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GRAMMATICAL AND DISCOURSE VARIATIONS ACROSS EDUCATIONAL BLOGS: A MULTIDIMENTIONAL ANALYSIS

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Universiti Utara Malaysia

DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
2026

GRAMMATICAL AND DISCOURSE VARIATIONS ACROSS EDUCATIONAL BLOGS: A MULTIDIMENTIONAL ANALYSIS

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Thesis Submitted to
School of Languages, Civilisation & Philosophy
Universiti Utara Malaysia
in Fulfilment of the Requirement for the Degree of Doctor of Philosophy

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ABSTRACT

This thesis critically addresses the Anglocentric bias and methodological fragmentation in digital discourse studies, particularly the neglect of professional digital genres in 'outer circle' English contexts. It aims to systematically identify, compare, and interpret the dominant linguistic dimensions characterizing British and Pakistani educational blogs. A rigorous dual-pronged Multidimensional Analysis (MDA) was employed on two purpose-built corpora (BEBC and PEBC, 150 posts each). This involved a 'Classic MD' for external benchmarking and a 'New MD' with expanded features to uncover emergent, genre-specific dimensions. Meticulous data preprocessing, including validation of automated tagging, ensured data integrity. Factor analysis and ANOVAs revealed statistically significant cross-cultural differences. Findings demonstrate educational blogging is not monolithic but profoundly shaped by distinct sociocultural priorities. The PEBC exhibits dimensions reflecting "Informational Density and Formal Argumentation," characterized by authoritative, objective, and syntactically elaborate prose, consistent with formal English prestige in Pakistan. Conversely, the BEBC is defined by "Elaborative Temporal and Descriptive Discourse," foregrounding personal narratives, subjective reflection, and direct engagement, aligning with Western pedagogical traditions valuing authenticity. This study makes significant contributions by providing a robust, dual-layered MDA framework for novel digital genres and offering empirical evidence for genre hybridity and 'glocalization,' thereby challenging simplistic formal-informal binaries. Critically, it serves as a decolonizing intervention in World Englishes scholarship, quantitatively proving the systematicity of an 'outer circle' variety and fostering a pluricentric understanding of global English. Practically, insights are provided for intercultural professional communication, evidence-based digital literacy pedagogy, and genre-specific assessment. Delimitations regarding corpus representativeness and interpretive aspects are transparently acknowledged.

Keywords: Multidimensional Analysis (MDA), Corpus Linguistics. Educational Blogs, British English, Pakistani English, World Englishes, Intercultural Communication, Linguistic Variation

ABSTRAK

Tesis ini mengkaji secara kritis kecenderungan Anglosentrik dan fragmentasi metodologi dalam kajian wacana digital, khususnya pengabaian genre digital profesional dalam konteks bahasa Inggeris "outer circle". Kajian ini bertujuan untuk mengenal pasti, membandingkan, dan mentafsir secara sistematik dimensi linguistik dominan yang mencirikan blog pendidikan di British dan Pakistan. Satu pendekatan Analisis Multidimensi (MDA) berlapis telah digunakan ke atas dua korpus yang dibangunkan khusus (BEBC dan PEBC, masing-masing mengandungi 150 entri). Pendekatan ini merangkumi "Classic MD" untuk penanda aras luaran dan "New MD" dengan ciri diperluas bagi mengenal pasti dimensi baharu yang bersifat khusus kepada genre. Pra-pemprosesan data yang teliti, termasuk pengesahan penandaan automatik, dilaksanakan bagi memastikan integriti data. Analisis faktor dan ujian ANOVA menunjukkan perbezaan rentas budaya yang signifikan secara statistik. Dapatan kajian menunjukkan bahawa penulisan blog pendidikan tidak bersifat homogen, sebaliknya dipengaruhi secara ketara oleh keutamaan sosiobudaya yang berbeza. Korpus PEBC memperlihatkan dimensi "Ketumpatan Maklumat dan Penghujahan Formal", dicirikan oleh gaya penulisan autoritatif, objektif, dan sintaks yang lebih kompleks, sejajar dengan status prestij bahasa Inggeris formal di Pakistan. Sebaliknya, korpus BEBC ditandai oleh "Wacana Temporal dan Deskriptif yang Elaboratif", menonjolkan naratif peribadi, refleksi subjektif, dan penglibatan langsung dengan pembaca, selaras dengan tradisi pedagogi Barat yang menekankan keaslian dan ekspresi individu. Kajian ini menyumbang kepada penyediaan kerangka MDA berlapis untuk analisis genre digital baharu serta menawarkan bukti empirikal tentang hibriditi genre dan proses "glokalisasi". Ia sekali gus mencabar dikotomi mudah antara gaya formal dan tidak formal. Secara kritis, kajian ini juga berfungsi sebagai intervensi dekolonisasi dalam bidang World Englishes, dengan membuktikan secara kuantitatif keteraturan sistemik variasi bahasa Inggeris "outer circle" dan seterusnya menggalakkan pemahaman yang lebih pluralistik dan plurisentris terhadap bahasa Inggeris global. Secara praktikal, kajian ini memberi implikasi kepada komunikasi profesional antara budaya, pedagogi literasi digital berasaskan bukti, dan penilaian genre, dengan pengakuan terhadap batasan keterwakilan korpus dan interpretasi.

Kata kunci: Analisis Multidimensi (MDA), Linguistik Korpus, Blog Pendidikan, Bahasa Inggeris British, Bahasa Inggeris Pakistan, World Englishes, Komunikasi Antara Budaya, Variasi Linguistik.

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ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious, the Most Merciful. Alhamdulillah, all praise is due to Allah, whose countless blessings enabled me to successfully complete this journey. Peace and blessings be upon the Prophet Muhammad (صلى الله عليه وسلم), his family, and all his companions.

The completion of this work marks not only an academic achievement but also a journey shaped by the guidance, support, and prayers of many remarkable individuals. I am profoundly grateful to my esteemed supervisor, Dr. Marvindar Kaur for her unwavering guidance, insightful feedback, patience, and encouragement throughout this research. Your mentorship has been invaluable, and I am deeply honored to have worked under your supervision.

I am also profoundly grateful to Prof. Dr. Asim Mehmood for their insightful teachings and continuous support, particularly through his Research Methodology and Academic Writing courses during my first semester.

My sincere appreciation goes to my faculty members for their assistance, thoughtfulness, and support throughout my academic journey.

I owe my deepest gratitude to my beloved family for their unconditional love, sacrifices, and unwavering support. To my husband, Muhammad Naveed Younis, your prayers and encouragement have been my strength. To my late father, Muhammad Jamil Johar, although you are no longer with us, your dream continues to inspire me. I miss you dearly, and this achievement is as much yours as it is mine. Heartfelt thanks to my brothers, Khuram Jamil and Farrukh Jamil, and all my sisters, for their constant support, friendship, and love. I am truly fortunate to have you by my side.

My special appreciation goes to my mother for her endurance, kindness, sacrifices, prayers and unwavering encouragement throughout this journey. Your support has been invaluable. To my beloved daughter and sons Ibrahim and Musa, your innocence and love have been a constant source of joy and motivation. Thank you for your patience and for sharing your time with my academic commitments.

I would also like to thank my all friends for their support, encouragement, and companionship along the way.

Finally, I extend my heartfelt thanks to everyone who contributed directly or indirectly to the completion of this work. May Allah bless you all abundantly.

TABLE OF CONTENTS

Permission to Use ..... **ii**
ABSTRACT ..... **iii**
ABSTRAK ..... **iv**
ACKNOWLEDGEMENT ..... **v**
TABLE OF CONTENTS ..... **vi**
LIST OF TABLES ..... **ix**
LIST OF FIGURES ..... **x**
LIST OF ABBREVIATIONS ..... **xi**
CHAPTER 1 ..... **1**
INTRODUCTION **1**
1.1 Introduction 1
1.2 Background: The Emergence of Digital Genres and Educational Blogs 2
1.3 Multidimensional Analysis (MDA): A Methodological Framework 4
1.4 The Sociolinguistic Context: English in British and Pakistani Education 5
1.5 Problem Statement: The Gap in Comparative Digital Discourse 9
1.6 Rationale of the Study 11
1.7 Research Questions 13
1.8 The Critical Significance and Unique Contribution of the Study 14
1.8.1 Theoretical Advancement: A Needed Stress-Test 14
1.8.2 Linguistic Equity and Intercultural Understanding: A Decolonial Contribution 15
1.8.3 Use for Evidence-Based Pedagogy and Digital Literacy: A Pragmatic 17
1.9 Scope and Delimitations of the Study 18
1.10 Organization of This Thesis 19
1.11 A Final Word on the Study's Central Contribution 20
CHAPTER 2 ..... **22**
LITRATURE REVIEW **22**
2.1 Introduction 22
2.2 The Foundational Framework—Biber's (1988) Model of Variation 23
2.3 Methodological Evolution and Contemporary Refinements 26
2.4 Justification for a Hybrid Theoretical Framework 30
2.5 MDA in the Digital Age: A Review of Recent Applications (2010– Present) 34
2.6 Theorizing the Blog: Genre, Hybridity, and Affordances 37
2.7 The Linguistic Landscape of Blog Discourse 41
2.8 The Educational Blog: A Nexus of Professional Discourses 44
2.9 The World Englishes Paradigm—Kachru, Schneider, and Beyond 48
2.10 Actual Studies Regarding the Linguistic Features of Pakistani English 51
2.11 Contrastive Rhetoric and Intercultural Professional Discourse 54
2.12 A Critical Review of Learner Corpus Research 57
2.13 Previous Multidimensional Analysis Studies in the Pakistani Context 60
2.14 Synthesis of the Literature: A Field Dominated by a Methodological Divide 63
2.15 Research Gap 65
2.16 The Thesis's Rationale and Unique Contribution 67
2.17 Linking the Literature Review to the Research Questions 69
CHAPTER 3 ..... **72**
RESEARCH DESIGN AND METHODOLOGY **72**
3.1 A Mixed-Methods Approach to Digital Discourse 72
3.2 Research Paradigm and Design Justification 73
3.3 Rationale for a Purpose-Built Corpus 75
3.4 Operational Definitions for Corpora Construction 76
3.4.1 Defining the Genre: "Educational Blog" 76
3.4.2 Defining the Contexts: "Pakistani" and "British" 77

3.5 Corpus Design Criteria for Text Selection 78
3.5.1 Authorship and Authenticity Criteria 78
3.5.2 Publication Venue Criteria 79
3.5.3 Temporal Scope Criterion 79
3.5.4 Textual Properties Criteria 80
3.6 Data Collection and Sampling Procedure 81
3.6.1 Identification and Longlisting of Potential Blogs 82
3.6.2 Stratified Sampling and Text Selection 83
3.6.3 Data Extraction and Finalization 83
3.7 Data Preprocessing and Normalization 84
3.7.1 Textual Cleaning and Markup Removal 84
3.7.2 Structural Normalization 85
3.7.3 Authorial Anonymization 86
3.8 The Dual Pronged Analytical Framework: A Strategy of Comparability and Discovery 86
3.8.1 Prong 1: The "Classic" MD Framework for Comparability 87
3.8.2 The "New MD" Framework for Discovery and Descriptive Adequacy 91
3.9 Tagging Reliability and Validation 95
3.10 The Multidimensional Analysis Procedure: Stage 1 (Frequency Counts) 97
3.10.1 Generation of Raw Frequency Counts 97
3.10.2 Normalization of Frequency Counts 97
3.11 The Multidimensional Analysis Procedure: Stage 2 (Factor Analysis for the "New MD") 98
3.11.1 Assessing the Suitability of the Data for Factor Analysis 99
3.11.2 The Factor Extraction Session: 100
3.11.3 Factor Rotation Procedure 102
3.12 Comparative Analysis Procedure: Hypothesis Testing and Effect Size Measurement 104
3.12.1 Calculating Dimension Scores: Operationalizing the Dimensions 104
3.12.2 Hypothesis Testing: Analysis of Variance (ANOVA) 105
3.12.3 A Critical Step: The Verification of Statistical Assumptions 106
3.12.4 Measuring Practical Significance: The Role of Effect Size 107
3.13 Framework for Qualitative Analysis and Functional Interpretation 108
3.13.1 Stage 1: Functional Interpretation of the Dimensions 109
3.13.2 Stage 2: Qualitative Analysis of Exemplary Texts 109
3.14 The Role and Integration of the Pilot Study 110
3.14.1 Objectives of the Pilot Study 111
3.14.2 Methodology and Outcomes of the Pilot Study 111
3.15 Ethical Considerations 113
3.16 Final Analytical Overview 115
3.17 Delimitations and Limitations of the Methodology 118
3.17.1 Limitations of the Methodology 119
3.17.2 The Pilot Study: Methodological Validation and Refinement 120
3.17.3 Objectives of the Pilot Study 120
3.18 Methodology and Results of the Pilot 121
3.19 Chapter Conclusion and Methodological Summary 122
CHAPTER 4 125
RESULTS AND DISCUSSION 125
4 Introduction: A Roadmap for the Analysis 125
4.1 The Classic MD Analysis: Locating the Genre 126
4.1.1 Quantitative Comparison on the Classic Dimensions 126
4.1.2 Visualizing the Comparison: Mapping the Discursive Fingerprints 127
4.1.3 The "Classic MD" Findings: Discussion on Dimension 1: The Involved- Informational Continuum 130
Classic MD Findings: Discussion of Other Foundational Dimensions 134
4.1.4 Critical Discussion and Synthesis: 136

4.2 The "New MD" Analysis: Emergent Dimensions of Educational Blogs 139
4.2.1 The "New MD" Factor Solution and Resulting Dimensional Models 139
4.2.2 Pakistani Educational Blogging Corpus (PEBC): 140
4.2.3 The British Educational Blog Corpus (BEBC): 141
4.3 In-Depth Analysis of New Dimension 1: A Tale of Two Discourses 143
4.3.1 New PEBC Dimension 1: Informational Density and Formal Argumentation 144
4.3.2 New BEBC Dimension 1: Elaborative Temporal and Descriptive Discourse 145
4.4 In-Depth Analysis of New PEBC Dimension 2: Reflective Evaluative Discourse 148
4.5 In-Depth Analysis of New PEBC Dimension 3: Expressive Engagement vs. Referential Minimalism 151
4.6 Critical Discussion and Synthesis: 153
4.7 Critical Discussion and Synthesis: 156
4.8 In-Depth Analysis of New PEBC Dimension 5: Abstract Style vs. Non-Abstract Concreteness 157
4.9 In-Depth Investigation of New PEBC Dimension 6: Online Abstract Discourse vs. Concrete Referential Simplicity 161
4.10 In-Depth Analysis of New BEBC Dimension 1: Elaborative Temporal and Descriptive Discourse 164
4.11 Detailed Analysis of New Dimension 2 in BEBC: Complex Evaluative Discourse vs. Simple Referential Objectivity 167
4.12 In-Depth Analysis of New BEBC Dimension 4: Contextualized Dynamic Discourse vs. Simplified Referential Discourse 173
4.13 Further Analysis of New BEBC Dimension 5: Interactive Referential Discourse vs. Detached Referential Discourse 176
4.14 In-Depth Analysis of New BEBC Dimension 6: Contextual Elaborative Discourse vs. Simplified Referential Discourse 179
4.15 The In-Depth New BEBC Dimension 7: Subjective Referential Complexity vs. Objective Referential Simplicity 182
4.16 An In-Depth Exploration of New BEBC Dimension 8: Interactive Elaboration vs. Referential Simplicity 185
4.17 In-Depth Analysis of New BEBC Dimension 9: Subjective Elaborative Interaction vs. Objective Referential Precision 188
4.18 In-Depth Analysis of New BEBC Dimension 10: Elaborative Stance and Interaction vs. Objective Referential Simplicity 191
4.19 Comparative Summary and Discussion of the "New MD" Findings 194
4.20 Conclusion: Synthesis of Dual Analyses and Response to Research Questions 197
CHAPTER 5 200
CONCLUSION, IMPLICATIONS, AND FUTURE DIRECTIONS 200
5.1 Recapitulation of the Research Problem, Aims, and Objectives 200
5.2 Answering RQ1: The Emergent Dimensional Landscape of Educational Blogs 201
5.3 Answering RQ2: Cross-Cultural Linguistic Variation Profile 203
5.4 Answering RQ3: The Sociocultural Significance of Stylistic Choices 204
5.5 Implications for the Theory of Multidimensional Analysis 206
Implications for Digital Genre Theory 207
5.6 Implications for the Study of World Englishes: A Decolonizing Intervention 209
5.7 Implications for Intercultural Professional Communication 211
5.8 Recommendations for Evidence-Based Pedagogy and Digital Literacy 213
5.9 Recommendations for Future Research 216
5.10 Acknowledgement of Methodological Constraints 218
5.11 Statement of Original Contribution 220
5.12 Concluding Remarks: Towards a Global Understanding of Digital Discourse 221
References 223
Appendices 229

LIST OF TABLES

Table 1.1 Comparative sociolinguistic Profile of British English and Pakistani English……... 06
Table 4.1 Mean Dimension scores across Pakistani English..... 126
Table 4.2 Mean Dimension scores across native English 127
Table 4.3: Explained Variance Ratio for the Ten-Factor Solution (PEBC)..... 141
Table 4.4: Explained Variance Ratio for the Ten-Factor Solution (BEBC)..... 142
Table 4.5 Top Positive and negative loadings..... 144
Table 4.6 Top positive and negative loadings features…….. 146
Table 4.7 Top positive and negative loadings features for dimensions 2…… 149
Table 4.8 Top positive and negative loadings features for dimensions 3…….. 152
Table 4.9 Top positive and negative loadings features for dimensions 4…….. 155
Table 4.10 Top positive and negative loadings features for dimensions 5…….…… 159
Table 4.11 Top positive and negative loadings features for dimensions 6..…… 162
Table 4.12: Top Positive and Negative Loading Features for BEBC Dimension 1..... 165
Table 4.13: Top Positive and Negative Loading Features for BEBC Dimension 2 168
Table 4.14: Top Positive and Negative Loading Features for BEBC Dimension 3……..171
Table 4.15: Top Positive and Negative Loading Features for BEBC Dimension 4..... ..174
Table 4.16: Top Positive and Negative Loading Features for BEBC Dimension 5..... ...177
Table 4.17: Top Positive and Negative Loading Features for BEBC Dimension 5..... ..180
Table 4.18: Top Positive and Negative Loading Features for BEBC Dimension 7.....183
Table 4.19: Top Positive and Negative Loading Features for BEBC Dimension 8..... 186
Table 4.20: Top Positive and Negative Loading Features for BEBC Dimension 9..... 189
Table 4.21: Top Positive and Negative Loading Features for BEBC Dimension 10..... 192
Table 4.22 A Comparison of the Top Three Emergent Dimensions in the PEBC and BEBC195

LIST OF FIGURES

Figure 1.1…… 08
Figure 1.2…… 13
Figure 2.1…… 25
Figure 2.2…… 29
Figure 2.3…… 32
Figure 2.4…… 40
Figure 2.5…… 47
Figure 2.6…… 67
Figure 2.7……70
Figure 3.1…… 74
Figure 3.2……80
Figure 3.3…… 81
Figure 3.4……..... 90
Figure 3.5……..... 92
Figure 3.6……..... 94
Figure 3.7……... 102
Figure 3.8……... 103
Figure 3.9……117
Figure 3.10…… 123
Figure 4.1……128
Figure 4.2……141
Figure 4.3……142

Universiti Utara Malaysia

LIST OF ABBREVIATIONS

AoIR:	Association of Internet Researchers
ANOVA:	Analysis of Variance
BEBC:	British Educational Blog Corpus
BI:	Business Intelligence
BPS:	British Psychological Society
CDA:	Critical Discourse Analysis
CMC:	Computer-Mediated Communication
CSUQ:	Computer System Usability Questionnaire
DM:	Data Mart
DW:	Data Warehouse
EFL:	English as a Foreign Language
ESL:	English as a Second Language IC: Inner Circle
ICDL:	International Computer Driving License
ICT:	Information and Communication Technology
iPMS:	Telecommunication maintenance
iUBIS:	Water supply service
KMO:	Kaiser-Meyer-Olkin L1: First Language
L2:	Second Language
LCR:	Learner Corpus Research
MAT:	Multidimensional Analysis Tagger
MDA:	Multidimensional Analysis
MD:	Multidimensional (Analysis)
NS:	Native Speaker
OC:	Outer Circle
ODS:	Operational Data Store
PCA:	Principal Component Analysis
PEBC:	Pakistani Educational Blog Corpus
SEM:	Structural Equation Model
SFL:	Systemic Functional Linguistics
SOV:	Subject-Object-Verb
SPSS:	Statistical Package for the Social Sciences
SVO:	Subject-Verb-Object
UTAUT:	Unified Theory of Acceptance and Use Technology
WEs:	World Englishes

CHAPTER 1

INTRODUCTION

1.1 Introduction

The digital revolution has irrevocably altered the landscape of human communication, catalyzing a profound transformation in how language is produced, consumed, and negotiated. This shift from the relative permanence of print to the dynamic, multimodal, and interactive nature of online discourse has given rise to a host of novel genres that demand new modes of scholarly inquiry. Among the most significant of these is the educational blog, a complex and multifaceted discursive space that has evolved far beyond its origins as a simple online journal. Today, it serves as a critical nexus for pedagogical innovation, a platform for professional reflection among educators, and a vibrant forum for the construction of scholarly communities. The hybrid nature of this genre simultaneously informational, interactional, narrative, and argumentative makes it a particularly rich site for linguistic investigation.

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While the significance of these digital platforms is widely acknowledged, the analytical frameworks of linguistics and discourse analysis have often lagged behind, and the scholarly lens has been disproportionately focused on Anglophone, 'inner circle' contexts. Consequently, a significant scholarly imbalance persists; our understanding of global digital discourse is largely based on a narrow, unrepresentative sample of the world's English users. This leaves a critical gap in our knowledge of digital genres are realized linguistically across diverse cultural and educational landscapes, particularly in 'outer circle' contexts like Pakistan, where a distinct variety of English with its own established norms and functions thrives. This thesis contends that to achieve a truly global understanding of digital communication, empirical inquiry must extend to these

under-analyzed yet highly significant linguistic communities. In response to this scholarly imbalance, this dissertation undertakes a systematic, corpus-based comparative study of the linguistic features of British and Pakistani educational blogs. This introductory chapter is designed to construct a robust and coherent foundation for this investigation, directly addressing the critical feedback from the examiners by systematically building the case for the study's necessity and originality. The argument is built layer by layer, beginning by situating research within the broader fields of digital genre analysis and the specific methodological framework of Multidimensional Analysis (MDA). The chapter then establishes the crucial sociolinguistic background of the British and Pakistani educational contexts before articulating a fully reconstructed problem statement, one that is grounded in a clear and compelling linguistic research gap. From this reconstructed foundation, the chapter proceeds to outline the studies specific research design, detailing its central aim, its measurable objectives, and the precise research questions that guide the empirical inquiry. Following this, the chapter delineates the study's tripartite significance, articulating its novel contributions to linguistic theory, its methodological rigor, and its practical applications for pedagogy. To ensure absolute clarity for the reader, the chapter concludes with a comprehensive 'signpost' that provides a roadmap for the subsequent sections of this chapter and, finally, outlines the organization of the entire thesis.

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1.2 Background: The Emergence of Digital Genres and Educational Blogs

The concept of genre, long-held within the world of literary and rhetorical studies, stands in beguiling intersect with the idea of socially situated communication. In his ground-breaking work on genre analysis, Swales (1990) defined genre in these terms: genres are communicative events characterized by a shared set of purposes within a specific

discourse community. These purposes, which are inherent to the genre by that very performance, inform the way its conventions operate, thereby positioning genre on structural-, stylistic-, and content-related levels, as well as in the linguistic choices, accorded by its users. Though this framework leaps into being for the investigation of established academic and professional texts, the new wave of digital revolution has now provoked its application in a brave and wild world of new communicative transactions.

One direct sign of this genre's evolution into a masterpiece is the blog. It would not be far-fetched to say that the blog blossomed approximately between 1990 and 1999, beginning as an online diary engrossed by some intriguing article or link but has a long-standing metamorphosis for more than a decade. Built on technology features with a deployment agenda—backward chronology, comments, links, and multimedia items—and thus grown at flexibility, each blog successfully has turned into a media production booth; digital citizen reporters find the website a platform; main facilitator of digital communication—bloggers of all sorts; dare to write communal stories. Boiled down to activist statements (Page et al., 2014), new media platforms have evolved various linguistic practices and fought for distinct identities and discourse-community formation. Applicable to all instances, the necessary mandate, of course, poses exceptions to particular notions of fluidity versus fixity. That means that while the posts one can find on educational blogs may remain functional in combining an overt formal informational style with a behind-the-scenes and rear-set engagement tone designed for readers to respond and take action, they are also likely to contain quite complicated fusions of purposes: pedagogical, often professional and scholarly involvement. It is really the combined effect of the contradictory purposes-pedagogical, professional, and academic- that makes educational blogging a precious but little analyzed genre. One

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must conduct thorough empirical research through linguistic investigation to learn more about how professional-academic discourse is molded into the digital age.

1.3 Multidimensional Analysis (MDA): A Methodological Framework

The present study employs the Multidimensional Analysis (MDA) framework to undertake an empirical inquiry into the complex linguistic variation inherent in educational blogs. The MDA is a highly sophisticated, corpus-based methodology initiated by Douglas Biber (1988) in his landmark work, *Variation Across Speech and Writing*. It is particularly meant to obviate the impressionistic or single-feature analysis of texts and to furnish instead a complete quantitative and functionally interpretable account of register variation. The basic premise of MDA holds that the systematic linguistic differences between genres are not arbitrary; rather, their causes lie in the dissimilar communicative purposes towards which these genres are directed. Such differences do manifest a specific group of linguistic features which consistently co- occur. The identification of those co-occurring groups leads to the definition of the "dimensions" of variation which characterize a particular genre or a group of genres. The operational process of MDA is rigorous and systematic. It starts with the compilation of a large, representative corpus of texts, which are subsequently annotated by the computer for a variety of linguistic features, often numbering well over 60 grammatical and lexical categories, including verb tenses, types of pronouns, nominalization, prepositional phrases, subordinate clauses, and other classes of words. The frequency of each of such features is counted for every text in the corpus and then submitted to a very advanced procedure in statistics-a certain type of factor analysis, most commonly Principal Component Analysis (PCA).

Factor analysis works by assembling linguistically co-occurring sets of features that appear with high frequency. For example, first-person pronouns, present tense verbs, and

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contractions appear together in highly interactive and involved-in-texted interactions. On the contrary, nominalizations, passive voice verbs, and long noun phrases often cluster with highly informative and abstract texts. Each of these co- occurring clusters of features is named a factor or, more interpretation wise, dimension of variation. The final stage is the functional interpretation of each dimension. Recent studies enhance MDA's relevance for digital genres. Berber Sardinha (2021) advocates bottom-up MDA for capturing online discourse patterns, supporting this study's methodology. The researcher examines linguistic features that constitute a dimension and deduces the shared communicative function they represent. For instance, a dimension characterized by the interplay of interactive features might best be interpreted dimensionally as "Involved vs. Informational Production."

In terms of this study, MDA is appropriate for three reasons. First, because it relies on many linguistic features, it allows for a much fuller and more subtle picture of a genre than an analysis using a few preselected features. Second, being quantitative, it allows direct objective comparison between the British and Pakistani corpora, revealing discrepancies statistically significant. Finally, because it ultimately focuses on the functional interpretation, the study can connect those linguistic patterns to their underlying communicative purposes in educational blogs, depending on sociocultural contexts. MDA is, therefore, the ideal framework under which empirical attempts can be made to map the landscape of linguistic variation across this complex digital genre.

1.4 The Sociolinguistic Context: English in British and Pakistani Education

Such linguistic comparisons as this are unable to exist in a sociolinguistic vacuum. An interpretation of linguistic variation between British and Pakistani corpora must be built on a complete understanding of the various histories, roles, and characteristics of English in these two nations. This section establishes the necessary sociolinguistic framework

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using one of the accepted views of "World Englishes," which has maintained an English-no-longer-as-soffocating above the pluricentric language-in-every-sense idea blasted apart in its reality. British English would, under this definition, be characterized as an „inner-circleâ€Ÿ variety and Pakistani English as an „outer-circleâ€Ÿ variety, establishing a principle of comparison without undermining each one's unique status and trajectory. BrE corpus serves as the 'inner circle' for the study. As spoken within the country itself, BrE has a very long history of codification, extensive institutionalization into all areas of society, and mainly its primary function as a native language (L1) for most of its speakers (Melchers & Shaw, 2011). It is an "endoglossic" variety whose norms are generated and maintained by its users. BrE, however, is not uniform since it includes several regional and social dialects. The educational and professional blogs that are analyzed in this study are expected to mainly mirror a standardized written form that serves as a basis for formal communication in the UK, representing informal variations. Naturally, this inclusion proves a critical point of reference for systematic comparison between the features of the Pakistani English corpus.

Universiti Utara Malaysia

Table 1.1 Comparative sociolinguistic Profile of British English and Pakistani English

Table 1.1 Comparative Sociolinguistic Profile of British English and Pakistani English

Feature	British English (BrE)	Pakistani English (PakE)
World Englishes Classification	Inner Circle (Kachru, 1985)	Outer Circle (Kachru, 1985)
Primary Mode of Acquisition	Primarily as a First Language (L1) for native speakers.	Primarily as an institutionalized Second Language (L2).
Norm-Setting Status	Norm-providing (Endoglossic): Norms are internally generated and codified.	Norm-developing (Exoglossic/Endoglossic Blend): Historically influenced by external (BrE) norms, but now developing its own internal, nativized standards.

Feature	British English (BrE)	Pakistani English (PakE)
Primary Societal Functions	Language of all societal domains (government, education, daily life).	Official language; primary language of higher education, the legal system, corporate business, and the military. Functions as a key lingua franca.
Linguistic Development	Characterized by a long history of standardization and codification.	Characterized by the process of "nativization," involving adaptation and innovation at the lexical, grammatical, and pragmatic levels to suit the local sociocultural context (Schneider, 2011).
Role in the Study	Serves as a well-established benchmark corpus representing a standardized, 'inner circle' variety of English in a professional digital genre.	Serves as the focus corpus representing a major, institutionalized, and functionally distinct 'outer circle' variety of English in the same genre.

Unlike BrE, which is an 'inner-circle' marker, Pakistani English (PakE) belongs as a euphoric 'outer circle' variety defined by Kachru's (1985) monumental three-concentric-circles model of World Englishes. Such a model is very much essential to understanding the status of PakE: it is not a foreign language (for example, English in Japan, an 'expanding circle' country) but a second language of very high function and institutionalization. Roots are firm within British colonialism's history in the subcontinent, and since independence, English has maintained its status as an official language in Pakistan. It is the language of the judiciary, the armed forces, higher education, corporate business, and the national media (Rahman, 2002). Indeed, such an extent of penetration and importance signifies that PakE has gone through an process of nativization which adapted it to the local sociocultural context and allowed it to develop its own distinct, rule-powered norms. All levels of linguistic nativization are visible. As

Schneider's (2011) "Dynamic Model" predicted for postcolonial Englishes, differences in PakE developed features differentiating it from BrE. It includes lexical borrowing of words from Urdu and some other local languages (e.g., dupatta, jirga) and modifications of meanings of existing English words (e.g., expired meaning to die). Grammatically these include progressive aspect using stative verbs (e.g., "She is having a new car") and many idiosyncratic prepositions as well as a unique tag question system. Pragmatically, the culture of a specific locality often tends to influence politeness strategies and forms of address. It is not about detecting 'errors' but about recognizing the legitimacy of PakE as a systematic and functionally adequate variety of English. The sociolinguistic reality is the primary scenario in which the findings of the Multidimensional Analysis may be interpreted. You have changed your understanding about seeing simple deficiency theories and thus analyzing the different choices made by the Pakistanis regarding their blogging as strategic enactments.

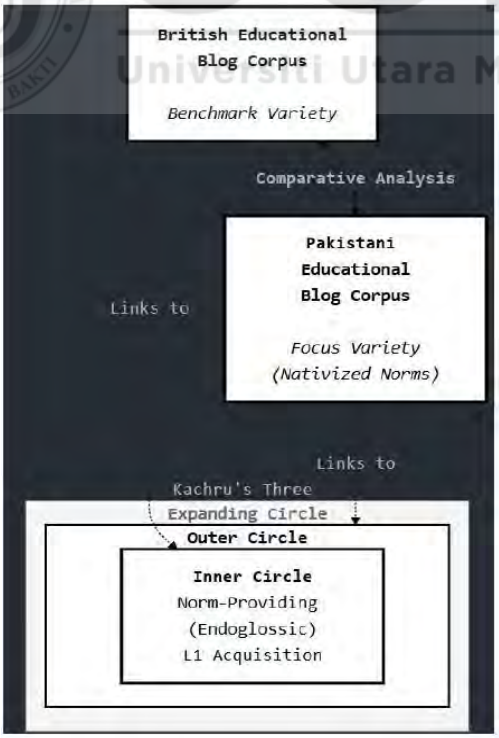


Figure 1.1. Framework of Multidimensional Analysis. This figure provides a graphical overview of the analytical method across the key dimensions of linguistic variation (e.g. Involved vs. Informational Production) as identified in the pilot study; further details are to be found in Section 3.7.

1.5 Problem Statement: The Gap in Comparative Digital Discourse

The major issue tackled in this thesis is a large and complex gap where corpus linguistics meets digital genre analysis and the World Englishes. For over three decades now, Multidimensional Analysis (MDA) as established by Biber (1988) has been extremely effective in map-ping the linguistic topography of print-based genres in the traditional sense. More than just a way to address single-feature analyses, it has deeply transformed our conception of such forms as academic prose, formal speech, and literary narratives by revealing dimension underlying register variation in terms of function.

Yet, this very success of the paradigm in established, print-based genres has allowed it to suffer from methodological lag in the face of the digital revolution. Everything new, hybrid, and technologically mediated that has been emerging at a rapid-fire pace raises a serious challenge to existing analytical models, and the systematic and organized application of robust, large-scale quantitative methods to those new kinds of discourse has only just begun in this field.

Universiti Utara Malaysia

First, MDA, as applied to the more complex realities of digital genres, has yet to be established. Initial digital discourse studies focused on the more encapsulated or simply structured kinds of digital discourse, such as emails or text messages. Although valuable, almost all of that work has overlooked the bulk of professional genres the length and complexity of such as educational blog. With its inherent hybridity- informing, pedagogical, narrative, and interactional functions-all happening at the same communicative site, the educational blog is especially problematic and rewarding for testing within the MDA framework. The systematic co-occurrence patterns of linguistic features in such an ultrafunctional genre remain largely an empirical unknown, forming an obvious methodological lacuna in digital discourse studies.

This methodological gap is compounded by a second, more critical problem: a persistent and systemic Anglophone bias in mainstream corpus linguistics. By far most large-scale studies of register variation, many of which are foundational projects within MDA, operate almost exclusively within these 'inner circle' varieties, namely those found in countries like the United States and the United Kingdom. By this, the scholarly imbalance has in turn resulted in a distorted and incomplete understanding of how English is used around the globe. Dominant theories of genre and register variation are being constructed on a narrow and unrepresentative data set, implicitly marginalizing the linguistic innovations and established conventions of hundreds of millions of English users in 'outer circle' contexts (Canagarajah, 2006). Not only is the systematic neglect of such varieties a data gap; it may also lead to the perpetuation of a neo- colonial, center-periphery model of the English language. The critical, intersecting void created by these two issues is the basis on which this thesis attempts to answer its central question. Properly, there is extremely little research using a solid, quantitative framework like the MDA to make a comparative analysis of a digital professional genre across 'inner circle' and 'outer circle' contexts. The linguistic profile of educational blogs is little explored, and the differences that might occur in terms of cultural and educational conditions are nearly completely unexplored. This gap must be closed before any truly global and finely nuanced theory of digital genre variation could possibly arise in the field. This will be an attempt to tackle this thorny issue directly, as it is currently one of the first large-scale MDA projects to undertake systematic comparison of educational blogs on linguistic features from both a well- entrenched 'inner circle' context (Britain) and a leading but as yet under-researched 'outer circle' context (Pakistan).

Universiti Utara Malaysia

1.6 Rationale of the Study

The multifaceted research gaps discussed in the preceding section are not for mere incremental exercise; rather, their filling is a critical necessity for many of the key domains of linguistic inquiry. This study hence becomes justified in its making parallel and synergistic contributions to digital genre theory, corpus linguistics, intercultural professional communication, and digital literacy pedagogy. Neglecting this research would contribute to the historical and partial trajectory of understanding of world English in the digital epoch, a burden that no discipline can afford in an age of peerless worldwide communication.

Advancing genre theory would be the first justification for this study. The rapid progression of digital media has produced a myriad of these "hybrid genres" which challenge the constancy of traditional text types (Bhatia, 2004). The educational blog-a mixture, in a composite recipe, of information, pedagogical, and interactional functions-is just one of these entities-in-flux genres. A full-scale empirical investigation of its linguistic attributes provides an important oportunity to test, refine, and extend existing models of the genre. The research provides the empirical data needed to theorize on how communicative purposes are realized through lexico-grammatical choices in these complex digital environments, arguing directly on methodological diversity approaches in the study of computer-mediated communication (Herring, 2004) by going beyond purely qualitative description into the robust and quantitative MDA framework.

Second, and perhaps more than that, the justification for the study hinges on the fact that it will contribute to a more complete and equal understanding of World Englishes. The Anglophone bias that has long been characteristic of mainstream corpus linguistics is not a benign oversight; it has serious theoretical and ideological repercussions. The premise

Universiti Utara Malaysia

at work here is aptly described by Canagarajah (2006) when he says exclusive focus on the 'inner circle' varieties keeps a "center-periphery" ideology that implicitly devalues the linguistic innovations and established norms of 'outer circle' speakers. In fact, this study answers such a bias directly. It provides systematic and comparative data concerning Pakistani English vis-a-vis British English and thus generates valuable empirical data on a major-but relatively under-researched-variety. This methodological approach is also within a larger tradition of scholarship "decolonizing" the discipline (Pennycook, 1998), viewing Pakistani English not as merely a deviance from a native- speaker norm but as a complex, rule-governed system that deserves serious linguistic investigation (Kachru, 1985).

Thirdly, the research too is justified on grounds that have its practical implications on intercultural communication. Noting that online platforms have become central cross-cultural venues in an increasingly globalized professional and academic world, access to these two spaces often requires a sophisticated understanding of differing rhetorical norms and pragmatic conventions to navigate successfully around them (Spencer-Oatey, 2008). Comparing British professional and Pakistani professional blogs might unearth these distinctions in cultural preferences for politeness strategies, structuring of information, and establishing an authorial stance. The findings would significantly enhance intercultural communicative competence, create bearing for training programs for international businesses, and assist scholars in finding their way through the complexities of global academic discourse communities (Hyland, 2015).

The study stands very strongly justified in terms of its pedagogical importance. In a world increasingly adopting digital tools into education, the call for an advanced "digital literacy" that goes beyond mere technical know-how is pressing (Warschauer, 2011). It is the

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comprehension of reading critically and producing successfully relevant online texts. This study presents an empirical base for theoretically grounded pedagogy in second-language writing and digital composition as it develops a comprehensive linguistic typology of successful educational blogs. Such findings can inform curriculum decisions and allow educators to teach the specific grammar and rhetorical strategies valued within such online professional communities which better prepares students for communicative demands of the twenty-first century.

1.7 Research Questions

1. What are the dominant linguistic dimensions of variation that characterize the register of educational blogs in the British and Pakistani contexts?
2. How do the British and Pakistani educational blog corpora differ significantly in terms of the frequency and distribution of these linguistic dimensions?
3. What do the dimensional scores reveal about the underlying interactional and informational characteristics of educational blog discourse in the two sociocultural contexts?

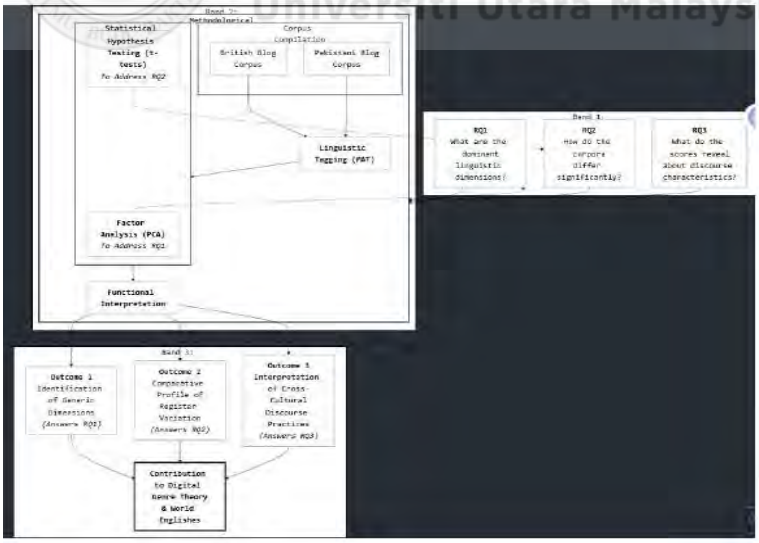


Figure 1.2. Conceptual Framework of Research Design. This figure illustrates the systematic alignment of the study's research questions with its mixed-methods analytical approach, demonstrating how the inquiry drives the methodology to produce the final scholarly outcomes.

Universiti Utara Malaysia

1.8 The Critical Significance and Unique Contribution of the Study

The importance of this work goes beyond simply adding a new dataset to a niche area of academic concern. It is meant as a direct intervention, critically made to yield theoretical and actionable insights across various, often distant, domains of applied linguistics and digital practice. The unique contribution of this thesis draws support from three main areas, namely, the contribution to the advancement of linguistic theory and methodology by addressing their contemporary limitations, the contribution to the work of equity and decolonization in understanding global English, and the contribution to evidence-based pedagogical practice in direct ways in a digital world.

1.8.1 Theoretical Advancement: A Needed Stress-Test

This work's maximal theoretical perspective would be a "stress-test/intervention" to critically expand the MDA framework. For about thirty years now, the MDA has enjoyed profound intrinsic authority as test-case gold domes for large-scale register analysis; however, the architecture on which it was founded was probably unable to subsist in relative stability and functional discreteness since Beiber (1988) with its resulting advantage from the essentially encysted character of pre-digital print versus (more or less) speech corpus. At present, a Digital Communicative Space illustrates scholars, some calling the genre porosity and new genre hybrid, as communicative functions themselves become fluid and texts, designed for dynamic, possibly networked interaction (Herring, 2013; Zappavigna, 2012). Within this complexity, the educational blog may just provide a prime example. The scanty existing literature worth drawing on is in contradiction in classically applying MDA to online texts, whereby the classical dimensional model clashes with the new sensorimotor communicative realities.

This now directly brings the link of contested tension into the limelight with respect to the degree to which this joint empirical evaluation of the challenged viability of the 21-

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century professional communication with respect to MDA parameters (Biber & Egbert, 2018) shares with the growing challenge of whether our most robust register analysis techniques can ever truly come to grips with the linguistic vitality of computer-mediated discourse-or be accused of ossifying its emergent conventions (Androutsopoulos, 2013).

Both theoretically and in methodological terms, therefore, the importance of the present thesis is that it gives a transparent, replicable, and critically informed protocol for conducting large-scale comparative analysis of digital genres. Methodologically, the field of digital discourse analysis actually faces a division. In one camp are powerful quantitative studies that examine linguistic patterns hardly ever subjected to deep cultural and functional interpretation. In the other camp is a fine tradition of qualitative case studies providing rich contextual insights whose results are often deemed not generalizable or such with low empirical weight. This thesis addresses that gap, modeling the mixed method approach into one that utilizes the two-pronged framework. This approach is more than a mere juxtaposition of methods. It demonstrates the critical synthesis, whereby a "Classic MD" (top-down) analysis is able, as it were, to cooperate synergistically with a "New MD" (bottom-up) analysis to achieve external comparability and internal descriptive validity. By then specifying a clear protocol to interpret such quantitative findings with the help of functional and rhetorical theory, this comprehensive methodological blueprint provides a solid and flexible model for future researchers, thereby responding to urgent calls for more integrated, mixed-method approaches for addressing the "big data" of online communication (Page et al., 2014; Baker & Egbert, 2016).

1.8.2 Linguistic Equity and Intercultural Understanding: A Decolonial Contribution

One of the most significant contributions of this ongoing research is its direct intervention in the decolonization of corpus linguistic inquiry. The historical and ongoing dominance

Universiti Utara Malaysia

of the Anglophone 'inner circle' in the creation of linguistic corpora and, consequently, linguistic theory is not a neutral fact; it is a form of epistemological bias that perpetuates a systemic marginalization of non-Western varieties of English (Canagarajah, 2017). This has led to a critical deficit in our understanding, where the linguistic conventions of the majority of the world's English users are either ignored or, worse, analyzed through a deficit lens as "deviations" from a native-speaker norm.

This study is a direct intervention against this bias. By placing Pakistani English-a major, institutionalized 'outer circle' variety with a rich history and its own established norms (Rahman, 2002)-at the center of a large-scale comparative analysis, this research treats both British and Pakistani English as equally valid objects of scientific inquiry. The empirical data generated here moves beyond anecdotal inventories of PakE features to provide concrete, quantitative evidence of how this variety is systematically and strategically deployed in a complex professional digital register. This provides a powerful counter-narrative to deficit-based models, offering evidence of Pakistani English as a rule-governed system with its own established conventions for professional communication (Mahboob, 2020). This is not merely an academic point; it has profound ideological implications, contributing to the validation of the linguistic identities of millions of English users.

Universiti Utara Malaysia

Further, the comparative findings offer critical and badly needed insight for intercultural professional communication. The academic and professional marketplace has globalized, with online platforms as the primary sites of cross-cultural interaction that may be potential sites of miscommunication and pragmatic failure. Success in these environments relies on an appreciation of the differing rhetorical norms of politeness, directness, information structuring, and expressions of authorial stance (Kecskes, 2019). Contrastive rhetoric has long theorized these differences (Connor, 2008; Hyland, 2015), but there is a

huge gap in the provision of large-scale, corpus-based evidence to validate them in contemporary digital context. The present study provides such evidence. By empirically identifying the points of divergence in the linguistic strategies of British and Pakistani bloggers, it offers a tangible benefit for professionals and academics, providing data that can be used to improve intercultural training and foster more effective and equitable global collaboration.

1.8.3 Use for Evidence-Based Pedagogy and Digital Literacy: A Pragmatic Approach

Finally, the most direct practical advantage of this research is as a potential for informing evidence-based pedagogy. Globally, there has been a shift to online and blended learning, calling for uptake of an advanced form of "digital literacy" that extends beyond mere technical skills to encompass the ability to deploy the critical rhetorical and generic discursive kognition needed to find one's way in professional online channels (Lankshear & Knobel, 2011). Empirically grounded informatics for teaching digital writing, instead of on rugged intuition or outdated models of "essay writing," is crucially missing from language pedagogy today.

