

Developing Templates for Writing Literature Review Section for Researchers in Post-COVID-19 Situation and Beyond

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Abstract

The study aims to develop ready-to-apply templates following Lexical Bundle Approach; fundamentally a data-driven approach, providing assistance in writing literature review section. Following mixed method research design, quantitative analysis leads extraction of LBs from applied linguistics theses corpus. The highly frequent LBs are used for the extraction of concordance lines for developing templates. Qualitative analysis consists of the process of examining, sifting, developing and grouping templates on the basis of their functions within contexts. Therefore, three sets of templates are designed addressing the essential requirements of writing literature review section. The study provides practical and easy to apply solution to the problems faced by the research scholars during and after the pandemic. It is very handy and needs no specific technical expertise regarding using sophisticated tools.

Keywords: lexical bundle approach, data-driven approach, lexical bundles, academic writing, Post-Covid-19 situation

Introduction

Working from home has become a new normal in post-Covid-19 scenario. The far-reaching implications of the pandemic have unparalleled impact on education system around the globe. As reported by UNESCO (July, 2020), it has affected the academic sector particularly due to unexpected closure of academic institutions. Even, after reopening of the institutions, the challenges for researchers are creating panic situation in terms of meeting the writing standards of academic discourse. Amidst pandemic, several inequalities regarding shifting to online teaching and learning are reported by Jandrić et al., 2020. Heralding new pedagogical approaches are the need of the hour because inequities in terms of the use of technological resources are prevailing around the world. The problems lie with technical resources, such as sophistication of gadgets, smooth network, continuous power supply, and learners' response (Noor & Anwar, 2020). In developing countries, such as Pakistan, inequities and inequalities in terms of resources posit inconvenience (Akram, et al., 2020). Although digitisation of education is thriving, yet the application of data-driven pedagogical tools in public sector educational institutions is indeterminate (Renz & Hilbig, 2020). Furthermore, an exposure to the state-of-the-art tools, databanks and software is also questionable on the part of both: the learners as well as the instructors (Jandrić et al., 2020). The situation becomes even more intense in terms of field-relatedness and genre-specificity with respect to academic writing protocols.

Redeeming the problem, corpus studies of lexical bundles (LBs) provide with filed-specific linguistic descriptions in terms of language produced in naturalistic communicative settings. The present study puts an effort to provide a practical solution to the problem with the help of field-specific LBs. It intends to offer ready-to-use templates for writing review of literature section by incorporating most frequently used field and genre-specific LBs, that would be helpful in drafting the section without applying sophisticated tools and skills. LBs are extended collocations retrieved from corpora without prior restrained linguistic or grammatical classes (Biber & Barbieri, 2007) occurring frequently rather than by chance. Corpus studies culminate that LBs are hoarded and redeemed as pre-fabricated patterns in language repository, since they work as benchmark to analyse the extent to which researchers use these formulaic patterns in discourse (Dontcheva-Navratilova, 2012). The appropriate use of domain-specific LBs contributes to win the research warrants from respective discourse community. A number of problems have been high pointed by the scholars with reference to the new normal in contemporary circumstances. The very problem identified by the present study is described in the next section.

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Need of the Study

In the course of Covid-19, language teaching practices are critically affected around the globe. The problems briefly highlighted above call for ready-to-apply solution to research scholars, at large, who are contrived to adopt advanced technological resources. In order to survive in the world of research publication, where the rule of “publish or perish” prevails, they are scuffling under the weight of the demand (Grimes et al., 2018). Academic writing is considered as a genre that needs mastery for producing scholarly articles and dissertations (Flowerdew, 2016). Owing to the problems researchers, mentors and supervisors face, the subject matter has grave pedagogical concerns apropos to the field of Applied Linguistics (AL) in general and Corpus Linguistics (CL) in particular. The present study finds solution to the problem through devising ready-to-apply templates retrieved from field-specific corpus produced by advanced (doctoral) level scholars with the help of LBs.

Objective of the Study

The study aims to develop ready for use templates for the expediency of researchers for writing literature review section in their research. It is intended to provide LB based templates that are convenient and ready-to-use without depending on smart networking, using concordance applications, utilising state-of-the-art devices or even without technology related skills. The next section puts forth research question to be answered in the current study.

Research Question

To what extent field-specific Lexical Bundles are useful in order to develop ready-to-apply templates for writing literature review section in research endeavours?

Significance of the Study

The present study offers practical solution to the problems faced in post-Covid-19 context in due course of time. The developed templates cover various dimensions of language production in literature review section. They facilitate the researchers to situate their research in the existing body of knowledge with the help of frequently used expressions by doctoral scholars. Further, it paves the way for future studies in order to generate templates in the same line pertaining to other fields of research.

