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Article:	Exploring Context vs. Situation-Dependent and Abstract vs. Non-Abstract Features in PhD Dissertations		
Author(s):	Muzammal Iqbal Rana Lecturer in English, Government Zamindar Graduate College, Gujrat		
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	Muzammal Iqbal Rana is serving as a Lecturer in English at Government Zamindar Graduate College, Gujrat Email: <u>Kilsanvi111@live.com</u>		

ABSTRACT

This study conducts a Multidimensional Analysis (MDA) of Pakistani Academic Discourse of PhD dissertations. A corpus was created for this analysis, comprising thirty (30) PhD dissertations each from the disciplines of Pure Sciences (PS) and Social Sciences (SS). The framework for the study is based on Biber's (1988) proposed taxonomy. Biber's (1988) proposed taxonomy for MDA provided the main framework for the analysis of the collected corpus of PS and SS. The study is limited to the analysis of Dimension 3 (D3) and Dimension 5 (D5) due to their relevance to academic discourse. This study employs Multidimensional Analysis Tagger (MAT) software for individual and comparative analysis of SS and PS dissertations across D3 and D5. The results reveal that on D3, which assesses context vs. situation dependency of a text, the mean values for PS (2.20) and SS (2.29) are nearly the same. While analysing D5, abstract vs. non-abstract, the mean score for SS (2.47) is slightly higher than that for PS (1.67) due to the greater frequency of conjuncts and adverbial subordinators in SS. This research holds pedagogical significance that can offer valuable insight for language instructors and syllabus designers engaged in Academic English. The results can facilitate in creating effective teaching strategies and materials for English language learners. On a theoretical level, this study is expected to stimulate further research initiatives in the domain of academic register studies.

Keywords: Multidimensional Analysis, Dimensions, Academic Discourse, Dissertations, Context vs. Situation, Abstract vs. Non-Abstract

1. Introduction

Academic discourse is the fundamental aspect of academic practices, occupying a central place in academia and playing a crucial role in nourishing and nurturing academic life. In recent decades, there has been considerable growth in analyzing the intricacies of academic discourse (e.g. Hyland, 2004, 2005; Biber et al, 1999; Swales, 1990). With a vast body of research into this relatively new field of study, it has quite successfully developed its typical terminology, methods of investigation, norms and practices and, above all, its significant role in the pursuit of higher education. Analyzing academic discourse is essential for understanding how knowledge is constructed and communicated within various fields. It helps to identify disciplinary conventions, rhetorical strategies, and evolving trends in scholarly writing.

The prevalence of English in Pakistani Academic Discourse can be traced back to the colonial period. The British colonial rule facilitated and introduced the English language in the Indian Subcontinent as they established educational institutions with English as a medium of instruction (Kachru & Nelson, 2006). The English-medium education system, which was established during British rule, has survived in Pakistan and is regarded as a gateway to chances in government positions, further education, and prominent professions (Rahman, 1996). The reliance on English helps Pakistani scholars to access international research and engage global academic communities. Doctoral dissertations are an important representation of Pakistani Academic Discourse (Rana, 2015).

Multidimensional Analysis (henceforth MDA) was developed by Biber (1988) as a methodological approach that employs statistical techniques to investigate register variation among texts (Biber, 2004). This approach allows researchers to examine various registers in regard to multiple linguistic patterns referred to as Dimensions (Biber & Conrad, 2009). MDA facilitates the description of relations among registers in terms of their linguistic features (Biber, 1995). MDA can help to compare and contrast different texts and registers effectively which may not be possible through traditional qualitative methods.

This study analyzes and compares the dissertations of Pakistani academic discourse of Social Sciences (henceforth SS) and Pure Sciences (henceforth PS). The study has explored two dimensions of Biber's MDA. Dimension 3 (henceforth D3) and 5 (henceforth D5) have been selected for the research due to their relevance to Academic Discourse. D3 differentiates between context-dependent and situation-dependent texts. As academic discourse is well organized and contains a lot of references, the dissertations are expected to exhibit the features of context-dependent texts. D5 is also selected for analysis since it involves the opposition between abstract and non-abstract information. As academic disciplines, especially texts related to sciences, frequently use agentless passive structures, it is appropriate to explore academic texts with respect to this Dimension.