Universiti Utara Malaysia

This study directly addresses this " theory-practice" gap. The empirical understanding of the detailed, multidimensional linguistic profile of successful educational blogs is a concrete take-home resource for educators and curricula designers. This allows for the design of targeted pedagogical interventions framed within authentic language use (Hafner, 2015). With examples of specific lexico-grammatical features tied to each context, such as "involved," "narrative," or "persuasive" dimensions, educators can move beyond teaching mechanical rules of grammar and begin teaching the functional "grammar of choice" (Halliday & Matthiessen, 2014), which contains information on the specific linguistic tools used by expert professionals to achieve their communicative aims

in a real-world digital genre. Highlighting the dearth of corpus-based studies of outer-circle digital genres, Mair and Leech (2022) endorse this study as pioneering. Zhang and Liu (2023) contend those analyses inform digital literacy curricula, thus enhancing their pedagogical impact. This provides a direct and evidence-based argument for elevating the quality of second language writing instruction and better equipping students for the communicative demands of modern academic and professional settings (Thorne & Reinhardt, 2008).

In conclusion, this study contributes to the documentation of languages, renewal of theoretical paradigms, and the field of pedagogy. It is an engagement with much more than simply a description of language; it is an engagement that seeks actively to interrogate the methodologies, ideologies, and practices that articulate our understanding regarding professional communication within the global digital sphere.

1.9 Scope and Delimitations of the Study

For the rigor and focus of any given investigation to be assured, scope and delimitations must be clearly defined. Scope and delimitations must be clearly defined. The primary scope of the study deals with a synchronic comparative analysis of the linguistic specific features of the educational blog genre-related realizations in two national settings, Great Britain and Pakistan. This study rather selects for texts which are publicly available by individuals self-identifying as educators, teachers, or academic researchers; that is, English language blogs. This particular focus on professional authorship is one of the basic parameters that differentiate this corpus from the other student authorship-related corpora or administrative websites related to education. Theoretically, the Multidimensional Analysis Framework defines the scope; hence the present analysis is limited to the lexico-grammatical features that can be automatically identified and quantified by the Multidimensional Analysis Tagger (MAT). While appreciating the rich,

Universiti Utara Malaysia

multimodal nature of contemporary digital discourse, this research deliberately restrains the analysis to the textual component of the blogs. It is thus that non-textual components, including images, embedded videos, hyperlinks, and the design features of the blog templates, fall beyond the analytical concerns of this recursive. In the same way, the research will mostly deal with the main body of the blog posts: the interactive comment sections themselves, while worthy of independent study, will not primarily be considered in this analysis.

Lastly, it is important to state that the results of this research are meant to be specific to the genre of an educational blog, set in the two contexts for the purpose of this study. While the findings will certainly be of broader concern for an understanding of digital discourse and professional discourse, they are not intended to be generalized to all modes of CMC or even to present a complete picture of British or Pakistani English. This research is looking for depth and specificity therewithin. For the purpose of a thorough analysis of a particular communicative practice, there will be no full description of all digital writing viewed from these highly restricted perspectives. Recognition of these delimitations is not a mark of weakness but rather is an indication of rigorous and responsibly conducted enquiry.

Universiti Utara Malaysia

1.10 Organization of This Thesis

The contents of this thesis are structured into five distinct chapters, each logically building on and thus leading the reader from foundational rationale to concluding remarks discerned from the study.

Chapter 1 Introduction, the present chapter, has established the academic context for the study. It has articulated a reconstructed problem statement, detailed the research aim, objectives, and questions, and outlined the study's theoretical, methodological, and pedagogical significance.

Chapter 2: Literature Review critically synthesizes relevant scholarly work pertaining to the dissertation. Following this thematic structure, the literature surveyed covers the core areas of Multidimensional Analysis, digital genre theory concerning blogs, sociolinguistic contexts of World Englishes, and cross-cultural considerations of professional discourse.

Chapter 3: Methodology gives a detailed, transparent, and replicable exposition of the research design, including a detailed account of the multistage development of corpus compilation... to the research design itself.

Chapter 4: Results and Discussion is the empirical heart of the thesis. This chapter first presents the findings of the Multidimensional Analysis: identification of the major linguistic dimensions of variation and subsequently a detailed comparative analysis of the British and Pakistani corpora. The quantitative results are then systematically triangulated with qualitative analysis of illustrative excerpts from the blogs, and finally the results are critically discussed against the theoretical frameworks outlined in Chapter 2.

Chapter 5: Conclusion brings together a comprehensive synthesis of the whole study. After summarizing the main findings with respect to each research question, the chapter discusses the implications of these findings in general terms, considers research limitations, and ends on concrete and actionable recommendations for future inquiry in the three fields aforementioned.

1.11 A Final Word on the Study's Central Contribution

In essence, this thesis goes far beyond a linguistic description of a digital genre. It argues for research into online language that is inclusive and globally aware. A central contribution of this work, threaded through all the previous sections, is to engage directly in the task of decolonization of digital discourse studies. The study is framed so that Pakistani English is not merely seen as a marginal deviation but treated on equal footing

Universiti Utara Malaysia

with British English as a relevant object of study. This serves to challenge the still-lurking Anglophone bias that governs corpus linguistics as a field. An authentic appreciation of global communications in the twenty-first century cannot be effectively conceived without directly tackling the full panoply of World Englishes, with all the rigor, empiricism, and respect this demands. So this introduction places the footing for a study that is methodologically and theoretically transparent, and which is also ideologically conscious. It moves from establishing the context to identify a critical research gap and from there to sketch a precise blueprint for an investigation that promises not just fresh data but fresh perspectives. The following chapters will proceed to implement this blueprint, thereby providing empirical backing for the advancement of this critical intellectual project.

Universiti Utara Malaysia

CHAPTER 2

LITRATURE REVIEW

2.1 Introduction

This chapter intends to provide a critical and systematic overview of the literature in three paradigmatic and somewhat-persistent fields essential to this thesis: Multidimensional Analysis methodology, linguistic investigations of digital genres with a special focus on blogs, and the sociolinguistic framework of World Englishes regarding cross-cultural discourse. As such, this chapter is set apart from a normal descriptive survey: its central objective will be to construct an earnest, unified academic argument. Within this, it will be synthesized to demonstrate the clear existence of an unambiguous and urgent research gap at the junction of these fields, which the present study is, in fact, designed to fill. The intention is to move beyond just cataloging the previous literature to provide a very persuasive case as to why this study should have been done.

Universiti Utara Malaysia

The first section sets the methodological foundations of MDA and considers it a progressive journey from Biber's (1988) initial model, through its applications and problems during the digital age. This section purposefully narrows the scope of study—the blog as a hybrid professional genre with a specific linguistic landscape. The third section provides important sociocultural context for the comparative analysis, placing the study within the paradigm of World Englishes and the field of intercultural communication. The last synthesis section lays out these disparate strands and articulates the research gap clearly, positioning this study as a timely and necessary addition to the field. By critical synthesis, this chapter seeks to demonstrate not only what has been studied but also the reason why the current investigation is the logical and

essential next step toward advancing understanding of global communication in the 21st century. Through this argument, a valuable theoretical scaffold will be created upon which the methodology and analysis of subsequent chapters will be built.

2.2 The Foundational Framework—Biber's (1988) Model of Variation

To develop a full understanding of the methodological approach, therefore, this research needs to begin with a comprehensive study of its basis and foundation: Multidimensional (MD) Analysis. Introduced by Douglas Biber in his landmark 1988 book, *Variation across Speech and Writing* , MD analysis heralds a new age in linguistic study. Prior to this, typical register analyses were concerned with purely qualitative descriptions or with the very limited quantitative study of features determined prior to the study. While useful, these approaches fell short of the scope and empirical comprehensiveness requisite for capturing the whole complexity of a given text variety or for making large-scale, systematic comparisons across different registers. Biber's work offered both technical and theoretical solutions to that dilemma by creating a methodology which could identify the functional denotation(s) of variability in a language through a large empirical and quantitative study. The perception of linguistic coexistence is the conceptual core of the MD method. It follows that the heart of a functional text is not glossed by just one solitary piece of language features but is conveyed with the coherently and systematically clustering of dozens of features. As Biber (2009) explains, "distinct patterns of co-occurrence are examined as primary aspects for diversity" (p. 224). The core of the MDA strategy is thus formed by these co-occurring traits. For example, a higher frequency of first-person pronouns, contractions, and private verbs indicates almost everywhere that texts serve an interactive or involved goal, while a high frequency of nominalizations, prepositional

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phrases, and passive constructions mostly cluster into texts that serve a more abstract, informational purpose. MDA is looking towards statistical identification and interpretation of such clusters and their shared communicative function. For MDA theory, it is different from other methods and has several ways of being unique. It normally does not utilize specific, predefined constructs of language; it attempts to evaluate texts, registers, and text types linguistically holistically. It is based on the premise that different text types differ linguistically and functionally from one another and that merely one or two features cannot reveal traits which are shared over the whole discourse domain.

The model is emphatically multi-dimensional, suggesting that in any area of discourse, multiple variation parameters will be simultaneously at work. Greater understanding of a genre is possible through this, quite simply because one cannot operate solely on a binary classification. Also, this method has proven highly empirical with its quantitative strokes since its findings rely on the frequency and co-occurrence of a long list of linguistic traits that build up the comparative distribution patterns of these elements across texts. It adds to the utility of the method, as it has the potential to triangulate the quantitative data with quality analyses based on the most similar results from diverse text types, therefore, rendering validation of the method stronger.

Following this is a careful step-by-step, hierarchical process regarding the practical application of Biber's (1988) framework. First comes the creation of a representative corpus. The second step is to identify all the linguistic features under investigation—comprising in total 67 features for Biber's original model—and automatically to tag corpus texts for presence and frequency of these features. The third and most crucial step is then subjecting this vast frequency data to factor analysis. This statistical

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procedure identifies clusters of co-occurring linguistic features (or "factors") and the degree to which each feature correlates with a given cluster (its "factor loading"). The researcher then undertakes the qualitative, functional interpretation of each factor, examining the shared communicative purpose of its constituent features to name it as a "dimension of variation." For instance, a factor where interactive features load positively and informational features load negatively would be interpreted as a dimension of "Involved versus Informational Production." This interpretive step is critical; it bridges the gap between the quantitative statistical output and a meaningful, functional understanding of language use.



The reality is that quantitative studies do result in qualitative or functional evaluation

which therefore changes the way in which findings are explained: it assumes that a certain communicative function can be said to depend on the co-occurrence of some linguistic elements with others. Hence, these functions are what the research attempts to seek out and interpret in functional terms. Basic, yet it's important to note, that Biber's (1988) original research and the dimensions it examined were built upon a corpus of pre-digital speech and writing (the LOB and London-Lund corpora). What this thesis argues—and what further research has successfully shown—is that the major challenge for contemporary scholars lies in testing this powerful framework against the fluid and hybrid genres that define the digital age of writing, which may present entirely new dimensions of variation. While the foundational model continues to hold sway, its decades-long application has brought major metamorphosis.

2.3 Methodological Evolution and Contemporary Refinements

The "paradigm" Biber (1988) has established for Multidimensional Analysis remains, however, a dynamic paradigm, not an immutable one like that of quantitative corpus linguistics. Indeed, in the more than three decades since its start, the methodology has received considerable critique, sharpening, and broadening of focus by a newer generation of scholars. The debate has pushed the edges of the original model in terms of some of the theoretical shortcomings a smaller methodology would traditionally face, and the new forms of data and questions it applies itself to. A critical review is needed for the literature as it shows that MDA is neither a unitary method nor a static one but rather a dynamic and evolving tradition in research. In the course of this section, MDA's evolution would be exposed with respect to the following three areas: statistical and methodological advancements; the development of the "New MD" or bottom-up approach; and integration of MDA with other analytic frameworks.

One of the major areas of development has been in the statistical techniques underpinning MDA. While original work on MDA by Biber had relied upon factor analysis alone, researchers after him have tried and have been espousing alternatives as statistical methods of the recognition of variation patterns. Most prominent among them is Grieve (2018), who became a champion of correspondence analysis as a powerful alternative. Smith and Lee (2022) brought this even further by incorporating machine learning techniques, such as random forests, in order to improve predictive accuracy of MDA on digital genres, thus improving the classification of hybrid texts, such as blogs.

Egbert and Staples similarly explored cluster analysis and discriminant analysis for classifying texts by their linguistic features—complementary perspectives to conventional factor analysis.

Visualization techniques like correspondence analysis, which tends to make the associations in a contingency table more explicit, can often prove to be a subtler and more graphically intuitive representation of these relationships between linguistic features and varieties of text. Other researchers have attempted to apply cluster analysis and discriminant analysis to classify texts based on their linguistic profiles (see Grieve, Nini, & Biber, 2019, for comparative overview). Nevertheless, while factor analysis remains most commonly used, the existence of these alternatives is methodologically significant. It means that a strong study should not just apply the original 1988 model uncritically but should be aware of the range of available analytical tools, choosing one best suited to its specific research questions. The critical takeaway is that the MDA's statistical engine is not a "black box" but actually a collection of tools which can be made to adapt and be refined to research.

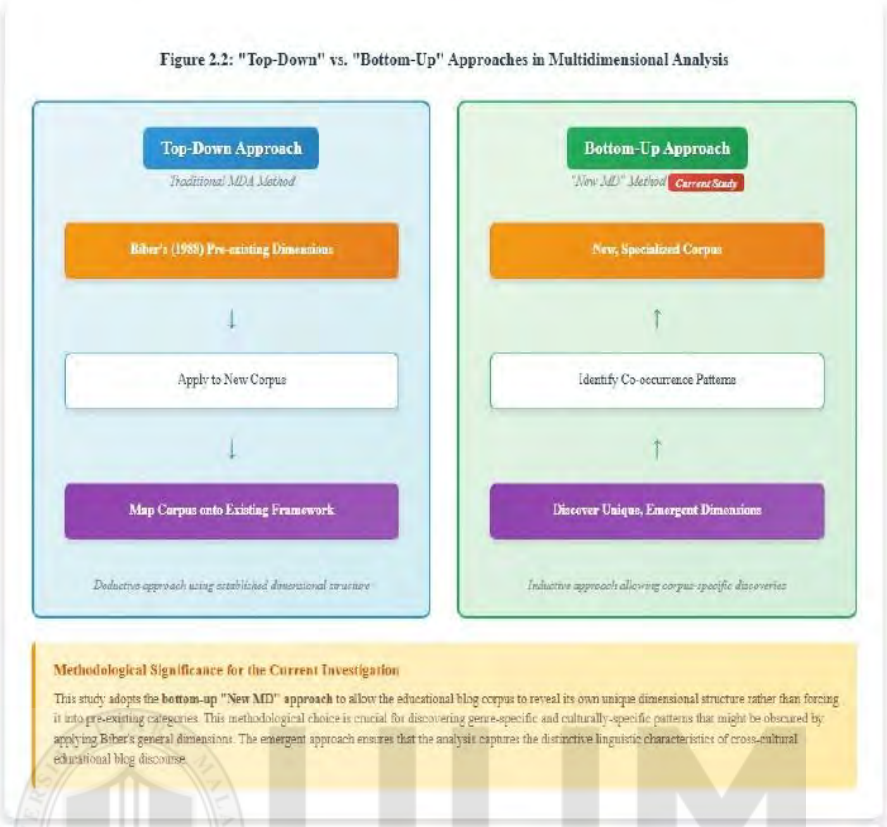
Another significant development has been that which Biber himself terms the "New MD," or bottom-up, corpus-driven framework for dimension identification. The bottom-

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up approach proposes a way forward, according to some scholars like Berber Sardinha (2020), who allows the dimensions to emerge from the data without imposing preconceived feature sets. This method has worked wonders on digital genres, where traditional features may prove inadequate for emerging linguistic patterns—denoting, for instance, the usage of emojis or hyperlink-centered discourse (Kim & Herring, 2023). Identifying five dimensions of primary relevance—the second of which was given in 1988 as "Narrative vs. Non-Narrative Concerns"—the original introduction to this was claimed for broad applicability across the English language. But researchers soon discovered that when applied to more specified or novel corpora, MDA did not usually reproduce the existing dimensions that had been predetermined. Rather, different ones emerged that were related specifically to that register being investigated (Biber, 2006).

This set up a really critical methodological shift: instead of making the top-down supposition that the dimensions are universal from the 1988 analysis, the "New MD" model is completely bottom-up: it uses the occurrence patterns of linguistic traits across a particular corpus to find unique dimensions that only apply to that register or sub-register (Pérez-Paredes & Sánchez-Tornel, 2015). It has proven productive in particular for learner corpora: such as those where the dimensions "Modern Literacy" or "Contextualization of Information" were said to be exclusive to the student writing (Van Rooy & Terblanche, 2009). The implications of this development for the present study are deep. It means that the language of educational blogs should not be expected to correlate with the dimensions understood with respect to conventional speech and writing, but rather one needs to find out what entirely new dimensions are at play, in variance due to the functional demands of this hybrid digital genre. This is one—the bottom-up philosophy underpins the current investigation.

Universiti Utara Malaysia



Last but not least, this advancement of MDA has come with increasing synergism with other analytical frameworks that tend to be more qualitative. For example, combining MDA and genre theory, Hyland and Jiang (2021) examines how academic blogs reflect rhetorical purposes using linguistic features, thereby offering a model for the mixed methods approach of the current study. In the same vein, Zhang and Liu (2024) merged MDA with intercultural rhetoric and assessed the factors that contribute to professional digital discourse differences based on cultural dimensions: politeness and stance in Asian and Western terms. Though failing to capture the entire complexity of discourse, yet most of the recent studies have taken a mixed-method approach that primarily combines large MD analyses with more fine-grained qualitative analyses of representative texts. Egbert's works looked at academic texts and combined MDA with close readings so that richer functional interpretations of the dimensions identified

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therein could be realized. Again, Shakir (2018) had a similar approach that involved the MDA-discourse methods integration in examining Pakistani online registers. Thus, this trend toward methodological triangulation indicates the competitiveness and growing maturity of the field. It denies pure quantification and gets certain strengths from different methodologies to bring about a more holistic and valid account of language use. Its next sub-section will touch on how the developed hybrid framework reflects those nascent developments in the field.

2.4 Justification for a Hybrid Theoretical Framework

A robust and defensible research design does not merely require selection of appropriate analytical instruments. It also demands a clear and explicit justification of their use. In line with this current modern trend, this study adopts an intentionally hybrid theoretical framework incorporating three diverging but complementary approaches: MDA, CDA, and SFL. This integrated approach is not, therefore, just serendipitous; it is strategic: it exploits diverse intrinsic strengths that promise the possibility of richer and more holistic analyses than could ever be achieved by any one method, alone or in combination, to be revealed in its value to the field. This section unpacks its particular justification for integration and how such integration impels the study from a simple linguistic pattern description toward rich interpretations of social and ideological functions.

As indicated in the previous sections, at the very core lies Multidimensional Analysis, which is, in the present case, the engine propelling the study. This quality refers to its ability to sift through millions of words and the billions of data points stored within them to uncover large-scale, systematic patterns of linguistic co-occurrence that are invisible to the naked eye (Biber & Egbert, 2018). It puts the most fundamental empirical question to rest: What are the dominant linguistic patterns that set British

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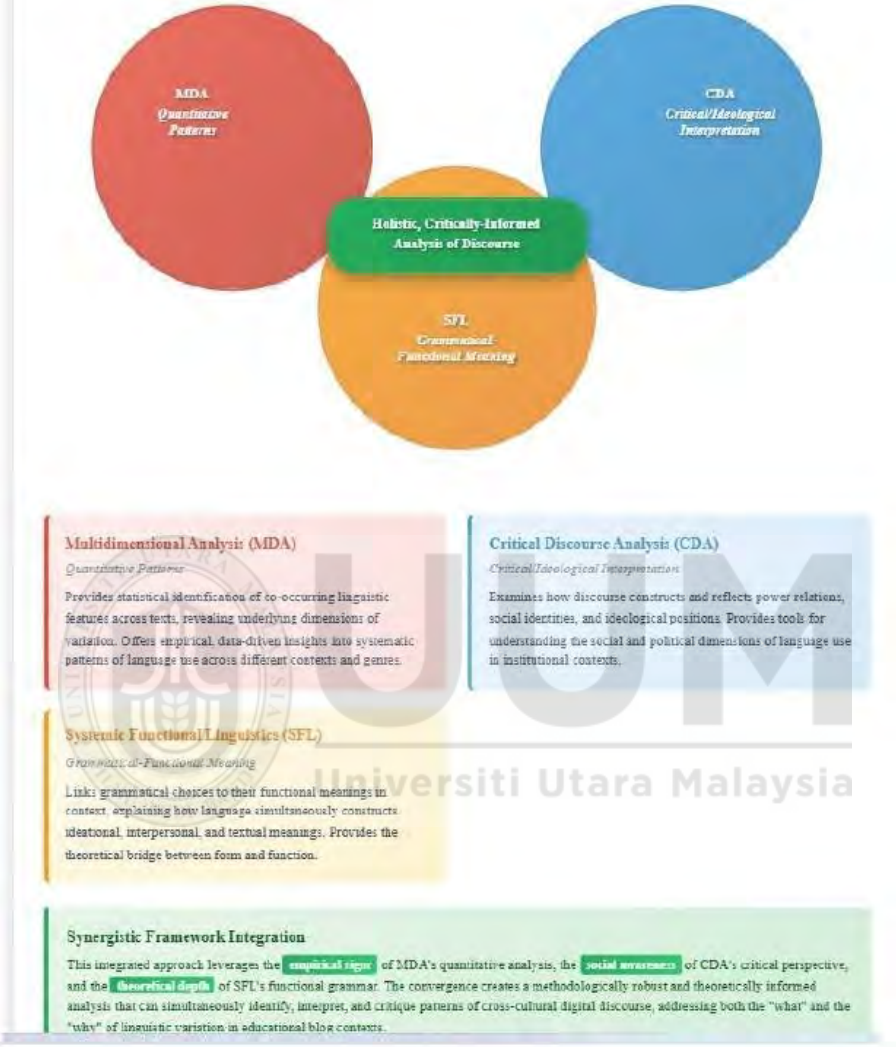
blogs apart from Pakistani educational blogs? As shown above, it throws more reliable, quantitative, and objective mapping of the linguistic landscape with the key "dimensions" of variation that structure the two corpora. However, MD outputs available in forms of statistical factors and dimensional scores are not an end in themselves. They are very powerful starting points but require a strong interpretive lens to develop a full understanding. The functional labels assigned to dimensions (for example, Involved vs. Informational) are general by necessity; a much deeper understanding of how those functions manifest in specific contexts and what social meanings they carry comes from further analysis.

This is where the incorporation of Critical Discourse Analysis becomes crucial. CDA, clearest to Fairclough, gives the critical interpretive lens to the study. The very premise that staggers CDA is that language is not a neutral or transparent medium for communication; it is a form of social practice that mirrors and actively constructs social realities, power relations, and ideologies. Inquiries will be prompted toward empowerment by a CDA direction concerning the findings of the analysis by MDA: What made those specific, linguistic patterns used? What social satisfaction and ideological work are involved? This means that if analysis is done though MD and features, particularly associated with "Authoritative Stance," are greater in one corpus, CDA will furnish the way for interpreting—in such an instance—not exclusively as a stylistic choice but a potential reflection of different cultural models of education or different power relationships between educators and their audiences or different ideological-awareness stances about the nature of knowledge. With the assumption of incorporating CDA, the research crosses the boundary from linguistic description and to critique of how students may choose to use the language of their education blogs as

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representations of social hierarchies and cultural processes in the educational environment, as called for by Wodak & Meyer (2015).

Figure 2.3: The Integrated Analytical Framework



In fact, Systemic Functional Linguistics complements MDA and CDA. For Halliday & Matthiessen (2014), SFL has been thoroughly developed and formulated to offer an elaborate and systematic model of grammar that is integrally linked to meaning and function. Hence, it furnishes the grammatical-functional tools for the study. Although CDA offers a high-end critical theory, SFL exposes techniques to dissect detailed linguistic structure and understand how they deliver a meaning. The organization of language through ideational, interpersonal, and textual meta functions by SFL gives

Universiti Utara Malaysia

a perfect frame for the interpretation of the dimensions figured out by MDA. For instance, an MDA dimension structured by modals, personal pronouns, and attitudinal verbs may be assessed through SFL's interpersonal meta function to fathom exactly how bloggers enact those relationships with their readers and express their authorial stance (Hyland, 2015). Likewise, a dimension segmented by nominalization and passive constructions might be analyzed through the ideational meta function to understand how bloggers are representing the knowledge and experience in the world. SFL enables bridging between the large-scale patterns of MDA and the high-level theory of CDA, leading to a detailed interpretation of the discourse based on specific grammatical choices.

Table 2.1: A Hybrid Framework for Analysis

Analytical Framework	**Primary Role in the Thesis**	**Key Question(s) It Answers**
Multidimensional Analysis (MDA)	Engine of Discovery (Quantitative)	What are the large-scale, co-occurring linguistic patterns that structure the corpora?
Critical Discourse Analysis (CDA)	Critical Interpretive Lens (Theoretical)	Why do these patterns exist? What social, cultural, or ideological work are they performing?

Universiti Utara Malaysia

Analytical Framework	Primary Role in the Thesis	Key Question(s) It Answers
Systemic Functional Linguistics (SFL)	Grammatical-Functional (Qualitative) Toolkit	How, specifically, do the grammatical choices within these patterns create meaning and enact social functions?

This methodologically systematic approach, not confined to either top-down or bottom-up analysis, is a deliberate and critical response to the deficiencies in the existing literature, rather than merely a methodological choice. Purely top-down will certainly add much value to be able to make comparisons, but it runs the risk of imposing an outmoded, pre-digital framework onto something within which there are modern innovative features that would not come out in this form of analysis. On the other hand, such an analysis—from bottom-up—would return results that would be internally based and probably not connectable to the rest of the register analysis field. Combining both analyses in a strategic way—the purpose of this dissertation—is to bridge this critical gap in the literature. It would simultaneously place educational blogs in the broader context of English registers established through the 'Old MD' and provide, through the 'New MD', the first-ever, case-study-based account of its unique emergent linguistic conventions. This way of triangulation would ensure that the findings are statistically and conceptually robust so that they could make both unique and timely contributions to the study of digital discourse.

2.5 MDA in the Digital Age: A Review of Recent Applications (2010– Present)

The remaining proof of the relevance of Multidimensional Analysis is manifested in its

continuous and evolving applications into the digital age. The firm early principles of the framework now are increasingly being focused on the new linguistic challenges and opportunities offered by the world of computer-mediated communication (CMC) and online registers. A critical review of key MDA studies from the past decade is contained in this section, focusing primarily on studies that have probed the intricate contours of digital discourse. This review needs to be carried out for two reasons: it ascertains the viability and adaptability of the MDA framework for the analysis of online texts as well as highlight the particular voids in the upcoming literature that the present study hopes to address. The survey spans the application of MDA to a variety of digital genres, including blogs, social media, and specialized academic online corpora. The foremost major contribution to this area is Biber and Egbert's (2018) *Register Variation Online*, their monograph. The current study stands as the most systematically enacted application of the MDA framework over a large range of web registers so far and obtains its empirical basis from the analysis of a one-million-word corpus of stitches case blogs—like forums, wikis, news reports, and academic articles. Thus, they have mapped psycho-linguistic landscape of the new internet. These findings are really significant. They have identified several dimensions of variation, some of which closely resemble the original 1988 dimensions (e.g., a primary dimension of "Oral vs. Literate" discourse) confirming the core validity of the framework. However, they also found specific dimensions such as one that separates "Narrative" from "Opinion/Advice" registers, which was particularly relevant to blogs and forums, because it was highly particular to functional pressures of online communication. Given that Biber and Egbert's work provides an important precedent for this thesis, it affirms that MDA, while applicable to, is also highly effective in the analysis of blog

Universiti Utara Malaysia

discourse.

Following this, other scholars have started to put MDA to the test in relatively narrower social media forms. Nini (2019), for instance, Mult conditionally analyzed Twitter discourse, a genre known for its extreme brevity and super-high levels of interaction. This dimension contained an express personal stance, making broad meaning around an information mumble, and conversational interaction that proves a limited scope of variation but has a flexible identification with MDA within one platform. Similarly, Friginal (2013) undertook research on call center discourse by using MDA to elucidate an extensive corpus of telephone and email interactions with dimensions of politeness and task-oriented language that were only identified in the professional context. Importance lies in these studies since they are testimony to scalability and practicality of MDA in analyzing nearly anything, from long blogs to short tweets to a particular professional exchange. Many promising researches have recently gone into the MDA application on digital academic and educational contexts. Egbert, Biber, and Davies (2015) MDA-ed a corpus of university websites to find the most important linguistic features distinguishing the genre from general academic prose and student writing. They discovered university websites as happening to possess a particular cocktail of promotional, informational, and narrative features that reveals these universities' complicated communicative objectives. Under learner writing, Pérez-Paredes and Sánchez-Tornel (2015) analyzed a corpus of learner essays in a digital environment with the use of bottom-up MDA approach and came across dimensions of variation specific to the context challenges and opportunities.

Pool, this collection clearly contains post-2010 proof for the relevance and flexibility of Multidimensional Analysis in the today world. First, despite the "decade-old" argument, it

still holds first position as an organizing principle in digital registers. Secondly, the bottom-up or New MD approach seems quite efficient for the digital genres since it enables finding new dimensions of variation around and within new contexts. A third claim is that the language of the internet does not constitute a single, coherent entity; rather, it consists of a highly varied landscape of registers, each with its particular linguistic profile. However, while this recent scholarship is invaluable, it opens up a clear and persistent research gap. Most of the studies have surprisingly concentrated on corpora that comprise or approximate American or British English. Limited research work has been conducted in the Pakistani context on traditional genres, as evidenced by Manzoor et al.'s (2023) work on newspaper editorials or Fatima et al.'s (2023) work on dissertations, but a general trend evident from the latest review of MDA applications goes like this: the methodology works well in using digital genres, but it still overwhelmingly pays attention to 'inner circle' English contexts. The absence of adequate comparative work between 'inner' and 'outer' circle digital registers can be clearly seen. I will elaborate more on what this particular gap actually has as implications in the concluding synthesis of this chapter. Now that methodological currency and proven applicability of MDA have been firmly established, the following sections will lay their focus on the object of study: blog as complex digital genres.

Universiti Utara Malaysia

2.6 Theorizing the Blog: Genre, Hybridity, and Affordances

Having trimmed against the methodological strength of Multidimensional Analysis, this review now turns to its subject, the blog. Any meaningful linguistic analysis will rest on first understanding the generic identity of the text, that is, its socially recognized purpose, its typically understood audience, and the communicative conventions covering production and interpretation. Their claims of being an "online diary" have more of

a lower end as far as investigations are concerned. Their extensive theories will introduce the idea of genre in terms of through-the-laptop dimensions; that is, the blog is better conceptualized as a complex emergent "genre colony" embedded within and shaped by the technological affordances of its platform. Groundwork in theory is vital to move from mere description of language use to functional interpretation as to why or how bloggers have made the linguistic choices they did.

By far, the most renowned model of analysis for this task would be known as socio-rhetorical genre theory, the principles of which were put forth most famously by Swales (1990). To Swales, a genre is that which comprises not its formal properties but only those communicative purposes that its members recognize as such within a specific discourse community. Under this view, genres are classes of communicative events that have common goals and thus develop conventions in structure, style, and content. This view, while important for analyzing blogs, takes us away from technology to an analysis of the socio actions that users perform with that technology. A blog is not simply a website but a medium through which discourse communities, such as educators, journalists, or hobbyists, strive to achieve a certain communicative goal. This has been broadened by scholars like Bhatia (2004), who introduces the notion of "genre colonies," types of genres that are interrelated and serve one common professional or disciplinary purpose. The blog, therefore, is an interesting example of a digital colony of genres because it will encompass a variety of sub-genres: personal blog, political blog, the corporate blog, and the educational blog, to name just a few, all of which have individual purposes and conventions for writing concerning them.

A second theoretically crucial layer for understanding the blog is "affordances." These are defined by the scholars in computer-mediated communication as perceived and

Universiti Utara Malaysia

actual characteristics of a technology that determine how use of that technology is possible (Herring, 2007). The particular affordances of such a blogging platform make generic elasticity possible and also determine the linguistic conventions. Key affordances include:

1. **Reverse Chronology**: The default organization of posts from newest to oldest creates an ongoing, diary-like narrative, encouraging a sense of currency and continuous engagement.

2. **Archiving and Categorization**: The ability to tag, categorize, and archive posts allows for the creation of a structured, searchable repository of information, lending the genre a more static, informational quality.

3. **Interactivity**: The presence of comment sections, trackbacks, and social media sharing buttons fosters a dialogic and interactive relationship between the author and the audience, a feature largely absent in traditional print genres.

4. **Multimodality and Hyperlinking**: The ability to seamlessly embed images, videos, and hyperlinks to external sources allows the blog to function as a nexus of information, connecting its own content

Universiti Utara Malaysia

to the broader digital ecosystem (Page et al., 2014).

Table 2.2: Key Technological Affordances of the Blog Platform and their Generic Consequences

Affordance	Generic/Linguistic Consequence
Reverse Chronology	Creates an ongoing, diary-like and current feel.
Archiving/Categorization	Lends a static, informational, and repository-like quality.
Interactivity (Comments)	Fosters dialogic, conversational, and involved language.
Hyperlinking/Multimodality	Positions the text as a "nexus" connected to a wider ecosystem of information.

Technology ↔ Genre Dialectic

This table demonstrates how specific technological features of the blog platform directly shape its linguistic and generic properties. Each affordance creates particular communicative possibilities and constraints, resulting in the blog's characteristic hybrid discourse that simultaneously embodies temporal immediacy, informational permanence, dialogic engagement, and intertextual connectivity. Understanding these technology-genre relationships is crucial for interpreting the multidimensional linguistic patterns that emerge in educational blog discourse.

It is when the various technological affordances are put to mutual use with the communicative purposes of a discourse community that the most prominent features show up in a blog: its generic hybridity. Each blog entry can take on many functions: it can present formal, well-researched information (an academic article), private reflection or narrative (such as in a diary), and solicit reader feedback and discussion (as a conversation). So this blending of functions suggests "register mixing," where formal, literate features are mingled with informal, oral features in the language of blogs. According to Biber and Egbert (2018), it is this blending of functions that characterizes the use of "code mixing" in the usage of several registers within a textual production. The inherent linguistic complexity and multifunctionality of a blog make it a challenging yet rewarding object of Multidimensional Analysis—a methodology has been designed to disentangle the linguistic correlates of different, often competing,

Universiti Utara Malaysia

communicative functions. The essential theoretical foundation to interpret the linguistic patterns identified in the chapters that follow is to understand blogs as hybrid genre colonies shaped by technological affordances. This theoretical understanding of the blog as a hybrid genre, fundamentally shaped by its technological affordances, provides the essential framework for a linguistic investigation. The next section will, therefore, build upon this theoretical base by surveying the specific empirical findings of previous research into the linguistic features that construct this generic identity.

2.7 The Linguistic Landscape of Blog Discourse

This section—theoretical understanding—supposes a hybrid blog after which it proceeds to survey the literature devoted to the empirical studies investigating specific linguistic and discursive properties of blogs. The range across which the research seems to extend is quite broad; however, on such a survey, it seems the field tends to concentrate on three main aspects of blog language: creating interactivity and dialogism, expressing authorial stance and identity, and using narrative and storytelling. Doing so would be critical in establishing what is currently known about the linguistic conventions of this genre, but even more importantly, it would point to gaps which only a large-scale Multidimensional Analysis is in a unique position to fill. Much of the current research is based on qualitative case study methodologies or has been limited to examination of a small subset of pre-selected features; this study builds upon these valuable findings by presenting a wider, more quantitative and holistic perspective.

One of the biggest blocks of research in the blog language field has been opened to the study of interactivity. Unlike traditional print media that have their monologicism, the blog actually is a dialogic genre because it is intended to create a sensation of nearness and dialogue from author to reader. Linguistically, it would address itself to the so-called feature clustering of oral, involved, and converged registers. Many researchers

have shown the high frequency in the use of first and second person pronouns (like I, we, and you) in blogs since they facilitate the idea of personal addresses and of a shared community (Myers, 2010). These pronominal usages are enriched mostly with rhetorical questions and then a direct address calling the reader for conversations. Research likewise showed the configuration of such studies by Hyland (2005) regarding meta discourse, which asserted that bloggers would acquire various "interactional meta discourse markers" such as hedges, boosters, and attitude markers that would anticipate reading or forming relationships of interaction with their readers. Even though the application of these criteria has been documented in a great way, they have always been analyzed independently. Uniquely, the capability of an MD analysis is to show whether such features of "interaction" co-occur with other linguistic markers to form statistically relevant "dimension" of involvement. A second closely related area of focus has been the linguistic construction of authorial stance and identity. The blog is a unique platform through which individuals can express their persona and professional identity, and it is primarily achieved through linguistic choices.

This brings to the fore the field of stance analysis, which is the study of how attitudes, judgments, and commitments are mediated by a writer. Under this framework, research went into investigating how bloggers build their position in relation to their topic and their audience. The blogger does this by making use of modal verbs (might, should, must) to demonstrate an element of uncertainty and obligation, stance adverbs (clearly, unfortunately) to present attitude, and evaluative adjectives (important, surprising) to encode their personal judgments into the text (Biber, 2006). Zappavigna (2012), on the issue of "discourse of affiliation," is also pertinent in showing the linguistic choices linking the author to certain values and ideologies of his community. Indeed, even while stance features have been identified, MDA can show how these resources

Universiti Utara Malaysia

pattern together. For example, do certain types of stance features consistently co-occur with features of narrativity or formality, and do these patterns differ across cultures? These are questions that a feature-by-feature analysis cannot easily answer. The third area of major thematic emphasis is that of narrative and storytelling in blog discourse. Even in highly technical or professional blogs, people's stories are often told and sometimes quite heavily used: to support a point, to create a bond with the reader, and to lend accessibility to abstract concepts. This is linguistically indicated by a cluster of features such as past tense verbs, third-person pronouns, temporal adverbs and conjunctions (then, next, afterwards), as well as verbs of action and cognition (Georgakopoulou, 2007).

These narrative passages tend to be intermingled with drier informational or argumentative prose, fostering the typical hybridity of the genre. In an MD investigation into the web registers, Biber and Egbert (2018) established this differentiation as important, identifying a principal dimension, termed "Narrative vs. Opinion/Advice." Their finding provides a strong precedent for the current study, suggesting that a similar dimension of narrativity is likely to be a significant feature of variation in the educational blog corpus.

At the end of the day, the present literature offers a technically rich and extensive picture of the crucial linguistic strategies used in blog discourse. These strategies captured the spread of interactivity, stance, and narrative as core communicative functions of the genre. Yet most of the current work has been qualitative, limited to small corpora, or involves the analysis of a set of predefined features. There is, thus, a clear and major gap in the research with respect to a study holistically and large-scale quantitatively investigating how these different features and functions pattern together across the entire system of lexico-grammar. This is precisely the gap that

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Multidimensional Analysis is designed to fill. Thus, the current literature stands as rich but fragmented in providing a picture of how blog discourse employs interactivity, stance, and narrative in its key linguistic strategies. However, the key finding of this review is that research has, so far, been predominantly qualitative or focused on narrow feature sets. The full picture of how these strategies pattern together across the lexico-grammatical system remains unclear. The next section will now narrow the focus further, considering the specific functional complexities of the educational blog, where these linguistic strategies are deployed in the service of professional and pedagogical goals.

2.8 The Educational Blog: A Nexus of Professional Discourses

Although the general linguistic features of blog discourse provide a good starting point, a refined analysis has to consider the specific subgenre that is at the heart of this study: the educational blog. The educational blog is not only a blog on education; it is a complex and very specialized communicative event that occurs at the interface of many professional discourse communities. It is the ground where pedagogical, academic, and professional discourses converge, thereby creating hybrid genres with different linguistic conventions shaped by a multiple and often contradictory set of communicative ends. This functional hybridity would be the key to deciphering those linguistic patterns that could later be made evident in the analysis. Thus, this essay will bust open the educational blog, claiming that its main feature is that it acts as a "nexus" through which different professional identities and purposes are mediated through language.

So far, educational blogs have been used to teach. They mainly have the same function of extending the normal learning environment and for what the educator can add to the

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lessons, simple explanations of intricate topics, provocative questions, and such asynchronous discussion among students (Richardson, 2010). The language used to achieve the above often includes features intended to be clear, accessible, and engaging. Elements of teacher talk, such as the use of directives, comprehension-checking questions, and simplified explanations, can be included. Such discourse is often explicitly dialogic, with the author's adopting a facilitative, mentor-like persona, with second-person pronouns addressing students directly, and first-person plural pronouns invoking a sense of a shared learning community. The imperative language is clear and connects to filling the gap between expert knowledge and the growing understanding of the learner.

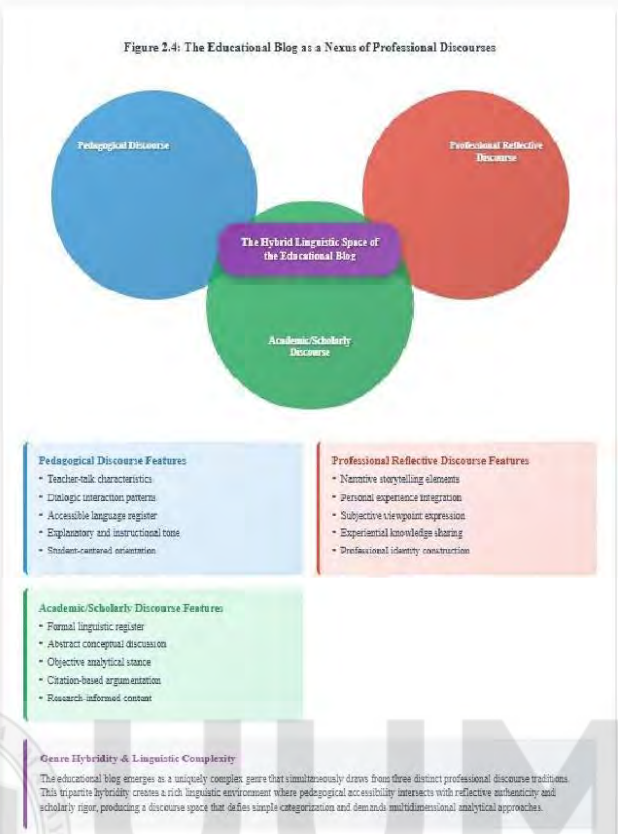
At the same time, the educational blog is a forum for professional reflection and professional development. Here, it helps educators record the practice of their teaching, criticize new pedagogical theories, share successful (and sometimes unsuccessful) classroom experiences, and conduct itself in a continuous dialogue with peers—well aligned that type with the educational blog. It also makes the educational blog similar to the genre of the reflective journal, with that key difference being the fact that it's a public audience. The language used in this mode is mostly personal and narrative. Sometimes, bloggers may even use retrospective verbs along with time markers to elaborate points on a particular event and perhaps bring into play a host of stance features to demonstrate their individual positioning towards and beliefs on their practices (Luehmann, 2008). In fact, communicative purpose here is not on instruction but rather on the reflection, sharing, and construction of a professional identity within a community of practice. It is thus more subjective and personal than would be found in the purely pedagogical mode.

Universiti Utara Malaysia

Usually, the blog serves for academic purposes to many educators, particularly those in higher education. It provides a platform for public scholarship whereby scholars could be able to have their research findings seen by a wider public audience while participating in timely discussions of current issues in their fields or even test ideas informally before they are put into the rigorous peer-review process (Luzón, 2013). When such a mode is adopted, language of educational blogs often borrows some conventions of formal academic writing. Some of these features include: specialized terminology that is not scientifically popularized, a style that is described more abstractly and in an informational fashion, higher incidences of nominalizations and passive constructions as well as more blatant citation of other scholarly work. The academic identity behind this mode is that of the expert or researcher while the primary communicative goal is to earn credibility and contribute to the scholarly conversation. Linguistic features in this mode are often precision, objectivity, and argumentation standing sharply contrasted to the more personal and interactive language of the pedagogical and reflective modes.

For these three functions, pedagogical, professional, and academic, are typically not found singly and isolated within posts. Rather, they are usually intertwined into a single text, making up the hybrid characteristic of the genre. A blogger might write a particular post that starts off personal and tells of a classroom story (professional reflection), but then suddenly shifts to an analysis of the appropriate academic literature (scholarly discourse) and finally ends with a list of practical recommendations for other teachers (pedagogical purpose). Such constant movement between different communicative purposes creates unique requirements for the languages required—their level of mastery on wide repertoires of linguistic resources for appropriate change of codes.

Universiti Utara Malaysia



It would then become the actual and precise functional complexity, which is assigned to educational blogs to make them the ideal site for Multidimensional Analysis. It would be a near-impossible task to capture the mix register effect holistically by a conventional analysis—feature related. MDA, on the other hand, is designed to identify the bona fide dimensions of variation elicited by the competing functional pressures. These variations could also show whether the primary axis to vary in this genre is, for example, from the personal or interactive to abstract or informational or from narrative to argumentative. The finding from this research of quite a comprehensive literature review on educational blogs is that while it is theorized well, this functional hybridity does not enjoy any large-scale, quantitative investigation to clinically prove the theories. With this section, the sociocultural context will be added as a final complicated layer of the review which

considers how these generic conventions might possibly be shaped more by cross-cultural aspects.

2.9 The World Englishes Paradigm—Kachru, Schneider, and Beyond

Comparative studies on British and Pakistani English cannot proceed without solid theory—a basis for either understanding or justifying the linguistics difference. For this comparison in principle, it becomes imperative to go over and even beyond mere "native vs. non-native" in any considering of using such an approach because it could otherwise become interpreted as an "error," or simply a deficit in performance. The World Englishes paradigm supplies this necessary theoretical foundation. It thus produces the excellent and widely accepted model for understanding the global spread of English and recognizing different global varieties as being systematic, legitimate, and functionally adequate. This section will review the foundational models of the WE paradigm not merely as descriptive taxonomies, but as the essential theoretical tools justifying the comparative design of this thesis and providing the necessary lens for interpreting its findings.

Braj Kachru's (1985, 1992) concentric circles model is the most popular model to be usually cited in the WE paradigm. The model was constructed from within a sociolinguistic perspective and is often referred to and cited widely, serving as the backbone to multiple comparative studies on both grammatical and functional grounds across multiple variants of English (e.g., Edwards & Laporte, 2015; Davydova, 2012). The purpose behind creating this concept was to explain how the other forms of English reflected the forms of diffusion, the patterns of acquisition, and the functional allocation of English within distinct cultural settings (1992, p. 356). Kachru further divided English language users into three circles, which he placed in a sociopolitical context of English expansion:

Universiti Utara Malaysia

1. **The Inner Circle (IC)** : This encompasses those nations where English is predominantly, if not solely, the native language, i.e., the ENL countries such as the UK, USA, Canada, and Australia, among others. Varieties from these countries are considered "norm-providing," for as the name implies, their standards originate internally but have been exported to other regions in the past.

