers and editors need to exert clear understanding of their usage in relation to context and discourse effects.

1. Introduction

Patterns and standards for academic writing are essential to the dissemination of knowledge. As a result of its strict requirements, academic writing is known for its distinctive use of language and high standards of clarity and consistency. The purpose of this study is to accumulate insights from experienced lecturers and professional writers on the significance of formulaic patterns as well as discourse markers in academic discourse (Bestgen, 2020; Biber, 2009; Lei and Sui, 2018). The purpose of this study is to improve our knowledge of how academic writers make use of these linguistic elements to articulate their thoughts and justifications by examining the complex interaction between these features and the influence they have on academic writings.

The formulaic sequences and discourse markers that are frequently found in academic writing are crucial to the texts' general consistency and organisation. Professional writers regularly resort to formulaic sequences, repetitive verbal patterns used to communicate intended meaning or to create norms in an area of interest, and including anything from multi-word statements to idiomatic phrases (Paquet et al., 2019; Paquet and Ganger, 2012; Gries, 2010). These sequences are helpful for organising points of view, denoting shifts in topic, and presenting information clearly and concisely. Discourse markers (including "but," "in contrast," and "moreover") provide a comparable function by helping readers follow the logical progression of ideas across the text (Demir, 2017; Alhassan and Wood, 2015).

Formulaic sequences and discourse markers are widely used in academic writing; however, little is known about their subtle purposes and applications. This study aims to close that knowledge gap by assembling the perspectives of lecturers and other skilled writers who often interact with academic literature. By drawing on their expertise, we want to learn more about how academic writers purposefully use formulaic sequences and discourse markers to enhance their written communication. Furthermore, knowing how these linguistic elements are used in various fields may help teachers

and students improve their writing abilities and negotiate the complex terrain of academic communication.

2. Literature Review

Academic writing is characterized by different unique and creative conventions which serve different purposes, mainly to aid communication and facilitate understanding. Formulaic sequence and discourse markers have been critically studied in the literature, but the focus has been on the patterns and structures as linguistic units (Hyland, 2008; Garner et al., 2020; Ellis and Odgen, 2019; Chen and Baker, 2016). To gain insight into the views of lecturers and other professional writers, it is pertinent to provide a review of the understanding of formulaic sequences and discourse markers, their functions, and typology.

A. Formulaic Sequences and the Roles in Academic Writing

Formulaic sequences, which are also referred to as "multiword expressions" or "lexical bundles", are repetitive assemblages of words or phrases that demonstrate a significant level of rigidity in their arrangement and collocational tendencies (Paquet, 2019; Garner, 2020; Cunningham, 2017; Bestge, 2020). These sequences exhibit a conventionalized nature, whereby the significance of the entirety frequently surpasses the cumulative value of its individual components. Formulaic sequences comprise a diverse array of linguistic units, such as colloquialisms ("take into account"), phraseology (e.g., "a piece of cake"), and lengthier phrases or sentence structures (e.g., "On the one hand, ... on the other hand") (Wray, 2008; Staples et al., 2018; Romeo, 2010; Lei and Lui, 2018). The prevalence of these sequences is ubiquitous in common language usage, and their occurrence in scholarly writing has garnered significant interest from scholars in recent times.

Formulaic sequences serve multiple roles and functions in academic writing, which aid in enhancing the content's clearness, cohesiveness, and preciseness. To begin with, formulaic sequences function as cohesive mechanisms that establish connections between concepts both within and between sentences or paragraphs. They facilitate the establishment of coherent linkages, accentuate interrelationships, and steer readers through intricate lines of reasoning (Gries and Ellis, 2015; Granger, 2018; Chen and Baker, 2010; Biber, 2009; Candarli, 2021). Through the utilisation of developed formulaic sequences, writers can exhibit their proficiency with multidisciplinary patterns and effectively captivate their audience.

Moreover, the "utilisation of formulaic sequences in academic writing serves to bolster the author's position" and enhance their perceived

level of expertise. The utilisation of specific expressions, for instance "it can be argued that," "previous studies have shown," or "this study aims to," serves to indicate the writer's stance and establish a structure for presenting evidence or asserting claims (Casal and Cressler, 2020). The application of such sequences confers a sense of credibility upon the author, thereby establishing their proficiency and situating their contentions within the established academic dialogue.

Moreover, formulaic sequences have a pivotal function in the optimisation of linguistic resources. The presentation of intricate concepts in a concise manner is a common feature of academic writing. The utilisation of conventional sequences enables writers to communicate a vast amount of information in a compact format. Through the utilisation of recognisable patterns and expressions, authors can effectively convey their message, thereby decreasing the cognitive burden for both themselves and their audience (Paquet, 2018b; Hylamd, 2008).

In addition, the utilisation of formulaic sequences serves to enhance the reader's understanding and assist in their navigation of the written material. Upon encountering established formulaic sequences, readers can promptly handle the data and predict the subsequent structure and content. The aforementioned sequences serve as cognitive heuristics, facilitating readers to concentrate on the underlying significance and examination rather than struggling with the superficial linguistic configuration.