This is a comparative study of two distinct disciplines: Pure Sciences and Social Sciences. Pure Science includes domains such as Chemistry, Physics and Biology along with their subfields such as astrophysics, organic chemistry, cell biology and so on. Any dissertation produced in the following areas is categorized as a text in Pure Sciences. Social Sciences is a vast field which studies human behavior and society and its domains overlap with one another. For this research, three fields from Social Sciences were chosen for analysis: Education, English and Political Science.

This study has the following objectives. Journal of Peace, Development and Communication

- 1. To examine the distribution of Dimension 3 and Dimension 5 across Pakistani PhD dissertations of Pure Sciences.
- 2. To examine the distribution of Dimension 3 and Dimension 5 across Pakistani PhD dissertations of Social Sciences.
- 3. To explore the differences between Pakistani dissertations of Pure Sciences and Social Sciences across Dimension 3 and Dimension 5.

This study has the following research questions.

- 1. What is the Dimension distribution of Pakistani PhD dissertations of Pure Sciences on D3 and D5?
- 2. What is the Dimension distribution of Pakistani PhD dissertations of Social Sciences on D3 and D5?
- 3. How do the Dimension distribution of Pakistani PhD dissertations of Pure Sciences and Social Sciences vary with respect to D3 and D5?

2. Literature Review

Academic discourse is a means of carrying out social communication; therefore, it must reflect interactive and rhetorical characteristics. These characteristics can be better conceptualized as rhetorical and linguistic features within academic texts. Through these features, researchers negotiate meaning, convince academics about their knowledge claims, account for their actions, acknowledge others' work in the field and perform many more tasks (Hyland, 2004). In essence, researchers try to persuade their audience in various ways provided by the conventional code of each discipline. For this, they manipulate the linguistic choices to serve their ends. However, they perform all these tasks according to set conventions of a certain genre.

Several studies have been conducted on academic discourse undertaking a variety of perspectives. Many studies have adopted social and rhetorical perspectives to explain the style of writers in a particular discourse (Halliday & Martin, 1993; Swales, 1990). Some researchers have analyzed medical scientific discourse (Atkinson, 1999). A few researchers have explained surface structures of academic discourse such as Hedging (Hyland, 1994; Hyland 2005), classes of verbs (Hunston, 1995), noun phrases (Halliday, 1988), conditionals (Ferguson, 2000), imperatives (Swales et al., 1998), politeness markers (Myers, 1989). A few works (e.g. Biber et al, 1999) have utilized corpus tools for the analysis of academic discourse.

As this study specifically deals with PhD dissertations, the researcher also reviewed a few extensive research works carried out on the linguistic features of research articles and dissertations by Pakistani scholars. Recently, some Pakistani doctoral researchers have analyzed the language of PhD theses. Yousaf (2019) analyzed lexical bundles of Pakistani PhD dissertations. Yasmin (2020) studied generic and metadiscourse features of Pakistani academic writing of research theses. Khan (2022) explored Authorial Voice in Citation Patterns of Literature Review Sections of PhD Theses and Khattak (2019) studied the specificity of Academic English used in PhD dissertations in the field of English studies in Pakistan.

A few researches have been done by Pakistani researchers utilizing the Multidimensional Framework by Douglas Biber. In the analysis of print advertisements in Pakistani media, Shakir (2013) found that language in advertisements varied considerably depending on the product category. Moreover, his findings indicated that the language of print ads is similar to non-profit grant proposals and letters by fundraisers. The results of another *Journal of Peace, Development and Communication*

study conducted on the features of online university prospectus with respect to Dimension 1 showed that prospectus language is informational in nature (Amjad & Shakir, 2014). A similar study investigated the distribution of Dimension 3 on prospectuses of Pakistani universities. The analysis of co-occurring linguistic features on Dimension 3 revealed that it is characterized by being more 'promotional, informational, and explicit' (Zahra & Shakir, 2015).

3. Research Methodology

This research analyzes linguistic features in doctoral dissertations of two major disciplines: Pure Sciences and Social Sciences. Dissertations for Pure Sciences were selected from the fields of Biology, Physics and chemistry. On the other hand, dissertations from the subjects of English, Education and Political Science were collected for the Social Sciences corpus.