Review of Literature

The current study primarily focuses on developing templates for the section of literature review with a variety of functions and options ready to incorporate through offering multiple contextual uses. Technically speaking, a review of literature is not simply reporting the list of the published work related to the research topic, it is rather a critical synthesis of conflicts, inconsistencies, informing new dimensions and endorsing previous results. In the context of academic discourse, a number of scholars focus on the study of the section of literature review (Winchester & Salji, 2016). Fink (2019) provides a step-wise guide to organize the section. In the author's opinion, in social sciences, its structure combines synthesis and summaries within analytical and conceptual categories, locating the study within milieu of existing knowledge. Paul and Criado (2020) opine about the central role of a well-crafted literature review with reference to identifying research gap, providing the readers with up-to-date knowledge of the topic, relating and integrating the intended research with extant studies, and serving as a base line for future research avenues. In the context of genre based pedagogy in academia, Li et al. (2020) point out the issue of knitting sentences together with reference to second language learners.

Lee and Swales' (2006) study introduces corpus based writing aid in the context of EAP (English for Academic Purposes). For academic purposes, academic vocabulary lists appear on the canvas for facilitation, for instance Academic Word List (AWL) introduced by Coxhead (1998), formulaic expressions based Academic Formula List (AFL) designed by Simpson-Vlach and Ellis (2010), Phrasal Expressions List proposed by Martinez and Schmitt's (2012) and Academic Phrase Bank of Morley (2017) are considered effective resource for scholarly writing. In the continuation of generation of word banks, the study of recurrent expressions in academia remains the focus of numerous studies. The effective role of LBs in academic texts is validated with reference to winning research warrants within particular research

community. Reinforcing the stance, Dontcheva-Navratilova (2012) stresses the production of conventionalised LBs to facilitate researchers in order to conventionally structure their research work. Moreover, concentration on larger chunks of language than individual words is necessitated.

In the light of hands-on workshops for academic writing, Chen and Flowerdew (2018) suggest corpus assisted academic writing aid for doctorate scholars. They report a satisfactory feedback from PhD scholars on the use of corpus tools during thesis write-up. The present study takes the initiative with reference to ready-to-use modules that need no technological skill for implementation.

Keeping in view the significance of academic discourse, a number of scholars analyse different sections of research articles. Lu et al. (2020) ponder over introduction section in research articles from six fields of social sciences. They delineate the need for studying complex sentence structures rather than lexical and phrasal features for linguistic proficiency and quality production. The study of Wright (2019) identifies a research gap regarding literature review in the genre of academic discourse. The author suggests further studies with reference to establishing pedagogical assistances for the use of bundles in literature reviews. Likewise, Wachidah et al. (2020) recommend future studies focusing on different sections of thesis during their study of LBs in findings and discussion sections of theses.

A remarkable study by Paltridge and Starfield (2020) sets forth PhD theses a research genre and study change in their write-up over time. They observe that doctoral theses in Humanities remain topic-based since inception. Topic specificity requires ostensive review of available literature in academic writing. In the case of current study, this portion is specifically targeted.

In the context of Covid-19, the trend of e-learning is emerging as smart learning around the world. Sintema (2020) highlights the problems of discontinuous power and interconnectivity as hindrance, while Bao (2020) specifies overload on internet services disturbing online educational system. Toquero (2020) further point out incompetency on the part of instructors regarding technological skills for successful online teaching. The author calls for effective solutions to outbreak of virus in future with reference to emerging technological resources. Yan (2020) considers the situation as a blessing in disguise in order to searching for opportunities with reference to the new normal.

Providing with a practical solution to the said problems and filling the gap identified, the current study offers ready-to-use templates for writing literature review section without depending on continuous electric and internet supply. This section concludes that the present study offers a novel assistance in terms of LBs based templates. The methodological details of the present study are presented in the subsequent section.

Research Methodology

The present study follows data-driven approach. The study depends upon data retrieved from the specialised corpus of AL theses. It intends to generate templates using concordance lines accessed through the use of highly frequent LBs. The very framework followed for serving the purpose is described in the sub-section.

Theoretical Framework

Lexical Bundle Approach provides the current study with theoretical underpinnings. It is postulated by Biber et al. (1999) and followed by Biber et al. (2003), Biber et al. (2004) and Conrad and Biber (2005). It is selected owing to objectivity and reliability in terms of LBs' selection because frequency is the chief criterion for selection. It suffices for setting forth LBs at discourse level, which might be unnoticed as playing the role of "building blocks" within discourse performing communicative functions (*ibid*).

The process of extracting LBs follows threshold for the identification propounded by Biber et al. (1999) and applied by scholars for corpus based studies of LBs (Conrad & Biber, 2005; Rezoug & Vincent, 2018). The normalised frequency of occurring not less than 10 per million, distributed in not less than 5 files is the cut-off for selection of an LB. Moreover, 4-word bundles' selection highly recommended by scholars (Jalali & Moini, 2018; Noor & Anwar, 2019) is also fixed.

The current study depends upon the data retrieved from specialised corpus. The details regarding gathering data and corpus compilation are described next.