In the realm of academic writing, formulaic sequences play a crucial role by fulfilling diverse functions that enhance the efficacy and expediency of scholarly discourse. The identification and comprehension of these sequences can be advantageous for writers and readers alike, as they can improve the lucidity, consistency, and involvement in scholarly communication (Paquet, 2014; Grager, 2018; Garner, 2020). Additional investigation into formulaic sequences is necessary to examine their distinct usage patterns, disciplinary discrepancies, and educational implications in the instruction of academic writing.

B. Discourse Markers and Their Functions in Academic Writing

In order to examine the characteristics and roles of discourse markers in scholarly writing, it is essential to differentiate between discourse markers and formulaic sequences. Although discourse markers and formulaic sequences both play a role in the structuring and cohesion of language, their respective functions are distinct. The primary function of "discourse markers is to serve as pragmatic elements,

whereas formulaic sequences mostly deal with lexical and syntactic patterns".

The utilisation of discourse markers is of a major impact in shaping and structuring communication across diverse contexts. Discourse markers are crucial linguistic tools that aid in the creation of coherent texts and facilitate effective communication in academic discourse, in which straightforwardness is paramount (Staples et al., 2018; Demir, 2017).

Discourse markers, which are also referred to as "discourse connectives, pragmatic markers, or transitional devices", are vocabulary elements that indicate connections between various segments of a discourse. These transitional devices serve as navigational aids for readers, as they signal the connections between concepts, emphasise crucial details, and promote the coherence of information within a text. Discourse markers encompass a variety of linguistic units, including words, phrases, and clauses, which function to establish connections between ideas, introduce novel information, clarify meaning, convey comparison, pattern instances, draw inferences, and indicate causal relationships. Lexical cohesive devices are utilised across different levels of discourse, spanning from single phrases to complete paragraphs, and play a crucial role in enhancing the cohesiveness and coherence of written compositions.

Discourse markers serve various roles and functions in academic writing, contributing to the efficacy and lucidity of communication. Primarily, they aid in indicating the arrangement and systematisation of a scholarly document. Discourse markers such as "firstly," "secondly," and "finally" are frequently employed to signify the sequence and advancement of concepts, thereby facilitating the comprehension of the argument's coherent progression by readers. The utilisation of markers serves to establish a coherent framework, facilitating the writer's ability to convey details in an organised and methodical manner (Demir, 2017, p.38).

In addition, discourse markers play a crucial role in emphasising significant points or essential information within academic discourse. Expressions such as "notably," "crucially," or "significantly" serve to highlight noteworthy discoveries, theoretical constructs, or empirical data, underscoring their pertinence and significance within the framework of the study (Candarli, 2021, p.48).

Discourse markers serve the purpose of enhancing cohesion by creating linkages between distinct segments of a given text. Transitional devices facilitate coherence in a text by establishing connections between ideas, presenting supporting illustrations or

evidence, and demonstrating the interrelationships among arguments. Transitional markers such as "in addition," "moreover," and "furthermore" are employed to introduce corroborating evidence or provide supplementary information that bolsters the primary argument.

Furthermore, discourse markers serve the purpose of indicating contrast and offering elucidation in the context of scholarly writing. Transitional markers such as "however," "on the other hand," and "in contrast" serve to introduce divergent viewpoints or ideas, thereby enabling authors to recognise different points of view or put forward alternatives.

C. Theoretical Foundation of the Study

Different theories have been developed and applied in the account of written and spoken language use in context; however, the conceptual basis of the Systemic Functional Linguistic theory surfaces to be instrumental in discussing diversified nature of discourses tied to divergent contexts (Halliday, 2013; Butler, 2004). Systemic Functional Linguistics (SFL) theory provides an extensive foundation for the analysis of language in relation to its communicative and social functions. The initial development of this theory can be traced back to Michael Halliday's work in the 1960s, which has subsequently undergone extensive refinement and expansion by an array of linguists. Systemic Functional Linguistics (SFL) regards language as a valuable tool for constructing meaning, highlighting the dynamic relationship between language and its social context (Neil, 2020; Wang, 2018).

The utilisation of Systemic Functional Linguistics (SFL) presents a valuable perspective for analysing the structural functions of formulaic sequences and discourse markers in academic writing (Butler, 2008). The systemic functional linguistics theory postulates that language functions beyond being a mere medium of transmitting information, and instead plays a crucial role in social and communicative contexts. This assertion underscores the notion that language selection is influenced by the situational factors in which it is employed and that diverse genres of written or spoken communication exhibit unique linguistic characteristics.

In academic writing, formulaic sequences, including idiomatic expressions, collocations, and lexical bundles, are of utmost significance. Writers are able to convey even the most complex ideas by consistently using a small number of well-chosen word combinations (Neil, 2020; Wang, 2018). According to systemic functional linguistics (SFL), formulaic sequences may be used for both

ideational and linked functions (Halliday, 2013). In terms of content, they aid writers in bringing together disparate pieces of information, arranging them coherently, and conveying complex concepts clearly. Interpersonally, formulaic sequences serve an important function in building a sense of familiarity and integration across academic communities and in developing discipline identities.