A total of sixty dissertations were collected; thirty for each of the two disciplines. For each sub-discipline, ten dissertations were collected to ensure a more representative dataset. Hence, equality has been maintained in the number of dissertations instead of the number of words. All of these dissertations were acquired from the Higher Education Commission's (HEC) repository in Pakistan. After downloading dissertations from the HEC repository, all of them were converted to plain text format.

The research made use of Biber's Multidimensional framework for the analysis. Biber (1988) delineates six Dimensions in the framework by assigning specific linguistic features to those Dimensions. Some linguistic features load the value toward the positive pole while others load toward the negative pole based on specific Dimensions.

The researcher used Multidimensional Analysis Tagger software specifically designed to replicate Biber's framework for the analysis of the texts. This program produces an annotated version of the selected text along with the statistics required to conduct register or text analysis.

The analysis begins with data computation via the *Tagger* module, which accepts .txt files, followed by the *Analyzer* and *Inspect Tool. Inspect Tool* enables a researcher to see the Dimension features of individual texts. It is very helpful in identifying specific linguistic features of every Dimension separately.

The study has been delimited to the analysis of D3 and D5. D3 distinguishes between situation-dependent text and context-dependent text while D5 explores the abstract and non-abstract nature of a text. The reasons for their selection have been stated earlier. The scores of features of each Dimension have been provided in the tables in the Data Analysis chapter. The example texts have been taken from the dissertations selected for analysis. The relevant features of a Dimension have been italicized, bolded or underlined.

4. Analysis of Data

This section gives the values of all six Dimensions of corpora of Social Sciences and Pure Sciences combined.

4.1 Distribution of all Dimensions in PhD Dissertations

In this study, dissertations from Pure and Social Sciences have been compared across two Dimensions. Nevertheless, below, an overall table containing values of collective data has been displayed including D3 and D5.

Dimensions	D1	D2	D3	D4	D5	D6
Mean Scores	-21.23	-4.33	9.24	-5.53	2.07	-1.42

Table 4.1: Distribution of all Dimensions for PS and SS dissertations combined *Journal of Peace, Development and Communication Volume 08 Issue 03*

Table 4.1 indicates that the mean value across D1 is significantly negative in dissertations, showing a negative score of -21.23. Dissertations are a major component of academia which generally have substantial information. So, the negative score indicates the informational nature of Dissertations (Biber, 1988).

Dimension 2 distinguishes between narrative and nor-narrative style. Academic discourse depicts a non-narrative style which is also demonstrated by the score of -4.33. A negative score shows that the text is rich in present tense verbs and attributive adjectives instead of past tense verbs and perfect aspect verbs (Rana, 2015).

The result of Dimension 3 in the corpus is high indicating the high utilization of WH clauses and nominalizations in dissertations. It means the text is explicit and one can easily identify referents in the writing (Biber, 1988). This result closely aligned with the values of *official documents* as identified by Biber (1988).

Dimension 4 presents a negative value for the whole dataset. Biber (1995) has also indicated that the value for this Dimension in academic discourse ranges from 0 to -1. A lack of infinitives, modals and conditional subordination results in a negative score. A text with a negative score indicates that it is based on research rather than the writer's opinion.

The mean value for Dimension 5 stood at 2.07, indicating high usage of passive voice sentences. This suggests that data in dissertations was presented in a technical manner because in academic discourse, especially scientific, emphasis is placed on the 'patient' not on the 'agent'. Such results were expected.

Dimension 6 is named as *On-line Informational Elaboration Marking Stance* and a high value on this Dimension indicates that the text is informational, but it is produced under specific time constraints (Nini, 2015). The overall value for the data including PS and SS dissertations was -1.42, which is marginally higher than that of English academic prose (Biber, 1988; Rana, 2015).

4.2 Distribution of D3 and D5 for PS Dissertations

Table 4.2 presents the values of D3 and D5 for Pure Sciences dissertations. The table includes mean, maximum and minimum values across PS dissertations, which are discussed in the next paragraph.

PS Dissertations	Mean	Max	Min
D3	9.2	14.54	5.12
D5	1.67	4.77	-0.6

Table 4.2 Statistics on Dimensions 3 and 5 for Pure Sciences Dissertations

Table 4.2 shows the mean values for PS dissertations in Dimensions 3 and 5, alongside the minimum (the lowest value recorded in an individual dissertation) and maximum (the highest value recorded) values. The score of Dimension in academic prose is high (manual) because it is not as much dependent on context as a sports commentary would be. The maximum value is up to 14.54 and the lowest is 5.12. It shows variability among dissertations. So is the case with Dimension 5 where the upper score reaches 4.77 and the lower score dips to -0.6 resulting in a mean value of 1.67. These results indicate the visible differences in values among Pure Sciences dissertations analyzed.

