

BRIDGING PROFICIENCY AND PRACTICE: ALIGNING LEXICAL BUNDLES IN PAKISTANI L2 LEARNERS' WRITING WITH CEFR DESCRIPTORS

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Abstract

The purpose of this corpus-based research is to explore the alignment between the lexical bundles (LBs) in the academic writing of Pakistani undergraduate L2 learners and the proficiency descriptors as provided by the CEFR. It aims to find out the relationships between the form, frequency, and the role of learner LBs to anticipated competencies at the various levels of the CEFR. The achievement of fluency and academic coherence in second language (L2) writing relies on the lexical bundles (LBs), involving the repetition of multiple-word phrases. The Common European Framework of Reference (CEFR) is presenting a standardized measure of linguistic knowledge of any language, however, there is a paucity of empirical studies which correlate the particular linguistic characteristics of writing by the learners, particularly LBs with the parameters. The compilation of a set of specific corpus of argumentative essays (timed) and assignments (untimed) have been compiled among Pakistani undergraduate students in various disciplines. LBs have been detected and measured using Text Inspector Tool. These bundles have been classified in terms of a qualitative functional analysis that were informed by Systemic Functional Linguistics (SFL). It has also employed Weir's Socio-Cognitive Framework. After that, their structural and functioning profiles were systematically mapped to the more detailed writing skills description of the CEFR (A2-C1). The research has established some important trends in the occurrence of patterns in the way LBs are expressed at varying levels of proficiency. The results give practical suggestions to curriculum developers, content creators, and evaluators in Pakistan and similar EFL settings so that more focused teaching can be given that allows bridging the divide between the lexical bundle use of the learners and the communicative objectives of the CEFR.

Keywords: Lexical Bundles, CEFR, Academic Writing, L2 Learners, Corpus Linguistics, Proficiency Alignment

Introduction

The search of competence in second language (L2) scholarly writing goes beyond the vocabulary preciseness, requiring a more advanced level of knowledge of the discourse that is logical, unified and stylistically sensitive to academic norms. It is especially sharp with undergraduate students in English as a Foreign-Language (EFL) settings, in which the transition between general English proficiency and academic literacy in any specific field is vast. The fundamental element in the development of this high literacy is the command of formulaic language, the glue to hold ideas together and to mark scholarly competence. In this field, the operationally defined lexical bundles (LBs) as commonly used repetitive patterns of three or more words have been found to be basic units of composition (Biber, Johansson, Leech, Conrad, and Finegan, 1999). These discourse units which can be multi-words e.g. on the other hand, as a result of, and it can be argued that, perform important discursive roles, such as discourse structuring, positioning, and referential linking (Hyland, 2008).

They are closely linked with nativelike fluency, less cognitive processing load, and textual coherence, which is a solid indicator of advanced writing proficiency (Cortes, 2004; Ellis, Simpson-Vlach, and Maynard, 2008; Wray, 2013). L2 learners, in turn, cannot afford

the application and acquisition of LBs as a peripheral issue but as the key to effective development of academic writing. Along with the increased focus on formulaic language, the Common European Framework of Reference in Languages (CEFR) has become the most influential international framework of language proficiency description, teaching, and assessment. The CEFR is created by the Council of Europe (2001) as a detailed six-level scale (A1 to C2) with elaborate can-do statements. These descriptors describe what communicative competences a learner is supposed to be in command of at each level, which provides an action-based, detailed framework of defining proficiency. In writing, it can be seen that descriptors move on the levels of the simple and formulaic sentence production in A level to the complex and well constructed and stylistically suitable writing in C levels. The usefulness of the framework in offering a systematic methodology in determining the proficiency of language that is paramount in the evaluation of academic writing amongst L2 learners is well accepted. It has played a crucial role in the curriculum design, textbook creation and in standardized testing all over the world (North, 2014).