The SFL paradigm also acknowledges the use of discourse markers in drawing attention to relationships between ideas, structuring arguments, and guiding the reader's understanding of the text. Academic writing benefits from discourse markers because they make it easier to articulate a variety of logical and rhetorical linkages between claims, which in turn improves the text's overall flow and readability. These indicators allow authors to indicate variations, differences, and links between causes and effects.

Systemic Functional Linguistic theory agrees with these views, offering a systematic technique for investigating how linguistic features contribute to the overarching purpose of scholarly writing as a means of communication. Through the utilisation of Systemic Functional Linguistics (SFL), researchers have the ability to investigate the dispersion and purposes of formulaic sequences and discourse markers within specialised fields of study (garner, 2020; Neil, 2020). This allows for the identification of patterns and deviations that provide insight into the rhetorical techniques employed by proficient authors. Our research attempts to utilise Systemic Functional Linguistics (SFL) to obtain a deeper understanding of the role that formulaic sequences and discourse markers play in enhancing the effectiveness, coherence, and persuasiveness of academic writing.

D. Research Questions

The following research questions are pursued in this study:

1. What is the perception and attitude of lecturers and other professional writers towards the use of formulaic sequences in academic writing?
2. What are the experts' views on the roles and functions of discourse markers and formulaic sequences in academic writing?

E. Problem Statement

Academic writing has evolved over the years, and researchers have paid attention to the manner in which language is used in academic discourse. There is an expanded literature on the nature of formulaic sequences and discourse markers used in academic writing, wherein attention has been on the functions and patterns of these linguistic features. However, the data for analysis on the functions and roles of

formulaic sequences in academic discourses have been derived mainly from a corpus of academic essays and publications. In other words, there is a need to interrogate the professional writers and lecturers directly, to gain personalized insights on the creative and strategic essence of the use of these linguistic features in professional academic writing. We initiated this study to generate the perspectives of the writers and researchers directly on their perceptions of the use of discourse markers and formulaic sequences in academic discourses.

3. Research Methodology

To collect and analyse the required data for this study, we adhered to the following methodological directions:

A. Research Community

We selected the respondents from the mainstream research community. The participants include university lecturers who must have published minimum of three research papers in their respective fields. The choice of university lecturers is beyond the fact that they use these formulaic sequences and discourse markers in their research publications, they also use them in teaching, and some of them teach these discourse markers to their students. Other key stakeholders are professional researchers who are either non-academic members of the university community who are professional writers, or independent academic writers and journal editors. The participants were carefully selected to reflect the main stakeholders in the academic writing sector.

B. Study Approach

A survey design was considered to be more suitable for this research, as the approach is quantitative. We collected statistically measurable data from a larger study population in order to gain deeper insights into the functions and roles of formulaic sequences and discourse markers in academic discourses.

C. Study Sample

Cross sectional purposive sampling technique was selected for this study wherein all the participants who were willing to participate in the study across different universities and private sector were given the opportunity to participate based on the selection requirements. Through purposive sampling approach, a total of 375 academic writing stakeholders were selected for the study, as presented in the demographic variables table below:

Groups	Categories	Variables	Frequency	Percentage
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University Lecturers	Gender	Male	87	62.58%
		Female	52	37.42%
	Work Experience	1-4 years	39	28.06%
		5-9 years	51	36.69%
		10 years and above	49	35.25%
Non-Academic University Staff	Gender	Male	49	32.03%
		Female	104	67.97%
	Work experience	1-4 years	57	37.26%
		5 years and above	96	62.74%
		Male	54	65.06%
Independent Writers and journal editors	Gender	Female	29	34.94%
	Work experience	1-4 years	23	27.72%
		5 years and above	60	72.28%

Table 1 provides insights on how the study sample saw stratified across different groups and categories. The nature of the nature informs the use of cross-sectional study design to gather the respondents in collecting the required data.

D. Data Collection Procedure

Structured questionnaire was designed and distributed electronically to the study respondents. The questionnaires are segmented into three main parts. The first segment elicits the necessary demographic variables from the study participants. The second segment focuses on the level of consciousness and awareness of the use of formulaic sequences and discourse markers in academic writing. The third segment focuses on the functions of these linguistic features in academic writing. The questionnaires were designed with five-points Likert scale (strongly agree, agree, disagree and strongly disagree). The choice of five-points Likert scale is to ensure that the respondents are constrained to provide feedback that are insightful as they are availed various options that suits their opinions about a question or statement (Jones, 2023).

E. Data Analysis Procedure

The analysis was carried out using relevant statistical tools. The mean and the percentages of the Likert scale values were calculated and computed in descriptive statistics tables. The research questions form the basis of the analysis.