Data Sampling Technique

The choice of non-random sampling suits to the purpose of the corpus for the sake of identifying LBs in specialized corpus. For practical reasons, random sampling is not appropriate for collecting data (doctoral theses of applied linguistics) from *ETHOS* considering cost and time effectiveness. Thus, non-random sampling also termed as convenient sampling technique is recommended and applied in social science research endeavours (Taherdoost, 2016). It is apposite for the research circumstances facing particular limitations (Etikan, Musa & Alkassim, 2016). It is considered convenient for the current study, where stretches of language are the population that is characteristically infinite and the issues are also to be dealt in relation with open access, ethics and copyright. Apropos to the considerations, data are retrieved within the framework of non-probability: convenient sampling. Furthermore, the year 2019 is selected for the collection of theses. The procedure of corpus compilation is described in the following section.

Compilation of ALTC (Applied Linguistics Theses Corpus)

The need for compiling specialized corpus is crucial in corpus based studies, when available corpora do not meet the objectives of study. In the present case, the templates are developed on the basis of doctoral theses of the fields of applied linguistics. Employing representativeness, twelve fields of AL in accordance with Grabe's (2012) elucidation in *the Oxford Hand Book of Applied Linguistics* are selected for data collection. In spite of ticking a certain number, twelve theses from each of the twelve fields are selected. The size of the corpus is expected to be large following formula of 12x12 as doctoral theses are happened to be dense. *ETHOS*: the authorised website of the British Library was the prime source of data extraction. The latest possible time-frame (2019) is selected for up to date linguistic representation. The downloaded files are cleaned and converted to plain text files using OCR (Optical Character Recognition) in software friendly utf-8 format.

During the cleaning process, unnecessary parts of theses, such as figures, tables, acknowledgements, resumes, appendices and long excerpts non-English are also eliminated. The mark-up of the corpus is kept simple and target-oriented. No headers are included in the individual files. The files are rather renamed after the codes consisted of the abbreviations of the fields of AL (Appendix-01), followed by the names of authors of theses with the degree completion year with file format subsequently, for instance Cont L-01 (Byrant 2019) utf. The next section presents concordance related detail.

Software's Detail

AntConc 3.5.6 (Anthony, 2018) for numerical description in the study facilitates the process of extracting LBs from ALTC. The tool of *Wordlist* creates the list of total words of the corpus. It provides with the detail of *Word Tokens* (9.8m) and *Word Types* (.22m). The list of LBs is generated by utilising the tool *N-gram/Clusters* with the description of rank, range and frequency of LBs. The software assists in providing access to the lines of occurrences of LBs with the help of *Concordance* tool. Further, the tool *File View* provides entrance to the very context of use to every single entry of LBs.

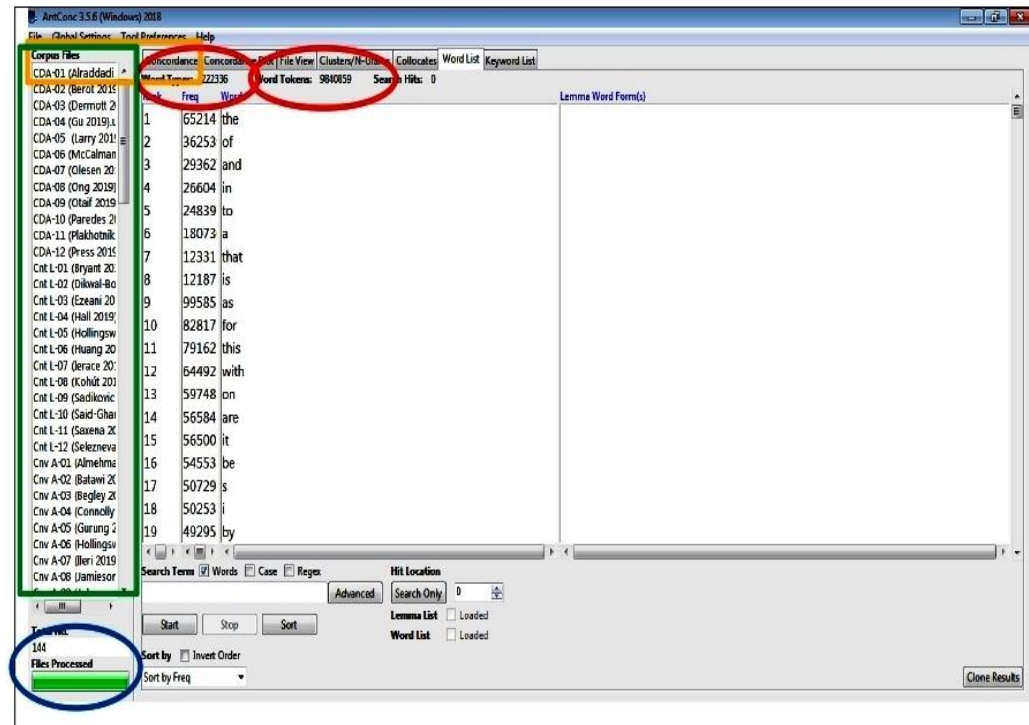
Figure 1 informs about the above-mentioned details. On the top left, yellow rectangle encapsulates the version of software, whereas beneath it green rectangle captures the window displaying corpus files in which files' mark-up is visible. The number of word types and word tokens are encircled in red, however number of files is encircled in blue. In the following section, research procedure is presented.