The comparisons of the scores for PS dissertations regarding Dimension 3 showed that the genre most close to it was of *official documents*, as indicated by Biber (1988). Following

this, *academic prose* was the next closest genre, succeeded by *prepared speeches* and *press reportage* respectively, with broadcasts representing the most distant category.

Comparing PS scores for Dimension 5 across various genres identified by Biber (1988), *press reportage* appeared as the nearest genre. However, the scores for *academic prose* and *official documents* identified by Biber (1988) showed some differences.

4.3 Distribution of D3 and D5 for SS Dissertations

Below table 4.3 shows the mean, maximum and minimum scores of Social Sciences dissertations for Dimensions 3 and 5.

SS Dissertations	Mean	Max	Min
D3	9.29	14.87	5.33
D5	2.47	9.42	-0.76

Table 4.3 Statistics on Dimensions 3 and 5 for Social Sciences Dissertations

In SS dissertations, D3 has a mean score of 9.29, a maximum score of 14.87 and a minimum score of 5.33. The high value for Dimension 3 suggests that text is context-dependent. Moreover, **Dimension 5** has a mean score of 2.47, with a maximum of 9.42 and a minimum of -0.76. Keeping these values in view, it is clear that most dissertations display an abstract style but the negative minimum indicates that some dissertations may significantly deviate from this style, possibly using less abstract language.

The scores for SS dissertations on Dimension 3 closely aligned with Biber's (1988) score for *official documents*, with *academic prose* being the next nearest genre. So, the score for SS dissertations was more similar to that of official documents than to academic prose, while *broadcasts* represented the most distant category.

For Dimension 5, the score of 2.47 indicates that SS dissertations reflect an abstract style, chiefly focusing on the patient rather than the agent or doer. This score was most closely similar to the score of *press reportage*, followed by *academic prose* and *official documents*. The farthest text types were *personal letters* and *conversations*.

4.4 Difference in Values of Dimensions for PS and SS Dissertations

The scores for the Dimensions under investigation were extracted using MAT software. Table 4.4 focuses on comparing and describing the difference in scores between PS and SS dissertations for D3 and D5. Additionally, a chart has been created to visually represent these differences. The detailed analysis has been done in the next headings.

Genre Type	Dimension 3	Dimension 5
Pure Sciences (PS)	9.2	1.67
Social Sciences (SS)	9.29	2.47
Difference	-0.09	-0.8

Table 4.4: Values for PS and SS Dissertations for D3 and D5

4.5 Comparison of PS and SS Dissertations across D3

This heading deals with the comparison of PS and SS dissertations on D3. Comparison has been done qualitatively and quantitatively. Figure 4.1 shows the overall values of Dimension 3 across PS and SS Dissertations. The scores show negligible differences in mean values.

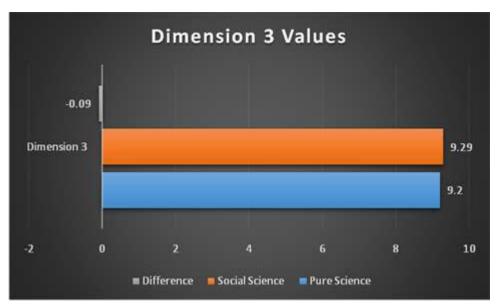


Figure 4.1: Comparison of the PS and SS dissertations for the Dimension 3

Dimension 3 differentiates between a situation-dependent text and a context-dependent text. Academic texts get high scores on this Dimension. The results indicate a positive score on D3 which is consistent with expectations. The scores on this Dimension for PS and SS Dissertations were not much different. The observed difference is minimal, suggesting that the various disciplines within academic research represented in Pakistani dissertations exhibit similarities. Thirty dissertations were selected for each discipline and texts below as examples have been given from those dissertations. The positive linguistic features on D3 have been bolded while negative features are italicized and underlined. Before example texts, table 4.5 shows the individual values of linguistic features of Dimension 3.