4. Results and Discussions

4.1. Results

A. What is the perception an attitude of lecturers and other professional writers towards the use of formulaic sequences in academic writing?

Five questionnaire items were derived from this particular research questions, which form the basis for the discussion of the perception and attitude of lecturer and other professional writers on formulaic sequences and discourse markers in academic writing. The results of the views of the stakeholders in academic writing are in academic writing are summarized in the following descriptive statistics table.

Table 2: Results of the attitude and perception of formulaic sequences by the respondents

Question items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Formulaic sequences and discourse markers have become an indispensable component of academic writing.	21.07%	52.53%	6.13%	10.93%	9.34%	3.94
Writers unconsciously deploy formulaic sequences and discourse markers in their studies.	7.46%	25.87%	13.07%	29.06%	24.54%	2.72
The use of formulaic sequences has constrained writers in academic domain from being free in their choice of linguistic features in different contexts.	19.47%	49.87%	10.4%	14.13%	6.13%	4.16
Using formulaic sequences and discourse markers in academic writing compels writers to be creative and context sensitive	24.8%	50.4%	9.34%	9.86%	5.6%	4.83
It is important for writers to critically study the semantic and pragmatic effects of various discourse markers and formulaic sequences before they deploy them in their academic writing	26.94%	52%	7.2%	10.4%	3.46%	4.93

Systemic Functional Linguistics theory, in accordance with the propositions of Halliday (2013) supports the claim that language use is derived by the consciousness to adhere to contextual requirement by the language users. According to Neil et al. (2020), language users consciously create expressions to suit their immediate contextual experiences as members of different communities or groups. These views support the findings in table 2. It can be seen that over 73% of

the academic writing stakeholders accepted that formulaic sequences and discourse markers have become an indispensable component of academic writing. Academic writers create academic discourses and contexts which necessarily requires the use of certain expressions to signify different meaning and reconnect with the primary context. This finding is further expounded by the views of over 53% of the academic stakeholders who rejected the claim that writers unconsciously deploy formulaic sequences and discourse markers in their studies. Following the foundational propositions of the Systemic Functional Linguistic theory, when speakers use linguistic features in certain contexts, they consciously deploy those expressions mainly to suit their understanding of the context in relation to the discourse (Garner, 2020). As such, it is advanced in this study that the use of formulaic sequences and discourse markers are consciously employed in the academic writing. Although over 32% of the stakeholders rejected this claim and 13.07% chose to remain neutral, more than half of the study sample affirmed that the use of formulaic sequences is rather conscious instead of unconscious as claimed by Wang et al. (2018).

Although academic writers consciously deploy these linguistic features, almost 70% of the respondents accepted that the use of formulaic sequences has constrained writers in academic domain from being free in their choice of linguistic features in different contexts. In other words, although the writers are consciously making use of these formulaic sequences and discourse markers, they are constrained to use them in relation to the context and semantics of the discourse. This may be why Wang (2018), using the Systemic Functional Theory, affirms that formulaic sequences are pragmatic rather than semantic concepts. This implies that it is the context that determines which formulaic sequence can be used by the academic writers in certain contexts. For instance, to submit the findings of a study in an abstract, the academic writer is constrained to use certain formulaic sequences such as 'this study reveals that', 'it was discovered that', 'the findings suggest that', among others. This may be different from the presentation of results in the discussion of data analysis section, where academic writers usually employ formulaic sequences such as 'it can be seen', 'the result is suggesting that', among others. Also, the formulaic sequences used in presenting the objectives of a study are different from the ones used in presenting research questions. This statement is also similar with the use of discourse markers. For instance, the use of these expressions 'therefore, in addition, and furthermore' must be in contexts of extending an earlier subjected view. Similarly, the use of these discourse markers 'notwithstanding, contrary to, on the other hand'

among others must be deployed in the expression of distinct view from what was stated earlier. It implies that despite the fact that academic writers are at liberty to use any formulaic sequence and discourse markers, they must do this in reflection of the contextual sensitivity of the discourse. This is also supported by over 74% of the academic writing stakeholder who affirm that formulaic sequences and discourse markers compel writers to be creative.

The table also indicates that it is important for writers to critically study the semantic and pragmatic effects of various discourse markers and formulaic sequences before they deploy them in their academic writing. This statement is affirmed by over 78% of the samples, and rejected by less than 14%. The implication is that the teaching of formulaic sequences and discourse markers in academic writing should form part of the academic curricula in the university. It is important to teach undergraduates and postgraduates how and the right manner to deploy the formulaic sequences. Furthermore, this calls for a general need to have institutional databases for formulaic sequences and discourse markers, from which students from certain disciplines can easily discover how these linguistic features are consistently deployed in academic discourses.

B. What are the experts' views on the roles and functions of discourse markers and formulaic sequences in academic writing?

Beyond the perceptions and attitudes of the lecturers, non-academic staffs who are academic writers, professional independent writers and journal editors towards the use of formulaic sequences and discourse markers in academic writing, it is pertinent to gain their views on the functions of these linguistic features.