Detail of Research Design

Mixed method design of research serves the purpose of the present study. The first part of the analysis comprises quantitative method. The extraction of LBs is directed by Lexical Bundle Approach. However, the second and main part of the study is qualitative in nature. Templates are developed using most frequently occurring LBs. The concordance lines from the corpus are extracted manually. The data are examined and sifted. The parts of discourse directly related to the very study to which it belongs are

deleted. In the spaces, slots are given allowing the scholars to put in target related information apposite to respective contexts.

Figure 1: Screenshot of the Compiled Applied Linguistics Theses Corpus (ALTC)



The next step follows Morley's (2017) functional titles used for organizing phrases in the phrase bank in order to allocate specific groups to the templates. The generated list of templates is scrutinised and on the basis of their functions within context, they are distributed into three groups. The templates are entitled with their prospective functions and displayed in tables. Keeping in view their usability, the section or chapter is also allocated to each of the templates for the ease of the users. The following section brings forth analysis with discussion.

Data Analysis and Discussion

Quantitative analysis of ALTC generated a list of 440 LBs with varied frequencies and dispersion values. The concordance lines of highly frequent LBs are thoroughly studied and the stretches of discourse performing discursual functions pertaining to the section of literature review are selected. The templates are developed going through the process of sifting specific details making them functional for general use. The slots are assigned to the cleared parts for context relevant insertion of information. The LBs responsible for the production of templates are underlined in the devised templates. The proposed chapters are listed in front of each template for instantaneous facilitation. What follows is the first list of templates with precise discussion pertaining to the critical review.

Templates Establishing a Niche / Reviewing Critically

The most important role of the review of literature in a quality exploration is high pointing research gap and initiating a niche for the study (Paul & Criado, 2020). Table 1 offers options to confer critical analysis of the field specific studies in order to establish niche in the available body of knowledge. Critical debate with reference to the subject matter accommodates researchers to justify their intended research endeavors (Bloomberg & Volpe, 2012). It can be accomplished in a number of ways in order to set forth points of discussion, as in Template 1. In the opinion of Torraco (2005), it is also possible through appraising practicality of requisites of theory/approach or simply rejecting the approach, such as Template 11 or straightforwardly pointing at research gap in the preceding studies as in Templates 2, 8 and 9 or by

Table 1: Templates Establishing a Niche/ Reviewing Critically

S #	Template	Sections
1	<u>On the other hand</u> , although (the***** approach) is widespread (****Reference), some of its requirements do not seem practical ones,	Introduction/ Literature Review
2	<u>On the other hand</u> , (***Authors/Studies) found a gap between the (***Concept1 and Concept 2)	Introduction/ Literature Review
3	<u>On the other hand</u> , these (***Processes) also confront several challenges, where supposed changes in the processes of (***Topic Related Notion/Concept), the (***Interpretation) of (***the Topic under Study/Subject Matter), as the authors emphasize, could turn in the wrong direction due to lack of understanding of (***the Context/Situation/Condition/Circumstance)	Introduction/ Literature Review
4	<u>At the same time</u> , the investigation extends to a previously unexplored (***Direction/Dimension/Grounds)	Introduction/ Literature Review
5	<u>At the same time</u> , relatively little attention has been devoted to (***The Problem/Issue)	Introduction/Review Literature
6	these critical accounts accentuate the need for, and <u>at the same time</u> provide valuable analytical frameworks for, <u>the analysis of the</u> (***Subject Matter)	Introduction/ Literature Review
7	<u>As a result of</u> what previous researchers have found <u>with respect to the</u> (***Subject Matter), it needs to be carefully considered within the realm of this (***Thesis/ Study/ Exploration/ Research Project)...	Introduction/ Literature Review
8	<u>The aim of the</u> current study is to address some of the gaps in our current (***Knowledge/ Understanding) of	Literature Review
9	<u>The aim of the</u> current study was therefore to contribute to the increasing area of research by addressing (***Respective) gap in the literature.	Introduction/Conclusion
10	<u>At the same time</u> , <u>there seems to be</u> a tendency among (***Authors/Researchers) to reject an approach that excludes (***Explanation of Problem)	Literature Review
11	<u>On the other hand</u> , there are instances where a concept may be associated with (*** Context), whereas it is not associated with another (*** Context)	Introduction/ Literature Review
12	<u>On the other hand</u> , this begs the question of significance of (***Procedure) in the process of making (***Inferences/ Interpretations/Conclusions)	Introduction/ Literature Review

challenging aptness of contextual variation for misinterpretation as suggested in Template 3. Pointing out unexplored areas of the subject matter as proposed in Templates 4 and 5 can also be helpful or by suggesting alternative frameworks as in Template 6, or with the help of other scholars' suggestions as recommended in Template 7. The point of debate can also be generated on the basis of examples not satisfying contextual difference such as exemplified in Template 12. Finally, Template 13 epitomizes strong argumentation built on Aristotelian Phrase for *circular reasoning* (*begs the question*) used when the drawn conclusions lack support.