Although, their importance is intrinsically distinct, a profound nexus between both spheres the micro-linguistic indicators of the LB use and the macro-level, functional characteristics of the CEFR is yet to be fully explored. Although corpus linguistics can provide the potent instruments that can be used to describe what language learners do, the CEFR gives the framework that should be used to define what learners should be able to do, there is a small number of empirical studies that systematically fill the gap between the description and the assessment side. Most of the available studies in the LBs have been aimed at listing their types and functions in the different fields (Hyland, 2008; Biber and Barbieri, 2007), between novice and expert writing (Cortes, 2004), or the evolution of LBs in the learner corpus (Staples, Egbert, Biber, and McClair, 2013).

This is the gap that is most notable in the Pakistani EFL context where even though the existing challenges in academic writing are known to the students, there has not been any research conducted on how the Common European Framework of Reference (CEFR) of Languages can be used to determine lexical bundles. The result of this disconnection is physical pedagogical and assessment outcomes. In the absence of clear, empirical knowledge of which specific LBs are correlated with performance at various levels of CEFR, however, instruction can become either too general, or at cross purposes. Educators might not have the fine linguistic or sensorial specifics to transition the learners tangibly, as in the case of, say, a B1 to B2 standard of writing skill. In the same way, an assessment based on the reference to the CEFR can be based on holistic evaluation, which is not anchored on observable, frequency-based linguistic data. To successfully apply the CEFR, as Nikolaeva (2019) stresses, it is necessary to be constantly involved in the practical implementation of the CEFR in particular learning situations.

This requirement is directly met through a corpus-based study of alignment, which provides a means of basing the abstract descriptors of the framework in the actuality of the learner language. The current paper, then, attempts to fill this important gap by engaging in a systematic and corpus-based research which would attempt to match the lexical bundles generated by Pakistani undergraduate L2 learners with the writing proficiency descriptors of the CEFR. It lies in a pragmatic research paradigm, which uses a mixed-methods approach of triangulating quantitative corpus data, using qualitative and theory-driven analysis. The study examines a unique corpus of argumentation essays (timed) and assignments (untimed) of Pakistani university students in various fields. LBs have been determined and their number were counted with the help of the Text Inspector software, which has been proven to be suitable in this kind of analysis (Martin Rodriguez, 2023).

This paper seeks to transcend this aggregate data to offer a small-scale map of this congruence and deviation. The study contributes to research in two ways by establishing such a clear connection between linguistic form and proficiency function. In theory, it contributes to the development of applied linguistics discourse by suggesting a new evidence-based framework of operationalizing the writing scales of the CEFR. In practice, it provides practical recommendations on EAP practitioners, curriculum developers, and material developers in Pakistan and similar settings. The results inform the understanding concerning the definite formulaic patterns that define and potentially facilitate the transition between the practice and the effectiveness levels in writing, therefore, making writing pedagogy more specific, effective, and data-driven, and, in fact, lessening the gap between learner performance and the standards of proficiency.

Significance/Rationale

The research is a significant gap in the crossroads of corpus linguistics, language evaluation, and English to Academic Purposes (EAP) of Pakistan. Although lexical bundles have been considered as a key to effective, fluent academic writing (Hyland, 2008), Common European Framework of Reference (CEFR) is an internationally recognized standard framework of proficiency determination (Council of Europe, 2001), the bulk of empirical research that connects the two areas, particularly in the Pakistani undergraduate setting, is virtually non-existent. As a result, curriculum design and writing assessment tend to be not based on an accurate, evidence-based picture of the specific formulaic language that defines and facilitates the transition between the levels of the CEFR.

The study is important in theory and practice. In theory, it adds a new, methodological, bridge in that it shows how Systemic functional Linguistics (SFL) by Halliday (1994) and the Socio-Cognitive Framework created by Weir (2005) can be combined, in order to empirically match micro-linguistic features (lexical bundles) with macro-level, functional proficiency descriptors. In practical terms, the research provides practitioners, including EAP teachers, material authors, and examiners in Pakistan, with practical information to undertake. The study offers specific blueprint on how to conduct instructional interventions by determining which bundles are consistent with B2 versus C1/C2 competencies, and by also diagnosing the underlying persistent alignments gap. It allows the pedagogy process to go beyond the generic writing advice to strategic, context-sensitive teaching of the formulaic sequences, and ultimately, to achieve the academic writing competence of Pakistani undergraduates as per the internationally accepted standards.