Table 3: Results of the Roles and Functions of Formulaic Sequences and Discourse markers in Academic Writing

Question Items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
The roles and functions of formulaic sequences are primarily determined by the writer and context.	33.33%	45.07%	4.8%	9.87%	6.93%	4.85
Majorly, academic writers deploy formulaic sequences and discourse markers in the effort to create their own register and style of writing	26.4%	46.66%	3.47%	14.67%	8.8%	4.26
It is expected to see certain formulaic sequences and discourse marker in	36.54%	46.14%	5.06%	7.2%	5.06%	5.03

academic writing as they serve to distinguish academic writing from other forms of discourse						
Academic writers also deploy discourse markers and formulaic sequences to create cohesion, embed style, avoid repetition and create contextual effects	37.07%	50.93%	4.54%	5.06%	2.4%	5.10

In according with the projections of the Systemic Functional Linguistic theory, the function of a linguistic expression is dependent on the context and pragmatic considerations of the linguistic surroundings (Bell, 2019). In other words, writers chose certain formulaic sequences to suit their discourse without paying close attention to the functions, but the context determines the functions of these tools. This view is supported by over 78% of the respondents as seen in the first question in table 3. Furthermore, over 82% affirm that academic writers primarily deploy formulaic sequences and discourse markers in the effort to create their own register and style of writing. According to the proponents of Systemic Functional Linguistic theory, the core function of linguistic variable is to communicate ideas and thoughts; however, language users create their own register and style as they communicate their ideas (Halliday, 2013; Butler, 2008). As such, in addition to communicating certain meanings, academic writers make effort to create their own writing style through the use of particular formulaic sequences and discourse markers. For instance, some authors, through corpus analysis, may see that they use certain formulaic sequences and discourse markers frequently in specific contexts, which form their own unique writing effects.

The table further indicate that over 82% of the sample affirm that it is expected to see certain formulaic sequences and discourse marker in academic writing as they serve to distinguish academic writing from other forms of discourse. The implication is that academic writers and journal editors must be looking out for the use of certain formulaic sequences and discourse markers in certain contexts in academic writing. Again, formulaic sequences and discourse markers set academic writing apart from other genres of writing; hence, the idea of 'formulaic sequences for academic writing'. In table 3 also, over 87% of the study population generally accepted that academic writers also deploy discourse markers and formulaic sequences to create cohesion, embed style, avoid repetition and create contextual effects.

4.2. Discussions

The presented data offers arrays of findings on the roles and functions of formulaic sequences and discourse markers in academic writing,

from the perspective of university lectures, non-academic staff of universities who are also academic writers, independent writers and journal editors. The findings indicate that a majority of academic writing stakeholders, specifically 73%, acknowledged the indispensability of formulaic sequences and discourse markers in academic writing. Academic discourse necessitates the use of specific expressions to convey distinct meanings and establish connections with the primary context. As such, academic writers employ these expressions to create academic contexts. The aforementioned discovery is elaborated by the perspectives of over 53% of the research participants who refuted the assertion that writers unconsciously utilise formulaic sequences and discourse markers in their research. In accordance with the fundamental principles of the Systemic Functional Linguistic framework, individuals utilise linguistic elements in specific settings with a deliberate intention to tailor their expressions to align with their comprehension of the context within the discourse (wang, 2018). This study posits that the deliberate utilisation of formulaic sequences and discourse markers is prevalent in academic writing. While a minority of stakeholders (13.07%) opted to remain neutral, a significant proportion (32%) rejected the assertion that the use of formulaic sequences is unconscious. However, the majority of the study sample indicated that the employment of such sequences is a conscious process.

Despite the deliberate utilisation of these linguistic characteristics by academic writers, a significant proportion of the participants, approximately 70%, acknowledged that the incorporation of formulaic sequences has limited the flexibility of writers in the academic field to select linguistic features appropriate for various contexts. The writers' deliberate employment of formulaic sequences and discourse markers, their usage is bound by the contextual and semantic parameters of the discourse.

The findings suggest that writers should conduct a thorough analysis of the semantic and pragmatic implications of different discourse markers and formulaic sequences prior to utilising them in their academic writings. This assertion is supported by a majority of the samples, specifically over 78%, while being refuted by a minority of less than 14%. It can be inferred that incorporating the learning of formulaic sequences and discourse markers into the academic curricula of universities is advisable for academic writing. Imparting knowledge on the appropriate utilisation of formulaic sequences is a crucial aspect of educating both undergraduate and postgraduate students. In addition, there is a pressing requirement for the establishment of institutional databases containing formulaic sequences and discourse markers. Such resources would enable

students in specific fields to readily identify the consistent deployment of these linguistic features within academic discourses.