Features of D3	PS Dissertations	SS Dissertations
Positive features		
WH relative clauses on subject positions [WHSUB]	-0.57	-0.27
WH relative clauses on object positions [WHOBJ]	-0.77	-0.73
Pied-piping constructions [PIRE]	-0.4	-0.19
Nominalizations [NOMZ]	1.35	1.78
Phrasal co-ordination [PHC]	4.22	4.14
Negative features		
Adverbs [RB]	-3.08	-2.78
Time adverbials [TIME]	-1.28	-1.16
Place adverbials [PLACE]	-0.61	-0.42

Table 4.5 Comparisons of Linguistic Features of PS and SS on Dimension 3

Examples from PS Dissertations

People living in developing countries are <u>excessively</u> burdened by diseases, <u>particularly</u> periodontal disease, this disease is aggravated by poverty, poor living **conditions**, lack of **education** about health **and** disease **and** failure of **government** to fund sufficient health care workers.

Excerpt from Biology Dissertation

Evaluation of antioxidant **activity** of a typical material with an assay based on one chemical **reaction** seems to be <u>*rather*</u> questionable, <u>*yet*</u> there is a need to employ multitude of tests to <u>adequately</u> assess antioxidant **activity**.

Excerpt from Chemistry dissertation

Examples from SS Dissertations

In this way, SRIs are <u>deficiently</u> used that means that a large **portion** of the benefits of SRIs are being wasted **and** remained un-used in the schools <u>where</u> PSEx is very high. Likewise, the school <u>where</u> the student **enrollment** is very high.

Excerpt from Education dissertation

The degree to which [PIRE] **employment** depends on friends **and** relatives in **government** was included to assess the potential **effectiveness** of voting trends to make independent decisions based on **evaluation** of party platforms **and** policies.

Excerpt from Political Science Dissertation

The frequency of WH relative clauses in object positions for Pure Sciences' and Social Sciences' texts displayed only a slight variation. However, the values for WH relative clauses in subject positions are lower in Pure Sciences dissertations compared to Social Sciences dissertations, indicating a reduced use of WH relative clauses in the field of Pure Sciences.

The values for pied-pipe constructions reveal a notable disparity between PS and SS dissertations. Specifically, the value for Pure Sciences dissertations was -0.4, while the value for Social Sciences dissertations stood at -0.19. This indicates that PS dissertations exhibit a significantly lower occurrence of pied-pipe constructions compared to their SS counterparts. This finding suggests that the structural complexity associated with pied-pipe constructions is less emphasized in Pure Sciences, potentially reflecting the straightforward and direct nature of communication commonly found in this discipline. An example from excerpts include *the degree to which* [PIRE] *employment depends on friends*....

The scores for phrasal coordination in both fields are significantly high and almost similar. This finding indicates that a considerable frequency of phrasal coordination is prevalent in academic discourse. Here are a few examples taken from the excerpts quoted above. Examples from PS dissertations are *health <u>and disease</u>*, and *Disease <u>and failure</u>*. Instances from SS dissertations include *wasted <u>and</u> remained* and *platforms <u>and</u> policies*. These examples together reflect that phrasal coordination is frequently employed in academic writing, emphasizing its significance as a structural element that facilitates clarity and cohesion within scholarly discourse across various disciplines.

Nominalization constitutes another positive feature on D3. Nominalization refers to the use of nouns that end in suffixes such as -ity, -ness, or -ment. The frequency of nominalization is significantly higher in Social Sciences dissertations, indicating that such nouns are more frequently utilized in SS discourse. This higher frequency can be attributed to the nature of topics discussed in Social Sciences such as humanities, culture, arts, language, etc. where abstract concepts are often central to the discourse. A few examples from the above excerpts of Social Sciences' dissertations include *enrollment, education, portion, employment, government* and *evaluation*. These nouns serve to encapsulate complex ideas, thereby enhancing the depth and clarity of discussions in this field. While nominalization is also present in Pure Sciences academic discourse, it is employed to a lesser extent than in Social Sciences. Examples from PS excerpts include terms such as *conditions, evaluation, reaction* and *activity*.