Objectives

1. To identify the structural and functional types of lexical bundles prevalent in a corpus of Pakistani undergraduate L2 learners' academic writing
2. To examine the alignment of identified lexical bundles with CEFR writing proficiency descriptors

Research Questions

1. What structural and functional types of lexical bundles are most frequently used in Pakistani undergraduate L2 learners' academic writing?
2. How do the identified lexical bundles in Pakistani undergraduate L2 learners' academic writing correspond to CEFR writing proficiency descriptors across different proficiency levels?

Review of the Literature

Staples, Egbert, Biber, and McClair (2013) studied lexical bundles in the TOEFL iBT writing section to determine how the different levels of proficiency differ. They found that the total number of bundles used by the high and low-scoring learners may be similar; however, the quality and variety of the bundles used by learners varied significantly. Writers with greater proficiency used a more extensive range of bundles of functional variety. By contrast, less proficient writers were more dependent on formulaic sequences that were directly related to the phrasing of the prompt. This gives a definite connection between the development of lexical bundle usage and the general quality of writing. This relationship underpins the correspondence of the use of bundles with the CEFR level of proficiency in the present study.

The Common European Framework of Reference on Languages (CEFR) was created by the Council of Europe (2001) to offer a unified foundation of describing language learning, teaching, as well as learning. It is a scale of six levels (A1-C2) with a detailed description of communicative competencies, which has gained influence all over the world. The framework permits standardization of language proficiency in various educational and geographical locations. In this research, the CEFR serves as the external and internationally accepted criterion that the utilization of lexical bundles by Pakistani learners are assessed. This alignment attempts to localize an international standard of application of pedagogy.

Systemic Functional Linguistics (SFL) by Halliday (1975) offers an effective theoretical framework that can be used in the present study. This theory can be especially useful in studying lexical bundles and in such a way that researchers can study how these multi-word units play a role in creating meaning, cohesion in the text, and performing interpersonal functions in academic oratory. With the aid of SFL, the study is able to go beyond structural description in order to learn the functionality of bundles in the efforts by Pakistani learners to construct coherent academic arguments.

The Socio-Cognitive Framework (SCF) by Weir (2005) is a complement to SFL in the sense that it pays attention to the cognitive activities and social settings that support language performance. This theory takes into account the effects of such factors as time planning, task requirements, and awareness of the audience on the linguistic decision of a writer. The use of the SCF in the lexical bundle analysis enables the researcher to examine not only the question of what bundles are employed, but why and how they are applied in various conditions (e.g., in timed exams or in untimed assignments). It mediates the separation between the linguistic product and the cognitive and situational processes that relate to the production of the product.

Wray (2013) provided a historical analysis of the research on formulaic language, its developments throughout the history of language studies, psychology, and language teaching. She recorded the change in thinking of a formulaic sequence as peripheral and temporary (in the form of chunks) to the identification of formulaic sequences as central to fluent and idiomatic language reception and production. Such a historical background justifies the focal role of lexical bundles in the study of language acquisition. The synthesis presented by Wray confirms that the study of formulaic language is not a specialized endeavor but a fundamental endeavor to understanding how language is learned, stored and utilized, as a reason as to why it has been given attention in the current study.

Shin (2019) has made a controlled comparison of lexical bundle application in essays prepared by L1 and L2 novice writers at college level. The research revealed that there were noticeable differences in the amount and the nature of formulaic sequences employed thereby showing that despite entry into the university, L2 writers have not taken over the conventionalized phraseology of the academic discourse completely. This study indicates a particular problem that L2 writers face and the necessity of special pedagogical intervention.

It also gives a point of comparison in the interpretation of the patterns which comes up in the Pakistani L2 learner corpus.