It has been found that 82% of the participants acknowledge the utilisation of formulaic sequences and discourse markers by academic writers as a means to establish their unique register and writing style. In accordance with the advocates of the Systemic Functional Linguistic theory, the fundamental purpose of a linguistic variable is to convey ideas and notions. Nevertheless, language users devise their own register and style while expressing their ideas. Academic writers endeavour to establish their unique writing style by utilising specific formulaic sequences and discourse markers, in addition to conveying particular meanings. For example, certain writers may utilise distinct writing effects by frequently employing formulaic sequences and discourse markers in particular contexts, as revealed through corpus analysis.

The findings reveal that a significant majority of the participants, specifically "82%", acknowledge the presence of formulaic sequences and discourse markers as an essential feature of academic writing. These linguistic elements are perceived to be instrumental in differentiating academic writing from other types of discourse. It can be inferred that individuals who engage in academic writing and those responsible for editing academic journals should remain vigilant in detecting the utilisation of specific formulaic sequences and discourse markers within particular academic contexts. Academic writing is distinguished from other genres of writing by its utilisation of formulaic sequences and discourse markers. This has led to the development of the concept of "formulaic sequences for academic writing." The majority of the study population, specifically over 87%, acknowledged that academic writers utilise discourse markers and formulaic sequences to establish coherence, incorporate style, prevent redundancy, and generate contextual effects.

5. Conclusions

This study has offered a new dimension to the study of formulaic sequences in academic discourses, focusing mainly on the views of key stakeholders in academic writing, including university lecturers, non-academic staff of universities who are also academic writers, independent writers and journal editors. A total of 375 respondents were engaged in the study across the different stakeholders group. Overall, the statistical analysis made open important findings, which are significant in this article. The study reveals that over 73% of the academic writing stakeholders accepted that formulaic sequences and discourse markers have become an indispensable component of academic writing. Also, over 53% of the academic stakeholders who

rejected the claim that writers unconsciously deploy formulaic sequences and discourse markers in their studies. The result further indicates that almost 70% of the respondents accepted that the use of formulaic sequences has constrained writers in academic domain from being free in their choice of linguistic features in different contexts. In other words, although the writers are consciously making use of these formulaic sequences and discourse markers, they are constrained to use them in relation to the context and semantics of the discourse. The findings also show that over 78% affirm that writers chose certain formulaic sequences to suit their discourse without paying close attention to the functions, but the context determines the functions of these tools. Finally, over 87% of the academic writing stakeholders generally accepted that academic writers also deploy discourse markers and formulaic sequences to create cohesion, embed style, avoid repetition and create contextual effects. It is thus concluded that formulaic sequences and discourse markers remain vital for academic writing, and writers and editors need to exert clear understanding of their usage in relation to context and discourse effects.

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References

- Al Sabi, Y. N., Jaradat, S. A., Ayasrah, M. N., Khasawneh, M. A. S., & Al Taqatqa, F. A. S. (2022). Shyness and its Relation with Self-esteem in Light of Some Variables. *Information Sciences Letters*, 11(6), pp. 2345–235. DOI: <http://dx.doi.org/10.18576/isl/110641>
- Al-Ajeely, S. A., & Khasawneh, M. A. S. (2022). The Role of University Education in Confronting the Phenomenon of Terrorism and Promoting Belonging among Young People. *Journal of Positive Psychology and Wellbeing*, 6(1), 3206-3211. <https://journalppw.com/index.php/jppw/article/view/5194>
- Al-Amrat, M. G. R., & Khasawneh, M. A. S. (2022). Students with Special Education Disabilities' Spatial Skills. *Journal of Positive Psychology and Wellbeing*, 6(1), 3185-3194. <https://journalppw.com/index.php/jppw/article/view/5190>
- Alatoom, E. K. T., & Khasawneh, M. A. S. (2022). The Reality of Online Education and its Obstacles from the Perspectives of Resources Rooms Teachers in Amman Schools During the COVID-19 Pandemic. *Journal of Positive Psychology and Wellbeing*, 6(1), 3195-3205. <https://journalppw.com/index.php/jppw/article/view/5192>