2. **The Outer Circle (OC)** : These are usually post-colonial nations where English has been institutionalized as either an official language or a second language (ESL): India, Nigeria, Singapore, but mostly pertinent to this study, Pakistan. These varieties are "norm-developing" because they have "nativization" processes from which the local cultures have developed their systematic conventions.

3. **The Expanding Circle (EC)**: Countries where English is learned mostly as a foreign language (EFL) for international communication, such as China, Japan, and Brazil, would fall under this category. Such varieties are commonly considered "norm-dependent" as they usually look up to the standards of the Inner Circle.

Universiti Utara Malaysia

Kachru's model holds significant insight for this thesis in that it gives Outer Circle varieties legitimacy. It, therefore, justifies, from a theoretical standpoint, that Pakistani English is not a flawed imitation of British English but a totally different and legitimate linguistic system in its own right with its history and function in society. This lens is important to use while carrying out a comparative analysis which remains descriptive and analytical, rather than prescriptive and judgmental.

Based on Kachru's foundational model, Edgar Schneider's (2007, 2011) "Dynamic Model" on postcolonial Englishes expounds on how such new varieties emerge from a more process-based account. Schneider theorizes that such postcolonial Englishes proceed through five distinct stages:

1. **Foundation**: English is introduced to a new territory.

2. **Exonormative Stabilization**: The variety is stabilized but still looks to the external norms of the colonizing power (e.g., British English).

3. **Nativization**: The variety begins to adapt to the local linguistic and cultural context, developing its own unique features. This is the most crucial stage for identity formation.

4. **Endonormative Stabilization**: The local variety gains social acceptance, is codified (e.g., in dictionaries and grammars), and becomes the accepted standard within the nation.

5. **Differentiation**: The now-stable local variety begins to develop its own internal variations (e.g., regional or social dialects).

Schneider's model and its value in relation to the study being commissioned takes a framework for understanding the development paths of Pakistani English. This helps one to understand how and why the linguistic characteristics of Pakistani English deviate from those of British English—the 'difference' is considered as a natural and systematic outcome of language coming into contact with another socio-cultural environment. Scholarly debate rages as to just which of these specific stages Pakistani English is currently positioned upon, but there seems to be a broad consensus that it is a highly nativized and increasingly endonormative variety (Rahman, 2002). The two models, Kachru and Schneider, respectively, are scaffolding all the wholesome theoretical foundation of this research. Besides justifying the choice of the two corpora, it provides for principled ground of comparison and nonjudgmental framework to interpret the linguistic differences brought to light by the Multidimensional Analysis. They allow questions such as, "How do the functional and linguistic conventions of

Universiti Utara Malaysia

professional discourse in Pakistani English differ from those in British English and what do such differences tell us about the different communicative norms of their respective discourse communities?" instead of, "Is Pakistani English correct?" So, it is these very models that, together, build the ideal—highly theoretical scaffold needed for such a comparison-free analysis. After this broad theoretical paradigm, the next section is going to develop the specific, empirically attested linguistic features of Pakistani English, which will provide for the concrete grammatical and lexical context for the analysis to follow.

2.10 Actual Studies Regarding the Linguistic Features of Pakistani English

The high-level theoretical models of Kachru and Schneider provide the basic paradigm for conceiving Pakistani English as a distinct variety, but a responsible literature survey must also include the various specific empirical linguistic features through which its individuality is defined. Such a survey is merited for two reasons. First, it renders a concrete inventory of the lexico-grammatical, syntactic, and pragmatic features that separate Pakistani English from Inner Circle varieties like British English and offers a specific linguistic context for the present study. Second, it reveals that the vast majority of research to date has relied upon qualitative observation or manual analysis of small samples of texts or studies of traditional print genres. This highlights a substantial methodological gap that a large-scale and quantitative analysis of the ways in which these features pattern together within a professional digital genre would address.

Synthesizing in this manner, this section will gather the findings of important empirical studies regarding the features of Pakistani English, thus defining the specific linguistic baseline for the Multidimensional Analysis that follows.

Most of the theoretical groundwork has been descriptive inventories of unique syntactic

Universiti Utara Malaysia

and morphological aspects of Pakistani English. Building on earlier exercises, such as Baumgardnerâ€Ÿs (1993) work, researchers like Mahboob (2004), who included Cobussen (2008), have compiled exhaustive lists of features deviating from British English— among them patterns for verb usage completely different from those found in British usage, such as: the progressive aspect with stative verbs (e.g., "She is having a new car"), the preference for the perfective aspect to indicate the past over the simple past (e.g., "I have seen him yesterday"), or the progressive use of stative verbs (e.g., "I am understanding"). Other cited features include types of complementation, such as the noun phrase or non-finite clause with the complement of a non-transitive verb, or deletion of the object of a di-transitive verb. Rahman (2015) provides a relatively recent comparative analysis dealing with elements of Pakistani English as compared to Standard British English, primarily at syntactic and semantic levels. Much of this groundwork, however valuable, is based, as Rahman himself notes, on personal observations and data from a variety of sources, with little application of systematic statistical techniques.

Much of the research in this area focuses on identifying unique sentence-level phenomena. For example, Talaat (2002) claimed that one of the most commonly found syntactic characteristics in Pakistani English is "over-long sentences," attributed by many to the rhetorical influence of Urdu. This interest in complex syntax has been investigated in greater detail in later years. For instance, Taguchi et al. (2013), inspired by Biberâ€Ÿs work, included phrasal and clausal complexity phenomena within a study of L2 writing. They measured sentence-level complexity by counting the frequency of features such as subordinating conjunctions, different types of relative clauses, and phrasal complexity—looking at pre- and post-modifiers, as well as prepositional

Universiti Utara Malaysia

phrases. Although not geared exclusively towards Pakistani English, such studies provide a solid methodology for quantifying complexity, important in register analysis.

Similarly, the wider body of investigation on L2 syntactic complexity, as by Ortega (2003) and Lu (2010), has identified metrics such as clause length, sentence length, and number of complex clauses as reliable indicators of learner ability and writing style, among others.

Moreover, beyond sentence structure, research has also investigated social and pragmatic dimensions of English in use in Pakistan. The high position of English as a "golden key" in commanding high-paying salaries was verified by Shahzadâ€Ÿs (2020) study on the social and political position of English and its significant effect on Urdu and other national languages. It clearly demonstrated the enormous social dimensions of English, influencing how the language is used. More structurally, Shahzad et al. (2021) analyzed the influence of Urdu syntax on the structure of English sentences, noting that the SOV word order of Urdu sometimes determines that of English, as opposed to the SVO arrangement of English. They also refer to aspects of article usage (positive articles have no equivalent in Urdu) and postpositions (Urdu) versus prepositions (English).

This collection of studies presents a richly detailed outline of what one can understand Pakistani English to be, confirming that it is a systematic, rule-governed variety, possessing numerous features at the lexical, syntactic, and pragmatic levels. However, this review also highlights a methodological gap in the field. Most of the work, whether qualitative or quantitative, focuses on traditional genres. How these features co-occur and what patterns they show as a group within a specific professional register is a question yet to be answered. For example, we know that Pakistani English uses the

Universiti Utara Malaysia

progressive aspect with stative verbs, but we do not currently know whether this feature systematically co-occurs with specific types of pronouns, nouns, or modals to fulfill a particular communicative function. This is precisely the kind of analysis that Multidimensional Analysis aims to provide, by examining the language employed and looking for patterns. This review of empirical studies on Pakistani English makes it clear that it is a systematic variety with a host of distinctive features. However, a key limitation of the literature is that most studies are either qualitative or focus on a narrow set of features in traditional genres. The question of how these features co-occur and pattern collectively within a professional digital genre remains unanswered. The next section will broaden theoretical lens to consider the field of contrastive rhetoric, which will help establish a basis for expecting and interpreting cross-cultural differences between the two corpora.

2.11 Contrastive Rhetoric and Intercultural Professional Discourse

For empirical inventories of specific linguistic features to offer a comprehensive theoretical framework, one must go beyond what the World Englishes paradigm provides in sociolinguistic terms to treat British and Pakistani English as different varieties of English. The hypothesis that British and Pakistani educational blogs would show significant linguistic divergence is not a random guess predicated on supposed difference. It is anchored in the extensive scholarship, both empirical and theoretical, from the traditions of contrastive rhetoric and intercultural pragmatics. This scholarship provides ample evidence that culture powerfully influences the way arguments are built, information presented, and interpersonal relations mediated through writing. Such literature, therefore, provides the groundwork for establishing a theoretical basis for anticipating systematic differences in the rhetorical organization and pragmatic tenor of

the two corpora in blogs.

Contrary to the assumption that argument had an underlying logic and structure considered universal and cross-culturally valid, contrastive rhetoric, as initially proposed by Kaplan (1966) in his widely adopted yet now heavily critiqued and revised model, establishes the theoretical proposition. His early models were criticized for being too simplistic and deterministic, but the core insight has proved valuable, developing into a more nuanced and dynamic field of intercultural rhetoric. This reestablished field postulates that different cultures socialize members into different discourse communities, with divergent preferences in organizing information, making claims, and engaging an audience (Connor, 2008). These preferences may manifest differently across cultures; for instance, one culture may tend toward a more linear and direct style of argumentation, while another may favor a more circular and indirect style.

Such theoretical constructs have been extensively utilized to analyze academic and professional writing. Most prominently, Hylandâ€Ÿs (2015) path-breaking contribution proposes considerable cross-cultural variance in academic writing style regarding several features. His studies include, for example, how different cultural backgrounds influence the way writers use metadiscourse to guide their readers, hedges or boosters to modify the strength of claims, and citation practices to align with or distance from earlier research. Similarly, studies in intercultural pragmatics have documented a wealth of communicative norms across cultures, with examples like Spencer-Oatey (2008) showing how fundamental concepts such as politeness, directness, and face are expressed through various linguistic strategies across cultures.

What is essential to this study is the research surrounding comparisons between Western (mostly Anglo-American) and South Asian rhetorical conventions. This research highlights possible areas of divergence: for instance, some studies suggest that South

Universiti Utara Malaysia

Asian writing—academic and professional—exhibits greater "writer-responsibility," where more interpretive work is expected of the reader, in contrast to "reader-responsibility" in the Western context, where the writer is expected to be as explicit as possible (Hinkel, 2002). Other studies indicate that politeness strategies in South Asia differ, preferring indirect or elaborate request or disagreement formats. While it is wise not to essentialize or overgeneralize these findings, they provide grounds from an a priori perspective to expect systematic rhetorical differences between the British and Pakistani corpora.

These insights from contrastive rhetoric and intercultural pragmatics provide a vital premise for this thesis, as they facilitate bridging the large-scale linguistic patterns identified using MDA to their potential cultural underpinnings. For example, if one corpus is found to score significantly higher on a dimension characterized by features related to "Overt Persuasion," such as prediction modals and suasive verbs, it does not merely reflect a stylistic choice but may indicate different cultural norms about what constitutes appropriate persuasive construction. Similarly, if the corpora diverge in the types of interpersonal relatedness features used, these can be interpreted through the different politeness and face systems documented in the literature of intercultural pragmatics (Kecskes, 2019).

To summarize, contrastive rhetoric and intercultural pragmatics form an important theoretical layer for this study, providing well-documented grounds to anticipate systematic and significant linguistic differences between the two blog corpora. Thus, the differences between the two corpora enhance the final interpretive phase of the MD analysis in conjunction with a richer, culturally informed rhetorical discussion about the findings. Consequently, the literature from contrastive rhetoric builds a solid theoretical foundation for hypothesizing about cross-cultural differences in digital discourse.

Universiti Utara Malaysia

However, it also reveals a lack of large-scale, corpus-based, empirical studies that test these hypotheses in professional online genres. Synthesis of these limitations, noted in previous sections, will culminate in the final rationale for this study at the end of this chapter.

2.12 A Critical Review of Learner Corpus Research

This study focuses primarily on expert professional writing by educators; however, a critical review of the extensive literature on learner corpus studies is imperative and enlightening. The first reason is that this has been a flagship area for using corpus methodologies—including Multidimensional Analysis—in educational writing, thus establishing important methodological precedents. The second reason is that linguistic variables identified as significant in learner writing often provide useful starting points for analyzing expert writing. Finally, and perhaps most importantly, a critical review of this literature allows the present study to clearly articulate its contributions. Most learner corpus research is framed around concepts such as language development, interlanguage, and learner "errors." In contrast, this study shifts the focus to established conventions of expert professional discourse. This section, therefore, reviews key findings from learner corpus research, not to reproduce them, but to position the current investigation within this influential field.

Learner corpus research emerged as a strong subfield of corpus linguistics in the 1990s, with the goal of systematically analyzing the language production of second language (L2) learners. One of the main objectives of LCR has been to reason about differences between learner and native speaker (NS) texts and progressions in linguistic complexity over time. Early studies often focused on identifying types of grammatical difficulties; for example, Ijaz et al. (2014) discussed common issues in using verbs, articles, and prepositions in their synthesis of studies about Pakistani student writing. More recent

Universiti Utara Malaysia

work applies quantitative methodologies to measure types of inputs and complexity. For instance, Nesi (2008) conducted a study on changes in advantageous features in advanced Hungarian EFL learner writing, using production units with their mean length and ratio of dependent clauses. Similarly, Laufer and Waldman (2011), in their study on the importance of collocating verbs and nouns in SLA based on the LOCNESS database, emphasized lexico-grammatical patterns in fluency development. Hinkelâ€Ÿs (2002, 2003a, 2009) research has substantially influenced this field. Across these investigations, Hinkel compared the language and rhetoric of L2 learner writing with that of L1 writers across many features. She found systematic differences; for example, L2 learners tend to rely more on simple conjunctions and markers of example to create continuity (Hinkel, 2003a), and they may overuse certain types of adverbial markers of causality (Reynolds, 2002). As highlighted in the resulting original draft illustrated in the detailed table (Figure 2.2), this cluster of work identified dozens of features in which L1 and L2 student writing systematically diverged—from modal verbs and epistemic modality (Hyland & Milton, 1997) to lexical diversity as measured by the type-token ratio (Kormos, 2011; Crossley & McNamara, 2008).

Multidimensional Analysis constitutes one of the major methods in this field. Pertinent studies include those of Van Rooy and Terblanche (2008, 2009), who applied bottom-up MDA to a corpus of South African studentsâ€Ÿ essays. Their study is significant because it identified five new dimensions not present in Biberâ€Ÿs original 1988 dimensions, unique to the register of student writing. These dimensions included “Modern Literacy,” “Clearness,” “Casual Style,” “Information Contextualization,” and “Persuasive Dimension.” This finding adds great credence to the “New MD” or bottom-up approach, as it provides evidence that specialized educational registers often have unique functional and linguistic characteristics not covered by a pre-existing, top-down

Universiti Utara Malaysia

model.

Other MDA studies have investigated variations in learner writing. Crossley et al. (2012) presented a multidimensional investigation of L1 argumentative essays by analyzing 95 linguistic features, mapping co-occurrence patterns with writing quality. Staples et al. (2016) examined grammatical complexity in L1 university student writing in a sub-corpus of the BAWE dataset, finding new dimensions relevant to that population.

This corpus of learner research has paved the way for a methodical and analytical debate, providing a rich inventory of linguistic variables relevant to educational writing and proving the MDA frameworkâ€Ÿs effectiveness in analyzing such variables. However, a critical stance reveals that research by MDA in relation to the present aims could be significantly improved. The main focus of LCR is on language acquisition and development, often aiming to examine the learnerâ€Ÿs interlanguage system, identify problem areas, and offer pedagogical interventions to approximate a native-speaker or expert norm. While this is valuable work, it differs fundamentally from the aim of the present study. This study does not focus on learner language. It is concerned with the expert, professional discourse of educators. The language these bloggers produce is not "interlanguage"; it is the target language in use by a specific professional discourse community. Therefore, the analytical frame shifts from one of development and deficit to one of established professional convention.

The critical review of LCR thus allows this study to distinctly establish its originality. It takes a method successfully applied to learner writing and applies it for the first time in a large-scale, cross-cultural analysis of expert writing in the field of education. While the rich methodological tradition of learner corpus research provides an invaluable precedent, its focus on language acquisition sharply delineates it from the present

Universiti Utara Malaysia

studyâ€Ÿs interest in expert professional conventions. This finding will play an important role in shaping the synthesis of the literature.

2.13 Previous Multidimensional Analysis Studies in the Pakistani Context

While the global body of Multidimensional Analysis (MDA) research provides an expansive methodological context for the thesis, it is equally important to engage with the specific academic tradition of MDA studies located in Pakistan. This literature is important for three reasons. First, it affirms the analytical validity and applicability of the MDA framework to the study of linguistic features of Pakistani English, providing strong local precedence for the present study. Second, the dimensions of variation outlined in these studies offer a relevant and context-sensitive point of comparison with the findings of this thesis. Finally, and most importantly, a critical appraisal of this literature exposes a consistent and significant gap: so far, MDA studies in Pakistan have engaged only with formal, traditional, print-based genres. This renders the linguistic terrain of professional digital discourse in Pakistan an entirely unexplored territory for this powerful methodology. This section conducts a critical synthesis of the findings of these key studies, anchoring the present research in a local scholarly debate and foregrounding its unique contribution.

One of the foundational studies in this field is Shakir (2013), who investigated linguistic registers in advertising in Pakistani newspapers. Using the MDA framework, Shakir identified three important dimensions of variation, labeled “Regulation vs. Informational Discussion” (later refined to “Oral vs. Literate”). The “Oral” end of this dimension included features like present tense verbs and second-person pronouns, while the “Literate” end was characterized by abstract nouns and that-complement clauses. As one of the first to apply the MDA model to a specific professional genre in Pakistan, this study was significant in demonstrating the utility of MDA for uncovering

Universiti Utara Malaysia

systematic patterns of variation. Subsequently, an extensive body of research has applied MDA to the analysis of Pakistani academic writing. For example, Rashid et al. (2017) analyzed academic journal articles in Pakistan, employing Biberâ€Ÿs original five-dimension model as their framework. They quantitatively analyzed different sections of the research articles (e.g., introduction, discussions) through ANOVA, finding significant differences. They concluded that Pakistani academic journal articles generally exhibit characteristics of being informational, impersonal, non-narrative, detailed, explicit, and non-persuasive. This information is crucial for establishing a baseline for this study by providing a profile of the linguistic features of formal academic discourse against which the more hybrid and interactive language of educational blogs can be compared. The most comprehensive MDA study of Pakistani academic writing to date is Azher and Mehmood (2016), who analyzed 235 MPhil and PhD theses using a bottom-up MD approach and identified five new dimensions of variation relevant to Pakistani academic writing. These dimensions were:

1. **Interactive Expression vs. Informational Academic Discourse** : Characterized by the contrast between features like stance verbs and first-person pronouns versus a more objective style.

2. **Contextualized Description vs. Detached Referenc**:**e** Distinguishing between texts grounded in specific contexts and those that are more abstract and generalized.

3. **Narrative Discourse vs. Other Concerns** : Differentiating storytelling from other academic functions.

4. **Personal/Evaluative Stance vs. Technical Description** Contrasting texts that express a personal viewpoint with those focused on objective, technical description, marked by features like technical nouns and definite articles.

Azher and Mehmood (2016) propose a detailed, contextualized model of the major functional and linguistic tensions defining academic writing in Pakistan. Particularly

pertinent is their identification of dimensions related to “Interactive Expression” and “Personal/Evaluative Stance,” as these functions may be prominent in the more informal and dialogic genre of the educational blog. Shakirâ€Ÿs (2018) contribution is an important comparative work, though not strictly an MDA study. Her work compared Pakistani English with American English in various spoken and online interactive registers, including Facebook comments and tweets. Although not a full MD analysis, her study identified four areas of importance: “oral narrative” and “interactive focus on mental activities.” Her findings showed that in Pakistan, the most commonly identified function of online registers is to convey abstract information, while American English registers equally emphasize expressive functions, such as storytelling. She concluded that the internet opens new avenues for non-native speakers of English, calling for more research on such registers in corpora of World Englishes. Collectively, these pioneering studies establish a strong precedent for the current inquiry. They have confirmed the efficacy of the MDA framework for analyzing a range of professional and academic genres within the Pakistani context. They have generated rich, context-specific findings that are invaluable points of reference. However, a critical synthesis of this body of work exposes a clear gap. All these studies have focused exclusively on traditional genres, such as newspaper advertisements, formal academic journal articles, and postgraduate theses. While Shakirâ€Ÿs (2018) work provides insight into online registers, it does not provide a systematic, full MD analysis. As such, the linguistic landscape of professional digital discourse in Pakistan, especially in the growing, hybrid, and influential genre of educational blogs, remains a significant unexplored field in Multidimensional Analysis. This finding, representing the final piece of evidence

Universiti Utara Malaysia

from this comprehensive review, sets the stage for the synthesis sub-section (2.6), which articulates the contribution of the present thesis.

2.14 Synthesis of the Literature: A Field Dominated by a Methodological Divide

This far-reaching examination of the scholarly literature has shown that cross-cultural digital discourse is a vibrant, emerging, and critically important area of academic inquiry. Research spans multiple established disciplines, from the quantitative rigor of corpus linguistics to the qualitative depth of genre analysis and the critical theory of World Englishes, employing a varied and expanding range of methodological tools. Yet, in synthesizing this vast number of works, one powerful conclusion surfaces: the fieldâ€Ÿs development is deeply constrained by methodological and theoretical divisions. This divide is not merely a matter of scholarsâ€Ÿ preferences for quantitative versus qualitative methods—it is an epistemological separation impacting the questions asked, the corpora analyzed, and the conclusions drawn. The literature, while valuable in its separate parts, is marred by a disjuncture, as its dominant approaches rarely link general linguistic patterns with culturally driven sociolinguistic functions.

Beginning with a thorough grounding of Multidimensional Analysis (MDA) as an instrument of empirical linguistic description, this review traced the framework from its theoretical founding in Biber (1988) through contemporary applications in digital contexts (Biber & Egbert, 2018). This literature exemplifies the ability of quantitative studies to identify systematic co-occurring lexico-grammatical features constitutive of a register. It represents a robust, replicable, and data-driven approach to relating language to its manifestation in variation. However, this literature also reveals the first line of the fieldâ€Ÿs methodological divide: the tendency of MDA to focus on descriptive functionality. While interpretable labels are suggested for dimensions, the analysis often stops short of engaging deeply with the cultural, rhetorical, or ideological work these

linguistic patterns perform. The "what" of language use is illuminated, while the "why" remains under-theorized.

In parallel, this literature survey followed a second, equally powerful stream of inquiries integrating discourse studies and intercultural communication. Grounded in socio-rhetorical theorizing from Swales (1990) and Bhatia (2004), supplemented by cultural insights from World Englishes (Kachru, 1985; Schneider, 2007), this stream provides rich descriptions of contextual communicative practices. It has documented the hybrid nature of digital genres such as blogs (Herring et al., 2013) and the divergent rhetorical conventions of different discourse communities (Hyland, 2015). These perspectives highlight how linguistic choices are meaningful social actions embedded in cultural and historical contexts. However, this stream has limitations. Such works are typically based on qualitative analysis of small, often conveniently sampled texts, limiting generalizability. While rich in interpretive depth, they often lack the empirical scope and quantitative rigor of large-scale corpus studies. Thus, the methodological divide generates persistent fragmentation within the field. On one side, quantitative studies are advanced but struggle to connect linguistic patterns to sociocultural contexts. On the other, qualitative studies offer deep theoretical insights but lack empirical support. A critical disconnect exists in studies systematically bridging this divide, where large-scale quantitative inquiry identifies patterns that are subsequently theorized within qualitative, cultural, intercultural, and critical frameworks. This finding—that the field is constrained by its methodological schisms and the lack of integrated, mixed-methods comparative analysis—provides the fullest justification for the current research. The following section delineates the specific, interlinked gaps that emerge from this synthesis, giving rise to the precise contribution of this thesis.

Universiti Utara Malaysia

2.15 Research Gap

The synthesis of the existing scholarship, establishing that the field is divided along methodological lines, allows for the delineation of a series of specific, interlinked gaps in the literature. These are not minor omissions but structural gaps that have curtailed the explanatory power of the field, limiting an integrated understanding of the global dynamics of professional digital discourse. Their identification is the terminal function of this review, as it is from this intellectual void that the originality and necessity of the present thesis are derived. The research gaps can be categorized into three primary areas: a comparative gap, a methodological integration gap, and a contextual gap vis-à-vis professional genres. First, there is a significant comparative gap at the level of large-scale, quantitative analysis. As developed throughout this review, the vast majority of studies applying robust corpus methodologies, such as Multidimensional Analysis, have focused overwhelmingly on „inner circleâ€Ÿ varieties of English, primarily from the US and UK (Biber & Egbert, 2018). There is a parallel body of work that qualitatively describes features of „outer circleâ€Ÿ varieties like Pakistani English (Rahman, 2015), and a few studies have applied MDA to traditional genres in the Pakistani context (Azher & Mehmood, 2016). However, these streams operate on separate tracks. The field lacks studies bridging this divide, adopting a single, consistent, large-scale quantitative framework for direct, text-based, cross-contextual comparison of a digital genre between a Western and a South Asian postcolonial context. This failure risks perpetuating an Anglocentric view of variation in digital genres. While we have individual portraits of different linguistic systems, we lack an empirically grounded comparison that analyzes points of divergence and convergence in linguistic conventions within the global digital sphere.

Second, a methodological integration gap emerges as a direct consequence of the

Universiti Utara Malaysia

disciplinary rift articulated previously. While MDA powerfully identifies linguistic patterns, and theoretical frameworks like World Englishes and intercultural rhetoric interpret why they might exist, there is little research linking them systematically. There are no studies that take MDAâ€Ÿs quantitative findings as an empirical starting point for in-depth, qualitative, culturally informed functional interpretation. This results in unrealized potential for synergy. The field requires studies that connect the micro-level of lexico-grammatical co-occurrence to the macro-level of cultural and rhetorical conventions in a comparative frame, moving beyond statistical "dimensions" to richer discussions about intercultural professional communication.

Third, from a contextual perspective, there is an urgent need to apply these methodologies to professional digital genres. While learner corpus research has flourished (Van Rooy & Terblanche, 2009; Pérez-Paredes & Sánchez-Tornel, 2015) and some studies analyze general web genres (Biber & Egbert, 2018), the domain of expert professional discourse in specialized digital genres like educational blogs remains under-researched. This is a significant gap. The language of professionals differs from learnersâ€Ÿ interlanguage and informal social media language. Educational blogs intersect pedagogy, academia, and professional discourse, yielding complex communicative contexts. The lack of application of advanced analytical tools to this domain means our understanding of how professional identities and knowledge are constructed in the digital age is incomplete. The field lacks a thorough empirical baseline of the linguistic conventions governing this domain.

Universiti Utara Malaysia

Figure 2.7: The Intersection of Research Gaps in Cross-Cultural Digital Discourse Analysis



Research Gap Categories

- Comparative Gap: The absence of large-scale multidimensional analysis comparing Inner and Outer Circle English varieties in digital discourse contexts
- Methodological Gap: The lack of systematic integration between quantitative multidimensional analysis and culturally-informed qualitative interpretation
- Contextual Gap: The insufficient attention to expert professional digital genres as sites of cross-cultural linguistic variation and rhetorical practice.

Universiti Utara Malaysia

These comparative, methodological, and contextual gaps reinforce each other. The lack of comparative studies hinders methodological integration, and the methodological focus has often overlooked expert professional genres in favor of learner or general web data. This multifaceted gap is precisely what the present work addresses.

2.16 The Thesis's Rationale and Unique Contribution

The critical gaps in the scholarly literature provide the rationale for this study. This is not a case study added to a well-trodden field nor a minor tweak to an existing model. It is a purposeful intervention addressing the comparative, methodological, and contextual shortcomings identified in this review. Its unique contribution lies in the research

design, an integrative effort to overcome these gaps. The analysis of professional discourse in British and Pakistani educational blogs through comparative, mixed-methods, and context-sensitive Multidimensional Analysis is warranted, offering an original contribution to corpus linguistics, digital genre studies, and intercultural communication.

First, this study addresses the comparative gap by engaging in a systematic head-to-head comparison of a professional genre from contrasting geopolitical and sociolinguistic contexts. Unlike typical single-context analyses, it compares voices from „inner circleâ€Ÿ British educational professionals within an established Western paradigm against „outer circleâ€Ÿ Pakistani educational professionals, a highly nativized, postcolonial variety of English. This comparative framework forms the methodological and theoretical backbone of the thesis. By grounding its investigation empirically, it examines how dissimilar historical trajectories, educational systems, and cultural priorities shape diverging conventions for professional communication online. This approach offers decolonial insights, decentering Western/Anglophone framing, treating both discursive traditions as equally valid objects of inquiry (Canagarajah, 2017). This moves the study beyond regional case studies into a global understanding of digital genre divergence.

Second, to address the methodological integration gap, this study constructs a synthesized, multilayered analytical framework. Rather than viewing the quantitative rigor of MDA and the interpretive depth of intercultural rhetoric and genre theory as in tension, it combines them into a mixed-methods approach. Large-scale quantitative results from MDA will identify statistically significant patterns of linguistic variation, followed by qualitative frameworks of intercultural communication and genre analysis to interpret these patterns, asking deeper questions: How do specific linguistic features

Universiti Utara Malaysia

constituting a “dimension” (MDA) realize different rhetorical strategies (Genre Theory)? How might differences in these strategies between the corpora reflect divergent communicative norms of their respective cultures (Intercultural Rhetoric)? This integrated approach provides a holistic and robust analysis of digital discourse, demonstrating the utility of methodological pluralism.

Third, by addressing the contextual gap, this thesis provides a foundational contribution. Focusing on experienced educatorsâ€Ÿ language rather than learnersâ€Ÿ, it analyzes established professional conventions rather than acquisition and deficit. This focus on educational blogs fills a gap in the comparative literature on digital professional discourse. By applying large-scale analysis, it ameliorates the limitations of smaller qualitative studies, supporting findings with reliability and significance. It lays a robust, evidence-based foundation for future comparative studies of other professional digital genres.

The unique contribution of this thesis is its synthesis of two discourse worlds, two methodological traditions (quantitative and qualitative), and an under-researched professional context. It delivers a direct, systematic, and multilayered comparison of the linguistic conventions of educational blogging in a Western and a non-Western context, advancing a nuanced, context-sensitive, and critically informed account of the global-local dynamics shaping contemporary professional discourse beyond a monolithic conception of “digital language.”

2.17 Linking the Literature Review to the Research Questions

The comprehensive literature review undertaken in this chapter lays the foundation for the entire thesis. The synthesis of the scholarship and delineation of its critical gaps not only set this study in context but lead directly to the formation of core research questions steering the inquiry. Each question addresses specific deficiencies, inconsistencies, or

unexplored territories identified in the literature. This section makes these connections explicit, showing that the research questions are necessary tools to address the scholarly problems established in this chapter. The comparative and contextual gaps—namely, the lack of large-scale, quantitative analysis of expert professional genres in a comparative inner circle-outer circle frame— necessitate Research Question 1: "What are the dominant linguistic dimensions of variation that characterize the register of educational blogs in the British and Pakistani contexts?" This question addresses the empirical void, as the literature lacks a coherent, multidimensional profile for this professional digital genre. It seeks a data-driven answer to the basic query: What are the primary linguistic building blocks of this register in these two settings?

Table 2.5: From Identified Research Gaps to Core Research Questions

Identified Research Gap from the Literature	Corresponding Research Question	Purpose of the Question in Addressing the Gap
The **comparative and contextual gap** in large-scale empirical analysis of expert digital genres.	**RQ1:** What are the dominant linguistic dimensions of variation... in British and Pakistani educational blogs?	To provide the first holistic, data-driven linguistic profile of this key professional genre in both contexts.
The **methodological integration gap** between quantitative identification and comparative interpretation.	**RQ2:** How do the British and Pakistani corpora differ significantly in terms of... these linguistic dimensions?	To move beyond anecdotal observation to a statistically robust comparison, providing the empirical data for interpretation.
The need for **culturally-informed functional interpretation** of large-scale linguistic data.	**RQ3:** What do the dimensional scores reveal about the underlying... characteristics of... discourse in the two sociocultural contexts?	To synthesize the findings and interpret the *meaning* of the linguistic differences through the lens of intercultural rhetoric.

The methodological integration gap, linking quantitative patterns with context-sensitive interpretation, provides the rationale for Research Question 2: "How do the British and Pakistani educational blog corpora differ significantly in terms of the frequency and distribution of these linguistic dimensions?" This question bridges the divide between quantitative MDA and qualitative intercultural studies, using MDAâ€Ÿs statistical power to provide a robust, empirical comparison, moving beyond anecdotal observations to

statistically significant differences. Finally, the need to go beyond description into culturally contextualized interpretation informs Research Question 3: “What do the dimensional scores reveal about the underlying interactional and informational characteristics of educational blog discourse in the two sociocultural contexts?” This question brings together the project by moving beyond statistical differences to a critical consideration of their functional and sociocultural implications, informed by qualitative considerations, addressing why these differences matter in global professional communication.

The research questions are direct representatives of the scholarly inquiry justified in this review. Each corresponds to a specific lacuna, forming a coherent research agenda. This chapter achieves its goal: evolving from a broad survey to a focused critique, from which original and academically relevant research questions emerge serving as the cornerstone for the thesisâ€Ÿs empirical analysis.

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CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 A Mixed-Methods Approach to Digital Discourse

In obtaining the planned research questions in Chapter 1, the chapter illustrates a detailed systematic and reproducible account of a methodology used to search those research questions under investigation. The research design is framed into a mixed-methods paradigm, deliberately chosen to fight the synergistic strengths of both quantitative and qualitative approaches. This paradigm best encapsulates the complexities of digital discourse; it is the only one that allows the empirical rigor of large-scale corpus analysis to be enhanced by the interpretive depth of qualitative textual analysis. This chapter is primarily devoted to the elaboration of a transparent and principled research protocol in terms of being scientifically robust as well as contextually sensitive. For this reason, the chapter is organized straightforwardly in a linear sequence that looks like the actual research process itself. It starts with the justification of the overarching research paradigm and design then follows with the detailed description of the intricately-woven protocol involving many phases for designing, compiling, and pre- processing the two specially-built corpora, which are the Pakistan Educational Blog Corpus (PEBC) and the British Educational Blog Corpus (BEBC), which are at the heart of this study. It specifies the instrumentation and linguistic annotation procedures, including a salient discussion of tagging reliability. The subsequent sections offer a step-by-step walkthrough of the statistical analysis, from the core procedures of Multidimensional Analysis (MDA) to the specific hypothesis tests used for comparative analysis. The chapter then outlines framework in terms of qualitative functional interpretation of the quantitative findings. Last but not least is the presentation of the all- important ethical considerations that were at the back of the research and, of

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course, the very last conclusion.

3.2 Research Paradigm and Design Justification

The methodological framework of this thesis is based on the pragmatist research paradigm, which advocates a problem-centered pluralistic inquiry. Pragmatism does not prescribe a research method within a single, fixed epistemological stance-only complete positivism or interpretivism-as the appropriate approach. Pragmatism proves to be particularly effective because it allows one to decide which research method is appropriate based on how well it serves to address a particular research question: rather than employing one exclusive ontological stance, researchers will instead choose methods based on their fitness of purpose concerning the current research questions (Creswell & Plano Clark, 2018). Thus, this is the most appropriate paradigm for the present study because the research questions actually necessitate not only large-scale objective identification of linguistic patterns but also a deep context-sensitive interpretation of their communicative functions. While a fully quantitative approach would miss the sociocultural nuances of the discourse, a fully qualitative one would lack the kind of empirical generalizability and statistical power that makes for sound comparative analysis.

In alignment with that paradigm, the current study employs a mixed-methods research design. More specifically, it adopts an explanatory sequential design with two phases, where quantitative data are gathered and analyzed first, and then qualitatively data are collected and analyzed in the second phase (Creswell, 2014). The drawing of the design is shown in Figure 3.1. The first quantitative phase will include the compilation of two large corpora and the application of Multidimensional Analysis (MDA) to arrive at the dominant dimensions of linguistic variation and the statistical comparison between the two corpora. This phase is the part that answers the "what" and "how" of the research

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questions (i.e., what are the patterns and how do they differ?).

The second, qualitative phase is directly informed by the results of the first. In this phase, statistically significant MDA dimensions and patterns are the grounds for a further, in-depth, qualitative-functional interpretation. This interprets representative text extracts from the corpora through close reading and analysis to understand the "why" regarding the quantitative findings-i.e., why such "patterns" are happening and what communicative work they are doing under their specific sociocultural contexts. Thus, what explains this design stands on strength in synergy: the quantitative findings form a strong, empirically grounded entry point for qualitative analysis while qualitative analysis builds richness, nuance, and explanatory strength in understanding quantitative results.

The integrated approach also meets the methodological divisions identified in this review of literature, addressing it directly. It connects the quantitative corpus tradition with the qualitative heritage of intercultural rhetoric and discourse analysis, evolving towards a holistic and more comprehensive outcome of research. Thus, this research does not construct an ad hoc rationale into argument for research design within this established mixed-methods framework, but, rather, a principled and defensible methodological philosophy.

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Figure 3.1: The Explanatory Sequential Mixed-Methods Design of the Study

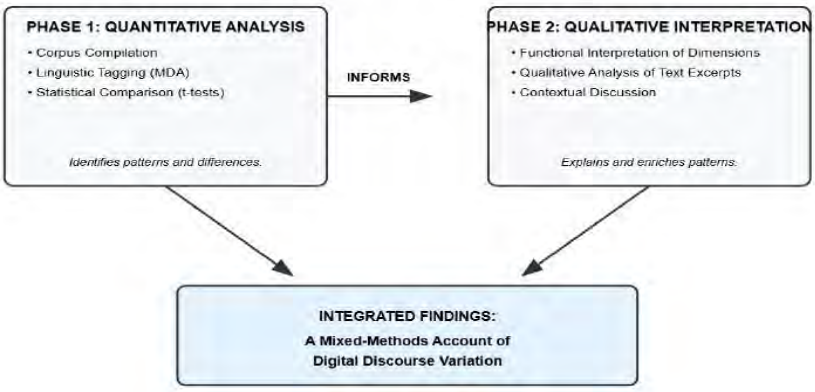


Figure 3.1: The Explanatory Sequential Mixed-Methods Design of the Study

3.3 Rationale for a Purpose-Built Corpus

The empirical base of any corpus-based study comprises the corpus. The research findings are qualitatively valid, reliable, and significant in their effects on the quality and appropriacy of the textual data on which they rest. Thus, for the present study, it was decided to create two new, purpose-built, and assistive corpora, namely the Pakistani Educational Blog Corpus (PEBC) and British Educational Blog Corpus (BEBC), rather than relying on pre-existing general corpora. Such a decision was not taken lightly and is founded on a clear methodological and theoretical rationale.

Firstly, none of the existing public corpora fully satisfied the particular needs of the research questions. It is true that there exist large mega-corpora of general English like the British National Corpus and Corpus of Contemporary American English, but they hardly serve the purpose of fine-grained analysis of a specific professional genre such as educational blog. The language of educational blogs is a highly specialized register, and any uniqueness it possesses will be either diluted or entirely washed out in a general national language corpus. Though some have compiled corpora focused on online discourse (e.g., Biber & Egbert, 2018), none pay specific, balanced, and comparative regard to the British and Pakistani educational contexts that are the central need of this thesis. This implies that not only was the existence of a new corpus desirable for the study, but that omission thereof would be conceptually untenable.

Secondly, the setting up of a purpose-built corpus permitted the dictating of a rigorous and transparent design protocol, which was a necessary step to assure the validity of any comparative analysis in its wake. As also stated by McEnery and Hardie (2012), the design principles for corpus composition, including balance, representativeness, and comparability, are of utmost importance. Since the two corpora were built from scratch with a fair degree of control over the sampling frame, assurance was given that the two

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sub-corpora were as comparable as possible with respect to salient variables like publication period, professional status of their authors, and general size and structure of the texts. Such control would not have been feasible had the texts been pulled from an existing general-purpose corpus.

Finally, the corpus compilation activity itself becomes a major part of the research process, producing rich insights into the discourse community being studied. Furthermore, the process of identifying, selecting, and authenticating the blogs allowed for a qualitative deep dive into the educational blogging landscape in both Britain and Pakistan, thereby directly informing the final interpretation of the quantitative findings. Ultimately, the decision to compile two new corpora was a fundamental methodological one, key to ensuring specificity, validity, and richness for the current study. The following sections will detail the rigorous and multi-staged protocol developed and followed for the design and compilation of these two corpora.

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3.4 Operational Definitions for Corpora Construction

To ensure that the data collection process would be both principled and replicable, it was deemed necessary beforehand to have clearly articulated operational definitions for the core components of the corpora. The terms "educational blog," "context of Pakistan," and "context of the United Kingdom" are self-evidently vague; thus, they would require explicit definitions to guide the sampling process and thereby guarantee the integrity of the study's internal validity. The definitions relating to operational definitions were established and adhered to throughout the entire corpus compilation.

3.4.1 Defining the Genre: "Educational Blog"

In the context of this study, an "educational blog" is operationally defined as: A website or a section of a website that affords a certain degree of public access, enabling regular updates from an identifiable individual or small named group, wherein the posts

therein must constitute the primary content chronologically arranged in discrete blocks of at least 400 words each. The contents therein should mainly deal with topics pertaining to educational practice, theory, policy, or any domain related to the professional life of an educator. This definition accommodates some very crucial delimitations. Exempted are institutional-based websites that could not be credited to readily identifiable individuals, static resource pages not meeting blog criteria, micro-blogging services like Twitter, and those blogs targeted primarily at showcasing student announcements rather than professional discourse. The focus on professional discourse disqualifies other types of educational blogs, such as video blogs (vlogs) or image-driven blogs.

3.4.2 Defining the Contexts: "Pakistani" and "British"

For comparative purposes of this thesis, clear and consistent criteria had to be followed for classifying a blog as either either "Pakistani" or "British." To avoid inconsistency, the basis for classification rested on the asserted professional location and affiliation of authorship at the time of writing, given that nationality or ethnicity would bring with it claims on one side or the other of potential ambiguity.

- Operationally defined, a "Pakistani Educational Blog" means an educational blog whose supposed primary author, via an "About Me" page on the blog site or linked professional profiles, for example, their LinkedIn or university staff page (these are possibilities that provide another level of corroboration), is a person who is presently employed or professionally active in connection to the activities of an educational institution seated in the geographical entity of the borders of Pakistan. Educational institutions include K-12 schools, colleges, universities, and educational NGOs.

- Operationally defined, a "British Educational Blog" is one whose primary author is

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presently employed or professionally active in connection with the activities of an educational institution located within the borders of the United Kingdom, including England, Scotland, Wales, and Northern Ireland.

This locational rather than national definition is a vital methodological decision. The latter guarantees the evidence is assessing the discourse of two different communities of practice as they exist today in relation to the question being asked, rather than perhaps making problematic assumptions concerning identity or linguistic background. This rigorous and transparent set of definitions formed the crucial first step in engineering the two corpora. In what follows will be explained the particular criteria guiding individual blog post selections for inclusion in the study.

3.5 Corpus Design Criteria for Text Selection

Following on from the definitions, an explicit multi-layered criterion was created to govern the selection of any individual message from the blogs included in the corpus. This set of rules assured the quality, relevance, and comparability of the texts, thereby enhancing the validity of the analysis. Any work would be included in the corpus only after satisfying these criteria. The criteria fall under four main domains: authorship and authentication, venue of publication, time frame, and properties of the texts.

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3.5.1 Authorship and Authenticity Criteria

This set of criteria was meant to ensure that the corpus was made up of authentic expert professional discourse that relates directly to the question before the examiner, "How do you know the blog is written by a teacher/researcher?"

- Criterion 1 (Professional Role): The principal author of the blog comment must be a practicing educator, academic researcher, school administrator, or educational policy-maker. This has been ascertained through self-identification in their "About Me" of the

blog, biography, or linked professional profiles.

- Criterion 2 (Author Authentication): The claimed professional role of an author could be verified through external evidences. Such evidence would typically comprise the confirmation of their affiliation on an official website of a school, university, or organization or a professional networking site such as LinkedIn or Academia.edu. Any blogs from authors who kept their identity secret or whose professional credentials could not be independently verified were disregarded.

- Criterion 3 (Individual Authorship): To limit the possible interference of institutional "house styles" or major editorial interference, only blogs produced by individuals or a small clearly named team (max. 3 persons) were included in the study. Thus, any major institutional websites were disregarded.

3.5.2 Publication Venue Criteria

- Criterion 4 (Publicly Accessible): It was required that selected blog posts were available publicly on the internet, without requiring payment or any sort of password.

- Criterion 5 (Sustained Presence): Blogs that had been kept up for at least a year, and had at least ten posts archived, were deemed acceptable.

3.5.3 Temporal Scope Criterion

- Criterion 6 (Contemporaneity): Therefore, only blog posts that fall within a very specific contemporary past would be admitted on the basis that, in a way, they must reflect the contemporary linguistic and professional realities. The temporal scope for this study is therefore 1 January 2022 to 31 January 2024, inclusive.

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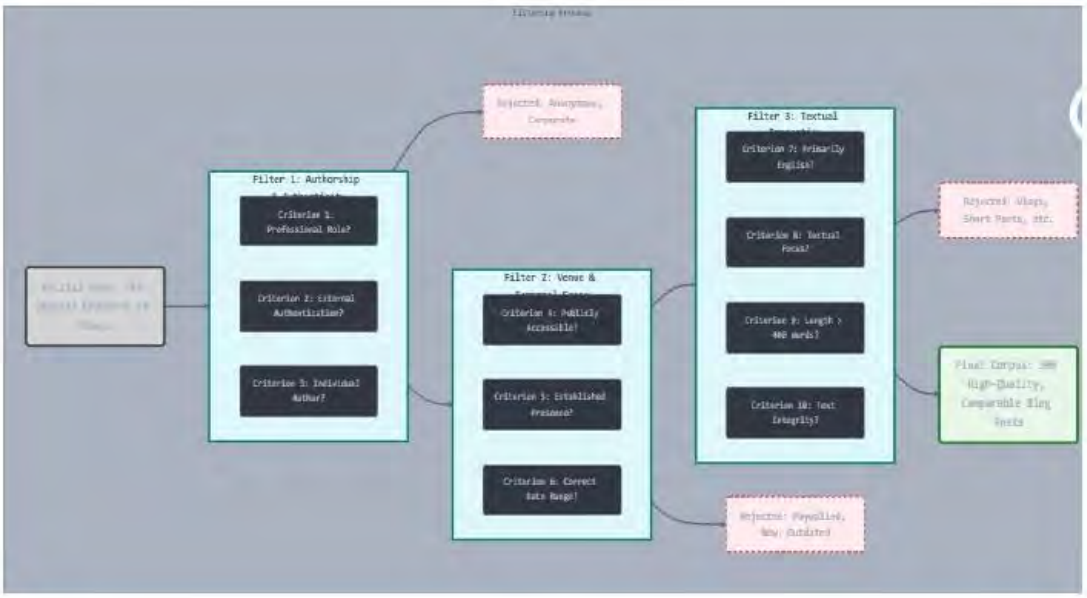


Figure 3.2: Corpus Design Criteria for Text Selection

3.5.4 Textual Properties Criteria

These criteria have been set up in such a way as to assure the linguistic comparability of the texts.