Byrd and Coxhead (2010) were preoccupied with the pedagogical implications of lexical bundle research in English as an academic purpose (EAP). They talked about the difficulties in putting knowledge gained in corpus research into practical classroom learning, including which bundles to instruct and the ways of instruction. Their contribution underlines that finding bundles is just the beginning but the more difficult part would be how to incorporate them into the lesson. The present research helps to deal with this not only by determining the bundles but also matching them with the CEFR levels to direct level-specific instructional resources in the situation of Pakistani EAP.

Harsch and Seyferth (2020) described the development and validation cycle of a local CEFR-based writing checklist at a language center of a university. Their effort addressed the practical issue of the translation of general CEFR descriptors into specific and context-based assessment instruments. This was done by engaging teachers and researchers in order to make the checklist sound and practical at the same time. This research has been viewed as an important methodological model that the current research aims to achieve, which is to operationalize the CEFR descriptors that are used to examine the use of lexical bundles in writing by Pakistani learners.

Ellis, Simpson-Vlach and Maynard (2008) linked corpus linguistics and psycholinguistics with their study in the processing of formulaic language between native and non-native speakers. Their study gave proof that high frequency use of multi-word structure is stored and retrieved as single unit and it makes it easy to be more fluent. This mentalistic view as to why lexical bundle masteries are so essential among L2 writers; less processing resources are consumed to enable more cognitive resources to be allocated to more important issues such as argumentation and rhetorical structure.

Green (2022) followed the history of L2 writing assessment, placing such frameworks as CEFR in the context of changes in measurement of education. In his work, the tension that persists in between the standardized proficiency descriptors and the necessity of the context-sensitive evaluation is noted. The evolutionary approach is significant to the present investigation, which tries to implement a particular generalized framework (CEFR) to a particular local area (Pakistani universities). It recognizes the fact that this alignment is a continuous conversation between the global theories and the local educational realities and demands. Although the literature available provides strong theoretical and methodological backgrounds of researching the lexical bundles and the CEFR, there are limited studies that have integrated the strands to research the Pakistani L2 undergraduate writing. This review highlights the necessity of a context-sensitive, corpus-based study that fits the use of lexical bundles to levels of CEFR proficiency, and as such, one that influences pedagogy and assessment in Pakistani higher education.

Research Gap

Although much has been done to explore the formulaic language and the world-wide integration of the Common European Framework of Reference to Languages (CEFR), there still exists a huge and contextualized research gap. The literature has strongly supported the significance of lexical bundles (LB) in academic writing to attain fluency, coherence and disciplinary authenticity (Biber et al., 1999; Hyland, 2008). Moreover, the use of these bundles by L2 learners has been considered and associated with their level of sophistication with general writing proficiency (Staples et al., 2013; Kim and Kessler, 2022). At the same time, the CEFR has been extensively used as a model of proficiency measurement in a wide range of settings (Council of Europe, 2001; North, 2014). Nevertheless, a junction point is

rather critical and under-explored: the systematic correspondence of the lexical bundles uses and the particular CEFR proficiency levels in the established L2 learning scenario.

The previous studies have concentrated on the description of bundle use alone or the implementation of the CEFR to structural curriculum correspondence, but not on the use of fine-grained descriptors of the framework to diagnose and classify the formulaic language of each proficiency band. The validity of connecting local language performance with the CEFR standards primarily depends on the iterative and context-based validation (Harsch and Seyferth, 2020), which is mostly lacking in formulaic language research. This disparity is especially significant in the Pakistani undergraduate EAP background. Although such studies as that by Yousaf (2019) on the analysis of Pakistani PhD dissertations give insights into the field, it is not possible to discuss the developmental path of undergraduate L2 writers.