Templates Reviewing Critically

Critical review of literature is a major part of any research that provides the researchers with basic knowledge of subject matter, already visited areas of interest with reference to respective procedures, data sources and findings (Torraco, 2005). Furthermore, it allows the researchers to place their piece of research within certain realm and provides a platform for comparison (Oliver, 2012). Keeping in view the significance, a wide assortment of templates is displayed in Table 2.

Critical evaluation of studies reviewed is needed at every stage of research. For the sake of assisting in multiple contexts, the above mentioned list of templates demonstrates varied options. Template 1 helps in documenting inadequacy of given facts and Template 2 delivers a critique on the role of participants/concepts, functions also highlighted by Boote and Beile (2005). Similarly, Templates 3 and 4 use the strategy of citing author/study for lending support to the current study, whereas Templates 5 and 8 raise questions about the capability of theory/approach in order to explain the matter. Further, Template 6 introduces the relevant studies, while Template 7 documents difficulty in defending specific critic/scholar's

point of view. In the same vein, Template 9 highlights insufficiency of theory/term agreeing with another researcher and Template 10 permits author to offer particular approach by opposing another. The said functions are considered as decisive characteristics of literature review by Bloomberg and Volpe (2012). Moreover, Template 11 is domain-specific, allows researcher to defend the issue of objectivity while using modern technology based resources. Subsequently, Template 12 allows the researcher to talk about the meagerness of theoretical/conceptual framework. Furthermore, Templates 13, 15 and 18 inform about complications with respect to limitations of approach.

Table 2: Templates Reviewing Critically

S #	Template	Sections
1	Facts pertinent to the issue, <u>on the other hand</u> , were missing from the data; there needs to be a purpose beyond mere description	Literature Review
2	<u>On the other hand</u> , challenging the role of (***) Concept/Participant) in (***) Concept/Situation) <u>seems to be</u> unpopular among the other (***)Authors/Studies)	Literature Review
3	<u>On the other hand</u> , (***)Author Citation)'s suggestions broaden the view and pinpoint the complexity of <u>the notion of the</u> (***)Subject Matter) in the (***)Respective) context..	Literature Review
4	<u>On the other hand</u> , (***)Author Citation) explains that the idea of (***)Subject Matter/Concept) served the reconciliation of a whole series of oppositions unnerving due to their ostensible incompatibility	Literature Review
5	<u>On the other hand</u> , the theory does not explain (***)Area of Interest), commonly found in (***)Respective Examples)...	Literature Review/ Theoretical Framework
6	<u>At the same time</u> , there are a few empirical studies that focus primarily on the (***)Subject Matter)	Literature Review
7	<u>At the same time</u> , a critique of the (***)Approach/Ideology) from the position of (***)Critic/Scholar/) appears to be a difficult (if not impossible) task <u>due to the</u> (***)Reason)	Literature Review
8	<u>at the same time</u> I consider (***)Theory/Approach/Ideology) to reach far beyond <u>the issue of the</u> (***)Subject Matter)	Literature Review
9	<u>At the same time, in line with the</u> (***)Author Citation), I recognize the inadequacy of the (***)Theory/Term) used, because (***)Reason)	Literature Review/Data Analysis
10	<u>At the same time</u> , the approach I propose (***)Explanation) goes against (***)Theory/Theorists') proposal that (***)Description)..	Literature Review
11	<u>In the case of</u> my research, objectivity is particularly challenging, as using new technologies such as (***)Internet or computer Based Learning/ Corpus Linguistics/Social Networking Sites) in EFL learning is an evolving issue	Literature Review/ Methodology
12	<u>In the case of</u> my study, (***)Theoretical/Conceptual framework) would not have been useful, particularly where there (***)Reason)	Literature Review/ Theoretical Framework
13	Accordingly, <u>in relation to the</u> limitations of the (***)Respective) approach, (***)Authors/Study Citation) (complicate/problematize/obscure)	Literature Review
14	other similar intricate details were not considered significant <u>in relation to the scope of this</u> study because it focuses on (***)Focus/ Objective of the Study)	Introduction/ Literature Review
15	Another limitation <u>in relation to the</u> adoption of (***)Particular Theory/Ideology/Philosophy/Approach) is <u>the fact that</u> it fails to	Literature Review/ Theoretical Framework
16	The report, however, is sceptical <u>in relation to the</u> significance of the (***)Theory/Modal) and require a fundamentally different approach.	Literature Review
17	<u>The concept of</u> (***)Subject Matter) was developed <u>as a result of</u> thorough engagement with the seminal work of (***)Theorist)	Literature Review/ Theoretical Framework
18	Furthermore, some scholars (***)e.g. Authors Citation) have argued that (***)Respective Problem) evolved <u>as a result of</u> the limitations and inadequacies of the (***)Approach/ Model)	Literature Review/ Theoretical Framework

Fink (2019) ponders over significant features of writing literature review, such as Template 14 overrules certain details with reference to the focus of the current study. Template 16 specifies sparseness of theory/ model in the light of report of results and Template 17 provides with the reason of shaping

particular concept with reference to the foregoing work. Further discussion is presented owing to the next list of templates.