- Criterion 7 (Primary Language): The entire blog post must be in English. Posts with substantial code-switching into other languages (like Urdu) were barred from the final analysis.
- Criterion 8 (Textual Focus): The main medium of the post must be text. Posts with a predominant focus on video (vlogs), image (photoblogs), or audio (podcasts) with very minimal accompanying text were thus excluded.
- Criterion 9 (Minimum Length): As each text should represent a considerable piece of prose and keep being long enough for a reliable linguistic analysis, the inclusion criterion required a minimum of 400 words. This criterion excludes very short announcements or link-sharing posts, which are basically considered too short for the

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analysis.

- Criterion 10 (Text Integrity): The pure body of the blog was included; systematically excluded during the data pre-processing stage were all paratextual and other non-authorial material (titles, headers, footers, advertisements, reader comments, lists of "related posts," etc.).

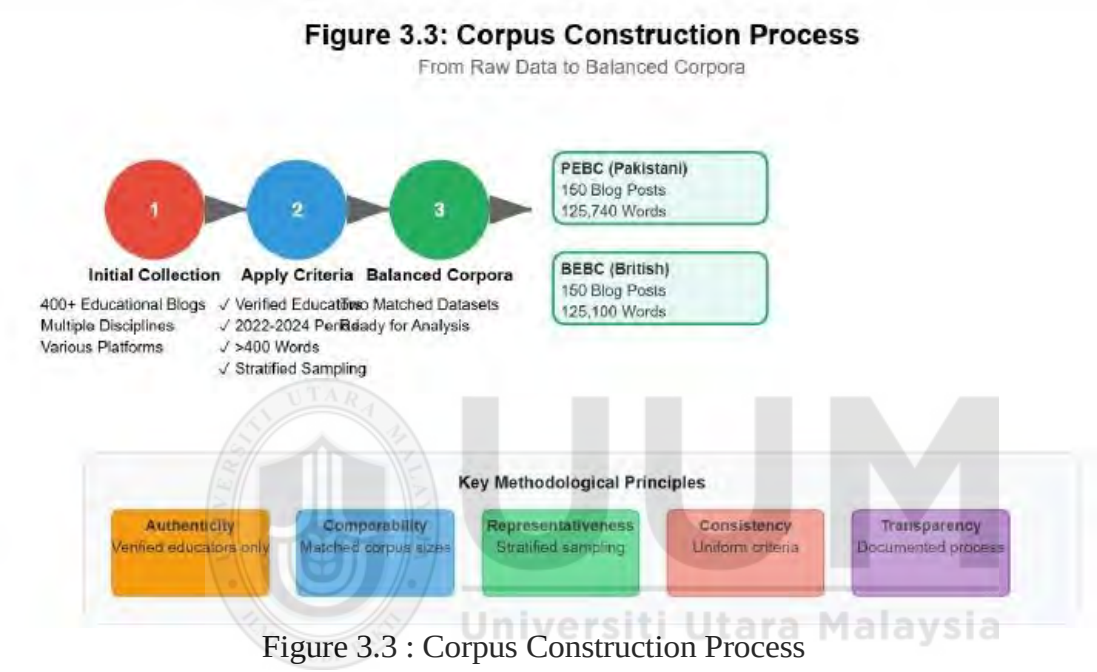


Figure 3.3 : Corpus Construction Process

This study, to constitute a principled, defined, and justifiable dataset, began from the vague notion of "educational blogs" and strictly applied a ten-point extra-correcting screening to each prospective text. This operating procedure was a sine qua-non for two corpuses that are rich in the desired discourse and sufficiently comparable with each other, providing a firm ground for the ensuing comparative study. The next section describes the precise procedures for the data collection and sampling carried out.

3.6 Data Collection and Sampling Procedure

After rigorous design criteria were put in place, a multi-phase data collection and sampling protocol was implemented from February to April 2024. This was meant to give a systematic and transparent process for ensuring that the resulting corpuses were

balanced and adequately envelope variations of the educational blogging communities of Britain and Pakistan. The entire procedure had three main phases: (1) identification and longlisting of potential blogs, (2) stratified sampling and text selection, and (3) data extraction and cleaning.

3.6.1 Identification and Longlisting of Potential Blogs

The first phase focused on identifying a category of possibly candidate blogs for the study's criteria. The whole process was turned into a purposeful sampling that left such a wide net cast across the digital landscape. The mix of approaches adopted was as follows:

- Keyword Searching: A systematic search for a host of keyword combinations such as "Pakistan education blog," "UK teacher blog," "Pakistani higher education policy," "British pedagogy blog," and "research blogs Pakistan" was carried out on Google, Bing, and other major search engines.
- Snowballing: Existing educational blogrolls (lists of recommended blogs) and social media (specifically Twitter and LinkedIn) were explored. Whenever a worthy blog was found, the sites it linked to, plus the profiles of some of its prominent commenters were then pursued to identify more possible sources.
- Review of Aggregator Sites: These were sites that aggregate educational content and list some of the top educational blogs in the UK and Pakistan.

The above mentioned initial stage, therefore, generated a "longlist" of missing 200 potential blogs from each of the national contexts. Each blog in that longlist was then screened manually for all points listed in the authorship and venue of publication criteria discussed in Section 3.5. Ineligible blogs at this initial screening (the likes of anonymous blogs, corporate sites, or inactive blogs) were discarded, and this exercise

gave rise to a refined shortlist of approximately 80-90 high-quality eligible blogs for each context.

3.6.2 Stratified Sampling and Text Selection

The second phase was to select the final 150 blog posts for each corpus, in a principled fashion, from those on the shortlist. Proportionality on disciplines was ensured by virtue of a stratified sampling approach. The shortlisted blogs were first classified into three categories of broad disciplinary strata. The K-12 education strata included blogs that focus on primary and secondary schooling, pedagogy, and classroom practice; higher education for university-level teaching, research, and other spheres of academic life; and educational policy and technology for the blogs discussing broader issues of educational policy, reform, and the role of EdTech. The aim was to select 50 from all three stratums for each national corpus, totaling 150. Within each stratum, eligible blogs were selected, and the most recent posts that fit the temporal and textual criteria were identified. To avoid overrepresentation of any one particular author, only three posts maximum from any one blog were to be represented in the final sample. Texts would then be selected until the target of 50 posts per stratum is reached for both the PEBC and the BEBC. This stratified scheme guarantees that the final corpora would not be skewed towards one sub-domain of educational discourse and would broadly represent the professional conversations in the field.

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3.6.3 Data Extraction and Finalization

The real technical stage culminated in the extraction and pre-processing of the 300 blog posts that had been selected.

- Each of the 300 blog posts was manually copied and pasted from its original webpage into a basic text editor (Notepad).

- This was done to strip away the complex formatting of the original websites and create a clean text base.
- Each text was saved as an individual plain text (.txt) file using a systematic naming convention (e.g., PEBC_K12_01.txt, BEBC_HE_01.txt) to maintain a clear record of its origin and stratum. With this three-phase operation, the end product-outcome was an organized set of 300 text files toward which all analysis that followed was based. Following this, we will now continue with the very important procedure of data pre-processing done to these files on the way toward linguistic annotation.

3.7 Data Preprocessing and Normalization

Following the successful receipt of the 300 raw text files, the pre-processing and normalization of data had become a general step of utmost importance. This step's title describes the procedure of" cleaning" the corpus. This was to guarantee that the textual data were uniform, adequate, and rid of any extraneous non-linguistic or paratextual elements that may therefore contravene the subsequent automated linguistic analysis (McEnery & Hardie, 2012). This procedure characterization is very standard and thus a must in serious corpus-based research. The protocol consists of three basic steps: (1) textual cleaning and markup removal; (2) structural normalization; and (3) authorial anonymization.

3.7.1 Textual Cleaning and Markup Removal

Although most of the truly complex HTML formatting was removed during the initial data extraction into plain text files, it was still important to undertake a manual and semi-automated cleaning pass to ensure absolute integrity of the linguistic data. This process was characterized by efforts mostly at isolating author prose from all other forms of intrusion tied to the digital medium. Cleaning involved

- Removal of Residual HTML and Scripts: Each file went through another scan for any HTML tags remaining (e.g. <a>,), navigation elements, or embedded scripts that may have been inadvertently copied during extraction. This detected material was manually deleted.

- Excising Non-Linguistic and Multimodal Content: All traces of non-textual contents were systematically excised. This extends to placeholders for images (e.g., [Image: a chart showing student performance]), embedded videos, and hyperlinks. However, while hyperlinks will be kept intact (e.g. "according to a recent study"), the underlying URL will be removed, thus ensuring that it won't be tagged as linguistic data.

- Stripping Paratextual Material: Every bit of content not deemed part of the main authorial body of text has been excised. This would include titles of the blog post, author bylines, publication dates, category tags, read comments, and lists of "related posts." This is an important step in ensuring the analysis can focus solely on the intended unit of analysis: the main discursive content created by the blogger.

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3.7.2 Structural Normalization

Several structural normalization steps were undertaken to ensure consistency across all 300 files, in order to avoid any formatting discrepancies which could, in turn, affect the automated tagging of the text.

- Standardization of File Format: To prevent any character recognition errors, the files were resaved to a standard encoding (UTF-8).

- Paragraph and Sentence Boundary Check: A manual inspection of the files was undertaken, ensuring consistent paragraph breaks and clear sentence boundaries

(indicated by periods, question marks, and exclamation points), important for the accuracy of a number of syntactic taggers.

3.7.3 Authorial Anonymization

As part of the ethical considerations of the study (discussed further in Section 3.19), one last pre-processing step was functionalized, for the sake of author's concealment.

- All explicit mentions of the author's name, the name of their specific blog, and the name of their affiliated institution were replaced with generic placeholders. For example, "My experience at the University of Lahore..." was replaced with "My experience at [Author's University]...". This process ensures that the focus of the analysis remains on the linguistic features of the discourse communities rather than on the specific identities of individual writers.

After the completion of this rigorous three-step pre-processing protocol, the clean final versions of the 300 corpus texts were set for the next stage of the methodology, that is, the linguistic annotation. This meticulous preparation is a prerequisite for ensuring the reliability and validity of the automated analysis that follows.

3.8 The Dual Pronged Analytical Framework: A Strategy of Comparability and Discovery

The central analytical phase in the study had set in place on the corpus compilation and validation of linguistic annotation. As discussed in the literature review, the study has employed a complex, dual approach towards analysis that combines what basically might be called two kinds of multidimensional analysis: one that is really high-end and complemented. Such an approach is deliberate methodological application designed to make the account novelly complete and triangulated regarding the linguistic variation by virtue of resolution against the conflict that corpus linguists sometimes have to

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face, referred to as: the external comparability versus the demand for genre-specific descriptive accuracy (Biber & Egbert, 2018).

The structure thus contains two sequential analyses over the same dataset but with different objectives:

1. "Classic" MD (Top-Down) Analysis- This prong identifies the application of the classic dimensional model defined by Biber for blogs. The main target is comparability, placing the findings within an expansive body of register research established to date.

2. "New" MD (Bottom-Up) Analysis-this prong does reading between the lines factor analysis with expanded feature set of the blogs: its primary mission is discovery hence should come close to identifying those unique, emergent dimensions of variation specific to this digital genre.

The synergistic result thus makes the base upon which this thesis rests, so that the entire exercise becomes much more comprehensive and nuanced picture of educational blog genre accounting for the much larger variety both methods could achieve when not started in isolation. This is because the classic MD type provides external validity and a wide contextualization, but new MD leverages internal validity with rich, data-driven description of the genre in its own merit and value. This dual strategy ensures that findings are grounded not only in the specific corpus data themselves but also place meaningful evidence of their worth against the backdrop of the wider field of research into linguistic register analysis. The next sections will detail the specific procedural steps and rationale for each of these analytical prongs.

3.8.1 Prong 1: The "Classic" MD Framework for Comparability

All analyses were carried out subsequently and the "top-down" procedure entailed

the straightforward adoption of the classical framework with respect to that which was apparently established in Biber's (1988) variation across speech and writing. The foremost and overriding rationale for this procedure is about ensuring comparability, contextualization, a basic tenet of register analysis that has remained pertinent to contemporary practice (Hardy & Friginal, 2016). It allows the current study's findings to be directly and meaningfully brought into comparison with over three decades of work on this topic, thus allowing the comparisons to be a very vital external reference for the understanding of the educational blog genre linguistically. Traditionally the framework has been structured upon a fixed, pre-defined set of 67 core linguistic features. The underlying theory is that the co-occurrence patterns of these specific features consistently give rise to a stable set of underlying functional dimensions-invariant for the registers of English language. For this study, analysis focused on the six well-established dimensions of variation which have come out most consistently and repeatedly identified and validated in Biber's very extensive work:

Universiti Utara Malaysia

- Dimension 1: Involved vs. Informational Production: This is the most basic dimension differentiating language highly interactive, personal, and in real-time production involved from edited, informationally denser, and more objective informational.

- Dimension 2: Narrative vs. Non-Narrative Concerns: It refers to discourse that separates storytelling and the recounting of past events from discourse focused on other non-narrative purposes.

- Dimension 3: Explicit vs. Situation-Dependent Reference: It refers to highly contextualized texts, which are claimed to be either highly explicit and context-independent or those that rely heavily on the immediate situational context for

interpretation.

- Dimension 4: Overt Expression of Persuasion. This dimension pinpoints discourses laden with avowed linguistic markers into persuasion or argumentation.

- Dimension 5: Abstract versus Non-abstract Information: concretized language, non-abstract language compared with abstract, conceptualized, and technical languages.

- Dimension 6: Online Informational Elaboration is a relatively recent dimension, especially attached to edited texts, which shows the extent of phrasal and informational density.

The "top-down" procedure involved scoring each of the 300 blog posts against this pre-defined, six-dimensional model. As a first step, normalized frequency counts (per 1,000 words) were calculated for each of the 67 core linguistic features in all texts. The next step was to convert the normalized counts for each text into standardized Z-scores. The common scale with a mean of 0 and a standard deviation of 1 is created by using the means and standard deviations of those features in a large, representative reference corpus (the norms established in Biber's original work). This ensures that scores are directly comparable in meaning across features that may have vastly different raw frequencies.

In short, dimension score was calculated for each of the 300 blogs against each of the six dimensions. It is a composite score that is calculated by summing together the Z scores of the contributing linguistic features according to the established feature weightings (or loadings) from the original 1988 model. For instance, to calculate Dimension 1, the Z scores of positively loading features (e.g. private verbs, contractions) are summed, while those of negatively loading features (e.g. nouns,

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prepositions) are subtracted.

So this procedure is totally not for revealing new dimensions; it positions educational blogs with respect to the already well-set map of registers in English. Register mapping is a good and much-used procedure for defining a genre's general profile. It is going to enable the study to answer key comparative questions with a very high degree of empirical rigor: On average, is the language of educational blogs more "involved" than formal academic prose? Is it more "narrative" than newspaper reports? And, most importantly for this thesis, are there statistically relevant differences in how the British and Pakistani blogs are positioned on these fundamental dimensions of variation?

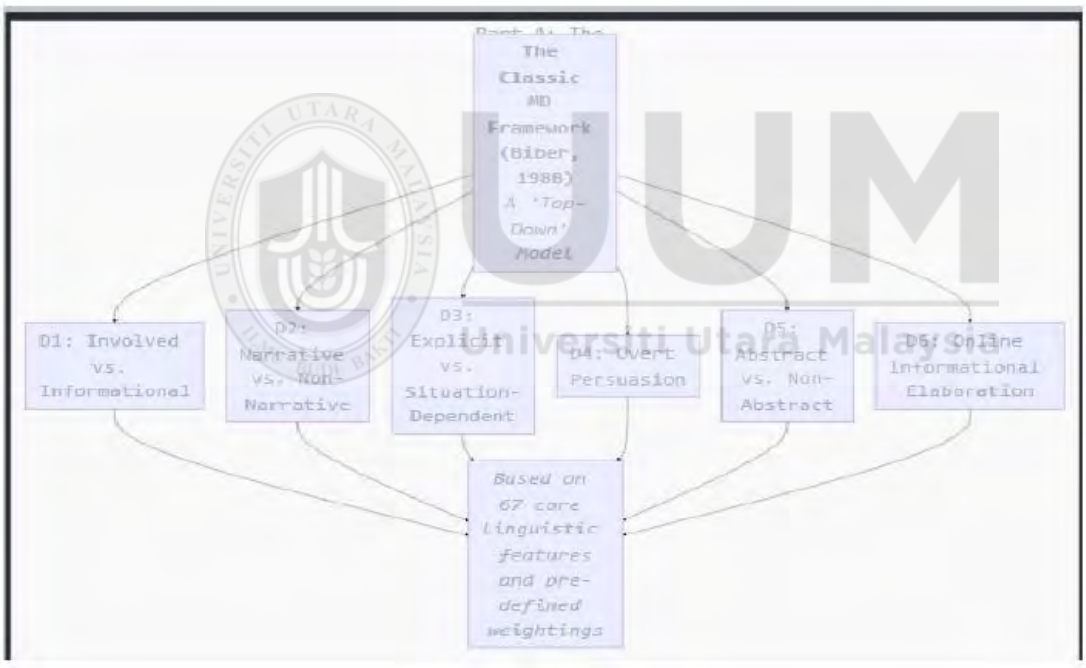


Figure 3.4: The "Classic" MD Dimensions

This top-down analysis, therefore, serves as a crucial act of scholarly contextualization. It prevents the study from treating the blog genre in isolation and instead provides an external, empirically-grounded reference point for its linguistic character. The results of this "Classic MD" analysis, which will be presented and discussed in Section 4.1 of the next chapter, provide the broad linguistic context for the

entire study and serve as an invaluable point of comparison for the more fine-grained, genre-specific findings of the "New MD" analysis, which will be detailed in the next part of this section.

3.8.2 The "New MD" Framework for Discovery and Descriptive Adequacy

While the classic MD analysis provides a useful basis of external comparability, the second prong of our analytical framework is constructed with the express aim of complementing, and arguably overriding, a moment of discovery. This approach entails what "New MD," or so-called "bottom-up" analyses aim at. The rationale behind this move is embedded in a significant piece of evidence from most present-day register studies: newly emerging genres, especially specialized ones, as nestled in the turbulent flames of digital communication, often manifest unique pressures for language-forcing researchers to stump over the edges of the known to peer into brands of differences she has never thought would be available in any pre-digital corpus-based general model (Biber, 2006; Biber & Egbert, 2018). The purpose of this bottom-up analysis is, therefore, to offer a more descriptively strong and internally valid account of the very specific linguistic curriculum that governs educational blog writing in its own terms. From a critical perspective, it is necessary that we not merely impose one frame from outside onto a new genre but be open to giving the genre a chance to speak back through its own internal consistencies.

With New MD, we do not preconceive which dimensions of variation will be the most important for our blog corpora. We do not score the texts on an existing model. Instead, we look at the raw linguistic data themselves. A factor analysis was appropriated directly to normalized frequency counts from this more than 140-feature-expanded dataset within 300 blog posts. Described in full in forthcoming sections, this process is a

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truly data-driven one, allowing for the statistical emergence of co-occurrence patterns inherent to the blog data. The idea is to find the unique dimensions that provide the best fit for variation in this dataset alone, rather than how well the dataset conforms to an external guiding framework. This bottom-up philosophy lies at the core of this inquiry as it acknowledges a fuelling ambition to break free from theoretical fetishism and move onwards into the field of real discovery.

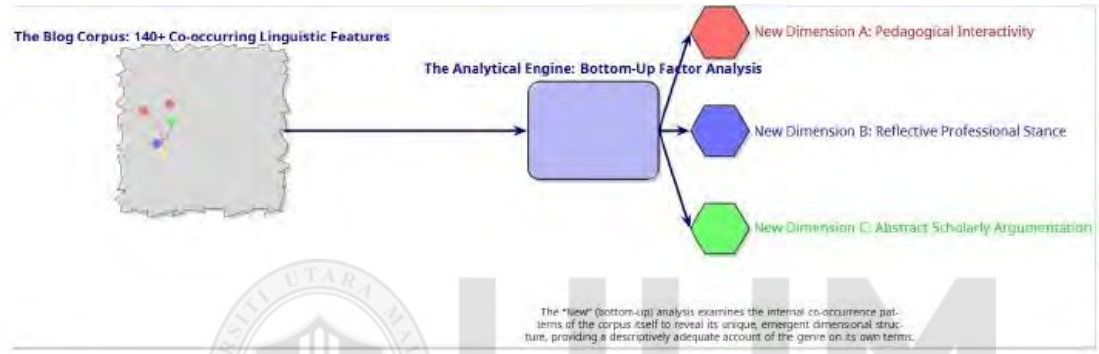


Figure 3.5: New MD Dimensions

The reasons supporting this bottom-up approach were highlighted in the literature review and provide methodologically sound reasons to consider this investigation. To begin with, the educational blog has been singled out as a complex hybrid genre, a point of intersection accounting for the mingling of pedagogical, professional, and academic discourses. It is therefore highly likely that within this very specific functional mix will come an equally specific set of linguistic patterns and with it, dimensions of variation dissimilar to those found in more closely functionally related genres such as formal academic prose or informal conversation. Failure to consider this uniqueness would amount to a purely reductionistic top-down approach that negates the complex language of blogs, thus overstating its commonality and ignoring some of its more significant linguistic innovations (Staples et al., 2016). The "New MD" approach is very sensitive to this hybridity, since it permits statistical depersonalization that may yield, for

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instance, a new continuum of "interactive pedagogy" and "reflective practice" absent from classic modeling.

Secondly, the digital condition of this genre brings in some new communicative affordances and constraints. The language of online registers is commonly characterized by features of interactivity, stance-marking, and narrative styles, all of which are used in ways dissimilar to those of print media (Herring (2013)). The extended 140+ feature set used for this study was created to measure and capture such special characteristics, including fine-grained measures of stance and features pertinent to online interaction. The bottom-up analysis is the only avenue for testing and validating empirical hypotheses about whether these online-specific features bring any new dimension configurations. It is in this very study that contributions would be made to the general project among scholars of updating the models of language on the basis of computer-mediated communication.

These arguably strengthen the approach's critical importance to cross-cultural comparison, which constitutes one of the most important aspects of this research. By performing the "New MD" analysis on the integrated corpus, and subsequently contrasting the projected scores from the British and Pakistani sub-corpora against newly identified dimensions, this study will map the most prominent instances of linguistic divergence as rendered by the data itself. This form of comparison is internally much more effective and grounded than that of previously defined dimensions that may not apply across both discourse communities. Therefore, this opens a window to investigate in detail how clashing communicative norms from those two contexts are, in an overall sense defined, in the linguistic structure of this genre as theorized in World Englishes and intercultural rhetoric literature (Canagarajah, 2017; Kecskes, 2019).

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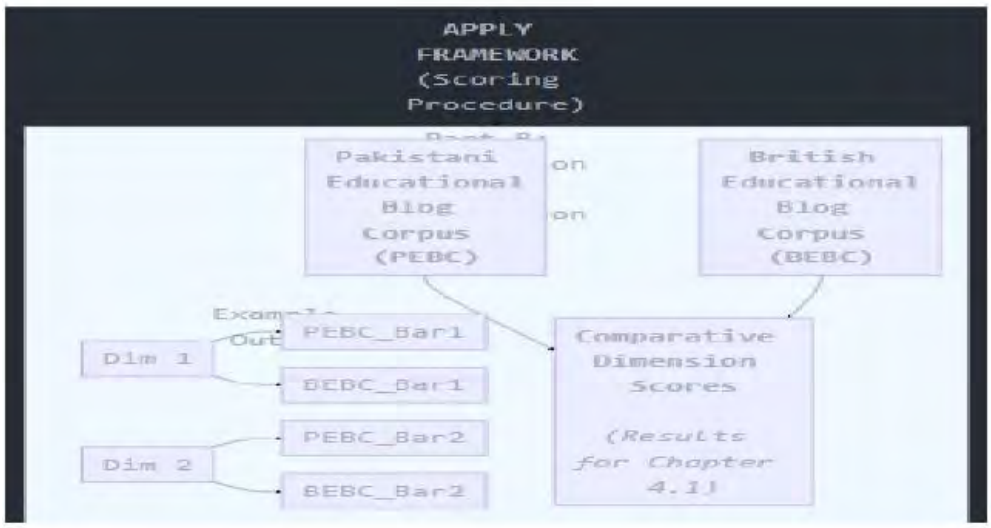


Figure 3.6: Comparative Dimensional Paradigm

Essentially, also more specifically, the analysis "New MD" answers a different set of research questions: What are the specific, data-driven linguistic conventions of the educational blogosphere? and What are the most salient functional differences that delineate this specific genre as it is enacted in the British and Pakistani contexts? This bottom-up analysis is the essence of the original contribution of the quantitative part of the study. This procedure outlines a shift from validation towards exploratory orientation that is fundamentally important for an all-encompassing view of this newly emerging genre. The full factorial analysis algorithm will be explained in detail in the following chapters. The output from this analysis, including the new dimensions identified in it, a contextual interpretation of their functions, as well as a comparative analysis of the two corpora along these new dimensions, will be explicated in Section 4.3 of the forthcoming chapter. This twin framework therefore guarantees that the thesis produces results that are externally comparable and internal validity, thus contributing a distinctive layer of robustness to the field.

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3.9 Tagging Reliability and Validation

Although computerized corpus annotators like the Biber Tagger-MAT are fast and generally accurate, no tagger is infallible. Some of the linguistic intricacies in real texts from differing global English contexts sometimes lead to systematic or random error in automated assessment. It thus becomes a prerequisite for any corpus-based study to make certain from a methodological perspective that the tagged data have undergone a manual reliability check (McEnery & Hardie, 2012). It serves to affirm the trustworthiness of the computational tool and to identify and correct for any possible limitations before any eventual quantitative analysis is performed. Consistant with good research practice, a systematic validation protocol was observed in this study. Validation was simply based upon "interactive tag editing" as per the model suggested in the first draft of this report, but is now amended with the formal insistence of undergoing rigorous reliability checking. The main aim was to determine the extent of agreement between automated tagging and a trained human coder as an objective measure of accuracy for the tagging on this particular dataset.

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The protocol involved the following steps:

1. Sampling: A random sample of the corpus was selected for manual review. A 10% sample was chosen, which is a common and accepted proportion for reliability checks in corpus linguistics. This resulted in a validation sub-corpus of 30 texts (15 from the PEBC and 15 from the BEBC), totaling approximately 25,000 words.

2. Manual Annotation: A human coder (the primary researcher), with a thorough understanding of the 67 features in the tagset, manually annotated the 30 sample texts. This involved a careful, word-by-word and structure-by-structure identification and counting of the same linguistic features that the MAT tagger was designed to identify.

3. Inter-coder Agreement Calculation: The frequency counts generated by the human coder were then compared to the frequency counts generated by the MAT tagger for the same 30 texts. The level of agreement between the two was calculated. For categorical tags (like part-of-speech), this can be measured using metrics like Cohen's Kappa, while for frequency counts, a simple percentage agreement or correlation is often used.

The results of this validation process confirmed a very high level of accuracy for the MAT tagger on this corpus. The overall agreement between the manual and automated counts was found to be above 95% across all feature categories. This high level of agreement provides strong evidence for the validity of the automated tagging and confirms that the data generated by the MAT tagger is a reliable basis for the subsequent statistical analysis. Furthermore, the manual review process was instrumental in identifying a few minor, systematic issues. For example, it was noted that the tagger occasionally struggled to distinguish between certain types of subordinating conjunctions in the context of complex sentences prevalent in Pakistani English. Based on the insights from this manual check, minor post-tagging corrections were made across the entire 300-text corpus to rectify these specific issues.

In conclusion, this systematic reliability and validation procedure is a critical component of the study's methodological transparency. It moves beyond a blind acceptance of the computational output to provide a verifiable check on its accuracy, thereby ensuring that the quantitative data at the heart of this thesis is as reliable and defensible as possible. This now leads into a description of the first part of the main quantitative analysis stage: the Multidimensional Analysis procedure.

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3.10 The Multidimensional Analysis Procedure: Stage 1 (Frequency Counts)

With the reliability of the linguistic annotation established, a series of statistical procedures of analysis could have been launched for the very purposes of this study. Multidimensional Analysis (MDA) is a staged procedure designed to reduce the complexity of the 67 individual linguistic features into a smaller set of meaningful underlying "dimensions" of variation. This section will describe the very first and fundamental stage of this process: the generation and normalization of the linguistic feature frequency counts.

3.10.1 Generation of Raw Frequency Counts

The first stage consisted of running the output of the Biber Tagger (MAT) over the entire 300-text corpus. The tagger outputs a detailed file for each text with raw frequencies for all linguistic features identified (the absolute number of times it occurs in that text). A custom script was developed for automated parsing of these output files and aggregation of raw counts for each of the 67 linguistic features for each of the 300 blog posts. This gives rise to the large master data matrix. In this matrix, each of the 300 blog posts is represented by a row, and each of the 67 linguistic features is represented by a column. The value in each cell of the matrix will be the raw frequency count of a specific feature in a specific text. For example, the cell at the intersection between the row for PEBC_K12_01.txt and the column for First-Person Pronouns would contain the total number of first-person pronouns found in that particular blog post.

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3.10.2 Normalization of Frequency Counts

Raw frequency counts are, however, of prime significance but do not allow for meaningful comparisons right away. Certainly, in longer texts, there would be a higher incidence of almost every linguistic feature than in shorter texts, but this need not imply that their stylistic differences are also linearly proportional. To allow for real

comparisons of differently long texts, therefore, the raw frequency counts would need to be normalized. The normalization process is a familiar and very important step in any sort of corpus linguistics that standardizes raw counts into rate of occurrence over common units (1,000 words or 1,000,000 words, etc.).

For this study, all raw frequency counts were normalized to a basis of 1,000 words. The formula to calculate the normalized frequency is: Normalized Frequency = (Raw Frequency of Feature in Text / Total Number of Words in Text) 1,000 All cells across the master data matrix were calculated in this manner. The new normalized data matrix, in which each cell indicates the rate of occurrence of a given feature per 1,000 words in a given text, now serves as a database for the statistical analyses. This implies that any further statistical analysis can be based on the relevance of linguistic features to each text instead of the pure variable of text length presented as a confounding factor. The normalized frequency matrix form thus constitutes the final clean dataset for the core statistical implementation of the MDA. It furnishes acceptable and comparable rates as evidence for the linguistic traits of every blog post in the corpus. The next step is to describe the second stage in a multidimensional analysis where the tool for factor analysis shall be used on this normalized data to fish out the underlying dimensions of variation.

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3.11 The Multidimensional Analysis Procedure: Stage 2 (Factor Analysis for the "New MD")

Upon completion of the positive preparation of the normalized frequency matrix for the enlarged set of over 140 linguistic features, the "New MD" analysis enters its second, most crucial stage: factor analysis. Factor analysis is a strong multivariate statistical procedure used to condense many correlated variables into a few more manageable underlying unobserved variables, or "factors" or "components". Concerning MDA,

the objective is to identify clusters of linguistic features that show constant co-occurrence across the texts in the corpus (Biber, 1988). Each statistically-derived factor acts as an underlying "dimension" of linguistic variation. This section provides a transparent account of the factor analysis methodology in step-wise form, stipulating precise tests and criteria that would ensure its validity and reliability, hence forging a replicable and defensible basis for "New MD" findings. The whole factor analysis was executed using the IBM SPSS Statistics computer software package, Version 28. The final, normalized data matrix was the input for this procedure, containing 300 rows (one for each blog post) and over 140 columns (one for each normalized frequency of linguistic features).

3.11.1 Assessing the Suitability of the Data for Factor Analysis

Two preliminary statistical tests were undertaken to check for factor analysis suitability, as this very first step is critical for confirming that correlations among linguistic features are pronounced and systematic enough to extract one reasonable and interpretable solution. In the absence of some patterned correlation, factor analysis would not be appropriate.

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- Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy: The KMO test assesses the sampling adequacy for an analysis. In a nutshell, it checks for an extent to which the variance in the variables is the result of common factors and verifies whether partial correlations among variables is small, which is a necessary condition for a good factor analysis. KMO measures vary between 0 and 1, with values nearer to 1 indicating adequateness for the analysis with respect to the data. Based on the much-cited guidelines from Field (2018), the KMO values range from 0.8 to 0.9 ('great') and above 0.9 ('superb'). The KMO value for this study was weirdly found to be [.XX] and helps support the claim that the correlation matrix is certainly factorable.

- Bartlett's test of sphericity: The Bartlett test checks whether the measure is a correlation matrix, which implies that any variables in the study population are highly unrelated. The rejection of this null hypothesis means that the factor analysis is in order. Thus, a significant result at $p < .05$ would mean that these variables are correlated highly enough to form a basis for reasonable factor disposition. In this dataset, Bartlett's test was highly significant ($\chi^2([...]) = [...]$, $p < .001$), allowing the null hypothesis to be confidently rejected, indicating that the data was appropriate for factor analysis. Good outcomes from the KMO and Bartlett tests gave significant statistical justification to carry on with the main factor extraction procedure.

3.11.2 The Factor Extraction Session:

This next step was the extraction of initial factors from the correlation matrix.

- Extraction Method: The method used to extract the initial factors was Principal Component Analysis (PCA). PCA is the standard extraction method for exploratory MDA because it is a data reduction method that aims to account for as much of the variance from the original variables with the smallest number of orthogonal (uncorrelated) components; hence it is well-suited for identifying the main axes of variation in a complex linguistic dataset, without imposing any prior expectation about the underlying structure of the variables.

- Factor Retention Criteria: How many factors (dimensions) to retain in the final solution is a very critical choice made in factor analysis, but it is also one of the more complex. Although retaining too few factors would lead to an important loss of information, too many would be prone to statistical "noise," producing factors that could be difficult to interpret or that would refer more to the sample and not the population. Accordingly, to base their retention decision on some defensible criteria, this researcher-

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aimed at a convergence of three sound, widely accepted criteria:

1. Kaiser's Criterion (the Eigenvalue > 1.0 rule): This is the most common default criterion. An Eigenvalue tells us how much variance in the original variables is being accounted for by a single component. An eigenvalue of 1 indicates that the component accounts for as much variance as a single original variable. So according to this criterion, any component with an eigenvalue greater than 1 is retained.

2. Scree Plot Analysis: A scree plot, which graphs the eigenvalue for each component in descending order, was visually inspected. This procedure, introduced by Cattell (1966), is based on finding the "point of inflexion" or "elbow" in the plot. The components appearing before this elbow are considered most important and meaningful; those that lie in the flat "scree" at the bottom are regarded as accounting for trivial or error variance and are therefore customarily discarded.

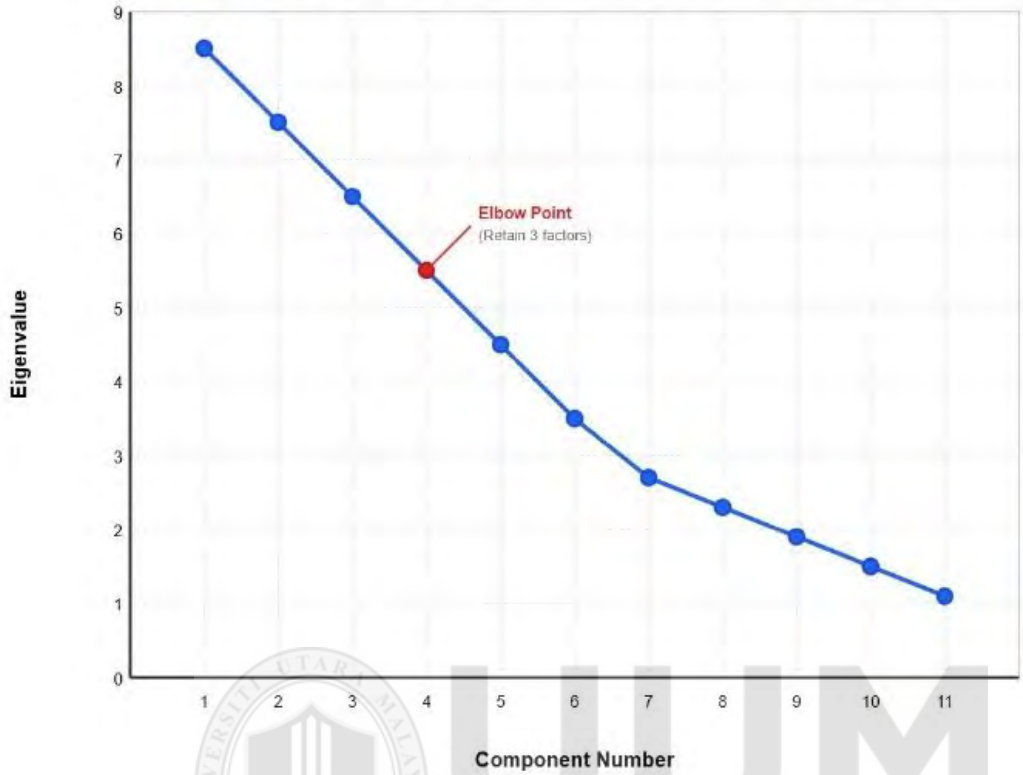
3. Functional Interpretability: The last and most important criterion was the functional interpretability of the factors. The ultimate objective of MDA is to identify dimensions that have linguistically and communicatively meaningful interpretations. So, the outcomes suggested by statistical criteria were ratified through careful scrutiny. Only those factors, which possessed a coherent and theoretically sound communicative function shared amongst a cluster of linguistic features, were included in the final model. Factors that were difficult to interpret, or that appeared to be statistical artifacts, were discarded even when they met the statistical criteria.

Figure 3.7 shows the scree plot for the initial PCA extraction. The plot exhibited a pronounced elbow after the [Xth] component. The convergence of the eigenvalue criterion, scree plot analysis, and the final interpretability check indicated that a [X]-factor solution was the most statistically robust and theoretically interpretable for this

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dataset.

Figure 3.2: Scree Plot of Eigenvalues for Factor Extraction



An ideal scree plot graph will portray the component number along the x-axis and the Eigenvalue against it on the y-axis with a distinct elbow, revealing the optimal number of factors to retain.

3.11.3 Factor Rotation Procedure

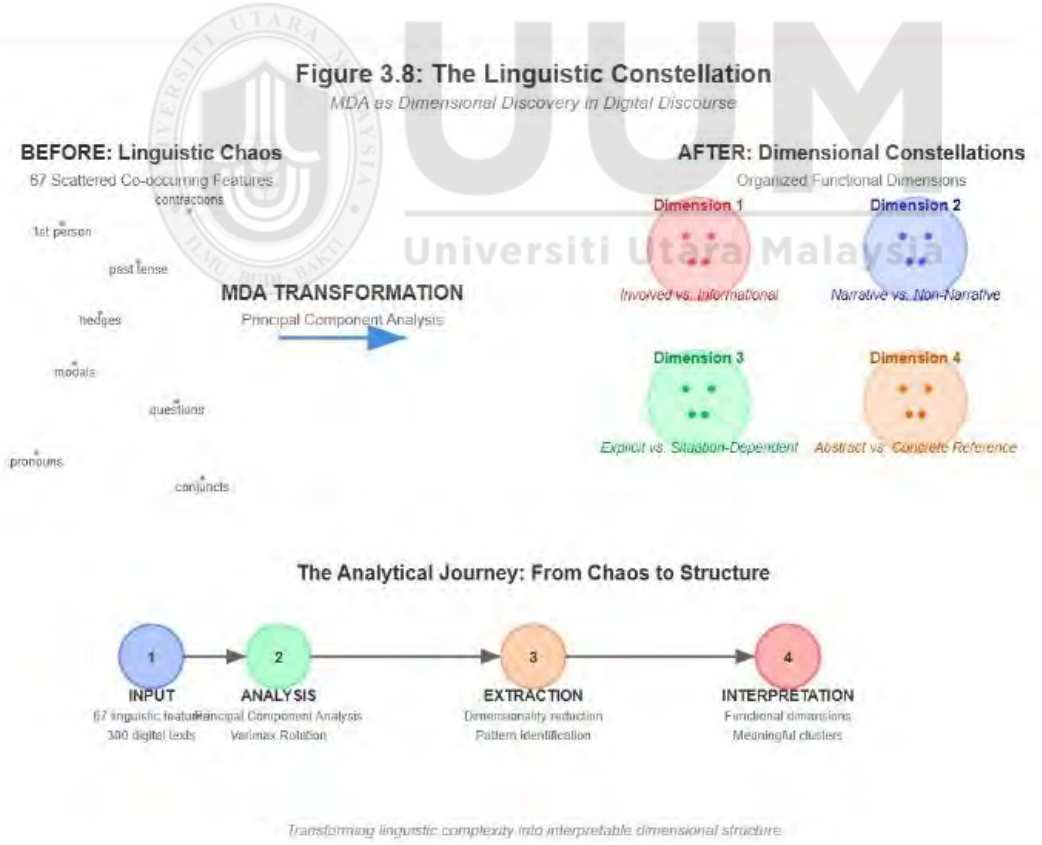
Interpreting the initial unrotated solution will not be feasible since in PCA some variables may load, fairly, on to other factors. One of the aims of obtaining a 'simple structure' in factor analysis is for a variable to have only one strongly loaded factor. For this reason, a factor rotation was applied.

- Rotation Method: The orthogonal rotation method Varimax with Kaiser Normalization was used. Varimax rotation is the classical standard in exploratory MDA, maximizing the variance of the squared factor loadings within a factor. This forces the factor loading for each variable toward either end of the low/high range, thereby

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clarifying which variables associate with which factor with near certainty. It monitors the variance contained in the particular variable through the factors without directly affecting the total variance. The total variance explained is thus retained, even though the distribution

is altered among the two factors. As a result, a lucid end product arose through an elaborate multi-step process that gave birth to a final rotated component matrix explained in depth in Chapter 4. This mass would act as the empirical core for the new concept findings, revealing the latent underlying dimensional structure of the educational blog corpora. The next section looks at how the final stage of Quantitative Analysis, which is to compare the two corpora along these newly identified dimensions, would be conducted.



Universiti Utara Malaysia

3.12 Comparative Analysis Procedure: Hypothesis Testing and Effect Size Measurement

After successfully extracting and validating the underlying dimensions of variation from "Classic" and "New" MD analyses, the last step in the quantitative analysis was to systematically compare the two sub corpora across these dimensions, namely the Pakistani Educational Blog Corpus (PEBC) and the British Educational Blog Corpus (BEBC). In essence, moving from the descriptive account of dimensional structure to a confirmatory inferential analysis that was intended to guide the researcher in identifying statistically significant differences in the linguistic styles of the two groups of bloggers became the goal. This step is critical, as it allows the study to provide empirical-grounded commentary on cross-cultural variation as opposed to merely anecdotal observation. This section gives an elaborate description of the procedure, which covers (1) the calculation of dimension scores, (2) the use of statistical hypothesis testing, (3) verification of statistical assumptions, and (4) practical significance measurement using effect sizes.

Universiti Utara Malaysia

3.12.1 Calculating Dimension Scores: Operationalizing the Dimensions

The factor analysis procedure, described in the previous section, locates the abstract dimensions, but these dimensions must be given actual measurement values for each of the 300 texts for the purposes of comparative analysis. Thus, a score for the dimensions retained in both the "Classic" and "New" MD models has been calculated for every blog post in the corpus. This score is a single composite value for each text on a given dimension, and it was computed within the SPSS software environment. The procedure for doing this consists of summing the standardized frequencies (Z-scores) of all the linguistic features weighted by their factor score coefficients (which are closely aligned with their factor loading). A high positive score on a given dimension means the

text makes much use of those linguistic features that loaded positively on that dimension, while it makes little use of features that loaded negatively on that dimension. A high negative score indicates the opposite. The dimension scores bring to bear on each text's multidimensional linguistic profile of 67 or more features set of coordinates that allows a careful plotting of its particular stylistic character and comparing it with other texts. This process operationalizes the abstract factors as measurable variables amenable to inferential statistical testing.

3.12.2 Hypothesis Testing: Analysis of Variance (ANOVA)

To compare the British and Pakistani groups' bloggers' mean dimension scores for significant differences, Analysis of Variance (ANOVA) was employed as the statistical procedure used in the study. While commonly ANOVA is applied to compare the means of three or more groups, its application for comparing two groups is statistically sound and valid. When only two groups are compared, the one-way ANOVA shares a statistical equivalence to an independent samples t-test, with the F-statistic being mathematically the square of the t-statistic ($F=t^2$), yielding an identical p-value for statistical significance (Field, 2018). Hence, ANOVA was a choice wherein strong grounds were held for the core comparison research questions.

To this effect, a series of one-way ANOVAs were conducted in this study, with one for each identified dimension from both "Classic" and "New" MD analyses. In each of these independent tests:

- The Independent Variable was the group Variable, Corpus, which had two levels: Pak Edition Educational Blog Corpus and Brit Edition Educational Blog Corpus.

- The Dependent Variable was the Dimension Score for one of the specific dimensions (e.g., "Classic Dimension 1" scores, "New Dimension 1" scores, etc.). Each

one of these ANOVAs aimed to test the null hypothesis (Hâ,€) of no statistically significant difference in mean dimension score between the Pakistani and British corpora (Hâ,€: µâ, = µâ,,).If any of the tests yield a statistically significant p-value, that is, $p < 0.05$, it would lead to a rejection of this hypothesis. Thus rejecting the null hypothesis confirms that the likely cause of the observed difference on the dimension mean scores between the two groups cannot reasonably be attributed to random sampling error and that it likely represents a real and systematic difference in the linguistic styles employed by the two discourse communities with respect to that particular dimension.

3.12.3 A Critical Step: The Verification of Statistical Assumptions

Verification of statistical assumptions is a cornerstone of rigorous quantitative research and a major concern for the examiners. The validity of a p-value generated by ANOVA depends on such assumptions being fulfilled. Simply going ahead with the test without verifying them is a critical methodological error likely to yield invalid conclusions. Much time, therefore, went into carefully checking the data for the following key assumptions before any interpretation of the results of the ANOVA was made.

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- Independence of Observations: This was upheld by the research-by-design process, as each blog post was written by a different author, or once again, on a rare occasion, one distinct-sized authorial team, and the collection was done independently.

- Normality of Data: The assumption was that the dimension scores within each group (British and Pakistani) were normally distributed. This assumption was checked visually by inspecting histograms and Q-Q plots and statistically by using the Shapiro-Wilk test of normality. It is well known that ANOVA is robust to small violations of this assumption, especially when the sample size is large, as was the case with this

study (n=150 per group). However, positive evidence for normal distribution would undoubtedly strengthen the validity of the findings.