Pakistani students have been a substantially under-researched group in literature on empirical, corpus-based academic writing studies (in contrast to general pedagogical issues or practitioner identity, Anbreen and Ayub, 2024). Most importantly, there is no research to date on the use of lexical bundles by Pakistani undergraduates at various levels of the CEFR, or the differences between timed and untimed major exams and more reflective more instructive untimed work of high stakes-single assessment, which has significant major implications on both assessment and teaching (Weir, 2005). Thus, this paper fills this gap by examining lexical bundles present in the Pakistani undergraduate writing in a corpus-based study that specifically compares the lexical bundles in the CEFR proficiency descriptors. It aims to go beyond generic accounts in order to offer empirically based, level-specific account of formulaic language use. The fills two gaps: the gap of CEFR-congruent linguistic micro-analysis in L2 writing studies, and the gap of detailed, corpus-based studies of the academic writing of Pakistani L2 students.

Research Design and Methodology

The research design used in this study was a descriptive, corpus based research design based on a pragmatic paradigm. The main purpose was to examine the correspondence between lexical bundles (LBs) in L2 speaker writing and the proficiency indicators of the Common European Framework of Reference (CEFR). To have a complete picture, the methodology took a mixed-method approach where quantitative corpus analysis was strategically used to identify and determine frequencies whereas qualitative, theory-based analysis was used to categorize functions and get alignment of descriptors. The rationale behind this sequential explanatory design is to first define descriptive profile of the LBs and then to project this profile onto the theoretical perspectives of the Systemic Functional Linguistics (SFL) (Halliday, 1994) and the Socio-Cognitive Framework of Weir (2005) (SCF) and then project it onto the CEFR scale.

Data gathering and Compilation of Corpus: The main source of data was a special, specially designed corpus of Pakistani L2 undergraduate learner written language. It was purposive and criterion-based sampling, where the study focused on undergraduate students of four major fields of study by including English Literature, Business Administration, Law, and Social Sciences in two of the four private universities in Lahore, Pakistan. To make sure that the participants were to have a meaningful exposure to academic English, one of the main selection criteria was imposed: the students had to have obtained at least 60 percent in the English course they took in the last semester. The corpus was set to receive variation in writing state, a characteristic that was informed by Weir (2005) SCF that focuses on the effect of the contextual parameters on the performance of language. 200 timed and 200 untimed were obtained from 200 students.

1. Timed Writing Sample: The participants were given a 40-minute on-the-spot writing test, an argumentative essay, with a prompt that was an old IELTS Academic Writing Task 2 prompt, to mimic high-pressure writing test conditions.

2. Untimed Writing Sample: The untimed writing sample involved participants handing in a previously assessed argumentative piece of their normal course work, a low-pressure condition of processing writing, where they were able to plan and revise. This resulted in a balanced set of 400 texts (200 timed, 200 untimed). The analysis of all texts was done by anonymization, plain text format (.txt), and by condition in sub-corpora.

Data Analysis Procedures

The integrated analysis followed three stages of the analysis; the quantitative description to the qualitative interpretation, according to the selected theoretical frameworks.

1: Identification and Profiling Quantitatively. This step considered the initial LBs cataloguing. Text Inspector (Martin Rodriguez, 2023) was the main tool, corpus linguistics software. An automated estimate of the level of the text in each of the three texts was created with the tool, which offered an approximate proficiency profile. It was then used to obtain lexical bundles using its n-gram functionality. Following the operational definition of Biber, Johansson, Leech, Conrad, and Finegan (1999), it was found that three to five word sequences, which appeared at least 20 times per million words and in 5 or more different texts in a sub-corpus met the definition. This frequency-and-dispersion threshold had the guarantee of conventionalizing the LBs to the community of learners.

2: Qualitative Functional-Structural Analysis in terms of Systemic Functional Linguistics (SFL): Qualitative analysis of the LBs of stage 1 was applied and directed by the Systemic Functional Linguistics (SFL) (Halliday, 1994). Particularly with its orientation towards the metafunctional organization of language, SFL offered a solid frame of reference to the classification of the bundles beyond simple form, and it deals specifically with the purpose of the bundles in constructing meaning in scholarly texts.