- AlHassan, L., & Wood, D. (2015). The effectiveness of focused instruction of formulaic sequences in augmenting L2 learners' academic writing skills: A quantitative research study. *Journal of English for Academic Purposes*, 17, 51–62.
- Alkhasawneh, T., Al-Shaar, A. S., Khasawneh, M., Darawsheh, S., & Aburaya, N. (2022). Self-Esteem and its Relationship to some Demographic Variables among Students with Learning Disabilities. *Information Sciences Letters*, 11(6), pp. 1929–1936. <http://dx.doi.org/10.18576/isl/110609>
- Alkhalwaldeh, M. A., & Khasawneh, M. A. S. (2022). Problems faced by English language teachers in teaching students with learning disabilities. *Science and Education*, 3(5), 677-687. [problems-faced-by-english-language-teachers-in-teaching-students-with-learning-disabilities.pdf](http://dx.doi.org/10.18576/sciedu/article/view/3458)
- Alkhalwaldeh, M. A., & Khasawneh, M. A. S. (2022). The challenges that English teachers face in the employment of the evaluation matrix in classes for students with learning difficulties. *Science and Education*, 3(5), 688-699. <https://openscience.uz/index.php/sciedu/article/view/3458>
- Ayasrah, M. N., Alkhalwaldeh, M. A., Khasawneh, M. A. S., & Alnajjar, F. Y. A. (2022). The Role of Teacher Interpersonal Communication with Autistic Students in Developing Social Skills. *Clinical Schizophrenia & Related Psychoses*. DOI: [10.3371/CSRP.MMWY.100127](https://doi.org/10.3371/CSRP.MMWY.100127)
- Bestgen, Y. (2017). Beyond single-word measures: L2 writing assessment, lexical richness and formulaic competence. *System*, 69, 65–78.
- Bestgen, Y. (2020). Comparing lexical bundles across corpora of different sizes: The Zipfian problem. *Journal of Quantitative Linguistics*, 27(3), 272–290.
- Bestgen, Y., & Granger, S. (2014). Quantifying the development of phraseological competence in L2 English writing: An automated approach. *Journal of Second Language Writing*, 26, 28–41.
- Biber, D. (2009). A corpus-driven approach to formulaic language in English. *International Journal of Corpus Linguistics*, 14(3), 275–311.
- Biber, D., & Barbieri, F. (2007). Lexical bundles in university spoken and written registers. *English for Specific Purposes*, 26(3), 263–286.
- Biber, D., Conrad, S., & Cortes, V. (2004). If you look at ...: Lexical bundles in university teaching and textbooks. *Applied Linguistics*, 25(3), 371–405.
- Butler, C. S. (2004). Corpus studies and functional linguistic theories. *Functions of language*, 11(2), 147-186.

Butler, C. S. (2008). Formulaic sequences in functional and cognitive linguistics.

Candarli, D. (2021). A longitudinal study of multi-word constructions in L2 academic writing: the effects of frequency and dispersion. *Reading and Writing*, 34(5), 1191–1223.

Casal, J. E., & Kessler, M. (2020). Form and rhetorical function of phrase-frames in promotional writing: A corpus- and genre-based analysis. *System*.

Chen, Y. H., & Baker, P. (2010). Lexical bundles in L1 and L2 academic writing. *Language Learning & Technology*, 14(2), 30–49.

Chen, Y. H., & Baker, P. (2016). Investigating criterial discourse features across second language development: Lexical bundles in rated learner essays, CEFR B1, B2 and C1. *Applied Linguistics*, 37(6), 849–880.

Cunningham, K. J. (2017). A phraseological exploration of recent mathematics research articles through key phrase frames. *Journal of English for Academic Purposes*, 25, 71.

Demir, C. (2017). Lexical collocations in English: A comparative study of native and non-native scholars of English. *Journal of Language and Linguistic Studies*, 13(1), 75–87.

Ellis, N. C., & Ogden, D. C. (2017). Thinking About Multiword Constructions: Usage-Based Approaches to Acquisition and Processing. *Topics in Cognitive Science*, 9(3), 604–620.

Ellis, N., Simpson-Vlach, R., & Maynard, C. (2008). Formulaic Language in Native and Second Language Speakers: Psycholinguistics, Corpus Linguistics, and TESOL. *TESOL Quarterly*, 42(3), 375–396.

Garner, J. (2020). The cross-sectional development of verb–noun collocations as constructions in L2 writing. *International Review of Applied Linguistics in Language Teaching*, 1957, 1–27.

Garner, J. R. (2016). A phrase-frame approach to investigating phraseology in learner writing across proficiency levels. *International Journal of Learner Corpus Research*, 2(1), 31–67.

Garner, J., Crossley, S., & Kyle, K. (2019). N-gram measures and L2 writing proficiency. *System*, 80(2), 176–187.

Garner, J., Crossley, S., & Kyle, K. (2020). Beginning and intermediate L2 writer's use of N-grams: An association measures study. *IRAL - International Review of Applied Linguistics in Language Teaching*, 58(1), 51–74.

Granger, S. (2018). Formulaic sequences in learner corpora: Collocations and lexical bundles. In A. Siyanova-Chanturia & A.

Pellicer-Sánchez (Eds.), *Understanding Formulaic Language: A Second Language Acquisition Perspective* (pp. 228– 247). Routledge.

Granger, S., & Bestgen, Y. (2018). Tracking L2 writers' phraseological Development Using Collgrams: Evidence from a Longitudinal EFL Corpus. In H. Sebastian, S. Andrea, A.-L. Sabine, & D. Lisa Marie (Eds.), *Corpora and Lexis* (Issue 81, pp. 277–301). Brill.

Gries, S. T. (2010). Useful statistics for corpus linguistics. In A. Sánchez & M. A. Sánchez (Eds.), *A mosaic of corpus linguistics: selected approaches*.

Gries, S. T., & Ellis, N. C. (2015). Statistical measures for usage-based linguistics. *Language Learning*, 65(S1), 228–255.