Templates Linking / Comparing with other Studies

In the course of research presentation, one needs to relate research processes with other studies (Oliver, 2012) in order to support, argue, compare and situate one's study within the specific realm of knowledge. Some ready to apply options are communicated through Table 3 accompanying their suggestive use with reference to chapter.

In the dominion of research, reviewing previous studies relevant to the subject matter provides comprehensive insight of the topic from different dimensions (Onwuegbuzie & Frels, 2016). Paul and Criado (2020) highlight the function of discussing data analysis procedure or concluding and reporting findings of the study, as accomplished in Template 1. Template 2 explains model/ paradigm apropos of theorists or studies. Template 3 exemplifies quantitative comparison. Citation is a crucial requisite of the section of literature review (Pautasso, 2013). Templates 4, 5, 8, 9, 10, 11 and 12 allow the writer to cite studies related to the `subject matter with multiple options. Template 6 presents comparison in results by proposing participants' involvement. It might be helpful in situation where juxtaposition of participation of partakers or some characterization is under discussion. Similarly, Template 7 provides another situation for comparing results.

Table 3: Linking/Comparing with other Studies

S #	Template	Sections
1	<u>In relation to the</u> present study, some of these (***)Categories / Instances / Groups) were incorporated in the (***)Previous Studies Citation)	Data Analysis / Conclusion
2	(***)Subject Matter/Observation/Speculation) can be explained <u>in relation to the</u> (***)Modal / Paradigm) of (***)Theorist Citation) where the (***)Explanation)	Data Analysis
3	Results <u>of the analysis of the</u> mean total scores of (***)Quantitative Data) demonstrates <u>that there was</u> (***)Increase /Decrease) in the mean scores as compared to	Data Analysis / Conclusion
4	Moreover, through <u>the analysis of the</u> characterizations of the (***)Subject Matter), (***)Author Citation) found that the	Literature Review
5	It is worthwhile to provide <u>an overview of the</u> main ideas the (Theorist/ Author) presents in his/her (***)Study / Work/ Book) before discussing the	Data Analysis / Literature Review
6	<u>On the other hand</u> , if the (***)Participants) are jointly involved in a shared task, information about the (***)Participants') perspective resembles	Data Analysis
7	<u>On the other hand, in the current</u> (***)Analysis / Experiment) the information presented in the common ground was not in a direct conflict with the	Conclusion
8	<u>On the other hand, and in line with the</u> (***) Literature Reviewed Citation) on the (***)Field) study presented	Literature Review
9	(***)Author 1 and (***) Author 2) <u>on the other hand</u> , have maintained an outstanding use of the..	Literature Review
10	(***)Author/Study) <u>on the other hand</u> , stressed (***)Respective) issues,	Literature Review
11	<u>On the other hand</u> , (***)Author) argues that in order for	Literature Review
12	<u>On the other hand</u> , (***)Author/Study) generates	Literature Review

In the light of the scholars cited above, the functions are assigned to the developed templates. The three sets of templates address several contextual requirements of writing the section of review of literature. This chapter of thesis or section of research article is like backbone of the study upon which the entire research endeavor stands. The wide-ranging collection of templates provides the scholars with a handy solution to the problem of field-specific and appropriate use of language based on academic expressions frequently used by doctorate scholars of well-reputed universities of United Kingdom. Therefore, the study achieves its prime goal to facilitate the process of work from home with reference to language pedagogy amid the pandemic. The discussion is concluded in the subsequent section.

Conclusion

The combination of quantitative and qualitative analyses brings the study to a successful conclusion. The use of specialized corpus and highly frequent LBs is found positive and successful in order to generate field specific templates. Resultantly, it offers a practical and easy to apply solution to the problems faced by the research scholars during and after the pandemic. It is very handy and needs no specific technical expertise regarding using sophisticated tools. In general, doctorate scholars are less exposed to state-of-the-art e-learning tools (Galy et al., 2011) and find difficult to use sophisticated writing tools, particularly in the fields of social sciences. To equip them with easy to incorporate writing assistance, the present study offers a module and recommends further investigation with reference to other fields of knowledge. It extends the scope of the use of LBs in academic writing context and provides a new dimension to the contemporary studies of generating vocabulary lists and phrase banks. The inventive use of LBs for developing a database of rhetorical expressions used and approved by the advanced scholars of the field suggests building data banks on departmental and institutional level. Thus, field and genre specific conventional writing standards can be set for the academicians with a wide range of linguistic choices for accomplishment of respective research goals.