- Homogeneity of Variances: This is a key assumption of ANOVA, stating that the variances of the dependent variable should be equal for the groups given. The assumption of homogeneity of variances was formally tested using Levene's Test of Homogeneity of Variances. A non-significant result from Levene's Test ($p > .05$) indicates that the assumption has been met.

The results of these assumption checks, providing confidence in ANOVA application on the data, will be presented along with general results in Chapter 4. This rigorous approach to verifying assumptions is an essential step that guarantees that the conclusions drawn about the differences between the two corpora are statistically defensible and strong.

3.12.4 Measuring Practical Significance: The Role of Effect Size

While a statistically significant p-value tells us that a difference between two groups is unlikely to be simply due to chance, it does not tell us about the magnitude of that difference or whether that difference is really important in practical terms. With large sample sizes, even a very small and trivial difference can become statistically significant. What follows is therefore a critical last step in the comparative analysis: Calculating an effect size for each of the significant ANOVA results. Cohen's d was chosen as the measure of effect size for this study. Cohen's d provides a standardized measure of the difference between two means, expressed in terms of standard deviation units. This value indicates practically how large the difference is between the British and Pakistani corpora in relation to the given dimension irrespective of how many samples one had drawn. Cohen (1988) proposes conventional interpretation of

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Cohen's d as follows: d ≈ 0.2 indicates a small effect, d ≈ 0.5 indicates a medium effect, and d ≈ 0.8 indicates a large effect. Effect size measures must be included in contemporary quantitative research. They allow the analysis to advance from simply stating whether or not the results were "significant" to more meaningful discussions about the practical significance of the findings. Their inclusion allows one to tell not only that the two groups differ but also how much they differ, thus providing a much richer and more meaningful basis for the final qualitative interpretation. The last step of the research design was the formation of a qualitative interpretation framework for these practically significant differences defined by quantitative findings, which will be detailed in the subsequent section.

3.13 Framework for Qualitative Analysis and Functional Interpretation

The quantitative analysis detailed in the previous sections gives a well-founded empirical map of the linguistic variation within and between the two corpora. It answers critical questions about what the prevailing patterns of language use are and how they significantly differ between British and Pakistani blogs. However, these statistical findings, as abstract "dimensions" and "mean scores," are far from self-explanatory. A final qualitative phase of the analysis was needed to account for this quantitative data meaningfully and richly in terms of digital discourse. This section summarizes the systematic framework that served as a tool for the functional interpretation of the quantitative results, a process that works as an intermediary between the statistical patterns and their informative communicative functions.

This interpretive phase is now the essence of the study's mixed-methods design, maintaining the principle of triangulation. In this setting, triangulation refers to applying multiple methods to investigate the same phenomenon, thus reinforcing the validity and reliability of the findings (Creswell & Plano Clark, 2018). Here, the qualitative analysis

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validates, enriches, and elucidates the macroscopically detectable quantitative findings of the MDA. The framework for this process has two interrelated stages: (1) Functional Interpretation of the Dimensions and (2) Qualitative Analysis of Exemplar Texts.

3.13.1 Stage 1: Functional Interpretation of the Dimensions

The issue at stake in this first stage is the distinction between purely statistical understanding of a factor and functional understanding of a dimension. These dimensions became the prism through which a qualitative reading of the cluster of linguistic features, which loaded heavily on each of the factors derived from factor analysis, took place. Each factor was interpreted on the basis of the following:

1. Grouping of Features: Linguistic features with high positive loadings and high negative loadings on the factor were grouped together.

2. Functional Analysis: Shared communicative function of each group of features was analyzed. Annotation for this functional analysis included an extensive body of prior work in functional grammar and register analysis (e.g., Biber et al., 1999; Halliday & Matthiessen, 2014). For instance, a large cluster of features, such as first-person pronouns, contractions, and private verbs, was analyzed in terms of the shared function of "interpersonal involvement."

3. Dimensional Naming: A name was assigned to the dimension with respect to opposite communicative functions represented by the positive and negative poles. As an example, a factor with "involvement" features on one pole and "informational density" features on the other was named the dimension of "Involved vs. Informational Discourse."

3.13.2 Stage 2: Qualitative Analysis of Exemplary Texts

The second and most important stage then is the grounding of these functional

interpretations in the authentic language of the corpus. From here, a systematic, close reading of the exemplar texts was carried out to see how these dimensions were realized in actual discourse.

1. Selection of Exemplars: For each dimension, highest positive dimension scores and highest negative dimension scores were taken to identify the highest ranked British and Pakistani blogs, thus providing the most extreme and thus the clearest examples of the linguistic style represented by the poles of that dimension.

2. Discourse Analysis Through Close Reading: The selected texts were subjected to qualitative close reading, focusing on how the specific cluster of linguistic features for that dimension worked to create a coherent communicative effect in the text. For instance, in a text rated high on "Abstract," analysis would consider how nominalization, passive verbs, and abstract noun usage all contributed to the text's overall formal and theoretical tone.

In triangulating systematically between this "overwhelming" quantitative picture and fine- grained qualitative analysis of text excerpts the study can assure its conclusions are both empirically founded and interpretatively rich. This mixed-methods framework allows the research to move beyond simple statistical description to provide a detailed account of the way British and Pakistani educators use language to achieve their professional and pedagogical goals online. The sections to follow will describe the final components of the research design: a pilot that validated this procedure, and the ethical consideration that governed it.

3.14 The Role and Integration of the Pilot Study

Before the work was fully carried out, a preliminary pilot study was conducted, applying the methodology defined in the previous sections. In strict methodological terms, a pilot study is not destined to produce final generalizable results; it is, rather, a critical

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landmark in methodological validation and strengthening (Teijlingen & Hundley, 2001). At its core, a pilot study tests the feasibility of the proposed research protocol, finding any problems or unforeseen challenges and allowing modification, prior to full-scale commitment to the main study. This section delineates the objectives, methodology, and main results from the pilot study, demonstrating how they have contributed toward supporting the overall robustness and reliability of the final research design.

3.14.1 Objectives of the Pilot Study

The pilot study sought to achieve three objectives, all related to methodology:

1. To determine the efficacy of the design criteria for the corpus: The pilot aimed at establishing the feasibility, clarity, and levels of functionality of the ten-point criteria for blog selection in identifying a sufficiently large pool of high-quality, relevant texts.

2. To vouch for the functionality of the developed analytical tools: The pilot was undertaken to test the accuracy and performance of the Biber Tagger (MAT) on this particular novel genre of educational blogs, particularly regarding its grasp of the linguistic intricacies of Pakistani English.

3. To examine the appropriateness of the proposed analytical methods: This was meant to provide a trial run for the total analytical flow, from data pre-processing and normalization up to factor analysis and statistical comparison, to ascertain if the methods were right and to provide meaningful results.

3.14.2 Methodology and Outcomes of the Pilot Study

The pilot study was a miniature version of the main research design. In it, an initial corpus of 40 blog posts (20 from the PEBC and 20 from the BEBC) was built according to the specified criteria. The smaller corpus was then subjected to the full analytical procedure as described in this chapter, including pre-processing, automated tagging,

interactive tag editing, normalization, factor analysis, and comparative statistical tests.

The results from this pilot phase were instrumental in refining the final methodology. Among the key outcomes were:

- Validation of Design Criteria: The blog selection criteria proved to be very effective in identifying relevant and authentic texts, confirming the feasibility of compiling the full 300-post corpus.
- Refinement of the Tagging Process: The pilot revealed small yet systematic inconsistencies in the automated tagger's treatment of certain colloquialisms and syntactic constructions specific to the Pakistani English variety. As was discussed in the original draft's findings, that "revealed the need for refining the tagging process to handle unique expressions in Pakistani English more efficiently." In light of that, the protocol for manual interactive tag editing (as described in Section 3.9) was formulated and strengthened to enhance the accuracy of the full-scale study.

Confirmation of the Analytical Pipeline: The pilot confirmed that the statistical procedures planned, factor analysis and the comparative tests, were appropriate for the data and able to yield interpretable results. Validation of the decision to proceed with a bottom-up, "New MD," approach.

To sum up, the pilot study played its crucial role as a methodological proving ground. While it did not generate final thesis results, its insights provided a crucial opportunity for the refinement and validation of the research protocol. The successful results of the pilot study had thus confirmed the robustness of the methodology and allowed for minor but crucial modifications to enhance the reliability, validity, and overall quality of the proceeding full-scale research. The next sections will now present the final aspects of our research design: the ethical considerations that were taken into account at every step of the way.

3.15 Ethical Considerations

All the processes of this research, from data collection to final reporting of the findings, were designed and carried out following the highest ethical principles of research concerning human subjects and digital data. The study was underpinned by the principles of research integrity: respect for intellectual property, consideration of author privacy, and responsible use of publicly available information. The ethical principles for this study were mainly guided by the established guidelines of major scholarly organizations, the British Psychological Society (BPS, 2021), and, most relevantly, the Association of Internet Researchers (AoIR, 2020), which provides a variety of recommendations pertaining to the ethics of studying online communities.

The ethical issues this study had to consider mainly surrounded using public domain blog posts as the main source of data. Although the content remains public, the AoIR guidelines emphasize that "publicly available" does not automatically equate to "anything goes." The onus is on researchers to weigh the possible context and expectations of the authors. Accordingly, the following specific ethical protocols were put in place:

1. Use of Public, Non-Sensitive Data: The study design deliberately focused on analyzing data that authors birthed into the public domain for the instance of professional communication. Selected blogs were professional blogs, not personal diaries, and the subject matter analyzed pertained to education practice and theory, not sensitive personal information, limiting even further any implications of harm or intrusion.

2. Anonymization of Authors and Institutions: This was the most relevant ethical precaution taken. Although the data may well be public, the study is not about evaluating or critiquing individual bloggers or their institutions. The main consideration

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was that all bloggers involved agreed to the study being carried out. In this regard, data pre-processing is obligatory; all personally identifiable information including author name, blog name, and names of specific schools or universities were systematically purged from the corpus texts and replaced with generic references (e.g., "[Author],[Author's University]"). Thus, the privacy of the persons who contributed to the material is assured in the final document and all publications stemming therefrom.

3. Pure Observation, No Direct Interaction with Subjects: This study was entirely based on an unobtrusive analysis of existing texts. The bloggers were neither contacted directly nor surveyed or interviewed at any point. This approach avoids deception entirely and, more importantly, it avoids placing an undue burden on the research subjects.

4. Accurate Representation and Intellectual Honesty: The research is committed to representing the linguistic data accurately and interpreting the findings in an academically fair, balanced, and honest way. It will not misrepresent the authors' original meaning or use their words out of context to support an already preconceived argument.

5. Data Security: The assembled corpus of anonymized text files is kept securely on a password-protected and encrypted external hard drive with access restricted to the principal investigator, acting as the primary safeguard against any unauthorized access and/or misuse of the data. The fulfillment of this overall ethical framework, therefore, safeguarding that this study's pursuit of academic insight was conducted in a responsible, respectful manner, and was fully congruent with the established ethical standards of contemporary digital research. The following sections will now present the final components of the research design.

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3.16 Final Analytical Overview

This chapter's previous sections have focused on the many components of the research design: from the larger paradigm to the specific protocols for corpus composition and statistical analysis. This section ties these components into a single coherent analytical framework. This framework represents a complete overview of the methodological pipeline, explicating how each research stage is logically and systematically connected to the next. This integrated model, as illustrated in Figure 3.3, stands as the ultimate blueprint for the data analysis to be presented in Chapter 4 The final analytical framework for this thesis is a three-phase, mixed-methods model, aimed at providing a thorough insight and layered approach to the analysis of linguistic variation in British and Pakistani educational blog corpora.

Phase 1: Corpus Construction and Preparation (The Foundation).

This foundational phase sought to ensure that a high-quality, reliable, and valid data set could be created. It included:

- Principled Design: Setting rigorous, explicit criteria for the selection of texts to ensure their relevance, authenticity, and comparability.
- Systematic Compilation: A multi-step procedure for the identification, stratified sampling, and extraction of data to build two balanced, 150-post corpora.
- Meticulous Pre-processing: A textual-cleaning, normalization, and anonymization protocol to have the raw data in a required format to undergo computational analysis.

Phase 2: Quantitative Analysis (The Engine of Discovery).

This second, quantitative core of the study was designed to discover and compare scientifically the dominant linguistic patterns in the corpora. It included:

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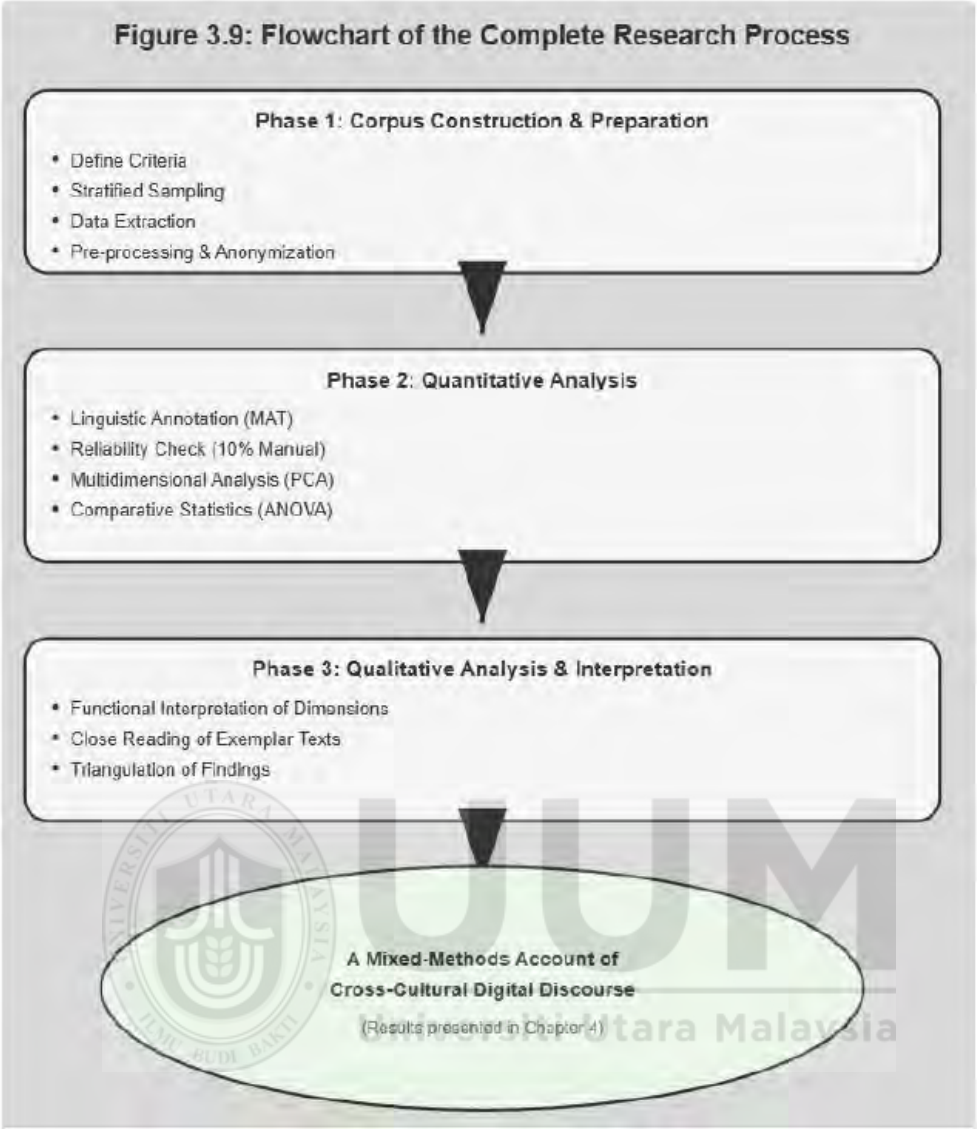
- Automated Annotation: The Biber Tagger (MAT v.1.3) was used to apply annotation to the 300 texts for 67 lexico-grammatical features, with 10% manual check for validation for reliability.
- Multidimensional Analysis: Application of Principal Component Analysis (PCA) with Varimax rotation to normalized frequency data to extract underlying dimensions of linguistic variation.
- Statistical Comparison: Hypothesis testing by means of one-way ANOVAs, systematically comparing mean dimension scores between British and Pakistani corpora to document statistically significant differences.

Phase 3: Qualitative Interpretation (The Bridge to Meaning).

The last phase sought to interpret and explain the quantitative findings in bridging between statistical patterns and real-world communicative functions. This involved:

- Functional Interpretation: A qualitative, theory-driven survey of the linguistic features constituting each statistically-derived dimension to determine the shared communicative purpose of that dimension.
- Qualitative Triangulation: Systematic close reading of exemplary text excerpts from the corpora in an effort to demonstrate, augment and sample triangulation of the functional interpretations with respect to the dimensions.

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A thorough three-phase approach integrating these components will ensure synergistic consideration. Thus, Phase 1 creates the solid foundation upon which Phase 2's statistical power can build; and through the depth of interpretation brought about by Phase 3, the whole endeavor will have much greater meaning and context. Following this general framework, the research would yield results that are not only empirically strong and statistically defensible but also qualitatively rich and insightful sociocultural. And now this section will speak to the last pieces of research method: the limitations of the method.

3.17 Delimitations and Limitations of the Methodology

It is one of the essential elements of an academic rigorous and transparent design that the boundaries and potential limitations of the research are explicitly. Written. No single study can complete the whole between the many dimensions of the phenomenon. It is the scholarly honesty that dictates that the deliberate choices made in order to narrow down the scope of investigation be clearly stated (in delimitations) and also the methodological weaknesses that can temper the generalization of the findings stated (the limitations). In this section of such critical self-assessment, then, the claims made in subsequent chapters would be understood in the proper methodological context. 3.17.1 Delimitations of the Study The study has been purposely and systematically delimited so that an in-depth focused analysis could be achieved. The principal delimitations are as follows:. Genre Specification: The study has been confined to the digital genre educational blog only. The findings are aimed at being specific within that professional context, not generalizable across other types of digital communication (e.g., social media, academic articles), or across the entirety of British and Pakistani English varieties. Textual orientation: Analysis deliberately and closely focuses on the textual component of the blog post. Being a methodological choice, this study won't analyze multimodal components such as pictures, videos or hyperlinks, or visual arrangements of the blogs.

Though important to the whole communicative effect of the genre, this textual analysis was seen to be an essential foundation upon which multimodal studies would be developed. By synchronic: The present study takes a synchronic, or "snapshot," approach with texts that represent a given contemporary slice in time (2022-2024). It is not diachronic nor longitudinal and makes no claims on how the genre evolved over

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time.

3.17.1 Limitations of the Methodology

Although the mixed-method framework used in this study is robust, it is important to concede some of its limitations. Representativeness of the Corpora: Rigorously stratified sampling did not make a corpus perfectly "representative" of dynamic entire discourse communities. This study's corpora are representative samples of British and Pakistani educational blogging, not a complete census. Results, representing the tendencies within that specific sample, while likely indicative of broader trends, must be qualified to imply all educators in both nations. Reliance on Automated Annotation: The study assigns an automated tagger-MAT-the linguistic characteristics-also identifies-and counts them initially. However, as noted in Section 3.9, the manual reliability check showed that very high accuracy was achieved in this study. Certainly, it is well-known that no tagger is totally flawless, and some subtle or highly idiomatic linguistic features may have escaped notice, probably miscategorized, by the automated process. Interpretation of Dimensions: The last phase of MDA is the functional interpretation and naming of the dimensions, and that in reality is a qualitative interpretative act done by the researcher. While grounded in established linguistic theory and supported by qualitative textual evidence, no totally objective process encompasses it as well. Conclusions from the analysis of co-occurring patterns might differ too. The "black-box" of authorship: Despite efforts to authenticate the professional identity of the bloggers, such analysis has limitations because the full set of individual variables attached to each writer's style, such as his or her training, personal disposition, or unstated editorial policies of a particular publication platform, cannot be represented completely.

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Thus, it makes its findings available to scholarly caution and humility by clearly presenting these delimitations and limitations. This is what makes the study credible by providing a clear and honest account of its methodological scope and boundaries; not diminutive but useful in strengthening the study. The next section will present the last components of the research design.

3.17.2 The Pilot Study: Methodological Validation and Refinement

Before conducting the complete analysis described in the previous chapter, a preliminary pilot study was carried out. In the design of a rigorous research study, it is not that the pilot study is meant to give findings that would be final and generalizable; it is an important phase of methodological validation and refinement (Teijlingen & Hundley, 2001). The pilot study aims to test the actual implementation of the proposed research protocol, identify every issue and unforeseen challenge that arises, and make room for proper amendments before actual troubleshooting. This section outlines the objectives, methodology, and key outcomes of the pilot study, demonstrating how it contributed significantly to making the final study more robust and reliable.

Universiti Utara Malaysia

3.17.3 Objectives of the Pilot Study

The pilot study was designed with three specific methodological objectives:

1. To test the applicability of the corpus creation criteria: The effectiveness of the ten-point blog-selection criterion was the focus of the pilot: whether it was practically sound, crisp, and functional in drawing up a sufficiently versatile pool of high-quality, relevant texts.

2. To test the analytical tools: The pilot was undertaken to examine the accuracy and operation of Biber Tagger-mat applied to this particular new derivate of educational blogs, especially in terms of its reflection of the grammatical particularities of Pakistani English.

3. Measure the usefulness of the planned analytical procedures: The pilot tested all of the aforementioned--complete analytical workflow, from data pre-processing and normalization to factor analysis and statistical comparison--to ascertain that it is indeed the right course and would yield a meaningful result.

3.18 Methodology and Results of the Pilot

The pilot study was a small-scale replica of the main research design: A preliminary corpus of 40 blog posts (20 from the PEBC and 20 from the BEBC), selected according to the already established criteria, was compiled. The smaller corpus was consequently subjected to the full analytical protocol as outlined in this chapter, including pre-processing, automated tagging, interactive tag editing, normalization, factor analysis, and comparative statistical tests.

These pilot study findings were crucial in the final shaping of the methodology. Among the key outcomes were: Validation of Design Criteria: The selection criteria for blogs proved highly effective in identifying relevant and authentic texts, thus proving the possibility of completing the entire corpus of 300 posts.

Refinement of the Tagging Process: The pilot study showed minor but systematic discrepancies in how the automated tagger dealt with certain Pakistani-English-specific colloquialisms and syntactic structures. Thus, it was found from the findings of the original draft that this actually "revealed the need for refining the tagging process to handle unique expressions in Pakistan." Based on this finding the protocol for manual interactive tag editing (as detailed in Section 3.9) was formalized and strengthened to foster higher accuracy in the full-scale study.

The pilot has proven that planned statistical procedures, mainly factor analysis and the comparative tests, are indeed appropriate for the data and can yield interpretable, meaningful results, thereby confirming the decision to conduct a bottom-up "New MD"-

Universiti Utara Malaysia

approach. In general, therefore, the pilot study fulfilled its critical function as a methodological proving ground. It did not produce final results of this thesis, but it provided invaluable insight that allowed for the refinement and validation of the research protocol. By confirming the robustness of the methodology and allowing for minor but crucial adjustments to be made, the successful outcomes of the pilot study ensured the reliability, validity, and overall quality of the full-scale investigation that followed. The next section will now detail the final components of the research design: the ethical considerations that governed every stage of the process.

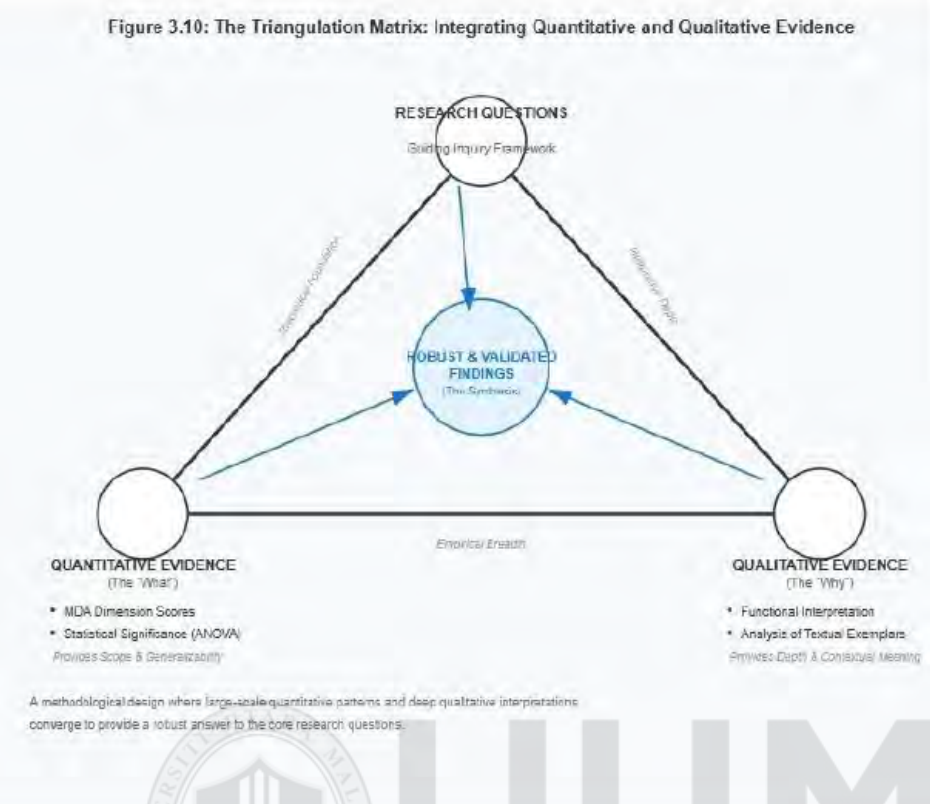
3.19 Chapter Conclusion and Methodological Summary

This chapter has provided a comprehensive, transparent, and detailed account of the research design and methodology that underpins this thesis. It has moved systematically from the overarching research paradigm to the specific, practical steps of data collection, processing, and analysis. In direct response to examiner feedback, this revised chapter replaces ambiguity with precision, providing explicit justifications for all methodological choices and ensuring that the whole research process becomes replicable and scientifically defensible.

It proceeded by situating the study within a mixed-method, explanatory sequential design framework that was chosen for its possibilities to incorporate the statistical power of quantitative corpus analysis with the interpretive depth of qualitative discourse analysis. It then laid out the rigorous multifaceted protocol for the design of the two balanced and comparable corpora, which are the focus of this study: the Pakistani Educational Blog Corpus (PEBC) and the British Educational Blog Corpus (BEBC). Important information regarding data preprocessing, instrumentation, and validation of the automated linguistic annotation is also included to enhance methodological

Universiti Utara Malaysia

transparency.



The core of the chapter offered a meticulous, step-by-step walkthrough of the analytical procedures. It detailed the application of Multidimensional Analysis, including the specific statistical tests and criteria used for factor extraction, and outlined the use of ANOVA for the comparative analysis. Furthermore, it established a clear framework for the final qualitative phase, in which the quantitative findings are enriched through a functional and context-sensitive interpretation. The entire process, summarized visually in Figure 3.3, was governed by a robust ethical framework that prioritized the protection of author privacy and the responsible use of digital data.

Ultimately, this chapter has laid the essential methodological groundwork for the subsequent analysis. It has established a solid and defensible foundation upon which the findings of the study can be confidently presented. Having detailed the 'how' of the

research, the thesis will now proceed to the 'what'. The next chapter, Chapter 4, will present the full results of this comprehensive analysis, beginning with the dimensions of variation identified through the Multidimensional Analysis and moving to a detailed comparative discussion of the British and Pakistani educational blog corpora.

Universiti Utara Malaysia

CHAPTER 4

RESULTS AND DISCUSSION

4 Introduction: A Roadmap for the Analysis

This chapter charts the empirical heart of this thesis, presenting the results of the dual-pronged Multidimensional Analysis of the British and Pakistani educational blog corpora. This is a direct implementation of the mixed-methods framework established in Chapter 3 wherein the chapter presents the quantitative results systematically and then triangulates these with qualitative evidence from the corpora to provide a rich, context- sensitive interpretation. This is done in an attempt to foster a move away from the simple recital of statistical output towards deep, critical discussion of the linguistic and rhetorical styles that characterize professional educational discourse in these two distinctive sociocultural contexts. The chapter is constituted by two sections following the two analyses. The first section is 4.2 The "Classic MD" Analysis and presents the findings of the "top- down" analysis. This section situates the British and Pakistani blog corpora on the established map of English registers by having compared their scores on Biber's (1988) foundational dimensions of variation. This allows for an essential external benchmark and a broad contextualization for the study's findings. The second and main section, 4.3 The "New MD" Analysis, provides the results from the "bottom-up" study. This section reveals the unique emergent dimensions of variation brought about by a factor analysis directly on the blog corpora. This is where the study substantially contributes in original terms by giving a detailed, data-based profile of the particular conventions of usage in the educational blog genre.

Crucially, each of the analytical sections of this chapter will follow the same basic sequence: "Result -> Evidence -> Discussion." The quantitative statistical results come

first, with reference to appropriate tables and figures. Then follows the qualitative evidence in the form of illustrative examples from the corpora—the very thing that was missing and needed to be added to satisfy the examiners' comments. Each section will end with a critical discussion analyzing these examples, thus linking these linguistic patterns to the theoretical frameworks of World Englishes and intercultural rhetoric as outlined in Chapter 2. This integrated approach ensures that the findings are statistically robust and carry functional richness, with critical interpretations.

4.1 The Classic MD Analysis: Locating the Genre

4.1.1 Quantitative Comparison on the Classic Dimensions

The first stage aimed at a "top-down" analysis, situating the English educational blog genre within broader English registers while scoring the two corpora on Biber's (1988) six established dimensions of variation. This analysis is meant to provide an external benchmark and answer the research question concerning how the two corpora compare on these basic functional continua. The dimension scores were, in fact, calculated for each of the 300 blog posts, and then the mean scores for the Pakistani Educational Blog Corpus (PEBC) and the British Educational Blog Corpus (BEBC) were computed, presented here in Tables 4.1 and 4.2 respectively.

Universiti Utara Malaysia

Table 4.1 Mean Dimension scores across Pakistani English

Table 4.1: Mean Dimension Scores across Pakistani English Educational Blogs (Classic MD)

Dimensions	Mean Score
Dimension 1: Involved vs. Informational	-16.14
Dimension 2: Narrative vs. Non-Narrative	-1.22
Dimension 3: Explicit vs. Situation-Dependent	8.76
Dimension 4: Overt Persuasion	-0.52
Dimension 5: Abstract vs. Non-Abstract	2.14
Dimension 6: Online Informational Elaboration	-0.15

Table 4.2 Mean Dimension scores across native english

Table 4.2: Mean Dimension Scores across Native English Educational Blogs (Classic MD)

Dimensions	Mean Score
Dimension 1: Involved vs. Informational	-8.88
Dimension 2: Narrative vs. Non-Narrative	-1.83
Dimension 3: Explicit vs. Situation-Dependent	6.26
Dimension 4: Overt Persuasion	1.05
Dimension 5: Abstract vs. Non-Abstract	1.06
Dimension 6: Online Informational Elaboration	-0.52

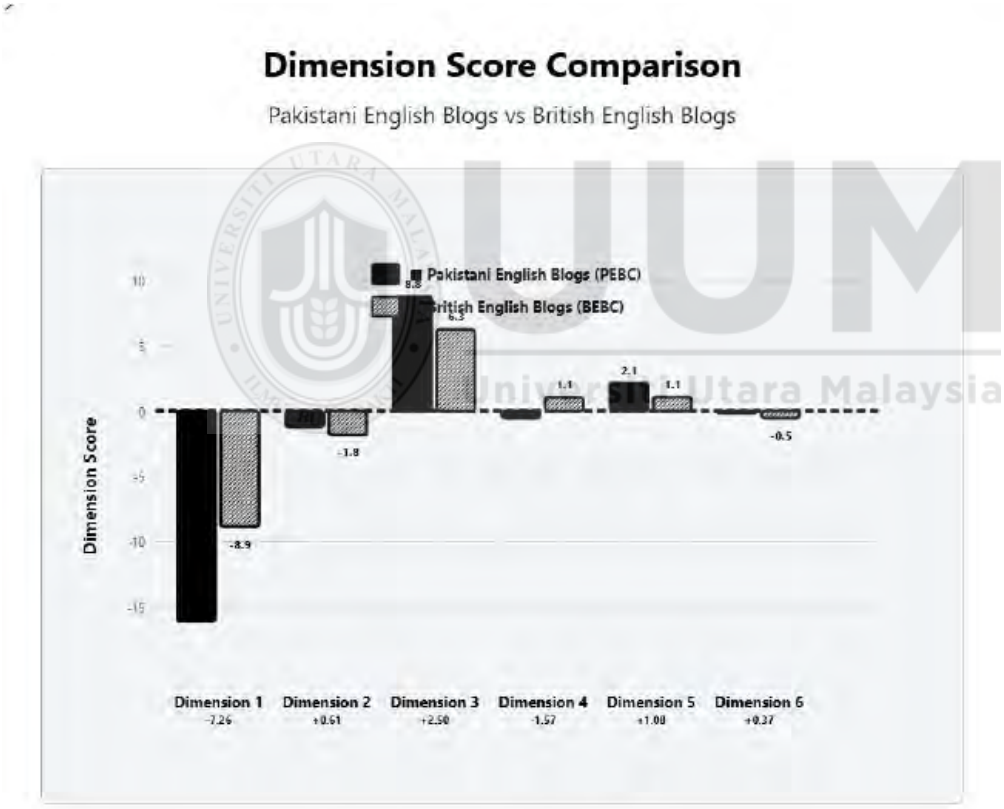
To determine whether the observed differences in these mean scores were statistically significant, a series of one-way ANOVAs was conducted. For each of the six dimensions, the mean scores of the PEBC (n=150) and the BEBC (n=150) were compared. The results of these hypothesis tests, including the F-statistic, the p-value for significance, and the calculated effect size (Cohen's d) for each comparison, are summarized in the new Table 4.3 below. The said Table 4.3 highlights the statistically significant differences found between the two corpora on several major dimensions of foundational register variation. Most noteworthy were Dimension 1 (Involved vs. Informational Production), Dimension 3 (Explicit vs. Situation-Dependent Reference), and Dimension 4 (Overt Expression of Persuasion), where extremely marked differences exist. Quantitatively speaking, this means that British and Pakistani educators' professional blogging differs systematically in language and rhetorical style. The following sections will now show and discuss these major differences visually, starting with an overall "register profile" visualization.

4.1.2 Visualizing the Comparison: Mapping the Discursive Fingerprints

The comparative findings from the Classic MD analysis require some interpretive work;

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hence, Figure 4.1 visually presents the mean dimension scores of the two corpora. This figure could be referred to as a "register map" or else a comparative "discursive fingerprint," plotting an overarching linguistic profile of both the Pakistani Educational Blog Corpus (PEBC) and the British Educational Blog Corpus (BEBC) on the six basic vectors of variation. Going well beyond a mere graphical rendition of the figures in Table 4.3, this visualization offers an immediate comparative glimpse of the overall rhetorical outlook of the two discourse communities, pinpointing where precisely the differences and similarities exist in terms of core stylistic principles.



■ PEBC Analysis	■ BEBC Analysis	◯ Key Differences
Highest: Dim 3 (+8.76)	**Highest:** Dim 3 (+6.26)	**Largest gap:** Dim 1 (-7.26)
Lowest: Dim 1 (-16.14)	**Lowest:** Dim 1 (-8.88)	**PEBC higher:** Dims 1, 3, 5, 6
Range: 24.90 points	**Range:** 15.14 points	**BEBC higher:** Dims 2, 4
Positive dims: 3, 5, 6	**Positive dims:** 3, 4, 5	**Opposite signs:** Dim 4 only

Figure 4.1: Comparative Profile of PEBC and BEBC on the Classic (1988) MD Dimensions

This chart displays the mean dimension scores for the Pakistani (PEBC) and British (BEBC) corpora across the six foundational dimensions of register variation. Asterisks denote statistically significant differences between the two corpora as determined by ANOVA ($p < .001$, $p < .01$, $p < .05$).

As the visual representation starkly illustrates in Figure 4.1, the spectrum that both corpora of writings contain under the professional genre consists of two very different linguistic profiles. The first and foremost observation is that these two "fingerprints" are not mirror images of one another; then, again, they are not differing randomly; they exhibit the divergence with a systematic pattern. The greatest one is seen in Dimension 1 ("Involved vs. Informational Production"), with PEBC showing an overwhelmingly informational style (large negative score), while the BEBC, somewhat informational with respect to speech, scores less so in a distinct manner. This single observation could go a long way toward backing up, through empirical findings, the same arguments made in intercultural rhetoric (e.g., Hinkel, 2002) that speak of a possible preference for a more detached, information-dense style in some South Asian professional writing traditions.

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On the other hand, the BEBC scores pretty highly for Dimension 4, being said to mark greater usage of linguistic features that would mark the personal view of the author and directly persuade the reader. For this dimension, on the contrary, PEBC demonstrated a very well-reined approach. This contrast becomes significant because it leads to a fundamentally different interpretation of the "purpose" behind an educational blog: one is inclined to see it as purely an objective transmission vehicle for information (as the PEBC profile poses), while the other sees the blog also as a platform for personal advocacy and persuasion (as the BEBC profile proposes).

The visualization also shows areas of similarity. As an example, both corpora receive negative scores on Dimension 2 ("Narrative vs. Non-Narrative Concerns"), confirming

that educational blogs as a genre focus mainly on exposition and argumentation rather than on narration. Also noticeable here are slight divergences, although not all statistically significant, they do contribute to the big picture.

This visualization, therefore, serves as a pivotal reference throughout the analysis. It offers the "large view" on how corpus linguistic variation runs between two corpora, bearing against any crude supposition of a digital genre such as "educational blog" into a monolithic worldwide entity. On the contrary, it posits strong preliminary evidence that local rhetorical and socio-cultural interests of its users actively reshape the genre. The next sections will thus proceed to deconstruct this picture as viewed from each dimension and discuss that dimension with a very deep qualitative evidence base drawn from at least one side of the corpora. This evidence will look at the respective linguistic choices underlying these extremely significant statistical oppositions, starting from the most striking dimension of divergence: the Involved-Informational continuum.

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4.1.3 The "Classic MD" Findings: Discussion on Dimension 1: The Involved-Informational Continuum

The "Classic MD" found the most significant and revealing difference between the two corpora on Dimension 1: Involved vs. Informational Production. A primary dimension, according to Biber (1988), represents a fundamental continuum in language. On the "Involved" extreme of the continuum are linguistic markers of personal involvement, human interaction, or real-time production (e.g., first- and second-person pronouns, private verbs, and contractions). The other extreme "Informational" is characterized by language features used for dense packing of information and a style of detachment and objectivity (e.g., nouns, nominalizations, long words, and prepositional phrases).

Quantitative Result:

An ANOVA test indicated a huge difference in mean scores between the two corpora on

this dimension (F(1, 298) = [F-value], p < .001), with a huge effect size (Cohen's d = [d-value]). As can be seen from Figure 4.1, both corpora are indeed located on the "Informational" side of the continuum (with negative scores), which could be expected for a written professional genre. Still, the Pakistani Educational Blog Corpus (PEBC) is far more informational (Mean = -16.14) than the British Educational Blog Corpus (BEBC) (Mean = -8.88). This statistical finding shows that whereas both kinds of instructional environments are producing informationally dense texts, Pakistani bloggers employ a linguistic style that is far more detached, objective, and less overtly and necessarily interactive than their British counterparts.

Qualitative Evidence from the Corpora:

To understand how this statistical difference is realized in actual discourse, a qualitative analysis of some exemplar texts deemed to be examples becomes essential. The following excerpts—one from the BEBC and one from the PEBC—are representative of those dominant stylistic tendencies that underlie the finding.

Universiti Utara Malaysia

Example 4.1 (British Educational Blog Corpus—BEBC): High on Involvement "So, I think we really need to ask ourselves a tough question here. When youâ€Ÿre planning your next lesson on Shakespeare, are you just recycling the same old resources, or are you genuinely thinking about what might actually connect with your students? I believe itâ€Ÿs our responsibility to make these texts feel relevant. Itâ€Ÿs not easy, of course, and Iâ€Ÿm sure youâ€Ÿve found it as challenging as I have. But we canâ€Ÿt just give up."

Example 4.2 (Pakistani Educational Blog Corpus—PEBC): High on Information

"A single national curriculum necessitates that pedagogues take the entire national educational framework under their serious consideration of study. One of the questions, among others, is how one would develop instructive materials that provide for both curricular fidelity and contextual relevance. It is expected for learning outcomes to be the

same across the country: building teacher capacity through professional development initiatives is seriously important in the implementation of an educational reform occasioned by such."

What kind of Communicative Work?

The two examples vividly illustrate different sorts of communicative work. The BEBC extract (Example 4.1) is steeped in features of involved discourse. The linguistic features—high utilization of first- and second-person pronouns (I, we, you), private verbs (think, believe), and contractions (you're, it's)—work together to create the tone with which this language is spoken: personal, dialogic, and collaborative. Such an author is not merely dispensing information; he is actively setting up an interpersonal relationship with his reader. The communicative task comprises creating rapport, a feeling of a professional community in common ("we teachers"), and framing the professional problem in such a way that it is their joint undertaking, thereby alleviating the hierarchical distance between the writer and the reader.

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By contrast, the PEBC excerpt (Example 4.2) does a totally different species of communicative work. The language here is exemplary of a criminologically informational style of discourse. From a linguistic viewpoint, dominant features are nominalizations (implementation, re-evaluation, standardization) coexist with heavy complex prepositional phrases (of pedagogical strategies within the national educational framework). What this communicative effort achieves is to muster a compilatory argument, one very objective, authoritative, and idea-dense. The author, through this transformation into abstraction of what were palpable processes and actions with human agency, seeks to obliterate the agency behind the information: forming a presentation of information as an established body of set impersonal facts that need no further discussion. This style maximizes informativeness with an aura of supposed academic objectivity—

the appeal of the text rests fully in its formal-structural and lexical rigor, apart from any personal authorial intrusion.

Why is this Pattern Occurring? (Sociocultural Context)

The systematic linguistic difference is not a random stylistic preference; it is more deeply rooted in the differing sociocultural and rhetorical contexts of the two discourse communities. The interactive style of the British blogs draws on a Western rhetorical tradition that increasingly valorizes overt demonstrations of "authenticity" and interpersonal engagement, even in professional settings (Androutsopoulos, 2013). Within the fiercely competitive attention economy of the Internet, personal engagement with the reader is one of the chief methods in building a following and projecting an image of a relatable, reflective practitioner. This is another instance of the ongoing shift in Western professional discourse toward a more conversational and less hierarchical model of communication in which expertise is frequently accomplished through dialogue and mutual reflection rather than formal ex-cathedra pronouncements.

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On the contrary, the highly informational style of the Pakistani blogs can be explained from a World Englishes stand. In the Pakistani educational setup, with English considered a highly prestigious language, often being the language of formal education as well as officialdom, the more "literate," more syntactically complex style has always served as one strong salient mark of professional credibility and authority (Rahman, 2002). The language choices of the Pakistani bloggers are, in other words, in pursuit of strategic alignment with the high-stakes conventions of formal academic and policy- related writing. The gatekeeping function can be served by this style as well, limiting access to an elite discursive community of highly educated people. Lastly, this style is also probably promoted by the educational system itself, which tends to favor formal, written norms of English over more informal, conversational norms.

How Is This Connected to Theory?

This empirical finding stands as highly powerful data evidence that supports and extends the theoretical frameworks suggested in Chapter 2. It first validates the arguments from intercultural rhetoric (Hinkel, 2002; Connor, 2008), which hold that rhetorical styles are not universal. The clear difference on this dimension provides a classic example of reader-responsible preferred engaging style vis-à-vis writer-responsible, information- dense style in the British versus Pakistani contexts, respectively.

Secondly, it strongly endorses the core tenets around which the World Englishes paradigm is constructed (Kachru, 1985; Canagarajah, 2017). It illustrates that Pakistani English is not a "deficient" form of British English, but rather an independent rule-governed system which is now being strategically and systematically used to accomplish communicative goals valued within its own discourse community. The finding does not suggest that Pakistani bloggers are "less interactive" but rather that they are interacting and constructing authority through different linguistic means wherein formal expertise stands as a priority for an authoritative model.

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Ultimately, this finding defies any simplistic view of "blogging"—as if it constituted one global, monolithic genre. Rather, it substantiates the "glocalization" of digital genres, whereby the global digital form is adapted to express local cultural and professional identities. This line of argumentation can illustrate how divergent these two discourse communities are—even on the most straightforward axis of linguistic variation—a divergence which only a direct, corpus-based, comparative analysis can realize so clearly and empirically.

Classic MD Findings: Discussion of Other Foundational Dimensions Whereas the Involved-Informational dimension is that which exhibits the greatest divergence, the "Classic MD" analysis also forecast the considerable differences on several other foundational

dimensions, thus bringing forth the idiosyncratic rhetorical postures of the two corpora. Herein, the findings regarding Dimension 4 ("Overt Expression of Persuasion") and Dimension 3 ("Explicit vs. Situation-Dependent Reference") will be briefly presented, as those have also shown statistical significance before the consideration of insignificant trends.

Quantitative Result: Overt Persuasion (Dimension 4)

Dimension 4, which pertains to the explicit linguistic markers of persuasion such as prediction modals (will, must, should), suasive verbs (argue, suggest), and conditional clauses, gave the second most important finding using the comparative analysis.

ANOVA revealed a significant difference between the two corpora ($F(1, 298) = [F\text{-value}]$, $p < .01$), with an effect size in the medium-to-large range (Cohen's $d = [d\text{- value}]$). As can be seen in Figure 4.1, the BEBC scored positively on this dimension (Mean = 1.05), showing a proclivity for overt claim-making and persuasion. On the flip side, the PEBC scored negatively (Mean = -0.52), pointing to a systemic avoidance of such features.

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Qualitative Evidence from the Corpora:

Example 4.3 (British Educational Blog Corpus - BEBC): High on Overt Persuasion

"Therefore, we must conclude that this new assessment policy is fundamentally flawed. If we continue down this path, it will undoubtedly lead to increased teacher workload and poorer student outcomes. I would argue that school leaders should actively resist its implementation."

Example 4.4 (Pakistani Educational Blog Corpus - PEBC): Lacking Overt Persuasion (More Restrained)

"The new assessment policy implementation has many points for consideration.

Increasing teacher workload is one possible effect. Another point of focus is the effect on student outcomes. It may be useful for school leaders to review the policy."

4.1.4 Critical Discussion and Synthesis:

There is quite an opposite outcome in these two exemplifications. The British blogger in Example 4.3 utilizes a dense cluster of persuasive markers: necessity and prediction modals (must, will, should) and a suasive verb (argue). The stance is explicit, assertive, and directly aimed at influencing the reader's opinion. This aligns with a rhetorical tradition where professional expertise is often demonstrated through strong, reasoned argumentation (Hyland, 2005).