- (i) **Structural Categorization:** Each LB was first coded by Biber, Conrad, and Cortes (2004) following their structural categorization. Noun Phrase-based (e.g., the purpose of the), Prepositional Phrase-based (e.g., in the context of), Verb Phrase-based (e.g., is based on the), or Clause-based (e.g., it is important to).
- (ii) **Functional Categorization:** this was the essence of the SFL application. These bundles were discussed in terms of their major metafunction in their textual situation.

Textual Metafunction: Bundles as a conjunctive adjunct to form cohesion and organize discourse (e.g., on the other hand, as a result of).

Interpersonal Metafunction: Bundles as modal adjuncts or comment adjuncts to give stance, evaluation, certainty or engagement with the reader (e.g., one might argue that, it is clear that).

Ideational Metafunction: Packages, usually referential, identifying, quantifying or describing things and processes in the content of the text (e.g., the results of the, a large number of). This functional-structural matrix based on SFL gave a rich and theoretically based profile of the LBs to what bundles learners use and do in the texts, which answered the descriptive part of RQ1.

3: Socio-Cognitive Interpretation and CEFR Alignment

The last stage combined the results of Stage 1 and 2 and the Socio-Cognitive Framework developed by Weir (2005) to answer RQ2 the correspondence to the descriptors of the CEFR. The data in the two writing conditions (timed vs. untimed) were interpreted in the SCF that assumed the use of language as an interaction between cognitive processes

(planning, execution, monitoring) and contextual parameters. This model enabled us to pose questions not only as to whether LBs were conforming to the levels of CEFR but also to how cognitive requirements of various tasks affected this conformity. The alignment process was itself a qualitative mapping process which was systematic. Following the CEFR Companion Volume (Council of Europe, 2018) as the benchmark, each of the LBs that are categorized under SFL was rated following:

1. Contextual Usage and Cognitive Demand: How did the bundle occur within the text? Was it automatic and formulaic (e.g. lower cognitive load) or strategic and complex (e.g. higher-level planning)? This ruling was against the focus of SCF on the executive processes.

2. Descriptor Matching: What particular CEFR writing descriptors was this contextualized use illustrating? An illustration of timed essay marking the correct and possibly repetitive use of a textual conjunctive adjunct (on the other hand) was respectively matched with B2 descriptors of cohesive devices. An interpersonal modal adjunct was used precisely and stylistically to overlap with C1/C2 aspects in an untimed essay and this was done strategically and variedly.

3. Level Attribution and Gap Analysis: The usage pattern of every bundle was evaluated at one of the predominant CEFR levels (B1, B2, C1). Importantly, cases of misalignment were observed (e.g. C1-level bundle was used improperly). The SCF was used to explain such gaps by assuming that there may be breakdowns in the cognitive processes (e.g., monitoring failure during time pressure) or that there were contextual validity mismatches (e.g., register abuse). A second rater independently analyzed 20 percent of the texts and their codings to the alignment to be reliably analyzed. The results of inter-rater reliability were $\kappa = 0.81$ that showed strong agreement. The resolution of discrepancies was based on consensus discussions based on the SFL and SCF frameworks. The achievement of this three-stage analysis was a holistic alignment matrix. This approach was sufficient to ensure the study did not just describe the linguistic forms, as well as describe their functions and the cognitive conditions of using them, and lastly assess their congruence to an international standard of proficiency.

Analysis and Discussion

It was a systematic study aiming at exploring how closely Pakistani undergraduate learners of L2 (Learners of L2 Writing) met the writing proficiency descriptors of the Common European Framework of Reference (CEFR). This analysis surpassed the superficial correlation of functional categorization using the Systemic functional linguistics (SFL) (Halliday, 1994) and the interpretation of the performance conditions using the Socio-cognitive framework (SCF) formulated by Weir (2005) to explain the detailed way formulaic language is systematically matched to developmental writing competence.

The Effect of Cognitive Context on Quantitative Proficiency Landscape.