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References

- Akram, W., Adeel, S., Tabassum, M., Jiang, Y., Chandio, A., & Yasmin, I. (2020). Scenario Analysis and Proposed Plan for Pakistan Universities–COVID–19: Application of Design Thinking Model. A Project of Re-imaging the Higher Education System Cloud-Based Learning in Pakistan-COVOD19_ <https://doi.org/10.33774/coe-2020-ql1w6>
- Anthony, L. (2018). AntConc (Version 3.5.6) [Computer Software]. Waseda University. Scribbr, <http://www.antlab.sci.waseda.ac.jp/>
- Bao, W. (2020). COVID- 19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113-115. <https://doi.org/10.1002/hbe2.191>
- Biber, D., Conrad, S., & Cortes, V. (2003). Lexical bundles in speech and writing: an initial taxonomy. In A. Wilson, P. Rayson & T. McEnery (Eds.), *Corpus linguistics by the Lune: a festschrift for Geoffrey Leech* (p.71–93). Peter Lang.
- Biber, D., Conrad, S., & Cortes, V. (2004). If you look at...: Lexical bundles in university teaching and textbooks. *Applied Linguistics*, 25(3), 371-405. <https://doi.org/10.1093/applin/25.3.371>
- Biber, D., & Barbieri, F. (2007). Lexical bundles in university spoken and written registers. *English for Specific Purposes*, 26, 263-286. <https://doi.org/10.1016/j.esp.2006.08.003>
- Bloomberg, L. D., & Volpe, M. (2012). Developing and presenting your literature review. In L. D. Bloomberg & M. Volpe (Eds), *Completing your qualitative dissertation: A road map from beginning to end*.(p. 140-179). SAGE Publications.
- Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational researcher*, 34(6), 3-15. <https://doi.org/10.3102/0013189X034006003>
- Chen, M., & Flowerdew, J. (2018). Introducing data-driven learning to PhD students for research writing purposes: A territory-wide project in Hong Kong. *English for Specific Purposes*, 50, 97-112. <https://doi.org/10.1016/j.esp.2017.11.004>
- Conrad, S. M., & Biber, D. (2005). The frequency and use of lexical bundles in conversation and academic prose. *Lexicographica*, 56-71. 10.1515/9783484604674.56
- Coxhead, A. (1998). An academic word list (Vol. 18). *School of Linguistics and Applied Language Studies*. Victoria University of Wellington. New Zealand.

- Dontcheva-Navratilova, O. (2012). Lexical Bundles in Academic Texts by Non-Native Speakers. *Brno Studies in English*, 38(2). <https://doi.org/10.5817/BSE2012-2-3>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4. doi: 10.11648/j.ajtas.20160501.11
- Fink, A. (2019). *Conducting research literature reviews: From the internet to paper*. Sage publications.
- Flowerdew, L. (2016). A genre-inspired and lexico-grammatical approach for helping postgraduate students craft research grant proposals. *English for Specific Purposes*, 42, 1-12. <https://doi.org/10.1016/j.esp.2015.10.001>.
- Galy, E., Downey, C., & Johnson, J. (2011). The effect of using e-learning tools in online and campus-based classrooms on student performance. *Journal of Information Technology Education: Research*, 10(1), 209-230. <https://doi.org/10.28945/1503>
- Grabe, W. (2012). Applied linguistics: A twenty-first-century discipline. In, R. B, Kaplan (2nd ed). *The Oxford handbook of applied linguistics* (p.34-44). Oxford University Press.
- Grimes, D. R., Bauch, C. T., & Ioannidis, J. P. (2018). Modelling science trustworthiness under publish or perish pressure. *Royal Society Open Science*, 5(1),171511. <https://doi.org/10.1017/S0261444811000504>
- Jalali, Z. S., & Moini, M. (2018). A Corpus-based Study of Lexical Bundles in Discussion Section of Medical Research Articles. *Iranian Journal of Applied Language Studies*, 10(1), 95-124. [10.22111/IJALS.2018.4265](https://doi.org/10.22111/IJALS.2018.4265)
- Jandrić, P., Hayes, D., Truelove, I., Levinson, P., Mayo, P., Ryberg, T., & Jackson, L. (2020). Teaching in the age of Covid-19. *Postdigital Science and Education*, 2(3), 1069-1230. <https://doi.org/10.1007/s42438-020-00169-6>
- Li, Y., Ma, X., Zhao, J., & Hu, J. (2020). Graduate-level research writing instruction: Two Chinese EAP teachers' localized ESP genre-based pedagogy. *Journal of English for Academic Purposes*, 43, 100813. <https://doi.org/10.1016/j.jeap.2019.100813>
- Lu, X., Casal, J. E., & Liu, Y. (2020). The rhetorical functions of syntactically complex sentences in social science research article introductions. *Journal of English for Academic Purposes*, 44, 100832. <https://doi.org/10.1016/j.jeap.2019.100832>
- Martinez, R., & Schmitt, N. (2012). A Phrasal Expressions List. *Applied Linguistics*. 33(3): 299–320. Oxford University Press. <https://doi.org/10.1093/applin/ams010>
- Morley, J. (2017). The academic phrase bank: An academic writing resource for students and researchers. *The University of Manchester: Manchester, UK*. 150.
- Noor, M., & Anwar, B. (2019). Structural and functional analyses of discipline-specific lexical bundles. *Pakistan Journal of Languages and Translation Studies*, 2, 24-52. ISSN: 2410-1230.
- Noor, M., & Anwar, B. (2020). Templates Developed for Writing Introduction Section for Research Scholars: Lexical Bundle Approach in Post-Covid-19 Situation. *Pakistan Journal of Social Sciences (PJSS)*, 40 (3), 1299-1315. <http://pjss.bzu.edu.pk/website/journal/article/5f74947876005/page>
- Oliver, P. (2012). *Succeeding with your literature review: a handbook for students: A Handbook for Students (Open Up Study Skills)* (1st ed.). Open University Press.
- Onwuegbuzie, A. J., & Frels, R. (2016). *Seven steps to a comprehensive literature review: A multimodal and cultural approach*. SAGE.
- Paltridge, B., & Starfield, S. (2020). Change and continuity in thesis and dissertation writing: The evolution of an academic genre. *Journal of English for Academic Purposes*, 48, <https://doi.org/10.1016/j.jeap.2020.100910>
- Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know?. *International Business Review*, 101717. <https://doi.org/10.1016/j.ibusrev.2020.101717>