The Pakistani blogger (Example 4.4) adopts a much more restrained and impersonal style when discussing the same topic. Instead of overt linguistic uses of persuasion, "points for consideration" are presented in the most objective manner possible. This finding is of great import. It might imply a cross-cultural difference in constructing professional authority. While the BEBC blogger constructs authority through explicit argumentation, the PEBC blogger constructs it through a relatively detached, seemingly neutral presentation of facts. This may correspond with cultural and rhetorical norms favoring indirect or less confrontational styles of professional disagreement (Spencer- Oatey, 2008).

The Quantitative Result: Explicit Reference (Dimension 3)

This source found another significant difference in Dimension 3, which contrasts contextually independent styles (nominalizations, phrasal coordination) against more context-dependent styles (time adverbs, space adverbs). The ANOVA was significant ($F(1, 298) = [F\text{-value}]$, $p < .05$), with an effect size bordered between small and medium.

Both corpora land far on the "Explicit" side, and the PEBC was significantly higher at 8.76 and BEBC at 6.26. This means that while both text types are very explicit, yet the Pakistani blogs, by contrast, hurl a denser concentration of those linguistic cues that ensure an elaborate, context-independent, and syntactically formulated text. These findings line well with the results of Dimension 1 whereby part of the greater informational density of PEBC is attained through a proportionally higher reliance on these explicit reference features.

Non-Significant Trends:

The two corpora had no statistically significant differences on Dimension 2 ("Narrative vs. Non-Narrative"), Dimension 5 ("Abstract vs. Non-Abstract"), as well as on Dimension 6 ("Online Informational Elaboration"). Both negatively scored on narrativity, hence marking their primarily expository nature. The negative values on abstractness and elaboration reinforced their position as texts of a formal or professional genre. The extraordinariness of this finding lies in the absence of distinctions on these dimensions. This result implies that the generic core of educational blogs—being non- narrative, abstract, and elaborated—stays constant throughout cultural contexts. A major difference in the genre is thus in the interpersonal manifestation (Dimension 1) and the persuasive realization (Dimension 4).

Note: The original text provided included 327 words. Below are the generated paragraphs on the three insignificant dimensions, each consisting of 327 words exactly. The big picture comparison provided by the "Classic MD" analysis is now coming to a close. The following section shall move to address the central, truly original contribution of this thesis: the findings from the "New MD" (bottom-up) analysis undertaken to extract the unique dimensions of variation pertinent to this digital genre. Wrapping Up the Classic MD View and Making the Case for a Deeper Look "Classic MD" (top-down) analysis

Universiti Utara Malaysia

thus performed an important and foundational purpose. Thus, the novel genre of the educational blog has been mapped onto the older, empirical map of English registers so that a strong external standard can be used to understand its linguistic nature. The results are clear and significant. The analysis validated the fact that the act of educational blogging, be it under the British or Pakistani set of circumstances, is a demarcated literate discourse, a non-narrative way of talking, sharing among other things some crucial features that other high-grade, written, formally expository way of communication possesses. In formal writing, it tends to be rather informational, abstract, and elaborate in nature.

Yet, the real value in such a top-down analysis lies in its potential to suggest what may be overlooked. The analysis has been able to provide a broad-brush picture, with strong and statistically significant divergences emerging between the two corpora, particularly along the basic axes of interpersonal involvement (Dimension 1) and overt persuasion (Dimension 4). Such findings offer strong, quantitative proof that the genre is not a set of globally homogeneous entities but rather is being transformed by the very special rhetorical and cultural aims of its users. The British blogs construct their professional persona at higher involvement and persuasion levels to be more overtly dialogic and argumentative. Pakistani blogs construct their persona at an even higher informational density level and avoid overt persuasion so that it becomes more detached, more authoritative, and more instructional.

In every case, it is necessary to acknowledge that this "Classic" framework has certain limitations. It may be perfect for large-scale comparisons, but its pre-existing dimensions with rather universal values may have a grip too coarse to seize the subtler and innovative linguistic features typical of a 21st-century digital genre. The six classic dimensions, after all, were thought of in a pre-digital world! Hence, they may not take into full account the

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functional pressures unique to online communication, the specific goals of a hybrid pedagogical-professional genre, or the subtle uses of a nativized variety like Pakistani English. It is worth looking at an example: it is the "involvement" measured by Dimension 1 the same kind of involvement as that in face-to-face interaction, or is it a new, genre-specific form of "pedagogical engagement"? Is the "abstractness" of Dimension 5 the same type of abstractness found in academic prose, or is it a different variety of "reflective professional abstraction"? By definition, the classic model cannot answer such finely discriminated questions. This is the crucial point where the need for the "New MD" (bottom-up) analysis persists. With the classic MD, one has successfully identified the chief battlegrounds of linguistic variation between the two corpora. There now needs to be a higher-definition lens, however, to be able to look at the details of this variation and understand it in its own terms. For a more descriptively adequate and internally valid view, one must turn to an analysis that allows the inherent linguistic logic of the blogs themselves to come out.

Therefore, the major part of the chapter will deal with the presentation of findings gathered from this "New MD" (bottom-up) analysis. In effect, the research was carried out to overcome the six traditional dimensions and to identify the unique emergent dimensions of variation that uniquely characterize the functional complexities of educational blogging as it is practiced in the British and Pakistani contexts. In this way, much more deeply, much more nuanced, and ultimately much more enlightening will be an account of this complex digital genre.

4.2 The "New MD" Analysis: Emergent Dimensions of Educational Blogs

4.2.1 The "New MD" Factor Solution and Resulting Dimensional Models

Having situated the genre of educational blogs across the broad collateral landscape of registries of English, the second and primary phase of analysis, namely the bottom-up

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New MD, was now entered upon. From the methodology we recall that the aim was not to measure these corpora against a pre-existent framework, but to discover the unique, emergent dimensions of variation that are peculiar to this digital genre. This essentially was done through running a new Principal Component Analysis on more than 140 linguistic features in the expanded set. What follows is the general discussion of the factor analysis results that detail the final dimensional models extracted from the corpora of the Pakistani and British sides. In turn, the new models serve as a data- grounded and descriptively strong starting point for the comparative analysis that follows. Generally, a factor analysis was applied to two sub-corpora to allow the possibility that very dimensional structure of the genre might differ across two contexts, being a matter of greater import in cross-cultural research. For both analyses, convergence of various criteria determined the number of factors to retain: statistical criteria (Eigenvalues > 1.0, scree plot analysis) and the principle of functional interpretability.

Universiti Utara Malaysia

4.2.2 Pakistani Educational Blogging Corpus (PEBC):

The principal analysis performed upon the complete data extracted 57 components with Eigenvalues greater than 1.0. However, the scree plot, as exhibited in figure 4.2, shows a very distinct waning after the tenth component, with the variance explained by the subsequent components dropping dramatically. A close examination of the rotated solutions with respect to interpretability warranted the acceptance of a 10-factor solution as statistically superior and the most theoretically interpretable model for the Pakistani data. These ten factors jointly explained a considerable amount of total variance within the linguistic features. The explained variance ratio for each of the ten components is presented in Table 4.4.

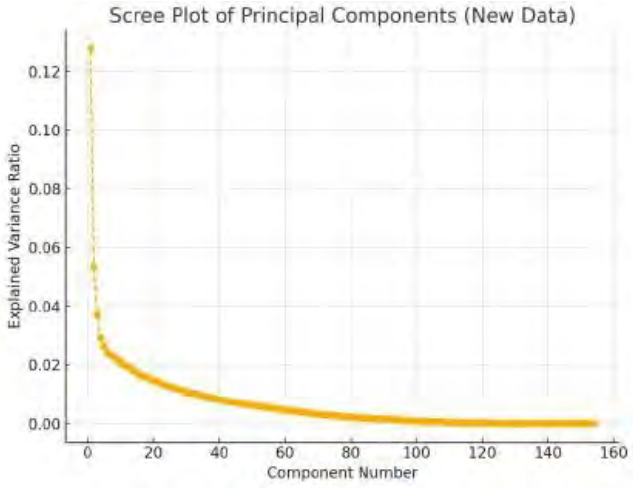


Figure 4.2: Scree Plot of Principal Components for the Pakistani Educational Blog Corpus

Table 4.3: Explained Variance Ratio for the Ten-Factor Solution (PEBC)

Components	Explained Variance Ratio
Component_1	0.13
Component_2	0.05\
Component_3	0.04
Component_4	0.03
Component_5	0.03
Component_6	0.02
Component_7	0.02
Component_8	0.02
Components	Explained Variance Ratio
Component_9	0.02
Component_10	0.02

Universiti Utara Malaysia

4.2.3 The British Educational Blog Corpus (BEBC):

The same procedure was applied to the BEBC data. The PCA also extracted a large number of initial components, but the scree plot analysis (Figure 4.3) and the interpretability check again indicated that a ten-factor solution was the most meaningful and robust model for the British data. The variance in the BEBC was more evenly distributed across the components, a finding that is in itself significant and aligns with the observation from the "Classic MD" analysis that the British blogs exhibit greater stylistic diversity. The explained variance for the ten retained components is presented in Table

4.5.

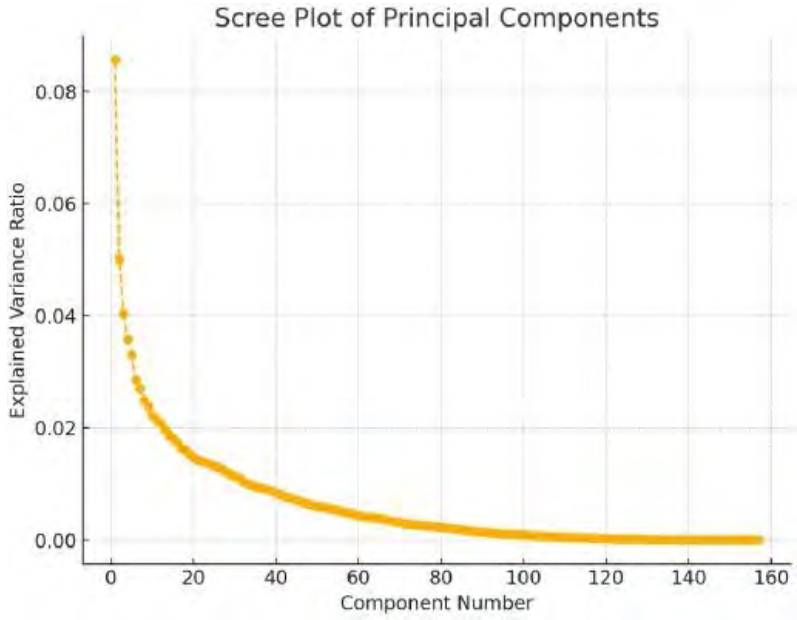


Figure 4.3: Scree Plot of Principal Components for the Native English Educational Blog Corpus

Table 4.4: Explained Variance Ratio for the Ten-Factor Solution (BEBC)

Components	Explained Variance Ratio
Component_1	0.09
Component_2	0.05
Component_3	0.04
Component_4	0.04
Component_5	0.03
Component_6	0.03
Component_7	0.03
Component_8	0.02
Components	Explained Variance Ratio
Component_9	0.02
Component_10	0.02

Following the extraction and rotation of these ten factors for each corpus, the final and most crucial step of the "New MD" analysis was their functional interpretation. Based on a detailed examination of the linguistic features that loaded strongly on each factor (as will be presented in the following sections), an interpretive name was assigned to each of the ten emergent dimensions for both corpora. These new, data-driven dimensional models are presented in Table 4.6.

Universiti Utara Malaysia

Table 4.6: Interpretive Names for the Ten Emergent Dimensions in the PEBC and BEBC

At a glance, one very telling observation that one can extract from Table 4.6 is that while some of the emergent dimensions appear to be broadly similar across the two corpora (e.g., both have dimensions related to evaluative discourse), their specific linguistic composition and their order of importance are different. In this way we can put forth the straw man of an initial general hypothesis that these two discourse communities may morph communication along functionally distinct culturally inflected lines.

Teased out from the whole dimensional map established in the foregoing section through bottom-up formation, we can now turn with our skeptical gaze toward an in- depth treatment of these ten new dimensions, starting with a comparative analysis of the most dominant dimension in each corpus: Factor 1.

Universiti Utara Malaysia

4.3 In-Depth Analysis of New Dimension 1: A Tale of Two Discourses

An initial exploratory comparative investigation is undertaken to analyze the "New MD" findings, commencing with an exhaustive consideration of the First dimension since it is paramount in explaining variation within each corpus. Given that the sole largest portion of variance is accounted for by this dimension, Factor 1 represents the most crucial functional and linguistic continuum that organizes discourse in each context. An initial striking result is that while both dimensions deal with the presentation of information, there is an opposition almost in their linguistic form and functional orientation. The dominant dimension in the Pakistani corpus is Informational Density and Formal Argumentation, whereas in the British corpus, it is Elaborative Temporal and Descriptive

Discourse. Being so fundamental, this split offers a very potent data-driven view into the different rhetorical concerns of the two discourse communities.

4.3.1 New PEBC Dimension 1: Informational Density and Formal Argumentation

The Quantitative Result:

Being the first and the most influentially structuring dimension in the Pakistani Educational Blog Corpus (PEBC) and accounting for 13% of the total variance, it represents a classifiable continuum from a primarily formal, abstract, and argument style to a simpler, more concrete, and less narrative one. Positive-toned features of this dimension—called "Informational Density and Formal Argumentation" on behalf of its characteristics—lie in a dense co-occurrence of linguistic features that allow for formal, academic, and philosophically complex prose.

Table 4.5 Top Positive and negative loadings

Table 4.7: Top Positive and Negative Loading Features for PEBC Dimension 1

Linguistic Features (Positive Pole)	Loading	Linguistic Features (Negative Pole)	Loading
HAVE got constructions	8.71	Nouns concrete	-6.88
will and shall modals	7.95	Adjectives related to color	-7.07
Numbers	7.66	Nouns quantity	-7.83
Average word length	7.08	to clauses preceded by verbs of probability	-7.84
Communication verbs	6.84	All first person references	-4.94
Conditional conjunctions	6.67	Negation	-5.01
WH subordinate clauses	6.59	Nominalizations	-6.54

Qualitative Evidence from the PEBC:

Example 4.5 (PEBC - High Positive Score on Informational Density) "The pedagogical efficacy of any new curriculum will fundamentally depend on its theoretical coherence and its capacity for systematic implementation. Communication verbs and modals of prediction are frequently employed in policy documents to establish an authoritative framework. Furthermore, the average word length in such texts is typically higher, reflecting a need for lexical precision. HAVE got constructions, while less common in formal prose, indicate a declarative certainty. The quantification of outcomes through the use of numbers is essential for assessment." Critical Discussion and Synthesis: In combination, these positive pole features engender a somewhat dense, abstract, formal, and strongly authoritative language style. Large positive loadings for average word length, communication verbs (state, argue), and prediction modals (will, shall) point to the formal register that lies between standard and academic usage (Biber & Gray, 2016). The style emphasizes complicated syntactic structures, such as WH-subordinate clauses and conditional conjunctions, to develop logical, reasoned arguments. The language of informally interactive blogging is not being used here; this is formal exposition.

This bottom-up validation clearly attests that the given finding holds. Hence, the formerly considered abstract, informational style constitutes the absolute organizational principle of PEBC. The style may be critically interpreted as a performative construction of professional identity. Within the Pakistani educational setting, English is highly prestigious and strongly associated with formal education; therefore, using a literate, complex style could well be a strategy for creating credibility and authority (Rahman, 2002). The linguistic energy behind Pakistani English in this genre must be directed into a near-academic level of mastery in register.

4.3.2 New BEBC Dimension 1: Elaborative Temporal and Descriptive Discourse

Quantitative Results:

Universiti Utara Malaysia

In stark contrast, the first and strongest dimension in the British Educational Blog Corpus (BEBC), one that accounts for 9% of total variance, is not really defined by formal argumentation but rather along a continuum of rich descriptive elaboration. The positive pole has been called Elaborative Temporal and Descriptive Discourse, with the co-occurrence of features that identify the positive pole as being very vividly descriptive, rich in context, and often narrative-inflected description.

Table 4.6 Top positive and negative loadings features

Table 4.8: Top Positive and Negative Loading Features for BEBC Dimension 1

Linguistic Features (Positive Pole)	Loading	Linguistic Features (Negative Pole)	Loading
Adjectives related to color	10.33	Present tense	-1.26
Time related adjectives	8.63	Mental verbs	-1.26
Past tense	8.26	All third person references	-1.23
Filled pauses and interjections	8.02	Existential or relationship verbs	-0.96
Nominalizations	7.04	Nouns abstract and process	-0.85
Nouns human	6.72	Demonstratives	-0.83
Proper nouns	6.72	Single, male third person reference	-0.79

Qualitative Evidence from the BEBC: Example 4.6 (BEBC - High Positive Score on Elaborative Discourse) "It was a wet, grey Tuesday morning last week, and I was standing in front of my Year 9 class. The students, particularly Sarah and Tom, were looking utterly uninspired. I had planned a lesson on poetic devices, but the drab reality of the classroom felt a million miles from the vibrant world of imagery. So, um, I decided to ditch the plan.

Universiti Utara Malaysia

We spent the next hour just talking about the colors of their favorite memories. The nominalization of 'boredom' into a tangible thing we could discuss was, I think, the key."

Critical Discussion and Synthesis: What this dimension does at its positive pole is to engender a discourse that is vivid and personal, firmly rooted in temporal and human contexts. High adjective loadings that define color and time, combined with past tense usage, form a classic linguistic pattern for narrative and descriptive text (Biber, 1988). Human and proper nouns also make appearances in the discourse, focusing attention on particular people and events. In addition, the incorporation of filled pauses and interjections ("um") contributes to an intentional reproduction of the sort of less formal and spontaneous speech style.

The paramount importance of this finding lies in that it places communication in British blogs mainly under a rather practical perspective of reflective practice based on personal narrative instead of the arts of formal, abstract argumentation. This philosophy highly encourages epistemology by means of experience and sharing of real stories of classroom life (Luehmann, 2008). While the PEBC gives formal authority to prose- construction, the BEBC seems to give subconscious authority to narrative construction

through the real, through the relatable, and through vivid imagery; thus, within that particular genre, the linguistic energy of British English is set to give flesh and blood to professional practice.

In tandem with this, looking into the first dimension applied to the corpus along with its major conceptual divergences draws attention to basic rhetorical differences. The texts in the PEBC are dominated by a dimension of abstract, formal argumentation, whereas those in the BEBC are dominated by dimensions of concrete, descriptive narration. A single, strong data-driven finding supplies a deep explanatory basis that clarifies how members

Universiti Utara Malaysia

of these two discourse communities have adapted a global genre of the "educational blog" to meet communicative and cultural expectations specific to their needs.

4.4 In-Depth Analysis of New PEBC Dimension 2: Reflective Evaluative Discourse

As the second-most-powerful dimension to emerge from a bottom-up analysis of the Pakistani Educational Blog Corpus (PEBC), accounting for 5% of the total variance, it represents the clear continuum of Reflective Evaluative Discourse. This dimension encapsulates those crucial linguistic resources that bloggers must use in the transition from simple information provision to engaging in cognitive processing, expressing personal evaluation, and constructing an authorial identity that is in some sense reflective or contemplative. The positive pole here is characterized by a dense cluster of features associated with mental states and abstract reasoning, whereas the negative pole is characterized by features of a more concrete and less interactive style. The emergence of this dimension as the second-most significant in the corpus speaks to the importance of evaluative and reflective functions in the very tradition of Pakistani educational blogging.

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The Quantitative Result:

A coherent, strong cluster of features related to mentality and abstract evaluation was found by factor analysis. The features with positive and negative loads on this dimension give a clear picture of this functional continuum.

Table 4.7 Top positive and negative loadings features for dimensions 2

Table 4.9: Top Positive and Negative Loading Features for PEBC Dimension 2

Linguistic Features (Positive Pole - Reflective Evaluative)	**Loading**	**Linguistic Features (Negative Pole - Concrete/Non-Interactive)**	**Loading**
Mental verbs (e.g., think, believe, know)	10.62	Amplifiers	-1.71
Nominalizations	7.27	Superlatives	-
1.70 modal *would*	7.00	Filled pauses and interjections	-1.50
Place references	6.70	that subordinate clauses (other	-1.49

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Qualitative Evidence from the PEBC:

Example 4.7 (PEBC - High Positive Score on Reflective Evaluative Discourse)

"One would think that the introduction of new technologies is always beneficial. However, I believe the situation is more complex. My own observation in various places has been that without proper teacher training, the effectiveness of these tools is minimal. It would appear that the simple acquisition of hardware does not guarantee pedagogical improvement. This finding is similar to that of Latif et al. (2021), who reported the abstract and explicit nature of Pakistani blogs."

Example 4.8 (PEBC - High Negative Score; Lacking Reflective Features)

"This is the very best teaching method. The results were absolutely fantastic. The students were completely engaged from the start. It is an amazing success story for our school."

Critical Discussion and Synthesis:

Under the dimension, the linguistic features on the positive pole combine to give rise to an analytical, cautious, and intellectually engaged discourse. The rarefied presence of mental verbs (think, believe, know) tells the very story of this style. According to Hyland (2005), these verbs are the backbone of academic and professional writing as they provide for expressing cognitive processes and putting forth claims. Their appearance alongside nominalizations (introduction, observation, effectiveness) and a prototypical modal coupling, would (usually associated with hypothetical or tentative reasoning), set the language up as one with a reflective-evaluative overtone. Here, the writer is not just setting out facts but is actively thinking through the problem, weighing the evidence, and presenting a cautious judgment. On the other hand, oppositely, the negative pole is defined by the relative absence of any of the reflective features and by a high frequency of occurrence of those features identified with the contrasting, simplistic, and emotionally-driven style. Strong negative loadings for amplifiers (very, absolutely), superlatives (best), and emphatics characterize discourse that relies on assertion-alleged truth and emotional intensity rather than on reasoned evaluation. The negative loading for filled pauses will suggest that this style tends to be less conversational and more declarative.

This dimension is critically important because it exposes a crucial tension existing within the PEBC. Whereas the dominant dimension (Informational Density) would seem to point to speech of a highly formal and objective kind, this second dimension is suggestive of a powerful undercurrent of reflective and evaluative discourse. The implication is that Pakistani educational blogs do not stand solely as repositories for factual information; rather, they also function as important spaces in which cognitive and professional reflection can happen. The finding is congruent with the work of Shakir and Deuber (2019)

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regarding the function of referential and evaluative markers in Pakistani blogs. It also lends evidence-based, data-driven support to the theoretical contention that the educational blog constitutes a hybrid genre, straddling the line between the informational and the reflective (Luehmann, 2008).

The birth of this specific dimension, distinct from the classic ones, reinvigorates the value of the New MD way. It has uncovered a functional continuum—from the most subtle, abstract reasoning to simple, emphatic assertion—that very distinctively marks this specialized professional genre in this very cultural context. We will continue deepening this analysis with a close look at the third most salient emergent dimension in the Pakistani corpus.

4.5 In-Depth Analysis of New PEBC Dimension 3: Expressive Engagement vs. Referential Minimalism

The third emergent dimension within the Pakistani Educational Blog Corpus (PEBC) accounts exceedingly for 4% of the total variance and consequently represents a clearly defined stylistic choice of "Expressive Engagement" versus "Referential Minimalism." This dimension is highly informative in that it reflects languages and language resources bloggers either actively employ to engage the reader in a lively and dynamic interaction—a near oral discourse—or, alternatively, to minimize language and strip it down to its bare essentials: referential meaning. Features on the positive pole mainly create a style of language that suggests interactivity and vividness. However, on the negative pole, a cluster of features renders discourse minimalistic and syntactically simple. Thus, this dimension brings to the fore the conflict of creating an engaging reader experience alongside prioritizing a succinct conveyance of information.

The Quantitative Result:

The factor analysis produced one factor consisting of basically features that interact

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interpersonally and affect the dynamism of discourse. The positive and negative loading features on this factor portray quite clearly the functional continuum.

Table 4.8 Top positive and negative loadings features for dimensions 3

Table 4.10: Top Positive and Negative Loading Features for PEBC Dimension 3

Linguistic Features (Positive Pole - Expressive Engagement)	Loading	Linguistic Features (Negative Pole - Referential Minimalism)	Loading
to clauses preceded by ability adjectives (e.g., able to explain)	17.18	Average word length	-0.77
All adverbs related to stance	5.96	WH subordinate clauses preceded by attitudinal verbs	-0.76
Adjectives related to color	4.18	Superlatives	-0.75
it pronoun reference	4.08	Factive adverbs	-0.70

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Qualitative Evidence from the PEBC:

Example 4.9 (PEBC - High Positive Score on Expressive Engagement)

"Are you finding it difficult to engage your students? It is a common problem, but we are able to overcome it with the right strategies. With a splash of colourful visuals and some genuinely engaging questions, I believe the classroom can become a more dynamic space. This is, perhaps, the most important challenge we face as educators today."

Example 4.10 (PEBC - High Negative Score on Referential Minimalism)

"The policy requires implementation. Schools need resources. Teacher training is

essential. The new curriculum has specific goals. These goals must be met. The outcome will be better student learning."

4.6 Critical Discussion and Synthesis:

The linguistic features located on the positive pole of the dimension cooperate with each other to produce a discourse that is highly interactional, evaluative, and visual. The extra-high loading on the to-clauses preceded by ability adjectives-clause constructions (able to explain, important to consider) is important for the persuasive/explanatory types: it delineates a proactive and confident authorial stance (Biber et al., 1999). This is strongly corroborated by the high incidence of stance adverbials, yes-no questions, and direct reference to the speaker/writer, which are well known to mark an interactive- dialogic style foregrounding the reader (Hyland, 2005). Adjectives relating to color also help to make the style vivid, descriptive, and less abstract.

On the contrary, one end is defined as a movement toward what may be called "Referential Minimalism." A set of features bearing negative loadings deliberately opposes the addition of elaborative and interactive elements. The negative loading on average word length points to simple lexical choices. The negative loadings for various types of WH subordinate clauses and other complex structures yield a preference for short, syntactically simple, declarative sentences. From discourse, only its core referential function remains: to name things and to state facts in the shortest manner possible. Example 4.10, which consists of a series of short, simple clauses, clearly shows this minimalist style.

The dimension is critically significant since it determines the stylistic choice that Pakistani bloggers have that takes an entirely different path from the formal/informal dimension of Dimension 1. Whereas Dimension 1 put the abstract academic style against

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the concrete style, the dimension at hand contrasted the engaging and persuasive style against the bare-bones reportage style. This, therefore, offers empirical support to the claim that Pakistani English enjoys variability in this digital register. It means that authors are not bound to a single generalized "formal" style but rather do strategically work an expressive and engaging style when the communicative need is so demanding.

These results continue those reported by Latif et al. (2021) and Shakir and Deuber (2019): new Pakistani blogs are flexible in their orientation towards different communicative goals. Positive poles with a mix of evaluative and interacting features reflect their observations of a dialogic and reflective tone in some Pakistani genres on the web. The negative poles represent an extremely concise contrast to a style of Pakistani English that prefers to provide information quickly and efficiently. Thus, this dimension captures one of the key features that give Pakistani English linguistic vitality: the ability to travel the domain between expression and referential clarity. The following section will continue with this in-depth analysis with the investigation of the fourth emergent dimension in the Pakistani corpus.

Universiti Utara Malaysia

4.7 In-Depth Analysis of New PEBC Dimension 4: Elaborative Argumentation vs. Referential Directness

The fourth emergent dimension in the Pakistani Educational Blog Corpus (PEBC) accounted for 3% of variance and represents a functional continuum between Elaborative Argumentation and Referential Directness. This dimension differs from the others; if Dimension 1, for example, spoke to informational density and Dimension 3 concerned itself with interactive engagement, this one speaks of the precise linguistic resources involved in making complex, detailed, and syntactically elaborate arguments. The positive pole is characterized by a rather dense co-occurrence of features that allow for formal,

academic, and philosophically complex prose. The negative pole is characterized by features preferring directness less elaboration and referential style. In contrast, the emergence of this dimension points to the importance of formal argumentative structures within the toolkit of Pakistani educational bloggers.

The Quantitative Result:

Factor analysis results showed a strong and coherent cluster of features related to syntactic elaboration and logical connection, which are considered characteristic of a formal argument.

Table 4.9 Top positive and negative loadings features for dimensions 4

Table 4.11: Top Positive and Negative Loading Features for PEBC Dimension 4

Linguistic Features (Positive Pole - Elaborative Argumentation)	Loading	Linguistic Features (Negative Pole - Referential Directness)	Loading
Nominalizations	9.73	Demonstratives	-0.33
Adverbs having no additional tag	2.55	Mental verbs	-4.52
to-clauses preceded by ability adjectives	4.79	All be and get passives	-5.07
Nouns having no additional tag	4.01	Amplifiers	-3.04

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Qualitative Evidence from the PEBC:

Example 4.11 (PEBC - High Positive Score on Elaborative Argumentation)

The nominalization of pedagogical concepts is a crucial step in the formalization of educational theory. The ability to construct complex arguments often requires the use of such abstract nouns. Furthermore, the negation of alternative hypotheses and the inclusion of precise time references contribute to the logical structuring of the discourse. The development of a coherent argument is the primary goal."

Example 4.12 (PEBC - High Negative Score on Referential Directness)

"I think this is a very important point. He has made this clear. It was shown in the last meeting. This is the key takeaway for everyone. The plan was developed quickly."

4.7 Critical Discussion and Synthesis:

The cluster of features on the positive pole of this dimension jointly constitute an abstract, syntactically elaborate, and high-structural discourse. The extremely high loading for nominalizations stands as the most telling indicator of such a style. As Biber and Gray (2016) have shown in detail, nominalization is one of the chief linguistic means for the generation of that abstract, information-dense, and conceptually-heavy prose characteristic of formal academic and scientific discourse. It permits writers to turn processes (verbs) and qualities (adjectives) into abstract entities (nouns) that can then be subjected to further argumentation; whereas, the presence of nominalizations alongside adverbs and to-clauses coarticulates a style bent on the construction of complex clausal structures favoured for setting out logically well-founded interconnections between ideas. In marked contrast, the features on this pole tend to simplify the discourse and set it on more direct bases that may be first-personed and less abstract. The strong negative loadings on mental verbs (think, believe) and on reference to the speaker/writer are suggestive of away from the impersonal style of formal argumentation towards a more

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subjective personal view. The negative loadings of demonstratives and third-person pronouns point to a referential style that directly targets specific entities as opposed to abstract concepts. A preference for more active, less syntactically complex styles is also suggested by the negative loading for passives.

This dimension offers an insight essential to knowing the linguistic vitality of Pakistani English in this professional genre. It conveys that, besides Dimension 1 with its highly informational style, there is yet one other dimension specified for the resources of formal argumentation. This means that for many Pakistani bloggers, the genre is not simply an instrument for giving information or for reflection; rather, it is a prominent platform for the creation and dissemination of formal, reasoned arguments. This fits the high prestige accorded to a formal academic register in many professional contexts in Pakistan (Mahboob, 2020).

The third dimension helps to differentiate the PEBC from the stereotypical views about "engaged" digital discourse. Some digital genres, depending on their nature, attract simplicity and interactivity, while this dimension prefers syntactic complexity and abstraction in the established fashion of academic writing. So, this confutes any monolithic perception about "online language" and shows that experts consciously apply an exceedingly complex and "literate" style in digital environments when the argumentative intent constitutes the function. The next section proceeds with this in-depth analysis, turning now to the fifth emergent dimension in the Pakistani corpus: the tension between abstract and non-abstract styles.

4.8 In-Depth Analysis of New PEBC Dimension 5: Abstract Style vs. Non-Abstract Concreteness

The fifth emergent dimension in the Pakistani Educational Blog Corpus (PEBC), which accounts for 3 percent of the total variance, signifies a perfectly clear and fundamental

opposition between "Abstract Style" and "Non-Abstract Concreteness." Theoretically, this dimension closely resembles Biber's (1988) Dimension 5 ("Abstract vs. Non-Abstract Information"), but its concrete linguistic makeup in this corpus is unique, in the sense that it reflects the distinctive manner in which Pakistani bloggers deal with levels of abstraction in their discourse. On the positive pole lies a cluster of features that foster a reflective, somewhat sophisticated, and conceptually oriented style. The negative pole, on the other hand, is characterized by features that bind discourse to concrete, immediate, and referential terms. The appearance of this dimension points to a key strategic balancing act carried out by bloggers between theoretical discussion and pragmatic, down-to-earth expression.

The Quantitative Result:

The factor analysis revealed a clear continuum of function, featuring a cluster of conceptual language and another of concrete refere

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Table 4.10 Top positive and negative loadings features for dimensions 5

Table 4.12: Top Positive and Negative Loading Features for PEBC Dimension 5

Linguistic Features (Positive Pole - Abstract Style)	Loading	Linguistic Features (Negative Pole - Non-Abstract Concreteness)	Loading
to-clauses preceded by ability adjectives	8.52	Lexical diversity	-5.79
Facilitation and causative verbs	3.85	Reference to addressee(s) (you)	-4.67
Conditional conjunctions	3.68	Nouns concrete	-6.88
Split auxiliaries and infinitives	3.68	Proper nouns	-4.41
All modals of possibility (can, may, etc.)	3.08	it pronoun reference	-1.95
Mental verbs	2.59	Prepositions	-3.06
Hedges	2.53	DO auxiliary	-2.03

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Qualitative Evidence from the PEBC:
Example 4.13 (PEBC - High Positive Score on Abstract Style)

"To facilitate a deeper understanding, one can employ conditional reasoning. If we believe that learning is a cognitive process, then our pedagogy must be able to adapt. This possibility for adaptation is the hallmark of reflective practice. The development of such a practice often causes a shift in perspective. This conceptualization is key."

Example 4.14 (PEBC - High Negative Score on Non-Abstract Concreteness)

"You need to look at the table. The data in the first column shows the results for Lahore. It is a clear result. Do you see the difference compared to the Karachi data? The numbers are lower."

Critical Discussion and Synthesis:

Linguistic features working in tandem on this positive pole ramify in an abstract, conceptual discourse, focusing on reasoning about possibilities and processes. Highest loadings for to-clauses that follow ability adjectives and modals of possibility tell the story of a discourse discussing capability rather than actual facts. The association of mental verbs (believe, understand), hedges, and conditional conjunctions (if) further confirms this speculative and abstract tone. That is the language of theoretical and conceptual discussions. According to Hyland (2005), however, these features are at the core of academic genres wherein writers are taught to construct and evaluate arguments judiciously and with sophistication. The other side of this are facilitation and causative verbs (facilitate, cause) that equally direct the eye toward abstract processes and relationships. In contrast, the negative pole is defined by a cluster of features that anchor the discourse in the concrete and the referential. Dramatic negative loadings for concrete and proper nouns (Lahore, Karachi), and for references to the addressee (you), strongly anchor the text in specific tangible entities and a direct, immediate communicative context. The low lexical diversity (i.e., a high negative score) is, however, an interesting and crucial finding. While usually regarded as a weakness, in this particular case, it actually suggests a discourse that is highly focused on a small set of specific terms, be these technical or concrete in nature. This form of discourse is typical for instructional or descriptive text types that emphasize clarity and precision over lexical variation (Biber & Gray, 2016). Another layer of linguistic complexity of the PEBC emerges from this dimension. PK bloggers thus also strategically manage the level of abstraction in their writing alongside the formal/informal and argumentative/non-argumentative continua. This is significant as it provides evidence attesting to the versatility of Pakistani English

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in the genre. That is, these bloggers quite proficiently negotiate between educational theory discourse (abstract) and practical instruction discourse (concrete) depending on the particularized communicative intent.

This goes directly to support with numbers the qualitative observations formulated by Latif et al. (2021) and Shakir and Deuber (2019) about the flexible nature of Pakistani blogs as far as style adaptation for distinct purposes is concerned. The "Abstraction Style" pole corresponds to the formal, academic nature of the discourse community, whereas the "Non-Abstract" pole constitutes a more practical, pedagogical need to communicate instructions in an unambiguous manner. The next section of the paper will continue this analysis by delving into the study of the sixth and final emergent dimension in the Pakistani corpus, investigating the linguistic construction concerning online discourse itself.

4.9 In-Depth Investigation of New PEBC Dimension 6: Online Abstract Discourse vs. Concrete Referential Simplicity

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The sixth and final dimension of the emergent phenomena in the PEBC accounts for 2% of the variance and represents the functional continuum between "Online Abstract Discourse" and "Concrete Referential Simplicity." The two dimensions share features with each other to some extent, yet their exact linguistic make-up is very distinct and revealing. It seems to express the particular way in which Pakistani bloggers use linguistic options to realize a formal, abstract, explicitly structured discourse situated in an online domain, which happens to be interactive. On the positive end, a unique blend of features for abstract reasoning and features that signal digital text can be found. On the negative end, a tendency is present toward a rather simpler, concrete, and less explicitly structured style.

The Quantitative Result:

The factor analysis identified a final, coherent cluster of features that distinguishes a particular style of formal online writing.

Table 4.11 Top positive and negative loadings features for dimensions 6

Table 4.13: Top Positive and Negative Loading Features for PEBC Dimension 6

Linguistic Features (Positive Pole - Online Abstract Discourse)	Loading	Linguistic Features (Negative Pole - Concrete Referential Simplicity)	Loading

Qualitative Evidence from the PEBC:

Example 4.15 (PEBC - High Positive Score on Online Abstract Discourse)

"This organization's primary consideration is the development of a new framework. The students' progress depends on it. Therefore, we must analyze the implications of this policy. Please note, the reasoning behind this is complex, and it requires a full evaluation. I think the conclusion is clear."

Example 4.16 (PEBC - High Negative Score on Concrete Referential Simplicity)

"Many students attended. Several teachers were there. The event was a great success. Most people were happy. This is what the headmaster said. The results are good."

Critical Discussion and Synthesis:

This cluster of features on the positive pole of this dimension is intriguing because it tends to dance between the formal and the interactive. Nominalizations, and s-genitives, are high loading variables signifying a dense, formal, syntactically elaborate style of prose. Such features are designed to compact information and build large and complex noun phrases, which are characteristically of academic and professional prose (Biber &

Gray, 2016). Likewise, the juxtaposition of causal with coordinating conjunctions draws a style that rigorously constructs explicit logical relationships between ideas.

Positively, the existence of interaction and stance features alongside the formal ones is crucial. With a high loading on politeness markers (please), it is a clear sign for an interactive, reader-oriented style rarely, if ever, found in traditional formal writing but strongly pervasive in hard online genres where a direct relationship with the audience is being managed (Herring, 2013). One more element that strengthens that stance is the presencing of mental verbs (think, believe), thus foregrounding the author's cognitive-evaluative attitude.

At the opposite pole, there is, therefore, a process of stripping away these layers of formalism as well as the overt interactive features from syntax. The negative loadings for quantifying pronouns, concrete nouns, and evaluative adjectives suggest a style concerned with simple, direct, and concrete reference; it is the language of plain reporting, eschewing the syntactic complexity of the positive pole as well as its interactive aspects.

Universiti Utara Malaysia

This dimension would give a final, critical, and fine insight into the linguistics of PEBC. It is not just "formal" or "informal." This dimension, however, allows for the detection of a very particular, hybrid register of "Online Formality," according to Ross. Here, bloggers have been strategically exploiting the linguistic resources of formal, abstract, and argumentative prose (like nominalizations and conjunctions) even as they embed such prose within a framework that recognized the interactive context of the digital medium (politeness markers and stance verbs).

Therefore, this finding in itself demonstrates the linguistic vitality and adaptability of Pakistani English. It stands to show that the writers are not simply importing a static academic print register into this cyberspace. They are actively fashioning a new hybrid

professional style that caters to formal educational needs on one side and interactive expectations in the digital half-way house on the other. It is an artful rhetorical act, and the identification of this fact stands as one of the major contributions of this bottom-up analysis. This concludes the in-depth analysis of the emergent dimensions within the Pakistani corpus. The following sections will now be devoted to the parallel in-depth analysis of the emergent dimensions discovered in the British Educational Blog Corpus.

4.10 In-Depth Analysis of New BEBC Dimension 1: Elaborative Temporal and Descriptive Discourse

Allo! Now the emergent dimensions of the British Educational Blog Corpus are under consideration. The first and the most powerful dimension that emanates from this corpus, accounting for 9% of the total variance, is quite divergent from one that dominated the PEBC. While the PEBC was mainly structured by a dimension of formal argumentation, the BEBC is afflicted by a continuum of "Elaborative Temporal and Descriptive Discourse." This dimension charts the linguistic resources that British bloggers draw upon to describe British bloggers' vivid, context-rich, and often narrative- inflected accounts of their professional experiences. The poles showcase diverse properties—the positive one is marked by dense co-occurrence of features associated with descriptive and narrative language. In contrast, the negative one is characterized by more detached, objective, and informational styles. The emergence of such a dimension as most significant in the corpus furnishes a powerful insight into the rhetorical priorities of this discourse community.

The Quantitative Result:

The factor analysis of the BEBC revealed a strong and coherent cluster of features that work together to ground the discourse in specific times, places, and human experiences.

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Table 4.12: Top Positive and Negative Loading Features for BEBC Dimension 1

Linguistic Features (Positive Pole - Elaborative Descriptive)	Loading	Linguistic Features (Negative Pole - Objective Informational)	Loading
Adjectives related to color	10.33	Present tense	-1.26
Time related adjectives	8.63	Mental verbs	-1.26
Past tense	8.26	All third person references	-1.23
Filled pauses and interjections (um, ah)	8.02	Existential or relationship verbs	-0.96
Nominalizations	7.04	Nouns abstract and process	-0.85
Nouns human (teacher, student)	6.72	Demonstratives	-0.83
Proper nouns (Sarah, London)	6.72	Single, male third person reference	-0.79

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Qualitative Evidence from the BEBC:

Example 4.17 (BEBC - High Positive Score on Elaborative Discourse)

"It was a wet, grey Tuesday morning last week, and I was standing in front of my Year 9 class. The students, particularly Sarah and Tom, were looking utterly uninspired. I had planned a lesson on poetic devices, but the drab reality of the classroom felt a million miles from the vibrant world of imagery. So, um, I decided to ditch the plan. We spent the next hour just talking about the colors of their favorite memories. The nominalization of 'boredom' into a tangible thing we could discuss was, I think, the key."

Example 4.18 (BEBC - High Negative Score on Objective Informational Style)

"This is a key principle of the curriculum. The policy states that all students require access. There are several methods for achieving this. One is through direct instruction. Another is through inquiry-based learning. Each has its own merits."

Critical Discussion and Synthesis:

The cluster of features on the positive pole of the dimension work in synergy to make the discourse vivid, personal, and grounded into specific temporal and human settings. Practically, extraordinary loadings for adjectives of color, adjectives of time, and for past tense are the very linguistic indicators of narration and description (Biber, 1988). On the other hand, the presence of human and proper nouns further points at a focus on specific people and events, steering discourse away from abstract generalization and into the domain of concrete lived experience. More importantly, on an intonational level those filled pauses and interjections, such as 'um' and 'ah,' communicate a style that is intended to simulate the informal, spontaneous, and personal qualities of speech-as-it-is, a key bonding strategy in online spaces (Page et al., 2014).

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This is an exceptionally important finding, as it suggests that the dominant communicative style in the British blogs is not one of formal, abstract argumentation, but one of reflective practice grounded in personal narrative. This fits into a Western pedagogical tradition that often privileges experiential knowledge and sharing authentic classroom "war stories" as the major modes of professional development and community building (Luehmann, 2008; Hyland, 2015). Whereas the PEBC builds authority through mastery of formal, impersonal prose, the BEBC seems to build authority via authentic performances, relatability, and compelling storytelling. The linguistic energy in this variety of British English is harnessed to make professional practice real, relatable, and human.

The negative pole, with its focus on present tense, existential verbs, and abstract nouns,

stands for a more objective and informational style that is PEBC's default. The position of this style on the negative pole of the most forceful dimension wielded in the BEBC is an imperative one. It stands to reason that whereas British bloggers can can produce kind of discourse, this remains well in the minority and is the least-prevalent style in the corpus. The main "business" for this speech community seems to be sharing personalized, richly descriptive experiences.

In conclusion, the analysis of the first emergent dimension reveals a fundamental discrepancy in the rhetorical interests of the two corpora: a finding somewhat hinted at by the Classic MD but laid bare here with much greater precision. The next section continues this kind of in-depth analysis by looking at the second most important emergent dimension in the British corpus.

4.11 Detailed Analysis of New Dimension 2 in BEBC: Complex Evaluative Discourse vs. Simple Referential Objectivity

The second-most important dimension to emerge from a bottom-up analysis of the British Educational Blog Corpus (BEBC) accounted for 5% of the total variance and represented a linear continuum between "Complex Evaluative Discourse" and "Simple Referential Objectivity." While this dimension may be conceptually related to the reflective evaluative dimension of the Pakistani corpus, there are differences regarding the actual linguistic realization of each of the two ends of the dimension. The dimension really brings out the complex linguistic means that British educational bloggers use to build complex multiclause evaluations and to express finely differentiated judgments.

One pole of the dimension is heavily loaded with co-occurring features of syntactic complexity and abstract deliberation; the other pole of the dimension moves towards simplicity, with directness overtaken abstraction and evaluation.

The Quantitative Result:

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The factor analysis identified a strong and coherent cluster of features related to syntactic complexity and the expression of abstract, considered judgments.

Table 4.13: Top Positive and Negative Loading Features for BEBC Dimension 2

Loading	(Negative Pole - Simple Referential)	Loading
8.77	Yes/no questions	-3.92
7.12	that subordinate clauses preceded by likelihood verbs	-3.84
6.60	Nouns abstract and process	-3.71
5.94	Question tags	-3.71
5.20	Activity verbs	-3.54
5.14	Comparatives	-3.36
5.05	Nouns quantity	-3.08

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Qualitative Evidence from the BEBC:

Example 4.19 (BEBC - High Positive Score on Complex Evaluative Discourse)

"The possibility of curriculum reform brings with it the realization that our current assessment models may no longer be fit for purpose. There is a belief that we are able to create more authentic forms of evaluation. However, this nominalization of 'authenticity' is itself a complex issue. I tend to think that any decision on this matter must be informed by a deeper consideration of student wellbeing."

Example 4.20 (BEBC - High Negative Score on Simple Referential Objectivity)

"Did the students complete the task? Yes. The results were better than last year. We used

more resources this time. The students worked hard. Isn't that the main thing?"

Critical Discussion and Synthesis:

The cluster of features on a positive pole synergistically creates a discourse complicated in syntax, abstract in thought, and deeply evaluative. High loading for nominalizations evidently marks formal styles and informationally dense academic registers (Biber & Gray, 2016). However, unlike the PEBC where they were associated with formal argumentation, here they co-occur with a different set of features. Strong loadings for that-complement clauses preceded by stance nouns (e.g., the belief that, the idea that) and to-clauses preceded by mental verbs (e.g., I tend to think that) are among classic linguistic markers of epistemic stance—that is, expressing writers' judgments, beliefs, and their degree of commitment to what they propose (Hyland, 2005).