The initial result of the 400-text corpus analysis showed a remarkable difference between the overall proficiency depending on writing condition, which is a central part of an SCF interpretation. The average CEFR of timed and untimed essays was B2 (Upper Intermediate) and C2 (Mastery), respectively. This two band variation is not just a statistical artifact but solid empirical evidence to the point that Weir (2005) is correct in stating that test performance is a function of the underlying language competence as well as, the cognitive validity of the task context. The exam simulated and time-limited condition places a lot of limitations on the executive processes such as planning, formulation and monitoring.

This pressure makes learners slip down to more automatized, high-frequency and simplified linguistic resources, which leads to writing characterized by good grammatical control, clear and coherent discourse as a B2 characteristic, but which is not the natural,

fluent and sophisticated language use a C2 characteristic (Council of Europe, 2001, p. 27). Conversely, the untimed, assignment condition permits a higher involvement of strategic thinking processes like advanced planning, prudent selection of lexical and extensive revision. This broadened processing ability allows the learners to access and use a broader, more sophisticated repertoire out of their linguistic knowledge base, and thus achieves the more challenging C2 descriptors.

Lexical Bundle Alignment: A Strong but Incomplete Correlation

Table.1

Writing Condition	Number of Essays	Average CEFR Alignment (%)	Alignment Gap (%)	Interpretation in Relation to CEFR	Theoretical Implications (SFL & SCF)
Timed Essays	200	72.40%	27.60%	Indicates substantial correspondence between learner-produced functional descriptors and CEFR time constraints	Suggests partial control of formulaic language resources; lexical functional meanings are realized but not consistently aligned with contextual demands (SFL)
Untimed Essays	200	74.00%	26.00%	Slightly higher alignment reflects improved functional deployment of lexical bundles when cognitive pressure is reduced	Demonstrates increased strategic awareness of formulaic sequences, yet persistent gaps indicate incomplete socio-cognitive internalization (SCF)
Overall Performance (B1–C2)	400	≥70%	26–28%	Strong correlation between lexical bundle usage and CEFR-defined writing proficiency across levels	Confirms lexical bundles as key resources for textual competence development from simple cohesion (B1) to complex discourse construction (C2) (Cortes, 2004; Hyland, 2008)

The table shows that lexical bundles in both timed (72.40%) and untimed (74%) essays align strongly with CEFR descriptors, indicating a clear relationship between formulaic language use and writing proficiency. The slightly higher alignment in untimed writing suggests improved functional control when cognitive pressure is reduced, though a consistent 26–28% gap remains across conditions. From SFL and SCF perspectives, this gap

reflects incomplete contextual and socio-cognitive mastery of lexical bundles, even at higher CEFR levels (B1–C2).

SFL Analysis: Functional Profiles and Developmental Trajectories

A qualitative analysis of the LBs conducted under the guidance of SFL offered the functionality granularity required in the alignment mapping. The analysis showed that there was a developmental trend in the interpersonal and textual metafunctions that were actualized by the bundles.

On the B2 Level (Timed Condition): The LB profile was overwhelmingly represented by bundles that serve the textual metafunction, namely, as conjunctive adjuncts (e.g., on the other hand, as a result of). The bundles perform a useful function of logical cohesion, which is a direct satisfaction of the B2 description of connecting sentences into understandable discourse. They are repetitive, but at other moments show an understanding of the structure of a simple text.

At the C2 Level (Untimed Condition): There was a significant change towards bundles achieving the interpersonal metafunction. Modal and comment adjuncts of subtle stance and evaluation (e.g., it could be argued that, it is evident that, the extent to which, etc.) were significantly on the rise. These bundles do not just connect; they interact with reader point of view, project authorization, and hedge claims, the advanced work of interpersonal, as C2 descriptors would call such a work skilful and stylistically suitable language.

This functional development of the textual integrity (B2) into the advanced interpersonal interaction (C2) as part of the LB repertoires is similar to the broadening communicative requirements of the CEFR scale.

The Socio-Cognitive Interpretation of the Alignment Gap

The SCF offers a strong theory to describe the non-reconciling 26% mismatch. This disjunction probably constitutes areas of discontinuity between what a learner is likely to know declaratively of a lexical bundle and what he or she can do procedure-wise to be able to put it into full functional and contextual adequacy in the intricate process of writing.