The analysis of the dissertations with the help of MAT software especially the *inspect tool* for D3 revealed that negative features are infrequent in the examples cited above and in the overall corpus also. Adverbs indicating time and place are uncommon in dissertations of both disciplines. Furthermore, the scores for time adverbials and place adverbials in both categories show no significant differences, suggesting a uniformity in their usage across disciplines. In contrast, the frequency of other types of adverbs is considerably higher than that of time and place adverbs. The frequency for other adverbs in PS dissertations and SS dissertations is -3.08 and -2.78 respectively, indicating a high usage of these linguistic items. Common examples of these adverbs include *rather* and *yet* which serve to enhance clarity and coherence in the academic discourse.

4.6 Comparison of PS and SS Dissertations across D5

This section addresses the comparison of PS and SS dissertations on D5, utilizing both qualitative and quantitative methods. Figure 4.1 illustrates the overall scores for Dimension 5 across PS and SS dissertations. The difference in mean value across PS and SS texts is -0.8 if the score of SS dissertations is subtracted from that of PS dissertations.

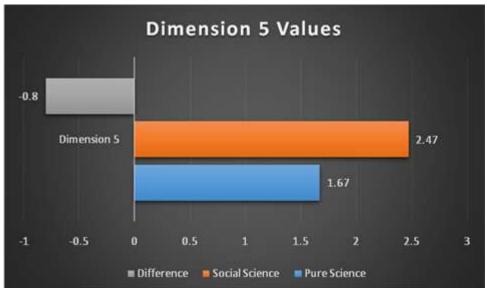


Figure 4.2: Comparison of the PS and SS dissertations for the Dimension 5

Dimension 5 differentiates between abstract and non-abstract styles of writing. A text is classified as abstract when the focus is on the 'patient', the entity receiving an action, over the 'agent', the entity performing the action. Dimension 5 has only negative features which include agentless passives, BY-passives and past participial adverbial clauses along with some other features. From Figure 4.2 it is clear that SS dissertations have a high value for this Dimension. Examples below have been quoted from the dissertations analyzed for this study. The examples are followed by the individual scores of Dimension 5 linguistic features in Table 4.6.

Features of D5 (only positive values)	PS Dissertations	SS Dissertations
Conjuncts CONJ	0.89	1.86
Agentless passives PASS	0.48	0.24
Past participial clauses PASTP	1.35	1.21
BY-passives BYPA	0.78	0.24
Other adverbial subordinators OSUB	0.2	0.46

Table 4.6 Comparisons of Linguistic Features of PS and SS on Dimension 5

Examples from PS Dissertations

Historically it is a very old technique which can be **[PASS]** traced to the formation of thin metallic film. The cloud of vapours is **[BYPA]** created by heating in Vacuum chamber. The vapours are **[PASS]** transported from source to target.

Excerpt from Physics Dissertation

Different water bodies entailing potential sites of the otter were **[PASS]** marked. Every potential otter site was **[PASS]** then visited. GPS coordinates were **[PASS]** recorded to develop the otter distribution maps.

Excerpt from Biology Dissertation

Examples from SS Dissertations

Similarly the word *request* is **[PASS]** used 29 % of the total in this pattern, in PWE whereas it is **[PASS]** used just 6 % and 3 % in American and British English.

Excerpt from English Dissertation

Consequently preferences and commitment to quality improvement get affected. **Moreover**, it takes time for the dust created **[WZPAST]** by the change to settle down and normalcy prevail.

Excerpt from Education Dissertation

A high score on D5 shows that the text is abstract. The analysis of both corpora revealed that the scores for PS dissertations and SS dissertations were high as shown in Figure 4.2. SS dissertations had a value of 2.47, while PS dissertations registered a value of 1.67.

These two academic disciplines differ in their use of various features associated with this Dimension as illustrated in Table 4.6. The occurrence of conjunctions was considerably greater in the Social Sciences discourse than in the Pure Sciences Discourse. Conjunctions such as *however* and *therefore* were commonly utilized in SS dissertations, whereas their occurrence in PS dissertations was low. This disparity reflects the differing communicative purposes inherent in the two fields. In Social Sciences, conjunctions are more prevalent as authors often present their perspectives, making these words particularly prominent in such texts (Rana, 2015).