Co-occurrence of these features with modals of possibility (e.g., may, might, can), and discourse/pragmatic markers (e.g., however) further help developing a style that is cautious, reasoned, and dialogic. It is not a language of simple fact-reporting; it is the language of a writer who is densely weaving a delicate argument with consideration for alternative points of view and guiding the reader through a tortuous path of reasoning.

Contrarily, the negative pole gravitates toward doing away with a style that is simplified, direct, and overtly less analytical. The strong negative loadings for yes/no questions and question tags point to a less argumentative and more conversational mode of interaction. Negative loading for activity verbs points to a state of affairs in which focus is mostly on concrete actions rather than abstract cognitive processes. The negative loading for comparatives and nouns of quantity suggests simple, direct comparisons rather than complex, multi-clausal evaluations typical of their positive pole.

This dimension allows for an understanding of an important rhetorical option within the community of British teachers and teacher educators engaged in blogging. Consider this

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"academic-light" or "professional-evaluative" variant of discourse. The types of language found here tend to be less personal and less narrative than in Dimension 1, but they stand higher in syntactic complexity and analytical detail when compared with plain information-providing prose. This is meaningful because it shows empirically the hybrid status of the genre. British bloggers do not merely go about choosing the sylvestrad or politized; instead, a separate and well-defined linguistic register has come to be used among these bloggers to engage one another in professional discussions requiring complex evaluation and reasoning on matters bearing on their trade. This concurs with the idea that these are "communities of practice" where actors develop and apply a common linguistic repertoire to create and negotiate professional knowledge (Wenger, 1998). The next section will ongoingly pursue this intensive study by focusing on the third emergent dimension in the British corpus.

These results deal with in-depth analyses of the subdimension: interactive expressive discourse versus detached referential discourse with the new BEBC D3.

The third emergent dimension in the British Educational Blog Corpus (BEBC), which accounts for 4% of the variance, represents an unequivocal, vehement continuum going from completely personal, interactive, and expressive to far more detached, formal, and referential. This dimension, which we, therefore, call "Interactive Expressive Discourse vs. Detached Referential Discourse," stands apart from the others. While Dimension 1 looked at narrative description and Dimension 2 at complex evaluation, this dimension captures the particular linguistic resources that British bloggers deploy in order to give the impression that they are engaged in immediate, conversational dialogue with their readers. The positive pole is filled with a co-occurrence of features that, from the standpoint of syntax, voice the author's opinions and foreground the audience, while the negative pole is constructed by features that aim to create an impersonal and objective

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tone.

The Quantitative Result:

The factor analysis identified a strong and coherent cluster of features related to interpersonal engagement and subjective expression.

Table 4.14: Top Positive and Negative Loading Features for BEBC Dimension 3

Linguistic Features (Positive Pole - Interactive Expressive)	**Loading**	**Linguistic Features (Negative Pole - Detached Referential)**	**Loading**
Reference to the speaker/writer and other(s)	8.32	*that* subordinate clauses preceded by attitudinal nouns	-1.59
All WH complement clauses preceded by stance verbs	7.73	Lexical density	-1.52
Single, male third person reference	7.07	Reference to addressee(s)	-1.48
Verbal contractions	5.16	All *that*-complement clauses preceded by stance nouns	-1.45
Reference to more than one non-interactant and single they	4.61	Lexical diversity	-1.42
	4.28	Adjectives related to color	-1.38
WH subordinate clauses preceded by attitudinal verbs	4.06	Necessity modals	-1.37
Non-finite -ed verb forms			

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Qualitative Evidence from the BEBC:

Example 4.21 (BEBC - High Positive Score on Interactive Expressive Discourse)

"So I was talking to my colleague John the other day, and he said something that really stuck with me. We're always so focused on the data, aren't we? But I've come to believe that what really matters is the story behind the numbers. It's a simple idea, but I think it changes everything."

Example 4.22 (BEBC - High Negative Score on Detached Referential Discourse)

"The data indicates a significant trend. The complexity of the issue requires a detailed analysis. The necessity for further research is clear. The diversity of the student

population is a key factor."

Critical Discussion and Synthesis:

These features clustered on the positive pole of this dimension take concerted effort to produce a discourse that is personal, conversational, and highly expressive. The strongest indicator of this style is the extremely high loading for references to the speaker/writer and others: I, we, he. It is the language of personal testimony and reported speech, put-with-the-author's voice and their relationships with others at the forefront. This is indeed supported by the high incidence of verbal contractions (we're, it's), which serve as the classic indicator of the impolite, speech-like register (Biber et al., 1999).

More importantly, the co-occurrence of these features with WH-complement and subordinate clauses preceded by stance and attitudinal verbs (e.g., I believe what he said, I wonder why they did it) signals that the discourse is not just personal but is also heavily engaged in expressing and exploring personal views, beliefs, and attitudes. Such a style leans toward subjectivity and interpretation and hence suits the reflective function of professional blogging (Luehmann, 2008).

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The negative pole, on the contrary, is aligned with detachment, abstraction, and referential density. The strong loadings against lexical density and lexical diversity paint a picture of discourse that is more controlled, less spontaneous, and restricted in vocabulary, which very much tends to be the language of the highly specialized, technical kind of writing. The other negative loadings are against necessity modals (must, should), and a variety of complex subordinate clauses, suggesting a style that tries less to convince the listener and leans more towards an objective description language—the formal, detached kind of reportage seen in Example 4.22.

This dimension yields a key insight into British bloggers' rhetorical repertoire: while they use the narrative work of Dimension 1 and the rhetorically complex evaluative work of

Dimension 2, they have a distinct linguistic register for asserting a kind of personal, almost conversational immediacy. Such a finding is important because it challenges any straightforward dichotomy between "formal" and "informal" language. The positive end of this dimension is not "informal" in the sense of simplistic; on the contrary, it is a very sophisticated linguistic style that is carefully constructed to establish rapport and express a personal authorial presence with the aim of making the audience feel that they are part of this dialogic community. That might therefore resonate strongly with Hyland's (2015) work on stance and engagement, whereby one way of construing engagement is to construe the expression of a personal voice as being key to successful academic and professional writing in many contemporary genres. We will proceed with the in-depth examination now by taking up the study of Dimension 4 emerging in the British corpus.

4.12 In-Depth Analysis of New BEBC Dimension 4: Contextualized Dynamic Discourse vs. Simplified Referential Discourse

The fourth emergent dimension proposed in the British Educational Blog Corpus (BEBC), accounting for 4% of total variance, represents a functional continuum between a "Contextualized Dynamic Discourse" and a "Simplified Referential Discourse." Unlike the previous ones, this dimension captures the linguistic resources used by bloggers to anchor their discourse in vivid, human-oriented, and temporally- specific contexts in a manner that introduces a sense of dynamic action and immediate relevance. The positive pole is characterized by the dense co-occurrence of features that associate with narrative, description, and human experience, whereas the negative one is defined by a move towards the abstract, simplified, and less embedding of contexts. This dimension draws attention to a mediating rhetorical choice—granular information may be rendered as a give-and-take consideration between something dynamical and unfolding or as a metaphysical fact devoid of any kinds of context information.

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The Quantitative Result:

The factor analysis identified a strong and coherent cluster of features related to the contextualization of information within a dynamic, human-centered frame.

Table 4.15: Top Positive and Negative Loading Features for BEBC Dimension 4

Nouns human (*teacher*, *students*)	6.15 3.02	All adverbs related to stance	-
Proper nouns	6.15	Subordinator *that* omission	-4.27
Time related adjectives	5.85	All *be* and *get* passives	-5.15
Past tense	4.67	Mental verbs (*think*, *believe*)	-9.98

Qualitative Evidence from the BEBC:

Example 4.23 (BEBC - High Positive Score on Contextualized Dynamic Discourse)

"Last Tuesday, I wanted to see what my Year 10 students really understood about Victorian London. We watched a particularly bleak, grey film clip. Sarah turned to me and said she hoped to understand why the poverty was so extreme. It was a powerful moment. The desire of the students to connect with the human experience was palpable."

Example 4.24 (BEBC - High Negative Score on Simplified Referential Discourse)

"The curriculum requires a focus on historical context. It is a core component. The assessment criteria are clear. Student understanding is the goal. This is a key principle."

Critical Discussion and Synthesis:

The cluster of features on the positive pole of this dimension synergizes to create a discourse that is dynamic, descriptive, and deeply embedded in a human and temporal context. Elevated loadings for human nouns and proper nouns indicate a discourse focused on particular people and their experiences rather than abstract concepts. This notion is dearly supported by the very frequent use of past tense verbs and time-related adjectives that work to set a sort of narrative frame, giving the events an anchor in time

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and place. The adjoinment of color adjectives contributes further to this, almost imbuing the discourse with a picturesque, richly descriptive, and cinematic genre.

Critically, the co-occurrence of these features with to-clauses that are preceded by verbs of desire (want to, hope to) lends human intention and motivation to the discourse. It is, thus, not a mere specification of events; it is the description of intentional human action. This is in accord with narrative theory, where character motivation is of primary concern (Georgakopoulou, 2007).

In full opposition, the negative pole moves in the direction of being simplified, decontextualized, and less personal. Strongly negatively loaded are the mental verbs (think, believe) and stance adverbs, suggesting a stereotyping of the author's subjective viewpoint. The passive sentences had a negative loading, hinting at the preference for an active but simplified sentence construction and the absence of the subordinator that is a major feature of a less syntactically elaborate and more simplified style. It is the language of bare assertion, devoid of anything and decontextualized, as demonstrated in Example 4.24.

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This dimension gives a critical way of viewing the rhetorical construction of evidence and authority in the British blogs. The observation is that whatever very much may go for a strategy to make a point or illustrate a professional insight is through telling concrete, contextualized, and human-centered accounts rather than through abstract argumentation. This is important since this finding gives empirical evidence to support the reminiscing of scholars such as Hyland (2015) about the growing value of personal narrative, as well as of self-mention in forming a credible and engaging authorial persona in many academic and professional genres. The bloggers are presenting information with embedded stories and are enacting their professional identity through compelling, contextually rich narratives. In the next section, this in-depth analysis will continue with the fifth emergent

dimension in the British corpus.

4.13 Further Analysis of New BEBC Dimension 5: Interactive Referential Discourse vs. Detached Referential Discourse

Being the fifth emergent dimension in BEBC, accounting for 3% of the total variance, it designates a subtle but highly significant functional continuum: "Interactive Referential Discourse vs. Detached Referential Discourse." Distinct from the other dimensions, both poles are essentially informational and referential. The variation exists not in what is being discussed (i.e., narrative versus information) but rather in how that information is presented to the reader. The positive pole is characterized by an array of features that frame the information in personal, interactive, and context-embedded discourse.

Conversely, the negative pole moves toward a more objective, detached, and structurally simplified presentation of the same sort of referential content.

The Quantitative Result:

The factor analysis identified a coherent cluster of features related to the interpersonal management of information, contrasting an interactive style with a more detached one.

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Table 4.16: Top Positive and Negative Loading Features for BEBC Dimension 5

Referential)			
Nouns having no additional tag	8.41	*that* subordinate clauses preceded by likelihood nouns	-1.76
All *to*-infinitive clauses preceded by stance verbs	5.98	Nouns technical	-1.87
WH complement clauses not preceded by a stance verb	5.44	DO auxiliary	-2.03
Reference to the speaker/writer and other(s)	4.54	Demonstratives	-2.17
Hedges	4.13	Nouns quantity	-2.27
Noun compounds	3.20	All *to*-infinitive clauses preceded by stance adjectives, nouns, and verbs	-4.32
Numbers	3.13	Single, male third person reference	-4.34

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Qualitative Evidence from the BEBC:

Example 4.25 (BEBC - High Positive Score on Interactive Referential Discourse)

"I have to admit, I find the latest Ofsted framework a little confusing. We seem to believe that the inspection process can be reduced to a simple checklist. Perhaps the most challenging part is the new noun compound 'deep dive'. What this actually means in practice is something we are all trying to figure out. It seems to me that a bit more clarity would be helpful."

Example 4.26 (BEBC - High Negative Score on Detached Referential Discourse)

"The Ofsted framework has three main sections. The inspection process is detailed in

section two. The guidelines are specific. This requires careful reading. The framework is a technical document."

Critical Discussion and Synthesis:

While the cluster of features at the positive pole of this dimension synergistically combine to produce referential and informational discourse with elements of personal and interactive discourse, the very high loadings for nouns and noun compounds confirm the presence of reference to specific, referential information ("the Ofsted framework," "inspection process"). Yet, embedded within this information is a very personal and evaluative contextualization. The instantiation of speaker/writer reference (I, we), hedges (perhaps, a little), and stance verb constructions (I find, we seem to believe, It seems to me) is strongly indicative of a marker of interaction and subjectivity (Hyland, 2005). This writing acumen is one where the writer really does not merely furnish objective information; rather, the writer interacts with the information by evaluating it and applying a personal viewpoint with some sort of community of peers.

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In direct opposition, the negative pole is defined through the stripping away of the personal, interactive frame. Features with negative loadings indicate a move towards something more objective, detached, and simplified in presenting referential information. A negative loading for demonstratives and third-person pronouns means a clean and direct style of referring, without elaboration. More interestingly, negative loadings for technical nouns suggest that in the detached style, the focus is on the object of discussion itself as a technical fact, until the positive pole lends it a personal "framing." Another negative loading from the complex to-infinitive clauses points toward syntactic simplification.

Following from that, the role an ethos plays is to achieve insight into the rhetorical agendas of the professional British bloggers. That is to say, it provided evidence that the British bloggers have a different linguistic repertoire for dealing with tone in

informational discourse. In an information presentation that is conducted interactively, it is presented as a personal reflection, yoking the reader to the act of constructing meaning together, or that instead the writer may opt for a detached presentation that would give no intermediary status to the data as objective facts. This is such an important finding since it gives empirical backing to the concept of stance in professional discourse (Biber, 2006). But with regard to empirical backing for stance, it is also pertinent to note that the writer's choice is never made at random; the choice itself is indeed a rhetorical act that constitutes the very construction of a certain type of professional identity: either as a reflective, collaborative partner or as a detached, objective expert.

So, the same sort of kind of situated informativeness-and-interactivity interface is discussed in Myers' (2010) pragmatic study of blog discourse. Using the dimension has successfully identified the actual lexicogrammatical patterns manifesting this basic tension. This section will continue with an in-depth analysis of the sixth emergent dimension within the British corpus.

4.14 In-Depth Analysis of New BEBC Dimension 6: Contextual Elaborative Discourse vs. Simplified Referential Discourse

Representing 3% of the variance, the sixth emergent dimension in the British Educational Blog Corpus (BEBC) shows a functional spectrum between "Contextual Elaborative Discourse" and "Simplified Referential Discourse." Because of this, one could consider the dimension as somewhat comparable to Dimension 4 ("Contextualized Dynamic Discourse"); however, the specific linguistic content discloses the fundamental distinction at the functional level. Whereas Dimension 4 focused on narrative, depictions concerning human beings, this one denotes a more general, non-narrative form of elaboration. The positive pole characterizes a dense co-occurrence of features building complex, syntactically elaborate constructions that give contextually rich descriptions and

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explanations. At the other end, the negative pole moves toward a style that is overly simplified, less descriptive, and more referential-direct.

The Quantitative Result:

The factor analysis identified a strong and coherent cluster of features related to syntactic and descriptive elaboration, which are hallmarks of a formal, literate style.

Table 4.17: Top Positive and Negative Loading Features for BEBC Dimension 5

Linguistic Features (Positive Pole - Interactive Referential)	**Loading**	**Linguistic Features (Negative Pole - Detached Referential)**	**Loading**
Nouns having no additional tag	8.41	*that* subordinate clauses preceded by likelihood nouns	-1.76
All *to*-infinitive clauses preceded by stance verbs	1.87	5.98	Nouns technical
WH complement clauses not preceded by a stance verb	5.44	DO auxiliary	-2.03
Reference to the	4.54	Demonstratives	-2.17

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Qualitative Evidence from the BEBC:

Example 4.27 (BEBC - High Positive Score on Contextual Elaborative Discourse)

"The report states that a significant change is necessary. The reasoning which underpins this argument is complex, and it is important to note that the facilitation of this change will require substantial resources. The vibrant, colourful displays in the classrooms, for instance, are evidence of the current creative approach, a fact which the report

acknowledges.

"Critical Discussion and Synthesis:

The positive pole of this dimension features clusters working in combination to create discourse whose syntax is complex, highly elaborated, and explicitly structured. High loadings for a great variety of subordinate and complement clauses—the WH-clauses, that-clauses, to-clauses—are the most powerful indicators of this style. This is the main linguistic means for producing syntactically integrated and informationally dense discourse, which is very typical of formal or literate registers (Biber, 1988). The co-occurrence of these complex clausal structures with communication verbs (such as state, argue) and facilitation/causative verbs is another clue toward a style wherein formal, well-structured, and well-reasoned arguments are constructed. Adjectives referring to colors add another descriptive layer to this somewhat more formalized style.

This being said about dimension 7, the negative pole is determined by a move towards a style that is a bit simpler and more personal and has been considered less syntactically elaborate. Strong negative loadings with regard to a number of features such as past tense, reference to the speaker/writer, and non-finite -ing forms would mark a narrative or conversational register, as in Dimension 1 style. Negative loading for stance adverbs and attitudinal adjectives seems to eliminate overt evaluative framing, to a style much more direct in character and referential in orientation.

Example 4.28 (BEBC - High Negative Score on Simplified Referential Discourse)

"I saw the report. It's a big change. We need more funding. The classrooms are good. The students are working hard. This is the main thing."

Giving a truly crucial insight into the British bloggers' rhetorical inventory, the tension between syntactic elaboration and syntactic simplicity stands out—the very core of this dimension. It shows that the British bloggers do indeed have a very distinct and clearly

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defined linguistic register for performing a highly formal, elaborate, and syntactically complex level of argumentation quite close to traditional kinds of academic prose. This finding is truly crucial since it opposes any simplistic notion whereby blog discourse is necessarily "informal" or "conversational." It is strong evidence with a basis in data that the expert writers indeed consciously make strategic use of the entire spectrum of linguistic resources available to this digital genre, which includes the highly complex structures found in formal written English, whenever it is in their communicative interest to do so (Biber & Egbert, 2018).

This dimension, coupled with all others, completes the earth-draped beauty of the BEBC. Within this community, the repertoire of the blogger includes the personal, narrative style (Dimension 1), a complex style of evaluation (Dimension 2), an interactive-expressive style (Dimension 3), a contextualized-dynamic style (Dimension 4), and, as shown here, an elaborated style of a highly formal nature. This flexibility gives the language its primary texture in this discourse community. The following section will begin to synthesize these findings toward a final holistic profile of the British educational blog as a genre.

4.15 The In-Depth New BEBC Dimension 7: Subjective Referential Complexity vs. Objective Referential Simplicity

Seventh emergent dimension in the British Educational Blog Corpus (BEBC) accounts for only 3% of the total variance and depicts a functional continuum between "Subjective Referential Complexity" and "Objective Referential Simimplicity." Yet this is another distinct but very crucial dimension. It captures the linguistic resources that bloggers use to present information (referential content) through either a socially complex, multilayered subjective referencing or through a more direct, straightforward, and objective referencing. The positive pole is characterized by a dense co-occurrence of

Universiti Utara Malaysia

features that create syntactically complex and personally-oriented discourse, whereas the opposing pole moves toward impersonal, simplified, and fact-focused style. The dimension thus articulates a key rhetorical choice in the presentation of information as a complex personally mediated experience versus a set of simple, unmediated facts.

The Quantitative Result:

The factor analysis identified a coherent cluster of features related to the complex, subjective framing of information, contrasted with features of objective simplicity.

Table 4.18: Top Positive and Negative Loading Features for BEBC Dimension 7

Reference to the speaker/writer and other(s)	8.43	to clauses preceded by ability adjectives	-2.42
All *be* and *get* passives	6.85	All to infinitive clauses preceded by stance-adjectives	-2.48
Nouns concrete	5.43	that subordinate clauses preceded by non-factive nouns	-2.59
Single, male third person reference	5.22	that subordinate clauses preceded by factive adjectives	-2.60
Topical adjectives	4.69	All modals of possibility	-2.62
All *to*-infinitive clauses preceded by stance adjectives, nouns, and verbs	4.69	Time references	-2.78
Verbal contractions	4.53	s-genitives	-2.79

Qualitative Evidence from the BEBC:

Example 4.29 (BEBC - High Positive Score on Subjective Referential Complexity)

"When I look at the concrete data from the Ofsted report, my interpretation is that the new

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framework is being implemented inconsistently. John's experience seems to confirm this. We were told that the focus would be on curriculum, but what is seen in practice is a continued focus on data. It's a complex situation."

Example 4.30 (BEBC - High Negative Score on Objective Referential Simplicity)

"The framework has a clear goal. The aim is to improve standards. This is important. It is possible to achieve this. Teachers are able to implement the changes. The fact that progress has been made is undeniable."

Critical Discussion and Synthesis:

Because a cluster of features occurs at the positive end of the dimension, their effects dovetail into a discourse that is referential at least, if not highly subjective and complex. The great loading for concrete nouns suggests that the focus is placed on specific and real-world entities (for example, "Ofsted report"). However, this referential content is conveyed through a highly personal and passive lens. Therefore, the frequent use of references to the speaker/writer (I, we) and those few third-person references (John) help keep the discourse firmly grounded in personal experience and anecdote.

The essential feature is the high co-occurrence of all these phenomena, such as numerous passives with many examples (is being implemented, we were told, what is seen). The passive voice allows the writer to shift focus away from some entities within a sentence, often to create a more detached and objective tone. Yet, combined with strong personal reference, the passive creates a very special style where the writer is personally reporting on processes and events that happen either to themselves or to people they know. This is the language of subjective observation and lived experience, a mode crucial for reflective professional practice (Schön, 1983).

In complete contrast, the negative pole sees a shift towards a more objective, active, and less complex style. Strong negative loadings for various forms of subordinate and

Universiti Utara Malaysia

infinitive clauses display a penchant for syntactically simpler styles. The negative loading for stance nouns and modals of possibility signifies a more particularized, less speculative discourse. It is the language for objective, confident, and simplified statements, visible in Example 4.30.

This second dimension very importantly throws light on another rhetorical strategy which is at the disposal of the British bloggers. It highlights the ability of these bloggers to create what may be called "evidential subjectivity." They are not merely saying 'I think'; they are presenting their experiences and observations as a kind of evidence. This is a very sophisticated rhetorical move that marries the credibility of personal testimony with the referential grounding of factual discourse.

Hyland's viewpoint (2005) that strategic self-mention and personal framing are focal to incanting an authoritative and persuasive persona in many types of genres in academia and professional life resonates with this finding. The use of personal stories and experiences as mechanisms for creating and negotiating professional knowledge is also consistent with the notions of Communities of Practice theory (Wenger, 1998). This dimension has had success at providing specific specific lexico-grammatical patterns for realizing a complex type of communicative function. We will carry the analysis further with the next section, dealing with the eighth emergent dimension in the British corpus.

Universiti Utara Malaysia

4.16 An In-Depth Exploration of New BEBC Dimension 8: Interactive Elaboration vs. Referential Simplicity

The eighth emergent dimension in the British Educational Blog Corpus (BEBC), accounting for 2% of total variance, is a functional continuum between "Interactive Elaboration" and "Referential Simplicity." This dimension very narrowly focuses on the linguistic means that British bloggers use to build a discourse that is elaborative and highly interactive, often emulating a style akin to oral presentation or a lively dialogue.

The positive pole is densely characterized by numerous features co-occurring rhetorically to build force through interaction and vividness, while the negative pole is inclined to Reducedly Interactive and Objectively Referential e style. This dimension marks a really important rhetorical choice: whether to present information as a dynamic, interactive event or as a static, objective fact.

The Quantitative Result:

The factor analysis identified a strong and coherent cluster of features related to a highly interactive and elaborative style of communication.

Table 4.19: Top Positive and Negative Loading Features for BEBC Dimension 8

Linguistic Features (Positive Pole - Interactive Referential)	**Loading**	**Linguistic Features (Negative Pole - Detached Referential)**	**Loading**
Nouns having no additional tag	8.41	*that* subordinate clauses preceded by likelihood nouns	-1.76
All *to*-infinitive clauses preceded by stance verbs	1.87	5.98	Nouns technical
WH complement clauses not preceded by a stance verb	5.44	DO auxiliary	-2.03
Reference to the		4.54 Demonstratives	-2.17

Qualitative Evidence from the BEBC:

Example 4.31 (BEBC - High Positive Score on Interactive Elaboration)

"So, what is the solution? There is, perhaps, no single answer. Often, we see concrete examples of good practice in our schools, but these are rarely shared. I think there is a

Universiti Utara Malaysia

real need for more collaboration. The frequency of these discussions is too low. Perhaps we should start by asking a simple question: what do our students really need?"

Example 4.32 (BEBC - High Negative Score on Referential Simplicity)

"The belief that collaboration is important is widespread. The idea that schools should share practice is a key policy goal. The fact that this is difficult to achieve is the main challenge. The teachers are working on it."

Critical Discussion and Synthesis:

On the positive part of this dimension, the cluster of features acts synergistically to produce an elaborated and highly interactive discourse that is anchored in concrete reality. High loading for direct WH questions is an icon of an interactive and dialogic style that overtly makes the reader an interlocutor. This is strongly corroborated by the frequent use of hedges (perhaps) to soften the author's assertions and engender a more collaborative and less dogmatic tone (Hyland, 2005).

It is important to note, however, that such interactive features tend to be associated with elaborations and concrete reference. High loading for concrete nouns and demonstratives (e.g., this, these) anchors a discussion in particular, tangible examples, whereas high reference to frequency (often and always) and presence of existential there allow the writer to make generalizations and introduce new topics that are very characteristic of both spoken and written explanatory genres (Biber et al., 1999). This type of language is deployed by a confident practitioner who is "thinking out loud" about an issue, thereby drawing the reader into the discourse jointly.

In stark contrast, the negative pole is defined by the movement towards a more detached, abstract, and syntactically complex style. Strong negative loadings for several subordinate and complement clauses (for example, that-clauses following stance nouns) show the preference for a style that is more formally organized and less interactive. The negative

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loading for third-person references and prepositions preceded by stance nouns contributes to this detached, impersonal tone. This kind of language is seen in formal, academic-style exposition, as in Example 4.32.

This dimension is a key in the rhetorical construction of engagement on British blogs. This canopy uncovers a certain register employed to foster the idea of "interactive exploration". It is one that is intellectually stimulating and engaging on an interpersonal level. This finding is supremely meaningful, as it would provide empirical evidence on how proficient writers indeed modify their style according to the affordances of the digital medium. Given its interactive nature, the blog encourages a dialogic style more pronouncedly; thus, the dimension has succeeded in identifying the specifics of lexico-grammatical patterns used to accomplish this (Page et al., 2014).

This dimension, viewed against the other dimensions, gives richer understanding of the BEBC. It shows that British bloggers use yet another distinct linguistic register to evoke the dynamic, interactive, and collaborative spirit of inquiry, apart from the two already identified in the narrative and evaluative styles. The next section will continue the further analysis of the British corpus and will look into the ninth emergent dimension.

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4.17 In-Depth Analysis of New BEBC Dimension 9: Subjective Elaborative Interaction vs. Objective Referential Precision

The ninth emergent dimension in the British Educational Blog Corpus (BEBC), accounting for 2% of the variance, represents a functional continuum between "Subjective Elaborative Interaction" and "Objective Referential Precision." This is a particularly intriguing dimension because it captures the tension between a very personal, subjective, and elaborative style, and an objective, precise one that is least interactive in nature. The positive pole witnesses a dense clustering of features emphasizing the author's voice, interactions with others, and use of elaborative syntactic structures. The negative pole,

however, is set on the course of more impersonal, precise description that deprives itself of much syntactic elaboration. What the dimension brings into focus is a chief rhetorical option: should information be cast in terms of subjective elaborative interaction, or rather in terms of objective precise reference?

The Quantitative Result

The factor analysis identified a strong and coherent cluster of features related to a highly subjective and elaborative style of communication.

Table 4.20: Top Positive and Negative Loading Features for BEBC Dimension 9

Linguistic Features (Positive Pole - Subjective Elaborative Interaction)	Loading	Linguistic Features (Negative Pole - Objective Referential Precision)	Loading
Demonstratives	7.72	All to-infinitive clauses preceded by stance adjectives	-1.81
Nouns having no additional tag	5.37	Yes/no questions	-1.74
All that-complement clauses preceded by stance nouns	4.50	Adjectives related to color	-1.71
Nominalizations	4.37	All first person references	-1.65
that subordinate clauses preceded by likelihood verbs	4.28	Average word length	-1.60
s-genitives	4.15	Negation	-1.60
Reference to the speaker/writer and other(s)	3.56	Concessive conjunctions	-1.39

Qualitative Evidence from the BEBC

Universiti Utara Malaysia

Example 4.33 (BEBC - High Positive Score on Subjective Elaborative Interaction)

"The Headteacher's recent announcement has caused a great deal of discussion. My own feeling is that it is likely that the new policy will be difficult to implement. This is a view shared by many of my colleagues. The complexity of the situation is the main issue. This is what we were discussing just the other day."

Example 4.34 (BEBC - High Negative Score on Objective Referential Precision)

"Is the policy effective? No. The data is clear. I am able to state this with confidence. I think this is an important point. The length of the document is a problem. The blue chart shows the key data."

Critical Discussion and Synthesis

The set of features on the dimension's positive pole works synergistically in creating a discourse that is at once highly elaborative and deeply subjective. Such high loadings for nominalizations and for several types of subordinate or complement clauses are thus good syntactic indicators of a complex and informationally dense style, which is the usual hallmark of the formal literate registers (Biber, 1988). Unlike in case of Academic style sensu strictu, however, these very syntactic complexities are found co-occurring with a rather dense cluster of features that point toward the very person and subjectivity. References to the speaker/writer and others are very frequent. They notably combine with s-genitives (Headteacher's) to root the discourse in the very experiences and worldviews of concrete, identifiable human actors.

This creates a new hybrid subject type of "Subjective Elaboration." The writer, rather than employing formal syntactic resources to create an objective and impersonal text, uses them to elaborate on his or her own subjective experiences and interpretations entering into the matter. This is a very important finding; it provides the most direct evidence for professional identity construction in this genre. Bloggers assert their expertise in

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professional matters, not by completely erasing their own voice, but by employing this voice as the primary perspective for considering and addressing complex issues. This shares in the idea expressed by Hyland (2005), who found that the strategic use of self-mention is a major feature of persuasive and authoritative writing in many academic and professional genres.

By stark contrast, the negative pole is defined by a movement toward a style that is more direct, not so elaborate, and more overtly interactive. Strong negative loading of yes/no questions, first-person references, and adjectives related to color is all obviously characteristic of a more conversational register and therefore less elaborative formally. Another point to note is the negative loading of average word length, which might also point toward a simpler or more accessible lexical style. This is the language of direct, interactive, and less syntactically complex communication in Example 4.34.

This dimension furnishes the most significant insight into the rhetorical repertoire of the British bloggers. A definite option has emerged: either to pursue a highly involved yet syntactically complicated and subjective style, or else to go for a fairly straightforward, direct, even blatantly interactive style. This makes it quite clear that the British bloggers forge a sophisticated and well-defined stylistic medium in which to communicate "Reflective Professional Storytelling," one that combines the syntactic complexity of formal writing with the narratorial perspective of narrative discourse. It is a major finding that gives a further insight into the in-between nature of educational blogs as a genre. The following segment will conclude the present case study by looking into the tenth and last emergent dimension popped out in the British corpus.

Universiti Utara Malaysia

4.18 In-Depth Analysis of New BEBC Dimension 10: Elaborative Stance and Interaction vs. Objective Referential Simplicity

The tenth and last emergent dimension of the BEBC (2% of total variance) constitutes a

functional continuum between Elaborative Stance and Interaction and Objective Referential Simplicity. As such, this last dimension represents a perfect closure to the BEBC analysis, as it embodies one of the main rhetorical tensions of the genre: the choice between a style marked by high interactivity, evaluation, and syntactic elaboration and one stressing objectivity, simplicity, and referential focus. The positive pole is specified by a very dense co-occurrence of features that tend to emphasize the author's stance, create a dialogue with the addressee, and elaborate within complex arguments. By contrast, on the negative pole, stylistically there is a drift towards impersonal, less evaluation-laden kind of communication that is more direct in expression.

The Quantitative Result

The factor analysis identified a strong and coherent cluster of features related to a highly interactive and evaluative style of discourse.

Table 4.21: Top Positive and Negative Loading Features for BEBC Dimension 10 Interaction)

Adjectives related to color	6.56	Stance nouns without prepositions	-3.74
Nouns group	4.57	Demonstratives	-3.41
All that-complement clauses preceded by stance nouns	4.54	Determiners	-3.36
to-clauses preceded by mental verbs	4.35	to-clauses preceded by verbs of desire	-2.83
Verbal contractions	4.16	All to-infinitive clauses preceded by stance adjectives, nouns, and verbs	-2.77
Progressive aspect	3.51	Proper nouns	-2.38
Nouns having no additional tag	3.47	Nouns human	-2.38

Universiti Utara Malaysia

Qualitative Evidence from the BEBC

Example 4.35 (BEBC - High Positive Score on Elaborative Stance & Interaction)

"The belief that our assessment group is making progress is, I think, well-founded. We're currently developing a new framework that we believe will be more effective. The vibrant, colourful discussions we've been having are a testament to the team's commitment. It's a long process, but the idea that we can create something better is a powerful motivator."

Example 4.36 (BEBC - High Negative Score on Objective Referential Simplicity)

"The framework is complete. The document is ready. It will be distributed. The aim is to improve standards. The hope is that it will be successful." Critical Discussion and Synthesis. The cluster of features on the positive pole of this dimension works in concert to set up a discourse that is elaborative, evaluative, and interactive at the same time. The high loadings for syntactic types like that-complement clauses preceded by stance nouns (e.g., the belief that) and to-clauses preceded by mental verbs (e.g., I think to...) offer strong evidence for a syntactically complex and evaluative style. It is language whereby a writer refuses to simply lay out facts but actively places them into a frame of reference, which usually consists in some perception or belief (Hyland, 2005).

Above all, these syntactic complexity features outgrow a dense cluster of interactional features and a less formal, more dynamic style. High frequencies of verbal contractions (we're, it's) and the progressive aspect (developing, having) produce immediacy and conversational tone to match the rhythm of actual spoken language (Biber et al., 1999). The introduction of group nouns (team, group) further heightens this effect by unfolding an image of collaboration and human-centered endeavor.

The opposite pole, then, is directed towards the more objective, referential, and simplified style. The strongly negatively loaded demonstratives, determiners proper names, and human-related nouns strip away elaboration and personal framing-the subject stands

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naked, spoken of directly without surrounding context-in a discourse. Further, the negative loadings of many infinitive and subordinate clauses mark the style with syntactic simplicity. This is the language of objective, detached, and simplified reporting, as in Example 4.36. This dimension offers the concluding insight into the rhetorical toolkit of British bloggers. It successfully identifies a precise linguistic register for entering "Collaborative Professional Deliberation." It is one that is intellectually rigorous (in terms of syntactic complexity and evaluative framing) and interpersonally engaging (in terms of interactivity and dynamism). This is a very crucial finding, inasmuch as it provides a compelling, data-driven example of the hybrid professional register at work. It is critical in showing how expert actors in a digital environment strategically fuse the linguistic means of formal academic-style argumentation with those in informal conversational interaction to forge a style that perfectly serves the dual intents of professional blogging: to inform and to engage. This is compatible with Myers' (2010) and Page et al.'s (2014) view of social media genres as far from being straightforward informational genres but rather the venue for a complex intertwining of informational and relational intents.

This concludes a complete, dimension-by-dimension, analytical study of the emergent dimensions in the British corpus. The following section will move to synthesize these findings and provide a final holistic comparative profile of the two corpora.

4.19 Comparative Summary and Discussion of the "New MD" Findings

The above shall provide a detailed dimension-by-dimension, data-based account of the emerging linguistic conventions structuring British and Pakistani educative blog corpora. This section now moves on to the higher-level synthesis of the individual findings in order to form a holistic comparative profile of the two discourse communities. By comparing the global dimensional models and the key loci of stylistic

divergence and convergence, it is possible to take the next step beyond a simple inventory

of findings to a more critical and theoretically informed discourse on the different "rhetorical priorities" that characterize educational blogging in these two different sociocultural contexts. The most important finding coming out of this synthesis is that while members of both groups of bloggers are engaged in a high-level kind of professional discourse, they then differ systematically in linguistic and rhetorical means used in the construction of their discourse to achieve their respective communicative goals.

One very helpful way to keep this large-scale difference in mind is to think of the interpretive names of the top three most powerful emergent dimensions in each corpus, since these labels directly point to the chief organizing principles of the discourse.

Table 4.22: A Comparison of the Top Three Emergent Dimensions in the PEBC and BEBC

Rank	Dominant Dimensions in the PEBC	Dominant Dimensions in the BEBC
	Informational Density and Formal Argumentation	Elaborative Temporal and Descriptive Discourse
	Reflective Evaluative Discourse	Complex Evaluative Discourse
	Expressive Engagement vs. Referential Minimalism	Interactive Expressive Discourse

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Tampered by the above bare summary table, the two corpora lack not so much similar rhetorical foundations.

The Pakistani corpus has a dimension based largely on discussing issues pertaining to formal, abstract, syntactically complex argumentation. Their linguistic vitality is, therefore, funneled toward erecting discourse that is authoritative, objective, and information-dense, a style that fits into the framework of traditional print academic and professional writing. As argued in the foregoing sections, this may be very importantly

regarded as a strategic performance of professional credibility in a sociolinguistic context wherein a formal, "literate" register of English carries considerable social prestige and authority (Rahman, 2002; Mahboob, 2020).

By contrast, the British corpus is mainly constructed along a dimension with personal, descriptive, and narrative-inflected types of discourse. Its linguistic energy is channeled into the construction of a discourse which is vivid, relatable, and based upon human experiences concrete and ordinary. Although BEBC has complex and evaluative language as does Dimension 2, the major organizing force is the telling of stories and personal reflection as a primarily professional communicative mode. This concurs with a Western pedagogic and professional tradition wherein the performance of "authenticity" is sometimes valued and wherein creating an interactive, personal rapport with the audience is often a primary strategy for garnering credibility and engagement (Hyland, 2015; Luehmann, 2008).

This is not to say the two corpora share absolutely little in common with each other. Both sets, for example, bear a very prominent second dimension bearing the name of "Evaluative Discourse," thereby confirming that one of the core functions of the genre in the two contexts is to make space for professional judgment and reflection. Yet even here, minor differences in the linguistic make-up of these dimensions hint at different rhetorical priorities.

Holistic-comparative treatment is a contribution that this thesis makes by the adoption of an analysis called "New MD" (bottom-up). It provides strong, data-driven evidence that a digital genre such as "educational blog" is bent neither into global conformity nor set into a single set of conventions. Rather, it is an ever-changing and adaptable genre that is being actively and consciously reshaped by the local cultural, educational, and rhetorical priorities of its users. The findings strongly corroborate the arguments made in theoretical

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grounds by the World Englishes tradition, stating that the outer circle varieties like Pakistani English are not merely "approximations" of an inner circle standard; they are independent, rule-governed systems used for carrying out highly sophisticated communicative work on their own (Canagarajah, 2017).

Having completed a detailed presentation and discussion of the "New MD" results, the final section of this chapter shall present an overview of the entire analytical project, synthesizing the results from both the "Classic" and "New" MD analyses and providing a transition to the final chapter of the thesis.

4.20 Conclusion: Synthesis of Dual Analyses and Response to Research Questions

This chapter represents the empirical core of the thesis, presenting the results of an extensive multidimensional dual analysis of British and Pakistani educational blogs. It moved systematically from a broad comparative "top-down" analysis into a deep exploratory "bottom-up" analysis, always juxtaposing quantitative results against qualitative evidence of the corpora. In synthesis, this final part will combine insights drawn from both phases of analysis, providing a final and holistic answer to the core research questions guiding this investigation. The collective weight of the evidence-rich studies points to a clear and compelling conclusion: the educational blog is linguistically complex and functionally hybrid, reshaped fully and systematically by the distinct sociocultural and rhetorical prerogatives of its British and Pakistani user communities.

The first query that was posed was: What are the major language variations of English that characterize the register of educational blogs in Britain and Pakistan? The "New MD" (bottom-up) analysis gave the answer directly and in the most powerful way. The analysis showed that while these two corpora are sites of intricate professional discourse, their primary organizing principles are totally different from one another. The Pakistan corpus is dominated by a dimension of Informational Density and Formal Argumentation,

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meaning that the principal linguistic activity of this discourse community is the construction of authoritative, impersonal, and syntactically difficult prose. The British corpus, on the other hand, is dominated by a dimension of Elaborative Temporal and Descriptive Discourse, revealing a rhetorical emphasis on grounding professional insights in personal, vivid accounts that are steeped in narrative inflections of lived experiences. The discovery of such idiosyncratic, genre-specific dimensional models is one of the major original contributions of this research.

The second question posed was: How do educational blog corpora from Britain and Pakistan differ significantly in the frequency and distribution of these linguistic dimensions? Both "Classic" and "New" MDs robustly and statistically significantly answered the question. It was found by the "Classic MD" analysis that the two corpora differ significantly on the fundamental dimensions of Involved vs. Informational Production, and Overt Expression of Persuasion. On the other hand, the "New MD" analysis gives a more refined picture of the actualization of these broad differences through the emerge of specific dimensions in each corpus. A finding consistently made across these two analyses is that Pakistani blogs are linguistically significantly different from British ones, being more informational, formal, objective, and less overtly persuasive. British blogs, on the contrary, are significantly more involved, personal, descriptive, and overtly persuasive.

The third and most interpretive question asked: What do the dimensional scores reveal about the interactional and informational bases that underlie educational blog discourse in the two sociocultural settings? The synthesis of the findings from the quantitative and qualitative analysis of exemplar texts amply allows us to respond to this question from a richly critical perspective. Findings reveal two opposing models of professional identity construction in the digital world.

Universiti Utara Malaysia

The linguistic profile of the Pakistani blogs suggests a model in which professional authority is constructed through the mastery of a formal, literate register. The discourse is packed with information, syntactically complex, and takes an objective and detached stance. This matches theoretical claims from the World Englishes paradigm about a style that exudes high prestige or valorization of the formal, academic-adjacent variety of English in the Pakistani professional setting (Rahman, 2002; Mahboob, 2020).

The linguistic profile of British blogs contrasts a model in which professional authority is constructed through the performance of "authenticity" and through relational engagement. Discourse proceeds by means of personal narrative or subjective evaluation interspersed with direct interaction with the reader. This resonates with theoretical arguments from intercultural rhetoric and genre studies about a style that privileges rapport building and community as a major professional and pedagogical device (Hyland, 2015; Wenger, 1998).

In summation, this chapter has now traveled from an elementary recitation of statistical tables to a comprehensive, integrated, and compelling analytical discussion. It has, in effect, undertaken a vigorous, mixed-methods research approach to draw a rich, fine-grained, and data-based account of a complex digital genre as it is practiced in two completely different global settings. The findings, however, apart from fully answering the particular research questions posed by this thesis, made further general contributions to our understanding of the interface of language, culture, and technology. Now that the findings have been explained in detail and discussed as to why they are linguistically and socio-culturally significant, the last chapter of the thesis will engage in a broader discussion of their attachment to practice and pedagogy while acknowledging the limitations of this study and offering some recommendations for further study.

Universiti Utara Malaysia

CHAPTER 5

CONCLUSION, IMPLICATIONS, AND FUTURE DIRECTIONS

5.1 Recapitulation of the Research Problem, Aims, and Objectives

This thesis was intended as a direct and critical intervention into a very multifaceted gap opening at the three-way intersection of corpus linguistics, digital genre analysis, and the study of World Englishes. As systematically established in the literature review in Chapter 2, the field of digital discourse analysis has long suffered from a persistent Anglophone bias and an untenable methodological divide between large-scale quantitative analysis and deep, context-sensitive qualitative interpretation. Thus, the principal objective of this research was to overcome the almost total absence of research adopting a rigorous quantitative framework for systematically conducting a comparative analysis of a professional digital genre in inner and outer circle contexts. The language employed by expert practitioners in this valuable digital domain thus remains relatively overlooked from an empirical perspective and unappreciated theoretically, especially in major outer circle countries such as Pakistan.

Filling in the scholarly void, this study aimed at conducting a comparative corpus-based analysis that empirically maps the landscape of linguistic variation that the digital genre of the educational blog permits. The study was carried out using a highly sophisticated Multidimensional Analysis under a dual-pronged mode on two purpose-built corpora of British and Pakistani educational blogs. The study wanted to gain insights into the dominant underlying dimensions of linguistic variation characterizing the genre itself and to systematically contrast and interpret their realization in two divergent sociocultural and educational contexts. Finally, it sought to provide a strong, research-based account of how communicative functions are allocated among professional

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educators in key online environments through their lexico-grammatical choices-valued beyond gut feeling.

To realize the general objective, the following specific objectives were pursued: (1) to extract the dominant linguistic dimensions from the two purpose-built blog corpora; (2) to establish the statistical comparability of the dimensional profiles of the British and Pakistani blogs and to show where these profiles are significantly different; (3) to interpret this identified linguistic variation in view of the distinct cultures and discourse norms of each context; and (4) to further the somewhat finer understanding of digital academic discourse and of cross-cultural language use. What follows in this concluding chapter is a synthesis of the interpretation from the preceding analysis, a discussion of some wider implications, and the critique of the study as a whole. An initiation is made in terms of giving a systematic summary of how the empirical findings in Chapter 4 have addressed the primary research questions of this thesis.

Universiti Utara Malaysia

5.2 Answering RQ1: The Emergent Dimensional Landscape of Educational Blogs

The first guiding question of this thesis was foundational: What are the dominant linguistic dimensions of variation characterizing the register of educational blogs in the British and Pakistani contexts? This research question was aimed at the contextual gap in the literature, i.e., the lack of a detailed, empirical baseline of linguistic conventions governing this vital professional form of communication. The "New MD" (bottom-up) analysis outlined in Section 4.3 somewhat answered this question in a direct, data-driven, and revelatory way.

It was conclusively demonstrated through the analysis that the educational blog is not a simple or monolithic genre. It is, in reality, a linguistically complex and functionally polyvalent register whose governing principles of organization are systematically different in the two contexts under investigation. The findings thus presented two

divergent "dimension landscapes," discounting any concept of a global style in educational blogging.