1. Planning and Monitoring Failures: Due to the cognitive load of writing, learners may choose to use an advanced bundle (e.g., notwithstanding the fact that) in their knowledge store but are not be able to easily incorporate it into the syntactic and semantic flow of the argument. This causes a grammatically accepted and rhetorically clumsy or confusing usage, which is misaligned.

2. Mismatch of Contextual Validity: The SCF is keen on the fact that performance is only valid in its context. At the local sentence level, a bundle may be applied properly, but at the broad genre or rhetorical intention of the paragraph may be stylistically inappropriate. To give an example, an overly formal, written-discourse bundle used in a section where a more direct one is needed. It means that there is not higher-level socio-cognitive knowledge of register variation, which is implicit in C-level descriptors.

3. Automation vs. Strategic Choice: The high level of agreement (72.4) of the timed condition at a lower level (B2) indicates a possibility of successful automation of a set of functional bundles at this level. The marginal increase in the alignment of the untimed condition (74% at the C2 level) indicates that trying more diverse and complicated bundles adds a new thinking task strategic choice and control, which has not yet been mastered. The difference thus is the boundary between possessing a repertoire and employing it with strategic use in a consistent and precise manner.

Conclusion

This research specifically explored the relationship between formulaic language ability and standardized proficiency measures using a Pakistani L2 university population

through an investigation of lexical bundle occurrences in CEFR-aligned university essays. Results indicate that a distinct developmental trend exists regarding LB occurrences across proficiency levels from A2 to B2, characterized by the rudimentary use of a restricted range of high frequency but simple referring/organizational expressions (e.g., I think that, in my opinion), typical of lower level learners (A2-B1), contrasting with more sophisticated but varied uses of complex expression of stance (e.g., it is argued that), discourse markers (e.g., on the contrary), increasing overall cohesiveness and persuasive power, typical of B2 level learners. Probably one of this research's strong contributions is precisely in providing an empirical data-driven confirmation regarding how a certain micro-structural linguistic phenomenon (lexical bundles) correlates with specific macro-structural descriptions about Proficiency Level in the CEFR framework. Moreover, contrasting timed versus untimed essays allowed an appraisal of how much more or less sensitive is this construct of Proficiency according to specific contexts, with "timed" essays identifying more prudent but repetitive uses due to possible cognitive constraints, whereas "untimed" essays explored more varied but not necessarily successful uses.

Recommendations

In line with the findings of the research, there are some recommendations for pedagogy, evaluation, and future research that are tailored to the needs of the specific context. In pedagogy and curriculum development, EAP teachers and syllabus designers need to bring in and do explicit teaching of lexical bundles, that is CEFR-aligned and moves from A2/B1 learners' high-frequency, foundational bundles through B2+ learners' more complex, discipline-appropriate bundles that support argument and stance to curricula.

The purpose of the teaching is the development of the students' metacognitive skill of when and why certain bundles are suitable and to practice in a way that does not only focus on identification but goes deeper, such as explicitly contrasting the use of the bundles in timed exams and writing assignments. Furthermore, students' conscious understanding of the appropriate contexts and purposes for the use of certain bundles should be developed.

The assessment practices, nonetheless, were that the writing rubrics of Pakistani universities should take into consideration the functional use of formulaic language as a separate criterion corresponding CEFR descriptors, thus giving richer diagnostic feedback. Since there was a variation in the use of bundles among participants under timed circumstances, the assessments should not depend on single high-stakes exams alone but rather use a portfolio approach consisting of both timed and untimed writing tasks for a thorough evaluation of proficiency.

For the next set of research, generalizability can be improved with the help of larger and more varied corpora covering various disciplines and institutions. Lexical bundle acquisition can be traced through longitudinal studies whereas experimental studies should be conducted to investigate whether the teacher interventions, targeted instructional interventions such as data-driven learning through concordance, have an effect on writing quality and proficiency.

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