On the other hand, the presence of agent-less passives in PS dissertations was nearly double that found in SS dissertations. The language employed in PS discourse is particularly technical. According to Biber (1989), the text types associated with engineering and technical prose have the highest score on D5. While passive structures are also present in SS registers, their frequency was not as noticeable as in technical and Pure Science dissertations. In Pure Sciences Discourse the stress is placed on the things which have received action, highlighting the importance of the 'patient' in the discourse. The abundance of agent-less passive structures in these texts illustrates this focus effectively. For example, a sentence may prioritize the action experienced by the 'patient,' thereby obscuring the agent, which aligns with the conventions of technical writing. This stylistic choice reflects the objective nature of research in the Pure Sciences, where the results and processes are often foregrounded over the individuals conducting the research. Here is an example from the excerpts cited above: *the cloud of vapours is created by heating the solid material*.

Additionally, the employment of by-passives in PS dissertations is also significantly more prevalent as compared to that in SS dissertations. Passive structures are frequently *Journal of Peace, Development and Communication Volume 08 Issue 03*

utilized in scientific discourse demonstrating the objective nature of this genre e.g. *the cloud of vapours is created by heating the solid material.*

In the case of past participial clauses, both corpora showed a similar tendency in incorporating this feature. There is a negligible difference in the use of this feature between PS dissertations and SS dissertations.

Similar to the use of conjunctions, Social Sciences dissertations displayed a higher frequency of adverbial subordinators compared to those in Pure Sciences dissertations. Common adverbial subordinators like *since*, *whereas* and *while* were repeatedly made use of in SS dissertations.

Overall, the score for SS dissertations was high in D3. While passive structures remained dominant in Pure Sciences dissertations, adverbial subordinators and conjunctions were widespread in Social Sciences dissertations. This reflects the distinct stylistic preferences and communicative functions characteristic of each academic discipline. This difference highlights the different rhetorical strategies employed in the fields of Social Sciences and Pure Sciences.

5. Conclusion

Since the study aimed to find the score of two distinct academic disciplines across Dimension 3 and Dimension 5, the researcher tried to find the reasons why such differences exist and to what degree these two disciplines differ from each other. A data scheme was devised in which disciplines of Social Sciences and Pure Sciences were chosen for comparative analysis.

After selecting these two disciplines for the study, sub-categories were identified and for every sub-category, data from ten dissertations was analyzed. The total number of dissertations included in the study amounted to sixty, with thirty dissertations allocated to each discipline.

The research employed Biber's (1988) Multidimensional Analysis Framework and its associated taxonomy across Dimensions 3 and 5 of the available data. The data were analyzed using MAT software, which provided scores for the relevant Dimension as well as for individual features. Differences were evaluated through graphical representations and comparison of the individual scores of different features.

While analyzing SS dissertations, it was revealed that the score for Dimension 3 was 9.29. The score of academic discourse for this Dimension is generally high, indicating the context-dependent nature of the text. This result closely aligned with the values of *official documents* as identified by Biber (1988). On Dimension 5, the score of SS dissertations was 2.47, reflecting the abstract style in which a *patient* gets attention rather than an *agent*. This score was similar to that of *press reportage*, with *academic prose* and *official documents* following closely behind in terms of similarity.

The next objective of the research was to find the concerned Dimension scores for the PS dissertations. The findings revealed that Dimension 3 had a score of 9.2 for PS dissertations, indicating PS as a high level of context dependence rather than situation dependence type of text. This score aligns closely with the genre of *official documents* as identified by Biber (1988), followed by *academic prose, prepared speeches*, and *press reportage*. The score for Dimension 5 for PS dissertations was 1.67, reflecting an abstract style. Compared to Biber's (1988) genre scores, *press reportage* was the closest match with SS discourse.

While comparing both disciplines, it was revealed that the scores for Dimension 3 were almost identical across both corpora having no significant differences; however, individual feature values showed some difference. Overall scores for both disciplines were very close. PS dissertations displayed a higher use of nominalizations and phrasal coordination compared to SS dissertations. On the other hand, Dimension 5 scores indicated that SS dissertations exhibited a more abstract style than PS dissertations. This Dimension consisted of only positive features. PS dissertations utilized more passive structures, including agentless and BY-passives, while SS dissertations exhibited a significantly higher use of conjunctions and adverbial subordinators.

The study has both pedagogical and theoretical significance as it identifies key differences between two major academic disciplines. Its results can facilitate comparisons with other discourses. Furthermore, the findings across Dimensions 3 and 5 can provide educators with insights into the genre of dissertations, which in turn, may help them improve their teaching skills for Academic English.

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