- Pautasso, M. (2013). Ten simple rules for writing a literature review. *PLoS Comput Biol*, 9(7), e1003149. <https://doi.org/10.1371/journal.pcbi.1003149>
- Renz, A., & Hilbig, R. (2020). Prerequisites for artificial intelligence in further education: identification of drivers, barriers, and business models of educational technology companies. *International Journal of Educational Technology in Higher Education*, 17, 1-21.
- Rezoug, F., & Vincent, B. (2018). Exploring Lexical Bundles in the Algerian Corpus of Engineering. *Arab Journal of Applied Linguistics*, 3(1), 47-77. EISSN-2490-4198
- Simpson-Vlach, R., & Ellis, N. C. (2010). An academic formulas list: New methods in phraseology research. *Applied linguistics*, 31(4), 487-512. <https://doi.org/10.1093/applin/amp058>
- Sintema, E. J. (2020). E-Learning and Smart Revision Portal for Zambian Primary and Secondary School Learners: A Digitalized Virtual Classroom in the COVID-19 Era and Beyond. *Aquademia*, 4(2), ep20017. <https://doi.org/10.29333/aquademia/8253>
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *SSRN Electronic Journal*, 5(2), 18-27. <https://doi.org/10.2139/ssrn.3205035>
- Toquero, C. M. (2020). Challenges and Opportunities for Higher Education Amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research*, 5(4). doi:10.29333/pr/7947
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human resource development review*, 4(3), 356-367. <https://doi.org/10.1177/1534484305278283>
- UNESCO (July, 2020). *COVID-19 Impact on education*. <https://en.unesco.org/covid19/educationresponses>
- Wachidah, W. D. N. A., Fitriati, S. W., & Widhiyanto, W. (2020). Structures and Functions of Lexical Bundles in Findings and Discussion Sections of Graduate Students' Thesis. *English Education Journal*, 131-142. <https://doi.org/10.15294/EEJ.V10I1.33994>
- Winchester, C. L., & Salji, M. (2016). Writing a literature review. *Journal of Clinical Urology*, 9(5), 308-312. <https://doi.org/10.1177/2051415816650133>
- Wright, H. R. (2019). Lexical bundles in stand-alone literature reviews: Sections, frequencies, and functions. *English for Specific Purposes*, 54, 1-14. <https://doi.org/10.1016/j.esp.2018.09.001>
- Yan, Z. (2020). Unprecedented pandemic, unprecedented shift, and unprecedented opportunity. *Human Behavior and Emerging Technologies*, 2(2), 110-112. <https://doi.org/10.1002/hbe2.192>

Appendix-1: Applied Linguistics Fields Selected for Corpus

S #	Applied Linguistics Fields	Abbreviations for Corpus Mark-up
1	Critical Discourse Analysis	CDA
2	Contrastive Linguistics	Cnt L
3	Conversational Analysis	Cnv A
4	Corpus Studies	CS
5	English as Second Language,	ESL, EFL
6	English as Foreign Language	
7	Language Education	LE
8	Language Policy and Planning	LP & P
9	Multilingualism & Bilingualism	ML & BL
10	Natural Language Processing	NLP
11	Second Language Acquisition	SLA
12	Stylistics	Sty
13	Translation Studies	TS