Hadhrami, A. S. A. L., Al-Amrat, M. R., Khasawneh, M. A. S., & Darawsheh, S. R. (2022). Approach to Improve Reading Skill of Students with Dyslexia. *Information Sciences Letters*, 11(6), pp. 2333–2338. <http://dx.doi.org/10.18576/isl/110639>

Halliday, M. A. K., & Matthiessen, C. M. (2013). *Halliday's introduction to functional grammar*. Routledge.

Hyland, K. (2008). As can be seen: Lexical bundles and disciplinary variation. *English for Specific Purposes*, 27(1), 4–21.

Khasawneh, M. (2022). The Relationship of Curriculum, Teaching Methods, Assessment Methods, and School and Home Environment with Learning Difficulties in English Language from the Students' Perspectives. *Journal of Innovation in Educational and Cultural Research*, 3(1), 41-48. <https://doi.org/10.46843/jiecr.v3i1.51>

Khasawneh, M. A. S. (2022). Developing the imagination skills among students with learning disabilities in English language. *Science and Education*, 3(4), 627-641.

Khasawneh, M. A. S. (2022). Language Skills and Their Relationship to Learning Difficulties in English Language from the Teachers' Point of View. *The Journal of Quality in Education*, 12(19), 104-113. <https://doi.org/10.37870/joqie.v12i19.308>

Khasawneh, M. A. S. (2022). The degree of practicing effective communication skills among teachers of learning disabilities in English language from their point of view. *Science and Education*, 3(2), 492-509. <https://orcid.org/0000-0002-1390-3765>

Khasawneh, M. A. S. (2022). The level of motivation among teachers of learning disabilities in English language in light of the COVID-19 pandemic. *Science and Education*, 3(4), 664-677. <https://openscience.uz/index.php/sciedu/article/view/3026>

Khasawneh, M. A. S. (2022). The level of practicing organizational trust among teachers of learning disabilities in English language from

their point of view. *Science and Education*, 3(2), 481-491.
<https://orcid.org/0000-0002-1390-3765>

Khasawneh, M. A. S. (2022). Work pressures among teachers of learning disabilities in English language from their point of view. *Science and Education*, 3(2), 510-529. <https://orcid.org/0000-0002-1390-3765>

Lei, L., & Liu, D. (2018). The academic English collocation list. *International Journal of Corpus Linguistics*, 23(2), 216–243.

Nell, K. (2020). The effect of systemic functional linguistics-based self-intervention programme on the ESL grammar proficiency of Grade 8 learners (Doctoral dissertation).

Shater, A., AlMahdawi, A. J., & Khasawneh, M. A. S. (2023). The Digital Learning of Disabled Students: Perceptions of Teachers in Public Schools. DOI: <http://dx.doi.org/10.18576/isl/120227>

Yaser, N. A. S., Samar, A. J., Firas, A. S. A. T., & Mohamad, A. S. K. (2022). USING SOCIAL MEDIA NETWORK BY SPECIAL EDUCATION TEACHERS. *International Journal of Cognitive Research in Science, Engineering and Education*, 10(2), 39-50. DOI: [10.23947/2334-8496-2022-10-2-39-50](https://doi.org/10.23947/2334-8496-2022-10-2-39-50)

Paquot, M. (2014). Cross-linguistic influence and formulaic language. *EUROSLA Yearbook*, 14(August 2014), 240–261.

Paquot, M. (2018a). Phraseological Competence: A Missing Component in University Entrance Language Tests? Insights From a Study of EFL Learners' Use of Statistical Collocations. *Language Assessment Quarterly*, 15(1), 29–43.

Paquot, M. (2018b). Phraseological competence: A missing component in university entrance language tests? Insights from a study of EFL Learners' use of statistical collocations. *Language Assessment Quarterly*, 15(1), 29–43.

Paquot, M. (2019). The phraseological dimension in interlanguage complexity research. *Second Language Research*, 35(1), 121–145.

Paquot, M., & Granger, S. (2012). Formulaic language in learner corpora. *Annual Review of Applied Linguistics*, 32(August 2015), 130–149.

Paquot, M., Naets, H., & Gries, S. T. (2019). Using syntactic co-occurrences to trace phraseological complexity development in learner writing: verb + object structures in LONGDALE. *Second Language Acquisition and Learner Corpora*, 1–19.

Römer, U. (2010). Establishing the phraseological profile of a text type: The construction of meaning in academic book reviews. *English Text Construction*, 3(1), 95–119.

Staples, S., Egbert, J., Biber, D., & McClair, A. (2013). Formulaic sequences and EAP writing development: Lexical bundles in the TOEFL iBT writing section. *Journal of English for Academic Purposes*, 12(3), 214–225.

Wang, Y. (2018). Formulaic sequences signalling discourse organisation in ELF academic lectures: a disciplinary perspective. *Journal of English as a Lingua Franca*, 7(2), 355-376.

Wray, A. (2008). *Formulaic language: Pushing the boundaries*. Oxford: Oxford University