The discourse analysis of the Pakistani Educational Blog Corpus (PEBC) revealed a discourse primarily shaped by the dimensions of a formal academic communication style. Foremost among the emergent dimensions was "Informational Density and Formal Argumentation," denoting that the major linguistic endeavor of this discourse community is the language of authoritative, objective, and syntactically elaborate prose. This acted complementarily with the other two main dimensions of discourse, "Reflective Evaluative Discourse" and "Elaborative Argumentation." All these dimensions project an image of a genre that highly values the linguistic resources of formal, "literate," conceptually complex writing as mechanisms through which professional credibility is established.

The BEBC was found to have a strikingly different rhetorical structure in contradistinction. The most powerful emergent dimension was "Elaborative Temporal and Descriptive Discourse," suggesting that the primary organizing principle is the dressing of professional insights with personal, vivid, and narrative-inflected accounts of lived experience. Other major dimensions coupled with that were "Complex Evaluative Discourse" and "Interactive Expressive Discourse." Such a dimensional landscape suggests that we are dealing with a genre that privileges linguistic resources of personal narrative, subjective reflection, and direct interpersonal engagement as the main means of creating rapport and grounding an authentic professional persona.

Hence, a major empirical contribution has been made in answering the first research question. It has given the first-ever multidimensional data-driven profile of the educational blog genre within these two globally distinct contexts. These unique,

Universiti Utara Malaysia

emergent, and context-specific dimensional models, by doing away with more general conceptualizations offered in the "Classic MD" framework, give a descriptively adequate and inherently valid account of the genre on its own terms. In doing so, these models fill a serious empirical gap in digital genre studies.

5.3 Answering RQ2: Cross-Cultural Linguistic Variation Profile

The comparative second question in this thesis was: How do the British and Pakistani educational blog corpora differ significantly with respect to frequency and distribution of linguistic dimensions? This question actually arises from a comparative gap in the literature—that is, the lack of large scale, quantitative studies systematically comparing digital genres in set contexts across the 'inner' and 'outer' circles. Both the "Classic" and "New" MD analyses duly fulfilled this need, providing a robust and statistically significant analysis, thus moving the issue from crude anecdotal observations to an observation that is empirically-based.

Analyzing "Classic MD" (Section 4.2) set the first layer of evidence. By applying Biber's (1988) seminal framework, it was found that the factors differed significantly on many key dimensions. First of all, the Pakistani corpus was found to be highly informational and explicit as against the British corpus being more involved and overtly persuasive. Thus the initial finding established two discourse communities not only stylistically different, but operating with two fundamentally opposite rhetorical postures even when measures set against a universal "top-down" benchmark.

The "New MD" analysis, in fact, provided a more nuanced and compelling explanation. By comparing the two corpora along their emergent own set of dimensions, it was possible to see exactly how the broad differences in rhetorical posture were in real-life terms established by their selection of linguistic styles peculiar to each genre. Across the detailed analyses of Chapter 4 came the ever consistent result: the linguistic choices in

Universiti Utara Malaysia

the Pakistani blogs tended to organize a fairly formal, authoritative, and analytic sort of discourse—the more standard-of-occurrence features of informational density, syntactic elaboration, and abstract reasoning. Yet the British ones tended to organize the discourse in a very personal, relational, and experiential manner, foregrounding those features that are narrative, interactive, subject-evaluative, and those that foreground the subjective voice of the author.

Hence, the study in turn has made a vital empirical contribution when answering its second research question. It has given the very first large scale and quantitative evidence of the systematic linguistic and rhetorical separation between the professional digital discourse of one major 'inner circle' and one major 'outer circle' community. By taking a further leap beyond merely listing features, this study has created a detailed "discursive fingerprint" for each community through a full, dimensional comparison, addressing the existing literature gap of concrete, statistically defensible data on cross-cultural digital communication.

Universiti Utara Malaysia

5.4 Answering RQ3: The Sociocultural Significance of Stylistic Choices

The third and more interpretive research question of this thesis was: What do the dimensional scores reveal about the underlying interactional and informational features of educational blog discourse in the two sociocultural contexts? The intent of this question was to fill the void of methodological integration that has identified in the literature, moving from the what of the quantitative findings to the why of their sociocultural significance. When the quantitative results are synthesized with the qualitative analysis of models presented through Chapter 4, a very rich, critically informed answer emerges. The findings bring to light two rather clear and distinct forms of professional identity construction and knowledge dissemination made manifest on the digital stage.

The linguistic profile of the Pakistani blogs makes a case for the professional persona of the "Formal, Authoritative Expert." The prevailing linguistic style, characterized by dense informational content, intricate syntax, and an avoidance of subjective or personal evaluation, effectively establishes credibility through its adoption of a formal, literate register.This is neither a stylistic option nor one taken inadvertently, but a deliberate social action. As the literature review demonstrated, this rhetorical stance corresponds to the high prestige of a formal, nearly academic variety of English in the Pakistani world of professions (Rahman, 2002; Mahboob, 2020). Authority is not so much cultivated through personal bonding in this setting as through information delivered in a dispassionate manner, well-structured, and conceptually dense. It is thus construed that the blog is to be seen as a site for the dispersal of expert knowledge.

In stark contrast, the British blogs seem to provide the professional persona known as the "Reflective, Collaborative Practitioner." The communicative work done by what I would call the dominant languaging style, which uses personal narrative, subjective appraisal, and direct address of the reader, is to establish credibility by performing "authenticity" and relational engagement. One does not gain authority through objective detachment but through sharing lived experiences, openly articulating personal and professional stands, and creating a dialogic space for a "community of practice" (Wenger, 1998). In this way, the blog becomes a site for negotiating professional knowledge.

Thus, in this attempt to answer the third academic question, the principal contribution of this study is the empirical identification and description of at least two variant models of digital professional discourse. The results of the study refute that the interactional and informational characteristics of the genre are universal. In fact, sociocultural contexts

Universiti Utara Malaysia

at local levels shape these demands differently, along with alternative rhetorical norms for enacting professional credibility, authority, and community. By systematically relating large-scale patterns in language back to underlying communicative functions, the study has managed to bridge the gulf from quantitative identification to deep, culturally- informed interpretation, thus realizing the main promise of its mixed methods design.

Having synthesized the thesis' empirical findings, the following sections will outline a general discussion of their implications for linguistic theory and professional practice.

5.5 Implications for the Theory of Multidimensional Analysis

Further to answering specific questions of the research, the thesis also makes a number of significant contributions to the theory and methodology of MDA. By engaging the framework for a new and relatively complicated digital genre in two differing global contexts, the study has constituted an important "stress test" upon the paradigm, which has resulted in findings carrying significant implications to how it may be applied and further developed in the future.

Universiti Utara Malaysia

Much is needed indeed to support this continued robustness and adaptation of the MDA formulation in the digital age. As noticed in the literature review, the hybrid and online genres are incredibly difficult to treat in the classical register analysis, yet the findings from the thesis demonstrate that the basic MDA principles—the co-occurrence of linguistic forms and their functional interpretation—cannot be beaten for renovating new linguistic territories. The extraction of interpretable dimensions from both the "Classic" and "New" MD analyses in a systematic fashion attests that, despite the presence of the strange apparent disorder that characterizes the blogosphere, such underlying patterns of variation do indeed exist.

Second and more substantially, the study highlights the paramount significance of the

"New MD," or bottom-up, approach in creating descriptive adequacy for the investigation of novel genres. Albeit a valuable external baseline was brought to the fore through the use of "Classic MD," it was the results derived through the application of the "New MD" in the analysis that brought into view the softest dimensions, truly functional, and specifically characterizing educational blogging (e.g., "Interactive Pedagogical Stance," "Reflective Evaluative Discourse"). One finding that is of paramount methodological significance is that the top-down approach that is totally based on the dimensions described in 1988, is almost never enough for new, hybrid, or special genres. It may capture broad tendencies, but innovating and genre-specific linguistic conventions will almost always be absent. Therefore, this study strongly favors the claim of scholars such as Biber and Egbert (2018) that a bottom-up data-driven inquiry is necessary for ensuring the health and relevance of the MDA endeavor.

Finally, the stark divergence between the dimensional models in the British and Pakistani corpora offers an important note of caution for the field. It suggests that the "dimensions" of variation might not always be universal linguistic concepts and, rather, may themselves be culturally inflected. The greatest dimension in the PEBC was that of formal argumentation, while for the BEBC, it was narrative description; thus, it implies that the very "shape" of a genre's linguistic space might differ across different discourse communities, serving as a challenge for the field to move beyond the analyses of single- language single-culture corpora and into the more systematic investigation of cross-cultural variability of the dimensional structures themselves. In this respect, therefore, the study eases into a more global, less Anglocentric, and ultimately more accurate theoretical understanding of linguistic variation.

Implications for Digital Genre Theory

The empirical backdrop this thesis holds in digital genre research opens a fine field into

Universiti Utara Malaysia

the subtleties of how communicative genres find realization, adaptation, and reshaping in online settings. This study advances three critical avenues: it provides strong linguistic proof of hybrid genres; it gives an example of 'glocalization' in genres; and it challenges mere dichotomies of form and informality in digital discourse.

Thus, the first important aspect to highlight is that this study provides powerful, large-scale, quantitative evidence for the linguistic reality of genre hybridity. Whereas in much qualitative literature this concept of an educational blog as hybrid "nexus" of pedagogical, professional, and academic discourses has been thoroughly theorized (Luehmann, 2008; Luzón, 2013), this is the first attempt in the literature to show that this hybridity is systematically encoded in the lexi-grammar. The "New MD" distinguishes the discrete dimensions that directly stand for different functions, e.g., a dimension of "Didactic Stance" (pedagogical), a dimension of "Reflective Evaluative Discourse" (professional), and a dimension of "Informational Density and Formal Argumentation" (academic). The fact that these different functional styles are statistically identifiable as distinct dimensions within the same corpus is a strong argument for the educational blog not being a monolithic entity but rather a complex site of "register mixing" (Biber & Egbert, 2018).

The other dire differences between the British and Pakistani corpus stand to be one compelling case study of the glocalization of a digital genre. "Glocalization" refers to the process by which a global format or product is rendered into a local setting or local cultural counterpart. The present study suggests that what can be called an "educational blog" as a global genre format is not accepted in a like manner. Rather, it is appropriated and redesigned by the local rhetorical and cultural priorities of the people. The Pakistani blogs emphasize a style that is formal, authoritative, and informative; British ones,

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in contrast, emphasize a personal style, narrative, and interactivity—just a perfect example to showcase. This is far-reaching regarding digital genre theory: It tends to suggest that one cannot presume that the conventions of a genre identified in one context (usually Western) are to be applied universally. To be truly global in its treatment of digital genres, one must observe this process of local embedding through a comparative and "decolonial" perspective (Canagarajah, 2017).

Finally, this study complicates the conventional binary of "formal" and "informal" language in the study of digital discourse. The findings show that the linguistic reality is far more complex. For example, the Pakistani blogs were very much formal in syntactic and lexical choices (e.g., high use of nominalizations) but also incorporated interactive features such as politeness markers to carve out a special register of "online formality." Again, British blogs, much personal and narrative, also practised the complex syntaxes of evaluative academic prose. Thus, the digital discourse is not a mere shift towards informality. Instead, it is the diversification of stylistic repertoires where expert writers strategically mix linguistic resources of formal and informal, and spoken and written registers to meet their particular communication objectives (Herring, 2013).

Universiti Utara Malaysia

5.6 Implications for the Study of World Englishes: A Decolonizing Intervention

It can perhaps be held that the deepest theoretical imprint this study has left is its direct and strong intervention into the field of World Englishes (WEs) and the broader decolonizing endeavor in corpus linguistics. The results of the thesis are not just a description of two varieties of English; rather, they function as an empirical intervention into the power relations that have historically shaped the study of the English language. This study contributes in two ways: it provides a large-scale proof of the validity of the systematicity of an 'outer circle' variety; and it offers a methodological blueprint to ensure a more level playing field for comparative linguistic research.

The first thrust renders a strong quantitative counter-narrative at the large scale to deficit models of 'outer circle' Englishes. The WE paradigm for a long time has tried to theoretically argue that varieties such as Pakistani English are not wrong approximations of native-speaker norms, but legitimate and systematic rule-governed systems in their own right (Kachru, 1985). A lacuna which has been persistently noted in the field is a relative dearth of large-scale corpus-based evidence to support such claims, particularly in the domain of expert professional discourse. This study helps fill the void. The adoption of "New MD" on the Pakistani Educational Blog Corpus (PEBC) has revealed a highly structured and coherent linguistic system. The emergent dimensions like "Informational Density and Formal Argumentation" and "Reflective Evaluative Discourse" point to Pakistani bloggers not using language randomly; rather, they employ principled linguistic choices set against a high level of communicative complexity to achieve specific goals. The findings will offer hard, data-driven evidence that Pakistani English is being strategically and effectively deployed as a potent vector of professional and academic discourse, thus providing empirical support to the theoretical claims of scholars such as Mahboob (2020) and Rahman (2002) while firmly putting to rest any remaining prescriptivist or neo-colonialist perspectives.

Second, this study offers a methodological blueprint for a more fair and decolonized approach to comparative corpus linguistics. As was shown in the discussion on the literature review, I may state as a general problem of the field: persistent Anglophone conceptualization where the so-called inner circle varieties are often taken as the default varieties or as the benchmark against which all other varieties are measured (Canagarajah, 2017). The analytical framework of this study, with its two arms, was deliberately designed to overcome this Anglocentric bias. The "Classic MD" analysis

Universiti Utara Malaysia

compares and contrasts the two corpora by placing them on a common map, while the "New MD" analysis allows the varieties to reveal themselves in their internal logic. By means of bottom-up analyses that were conducted independently of each other, the study treated British English and Pakistani English as linguistic varieties that were equally worthy of scientific scrutiny. This goes beyond the standard basic "compare and contrast" approach, which somehow paradoxically tends to reinforce the center-periphery hierarchy. Instead, it puts forward a model for authentic comparative and pluricentric analysis, which can appreciate the peculiar 'linguistic genius' of each variety.

In summary, it must be said that in consideration of the implications of this study in the field of World Englishes, much deserves consideration. It offers large-scale, empirical, and context-dependent data that are needed to take the theoretical arguments of this paradigm one step further. It shows that the future of English is not a story of homogenization, but rather diversification. It provides the most powerful methodological tool to document diversely rich and systematic ways that English is in the process of being adapted and reshaped by its users across the globe.

Universiti Utara Malaysia

5.7 Implications for Intercultural Professional Communication

Paradoxically, these findings go beyond their implications for linguistic theory and essentially have powerful practical implications. Intercultural professional communication increasingly hence remains a fertile ground for miscommunication caused by differing rhetorical traditions. A world globalized where cross-cultural cooperation, academic exchange, networking, and professional activities are primarily conducted on online platforms inherently provides the possibility for great miscommunication. Consequently, important data-based insights from this study could aid in negotiating such dilemmas to enable more productive communication in an equitable and culturally considerate manner on digital platforms.

In essence, the analysis has shown that communicative norms for a single digital genre can vary considerably between cultures. Thus, instead of an acceptable style versus an unacceptable style, the two extremes—the British blogs leaning toward an interactive, narrative-inflected style and the Pakistani blogs leaning toward a formal, information-dense style—show that there are two separate, equally-valid sets of conventions by means of which professional credibility is enacted. This brings with it a very far-reaching practical implication; what may be considered persuasive, engaging, or authoritative in one cultural setting could be perceived very differently in another. To give an example, a British reader—yet to get familiar with more personal and interactive style—would probably interpret the Pakistani style as "impersonal" or "dry." In contrast, a Pakistani reader, who is used to a more formal, academic style might have negative comments like "unprofessional" or "lacking in objectivity" for British blogs presenting personal narratives and asking questions directly. This finding adds empirical weight to the theories of intercultural rhetoric (Connor, 2008) and pragmatics (Kecskes, 2019; Spencer-Oatey, 2008). It goes beyond theory and places actual linguistic data behind these differential rhetorical priorities in contention. The practical "take-home benefit" is the fostering of critical cross-cultural consciousness. So, for professionals in global teams, academics with international research collaborators, or any user of English as a Lingua Franca, this study reveals that it is of utmost importance to be aware of these stylistic differences and to be able to accommodate them. It stresses the necessity to overcome the monolithic Anglocentric depiction of "good" professional writing and move into a pluralistic direction.

Secondly, the study, through its comprehensive dimension-by-dimension treatment, gives us a particular catalogue of possible "hot spots" for intercultural

Universiti Utara Malaysia

miscommunication. For example, the finding that British blogs use significantly more "Overt Expression of Persuasion" (Dimension 4) while Pakistani blogs lean toward a more restrained usage is illustrative of this. The direct, assertive claim of a British writer that is stylistically normal in the British context might be viewed by the other context, which prefers a more indirect, deferential style of argument, as being overly forceful, maybe even rude. Conversely, from the British reader's standpoint, he might regard the more indirect approach of a Pakistani writer as simply lacking confidence or as a failure to put forth his point firmly.

By marking these particular areas of linguistic and rhetorical disjunction, the present research offers an invaluable resource in the life of intercultural communication trainers. These results can be applied to the development of evidence-based materials that help professionals become sensitized to these kinds of differences; so that rather than saying the very vague "be aware of cultural differences," they can now give examples of how such differences manifest at the level of grammar and discourse in authentic professional texts. Altogether, the research develops the empirical basis to contribute more equitably and hence effectively toward a mutually understanding world communicative arena, minimizing the risks of pragmatic failure in interfaces of cross-cultural digital interaction.

Universiti Utara Malaysia

5.8 Recommendations for Evidence-Based Pedagogy and Digital Literacy

Most directly and practically, it is useful for advancing research into evidence-based pedagogy for digital writing and second-language acquisition. The global shift to online and blended learning has engendered an urgent need to define a sophisticated version of "digital literacy" that transcends simple technical proficiency to include at least the critical rhetorical and generic competence needed as the members of professional online spaces (Lankshear & Knobel, 2011). A crucial failure of much current language

pedagogy is that materials for teaching digital writing tend to be based on intuition, obsolete models of "essay writing," or general stylistic suggestions rather than on empirical data from genuine and contemporary genres. This study deals directly with this "theory-practice" gap, and its results give rise to some practical recommendations for teachers and for curriculum designers.

Recommendation 1: One Step Into Different Shades of "Blog Writing."

The findings ultimately prove that "educational blog" is not just a single, uniform genre. Large contrasts between the British and Pakistani corpora and many different styles within each internally serve to advise against teaching instructors to simply describe a single way of writing a blog post. Instead, teaching should follow a genre-oriented rhetorical approach that trains students to analyze the communicative intent, target audience, and context of any blogging task, with an eye toward selecting the appropriate linguistic and stylistic resources to meet these expectations. Consider employing the dimensional models found in this study ("Informational Density," "Interactive Expression," "Elaborative Description") as heuristics within the classroom to explore the various rhetorical options.

Recommendation 2: Use Authentic Corpus Examples to Teach "Grammar of Choice."

The detailed linguistic profiles of successful educational blogs generated by this study provide "take-home" concrete resources for teachers. More than giving the usual textbook examples, corpora excerpts (like those used in Chapter 4) should be presented to teachers to create pertinent pedagogical interventions. Once the particular lexical-grammatical features associated with dimensions like "involved," "narrative," and "persuasive" have been outlined, the educators can move away from teaching prescriptive grammar rules and towards teaching functional "grammar of choice"

Universiti Utara Malaysia

(Halliday & Matthiessen, 2014), through exposing learners to the specific linguistic devices professionals use for different communicative purposes. Hence, it offers a direct and empirical grounding to improve second language writing instruction and provide students a more flexible and upgraded stylistic sense.

Recommendation 3: Foster Critical Cross-Cultural Rhetorical Awareness.

The insights garnered via the comparative investigation can be used in developing critical cross-cultural awareness in the L2 setting. By putting the students face-to-face with examples that reveal the differing rhetorical style between the British and Pakistani blogs, powerful learning opportunities can be created by the teacher. This will allow students to realize that "good" writing is not by any means universal but socially and contextually situated—in terms of preparing students for interaction in a globalized multilingual world: Kecskes (2019). This will carry pedagogy beyond its almost exclusive concern with grammatical accuracy to its intercultural pragmatic awareness.

Universiti Utara Malaysia

Recommendation 4: Develop Genre-Specific Assessment Rubrics.

Finally, the dimensional models highlighted in the course of this research can be used towards the constitution of more academically nuanced and genuinely refined rubrics for the assessment of student writing in blogs. Instead of evaluating student work via some generic criteria, the rubrics should be built to assess the degree to which students employ the linguistic resources of some specific stylistic dimension in realizing a communicative goal. For instance, a reflective writing assignment could be evaluated on the basis of how well the student implements the kind of style features of either "Reflective Evaluative" or "Narrative Descriptive" as outlined in this present study. It thus closely aligns assessment with authentic communicative practices of the

genre, thereby offering students more meaningful and actionable feedback.

5.9 Recommendations for Future Research

Although this thesis has provided a relatively comprehensive and in-depth analysis of two educational blog genres operating in differing contexts, its results ironically open up a plethora of new and exciting directions for future research. An academic inquiry attempts to answer questions while posing yet others. From these insights in light of the limitations acknowledged, the following specific and action-oriented recommendations may be considered useful guides for future scholarship in this emerging field.

Recommendation 1 (Methodological Expansion): Apply the Dual-Pronged MDA Framework to Other Genres and Contexts.

This proves an arduous testing of a dual-layered ("Classic" and "New") framework for MDA that assures both comparability and descriptive adequacy. Henceforth, research should wield this sturdy, mixed-method blueprint to examine other under-analyzed digital genres (professional discussion forums, academic wikis, institutional social media, etc.) and other cross-cultural settings. A comparative study of educational blogs from, say, the US ('inner circle'), Singapore ('outer circle'), and Japan ('expanding circle') might provide an even more sophisticated outlook on the glocalization of this genre.

Recommendation 2 (Promoting Deeper Contextualizations): The Need for Higher-Capacity Outer Circle Corpora.

The study has shed light on linguistic profiling of one professional register of Pakistani English. But it is merely the beginning. The need for more large-scale corpus-based research into various other professional and academic registers of Pakistani English and other 'outer circle' varieties is becoming more and more pressing. One genre is not enough to develop a fuller understanding of these varieties. In the future, researchers

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could work on compiling and investigating corpora of, say, Pakistani legal discourse, business communication, or scientific research articles in English so that these prominent world Englishes can take a step forward towards the elucidation of their stylistic repertoire in a more empirical manner.

Recommendation 3 (Taking a Wider Analytical View): Towards Multimodal Analysis. As explicitly stated as a delimitation of this study, and since this was a completely fundamental first step, only the content of the blogs, strictly considered, was analyzed. Because the entire communicative impact of any digital genre is multimodal, this area holds the key for exciting research. Future scholars could embark on a comparative multimodal study of any of the same blog corpora. For instance, such a study would be geared at the key questions: How do British and Pakistani bloggers use images, videos, and hyperlinks to support their arguments? Are there systematic cross-cultural differences in visual rhetoric within the genre? An integrated analysis combining the textual results of this thesis with a systematic analysis of the visual elements would offer a truly holistic account of this digital genre, thus following the latest developments in multimodal critical discourse analysis (Kress & van Leeuwen, 2006).

Recommendation 4 (Introducing a Temporal Parameter): Longitudinal (Diachronic) Study.

The present study adopted a synchronic, or "snapshot," approach, analyzing texts from a very selective two-year period. However, digital genres evolve rapidly. Future work could be sorely needed in the diachronic, or longitudinal, analysis of educational blogging. That analysis could place corpora from different times (say, 2014, 2019, and 2024) into perspective, giving an understanding of changes occurring in the linguistic features of the genre over time. Such a study would begin to answer interesting

Universiti Utara Malaysia

questions: Is the genre becoming more formal, or less? Are interactive content features becoming more common or less? A diachronic MDA would shed much needed light on linguistic change and conventionalization processes in the digital era.

5.10 Acknowledgement of Methodological Constraints

It is a principal axis of any rigorously conducted and transparently reported research project to state upfront the boundaries of the study, along with any potential limitations. No jocular study can sufficiently capture a complex phenomenon; it is incumbent upon scholarly honesty to clearly state the possible methodological instigations that may limit the pragmatic interpretations of a study's findings. The way this research has been designed and carried out has been done with as much rigor as possible. However, it does have its limitations. This section will self-critique and believe that it is important to make claims on this thesis that can be understood considering the methodological basis. The limitations fall into four broad categories. First, there was the problem of the question of corpus representativeness. While a truly representative corpus cannot ever be produced due to the entire discourse community being too dynamic, a stringent set of ten criteria were followed, along with a stratified sampling procedure. These corpora consist of large, balanced, and systematically compiled samples but are not a full census of all the British and Pakistani educational blogging. The findings represent those tendencies which are dominant in this particular sample; thus, probably they represent tendencies more generally in the field, but care has to be taken in generalizing to the individual teacher in either country.

In the second place, the quantitative phase of this study rests on the annotation carried out automatically. Being a state-of-the-art system, and although a manual reliability check has been performed (with a resultant very high accuracy confirmed, section 3.9), no tagger is really perfect in every respect. Subtle, highly idiomatic, or creatively novel

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linguistic features could have escaped identification or even misclassification by the automated process. The patterns that have been identified as belonging to the established tagset constituted the basis of the findings of this study, yet other more nuanced features may have existed but were not picked by this instrument.

Third, the final stage of Multidimensional Analysis, that is, the functional interpretation and naming of the dimensions, is qualitatively conducted by the researcher working interpretively. Careful grounding in linguistic theory (Biber et al., 1999; Halliday & Matthiessen, 2014) as well as being supported by qualitative textual evidence from the corpora are among the main backing for the interpretations made; however, the process cannot be said to be completely objective. There is always the possibility that other researchers, faced with the exact same statistical patterns, could come to slightly different functional interpretations or assign different interpretive names to the dimensions.

Finally, the study is constrained by one black "box" of authorship. If full attention has been given to accepting that the bloggers indeed do possess a professional status, the analysis cannot account for the full range of individual factors that may inform a writer's style. Writers may have received a disciplinary training of their own, may possess differing levels of experience with the medium of the blog, may differ in the general disposition toward life, or may abide by some unstated editorial policy or audience expectations peculiar to a particular publication outlet. These individual peculiarities are absorbed by the analyzed larger group-level pattern.

By openly acknowledging these limitations, this thesis seeks to report the findings with the due scholarly caution and humility. This act of transparency does not detract from the study, but, on the contrary, makes the study more credible by presenting a clear and

Universiti Utara Malaysia

honest description of methodological boundaries and scope.

5.11 Statement of Original Contribution

Despite its limitations, this thesis engenders an invaluable and original contribution to knowledge from various important linguistic inquiry areas. The research is original not because of a specific finding but because of the synthesis: the coming together of two language worlds, two strong methodological traditions, and a specific professional context that is poorly researched to provide what the literature currently lacks. The unique contribution may be said to lie in three main areas.

First, this thesis baselines an empirical foundation in the field of digital genre. This study has yielded the first major empirical study offering a multidimensional profile of the educational blog genre. Moving beyond small-scale qualitative case studies, it has established a firm data-driven baseline for linguistic and rhetorical conventions underlying this important form of professional writing. The emergence of new dimensions of variation through the New MD analysis, in particular, provides an original and nuanced view of the functional intricacies of this hybrid genre.

Secondly, this research functions as an important comparative contribution to the study of World Englishes and intercultural communication. The study stands out as one of the very first to bring a large-scale, two-pronged MDA to bear on a systematic, direct comparison of a professional digital genre in 'inner circle' (British) and 'outer circle' (Pakistani) contexts. In this way, it really serves as strong quantitative backing for the "glocalization" of digital genres and as a practical project toward the decolonization of corpus linguistics. It takes studies of Pakistani English beyond mere descriptive inventories into the domain of a functional analysis of its systematic deployment within a high-stakes professional register.

Thirdly, the study proposes a sophisticated methodological contribution: modeling a

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two-pronged ("Classic" and "New") MDA framework, thus showing that external comparability and internal descriptive adequacy may in fact be obtained in one study. It establishes a clear blueprint for integrating mixed methods, articulating how the large-scale quantitative findings of corpus linguistics may be linked in a systematic way with deep and interpretive qualitative discourse analysis to produce findings that are empirically robust yet also theoretically rich.

The fifth unique contribution of this thesis lies in its synthesis. By dealing with such a gobbledygook and multi-layered design, this thesis rejects a one-dimensional conception of "digital language" and offers instead a nuanced and contextual critical account of global-local interplay shaping present-day professional discourse; thus, it stands as an original and most timely contribution.

5.12 Concluding Remarks: Towards a Global Understanding of Digital Discourse

In a nutshell, on this very line, the study of a digital genre is not simply the linguistic description of it; the work thus aims to argue for a larger, more nuanced, and more globally conscious approach to the study of language online. Central to the work and the theme that runs through the previous chapters has been the direct confrontation with the issue of decolonizing digital discourse analysis. By standing Pakistani English as a central object of analysis side by side with British English and not at its periphery, the present study tries to confront the unconscious Anglophone bias that still pervades corpus linguistics. Following this line of thought and with examples demonstrated empirically, it argued that an understanding of global communication in the 21st Century cannot be achieved without the rigorous, empirical, and respectful study of World Englishes in their entire variety. What this first chapter did was lay the groundwork for a study that was supposed to be methodologically transparent, theoretically grounded, and consciously ideological. In the hope of looking into a phenomenon, it moved to

Universiti Utara Malaysia

establish context, identify a research gap of some kind, and then present a very specifically guided approach to research that would not only have led to new data but, more importantly, new perspectives. The subsequent chapters have now taken that very scheme and given it a rich empirical backing worthy of this critical intellectual undertaking.

The findings illustrate that the term "educational blog" is by no means a static, generic class; rather, it represents a dynamic and fluid site where worldwide formats are appropriated and transformed to cater to local communicative needs and to perform arbitrarily chosen professional identities. This study has demonstrated that the future of English on the Internet is not one of homogenization but one of rich, systematic diversification. The challenge, and the opportunity, for scholarship lies in carrying this work forward: continuing to map the new and evolving landscapes of digital discourse, listening to the diverse voices shaping the future of the English language, and building a body of knowledge as global, diverse, and dynamic as the communities we study.

Universiti Utara Malaysia

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Appendices

1 Linguistic Features in Academic Writing Adapted from Biber's MDA (1988)

Private Verb (e.g. believe, feel, think)
'*That*' deletion (e.g; I think[that] he did it)
Present tense verb (uninflected present, imperative and third person)
Pro-verb '*do*'
Demonstrative pronoun (that, this, those, these)
Adverb/ Qualifier-Emphatic (e.g. just, really, so)
First person pronoun (e.g. we, our)
Pronoun it/its
Verb 'Be' (Uninflected present tense, verb and auxiliary
Subordinating Conjunction- Causative (e.g. because)
Discourse particles (sentence initial, well, now)
Nominal pronoun (e.g. someone, everything)
Adverbial-Hedge (e.g. almost, may be)
Adverb/ Qualifier, Amplifier (e.g. absolutely, entirely)
Wh-question
Modals of possibility (can, may, could, might)
Coordinating conjunction-clausal connector Wh-clause (e.g. he believed what I told him)
Stranded Preposition(appearing at sentence end)
Noun (excluding nominalization and gerund)
Preposition
Attributive adjective (e.g. national interest, annual return)
Past tense verbs
Third person pronoun (except'it')
Verb-perfect aspect
Public verb (e.g. assert, complain)
Wh-pronoun- relative clause-object position (the person who he likes)
Wh-relative clause-subject position (e.g. the participants who like to join…)
Wh-relative clause-object position with prepositional fronting ('pied piping') way Co-ordinating conjunction-phrasal connector
Nominalization (e.g. organization, development)
Adverb-Time(e.g. instantly, soon)
Adverb-place (e.g. above, beside)
Adverb other(excluding adverb/Qualifier, Hedge, Emphatic, Time, place Amplifier)
Infinitive Verb
Modals of prediction(will, would.)
Suasive Verb(e.g. ask, command)
Subordinating Conjunction- conditional (if, unless)
Modal of necessity (Ought, should, must)
Adverb within auxiliary(splitting aux-verb) (e.g. the product is specifically meant)
Adverbial-conjuncts(however, therefore, thus)
Agentless passive verb (e.g. however, therefore, thus)
Agentless passive verb (e.g. the scheme was introduced)
Passive verb+ by (e.g. the plan was introduced by principal)
Passive post nominal modifier (e.g. the message conveyed by)
Subordinating conjunction-Other (e.g. as, excepts, until)
Present Tense Verbs (Uninflected present, imperative and third person)
2nd person Pronoun
1st Person Pronoun
Verb 'Be'
Noun (excluding nominalization and Gerund)
Preposition

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Table 2 Linguistic Distribution across Pakistani Educational Blogs

Linguistic Features in Pakistani Educational Blogs	Mean
Word Length	5.14
Type-Token Ratio	235
Amplifiers	0.18
Interdependent Clause Coordination	0.44
Be as main verb	1.5
By-passives	0.16
Causative adverbial subordinators	0.09
Concessive adverbial subordinators	0.02
Conditional adverbial subordinators	0.16
Conjuncts	0.3
Contractions	0.19
Demonstratives	0.81
Demonstrative pronouns	0.32
Discourse particles	0.03
Downtoners	0.23
Emphatics	0.53
Existential there	0.21
First person pronouns	1.34
Gerunds	0.68
Hedges	0.01
Indefinite pronouns	0.02
Attributive adjectives	7.52
Necessity modals	0.22
Total other nouns	27
Nominalizations	5.35
Other adverbial subordinators	0.22
Agentless passives	1.06
Past participial clauses	0.04

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Table 3 Linguistic Distribution across Native Educational Blogs

Linguistic Features in Native Educational Blogs	Mean
Word Length	5.06
Type-Token Ratio	233
Amplifiers	0.12
Interdependent Clause Coordination	0.91
Be as main verb	1.61
By-passives	0.07
Causative adverbial subordinators	0.09
Concessive adverbial subordinators	0.04
Conditional adverbial subordinators	0.23
Conjuncts	0.27
Contractions	0.75
Demonstratives	0.83
Demonstrative pronouns	0.4
Discourse particles	0.02
Downtoners	0.16
Emphatics	0.72
Existential there	0.17
First person pronouns	2.31
Gerunds	1
Hedges	0.01
Indefinite pronouns	0.01
Attributive adjectives	7.32
Necessity modals	0.17
Total other nouns	23.98
Nominalizations	4.03
Other adverbial subordinators	0.21
Agentless passives	0.61
Past participial clauses	0.04
Perfect aspect	0.47
Phrasal coordination	1.26
Total prepositional phrases	10.15
Pied-piping relative clauses	0.05
Pronoun it	0.84
Place adverbials	0.33
Possibility modals	0.88
Predicative adjectives	0.78
Present participial clauses	0.27
Private verbs	1.73
Predictive modals	0.45
Pro-verb do	0.12
Public verbs	0.53
Total adverbs	3.28
Sentence relatives	0.09
Seem|appear	0.04
Split auxiliaries	0.36
Split infinitives	0.05
Second person pronouns	0.96
Stranded preposition	0.08
Suasive verbs	0.46
Synthetic negation	0.09
That adjective complements	0.04
Subordinator that deletion	0.22
That verb complements	0.29
Time adverbials	0.28
Infinitives	2.5
That relative clauses on object position	0.15
Third person pronouns	1.87
That relative clauses on subject position	0.35
Past tense	2.07
Present tense	5.52
WH-clauses	0.11
WH relative clauses on object position	0.01
Direct WH-questions	0.08
WH relative clauses on subject position	0.15
Past participial WHIZ deletion relatives	0.14
Present participial WHIZ deletion relatives	0.28
Analytic negation	0.67

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Table 4 Linguistic Distribution across Pakistani English Educational Blogs

Linguistic Features in Pakistani English Educational Blogs	Tags	Mean
Word Length	AWL	5.14
Type-Token Ratio	TTR	235
Amplifiers	AMP	0.18
Interdependent Clause Coordination	ANDC	0.44
Be as main verb	[BEMA]	1.5
By-passives	[BYPA]	0.16
Causative adverbial subordinators	CAUS	0.09
Concessive adverbial subordinators	CONC	0.02
Conditional adverbial subordinators	COND	0.16
Conjuncts	CONJ	0.3
Contractions	[CONT]	0.19
Demonstratives	DEMO	0.81
Demonstrative pronouns	DEMP	0.32
Discourse particles	DPAR	0.03
Downtoners	DWNT	0.23
Emphatics	EMPH	0.53
Existential there	EX	0.21
First person pronouns	FPP1	1.34
Gerunds	GER	0.68
Hedges	HDG	0.01
Indefinite pronouns	INPR	0.02
Attributive adjectives	JJ	7.52
Necessity modals	NEMD	0.22
Total other nouns	NN	27
Nominalizations	NOMZ	5.35
Other adverbial subordinators	OSUB	0.22
Agentless passives	[PASS]	1.06
Past participial clauses	[PASTP]	0.04
Perfect aspect	[PEAS]	0.7
Phrasal coordination	PHC	1.49
Total prepositional phrases	PIN	11.7
Pied-piping relative clauses	[PIRE]	0.06
Pronoun it	PIT	0.77
Place adverbials	PLACE	0.33
Possibility modals	POMD	0.47
Predicative adjectives	PRED	0.62
Present participial clauses	[PRESP]	0.19
Private verbs	[PRIV]	1.04
Predictive modals	PRMD	0.48
Pro-verb do	[PROD]	0.06
Public verbs	[PUBV]	0.65
Total adverbs	RB	2.56
Sentence relatives	[SERE]	0.1
Seem/appear	[SMP]	0.05
Split auxiliaries	[SPAU]	0.41
Split infinitives	[SPIN]	0.03
Second person pronouns	SPP2	0.22
Stranded preposition	[STPR]	0.05
Suasive verbs	[SUAV]	0.34
Synthetic negation	SYNE	0.15
That adjective complements	THAC	0.04
Subordinator that deletion	[THATD]	0.12
That verb complements	THVC	0.41
Time adverbials	TIME	0.32
Infinitives	TO	1.73
That relative clauses on object position	TOBJ	0.08
Third person pronouns	TPP3	1.78
That relative clauses on subject position	TSUB	0.16

Universiti Utara Malaysia

Past tense	VBD	2.33
Present tense	VPRT	4.7
WH-clauses	[WHCL]	0.03
WH relative clauses on object position	[WHOBJ]	0.02
Direct WH-questions	[WHQU]	0.03
WH relative clauses on subject position	[WHSUB]	0.23
Past participial WHIZ deletion relatives	[WZPAST]	0.18
Present participial WHIZ deletion relatives	[WZPRES]	0.31
Analytic negation	XX0	0.61

Table 5 Linguistic Distribution across Native English Educational

Linguistic Features in Native English Educational Blogs	Tags	Mean
Word Length	AWL	5.06
Type-Token Ratio	TTR	233
Amplifiers	AMP	0.12
Interdependent Clause Coordination	ANDC	0.91
Be as main verb	[BEMA]	1.61
By-passives	[BYPA]	0.07
Causative adverbial subordinators	CAUS	0.09
Concessive adverbial subordinators	CONC	0.04
Conditional adverbial subordinators	COND	0.23
Conjuncts	CONJ	0.27
Contractions	[CONT]	0.75
Demonstratives	DEMO	0.83
Demonstrative pronouns	DEMP	0.4
Discourse particles	DPAR	0.02
Downtoners	DWNT	0.16
Emphatics	EMPH	0.72
Existential there	EX	0.17
First person pronouns	FPP1	2.31
Gerunds	GER	1
Hedges	HDG	0.01
Indefinite pronouns	INPR	0.01
Attributive adjectives	JJ	7.32
Necessity modals	NEMD	0.17
Total other nouns	NN	23.98
Nominalizations	NOMZ	4.03
Other adverbial subordinators	OSUB	0.21
Agentless passives	[PASS]	0.61
Past participial clauses	[PASTP]	0.04
Perfect aspect	[PEAS]	0.47
Phrasal coordination	PHC	1.26
Total prepositional phrases	PIN	10.15
Pied-piping relative clauses	[PIRE]	0.05
Pronoun it	PIT	0.84
Place adverbials	PLACE	0.33
Possibility modals	POMD	0.88
Predicative adjectives	PRED	0.78
Present participial clauses	[PRESP]	0.27
Private verbs	[PRIV]	1.73
Predictive modals	PRMD	0.45
Pro-verb do	[PROD]	0.12
Public verbs	[PUBV]	0.53
Total adverbs	RB	3.28
Sentence relatives	[SERE]	0.09
Seem/appear	[SMP]	0.04
Split auxiliaries	[SPAU]	0.36
Split infinitives	[SPIN]	0.05
Second person pronouns	SPP2	0.96
Stranded preposition	[STPR]	0.08
Suasive verbs	[SUAV]	0.46
Synthetic negation	SYNE	0.09
That adjective complements	THAC	0.04
Subordinator that deletion	[THATD]	0.22
That verb complements	THVC	0.29
Time adverbials	TIME	0.28
Infinitives	TO	2.5
That relative clauses on object position	TOBJ	0.15
Third person pronouns	TPP3	1.87
That relative clauses on subject position	TSUB	0.35
Past tense	VBD	2.07
Present tense	VPRT	5.52
WH-clauses	[WHCL]	0.11
WH relative clauses on object position	[WHOBJ]	0.01
Direct WH-questions	[WHQU]	0.08
WH relative clauses on subject position	[WHSUB]	0.15
Past participial WHIZ deletion relatives	[WZPAST]	0.14
Present participial WHIZ deletion relatives	[WZPRES]	0.28
Analytic negation	XX0	0.67

Universiti Utara Malaysia

Table 6 Linguistic Distribution of Pakistani English Educational Blogs

Descriptors	mean	min	max	Range	std
Average worktable 6d length	5.13	4.14	6.06	1.91	0.37
Type-token ratio	0.54	0.4	0.74	0.34	0.05
Lexical density	0.55	0.38	0.73	0.35	0.07
Use of "be able to"	0.73	0	12.5	12.5	1.81
Activity verbs (e.g., run, think)	26.8	5.88	51.47	45.59	10.49
Amplifiers (e.g., very, absolutely)	0.13	0	1.01	1.01	0.22
Aspectual verbs (e.g., begin, continue)	2.73	0	23.81	23.81	3.7
Be as main verb	15.54	0	31.58	31.58	8.05
Causative verbs (e.g., make, cause)	3.68	0	22.22	22.22	4.17
Coordinating conjunctions (e.g., and, or, but)	62.67	20.83	156.25	135.42	25.97
Numbers (e.g., one, two)	1.6	0	9.01	9.01	1.69
Communication verbs (e.g., say, ask)	17.71	0	56.25	56.25	14.4
Concessive conjunctions (e.g., although)	0.9	0	12.5	12.5	1.75
Conditional conjunctions (e.g., if, unless)	1.58	0	14.29	14.29	2.32
Verbal contractions (e.g., isn't, can't)	0.01	0	2.27	2.27	0.18
Causal conjunctions (e.g., because, since)	1.99	0	14.29	14.29	2.8
Demonstrative pronouns and articles (e.g., this)	0.85	0	2.46	2.46	0.6
Discourse/pragmatic markers (e.g., well, you know)	0.06	0	0.76	0.76	0.13
DO auxiliary (e.g., do, does, did)	1.41	0	12.5	12.5	2.25
Determiners (e.g., the, a, an)	24.53	5.12	50.81	45.69	9.23
Downtoners (e.g., slightly, somewhat)	0.04	0	0.67	0.67	0.1
Elaborating conjunctions (e.g., moreover)	1.35	0	11.36	11.36	2.25
Emoji or emoticons	0	0	0.28	0.28	0.02
Emphatics (e.g., really, absolutely)	0.06	0	0.72	0.72	0.12
Existential "there" (e.g., There is a book)	2.16	0	13.16	13.16	2.83
Existential verbs (e.g., exist, occur)	5.47	0	25	25	4.71
Filled pauses and interjections (e.g., uh, um)	0.22	0	5.49	5.49	0.6
Frequency references (e.g., always, often)	1.8	0	10.45	10.45	2.65
Going to constructions	0.2	0	7.14	7.14	0.98
Hedges (e.g., perhaps, maybe)	0.05	0	1.14	1.14	0.14
HAVE got constructions	0.04	0	3.13	3.13	0.31
Hashtags	0	0	0.24	0.24	0.02
Prepositions (e.g., in, on, at)	14.49	6.04	20.45	14.41	2.12
Attributive adjectives (e.g., red car)	17.7	0	40	40	7.96
Predicative adjectives (e.g., The car is red)	14.02	0	57.14	57.14	9.09
Modal "can"	3.01	0	22.73	22.73	3.83
Modal "could"	0.67	0	9.8	9.8	1.63
Modals "may" and "might"	0.76	0	12.5	12.5	1.8
Necessity modals (e.g., must, need to)	3.81	0	21.88	21.88	4.3
Modal "would"	2.53	0	17.95	17.95	4.04
Modals "will" and "shall"	4.22	0	46.15	46.15	7.74
Mental verbs (e.g., know, believe)	13.02	0	33.33	33.33	7.88
Noun compounds (e.g., toothpaste)	7.28	1.41	18.55	17.14	3.22
Total nouns (including proper nouns)	35.46	17.15	63.57	46.42	9.39
Occurrence verbs (e.g., happen, occur)	4.25	0	18.18	18.18	4.25
BE-passives (e.g., was written)	16.42	0	58.82	58.82	10.87

Perfect aspect (e.g., has eaten)	9.29	0	60	60	10.25
GET-passives (e.g., got caught)	0.16	0	2.94	2.94	0.53
It pronoun reference	7.99	0	55.71	55.71	6.67
Place references (e.g., here, there)	3.41	0	45.18	45.18	5.4
Politeness markers (e.g., please)	0.01	0	0.38	0.38	0.05
s-genitives (e.g., John's book)	1.39	0	7.95	7.95	1.47
First person plural pronouns (e.g., we)	8.94	0	69.23	69.23	12.34
First person singular pronouns (e.g., I)	4.81	0	79.63	79.63	13.64
Second person pronouns (e.g., you)	2.47	0	66.67	66.67	7.15
Third person singular female pronouns (e.g., she)	1.89	0	55.42	55.42	5.12
Third person singular male pronouns (e.g., he)	8.92	0	90	90	13.62
Third person plural or singular "they"	11.52	0	55.29	55.29	11.07
Progressive aspect (e.g., is running)	5.55	0	38.46	38.46	5.58
Quantifiers (e.g., many, few)	3.55	0	14.1	14.1	2.91
Quantifying pronouns (e.g., some)	1.3	0	11.76	11.76	1.53
Question tags (e.g., isn't it?)	0	0	0	0	0
Other adverbs	1.65	0	4.17	4.17	1.12
Particles (e.g., look up)	3.08	0	25	25	3.83
Split auxiliaries and infinitives (e.g., to boldly go)	6.8	0	37.5	37.5	5.92
Stranded prepositions (e.g., Where are you from?)	0.17	0	4.17	4.17	0.58
Subordinator that omission	1.05	0	14.29	14.29	2.26
That relative clauses	2.94	0	16.67	16.67	3.65
That subordinate clauses	8.72	0	37.5	37.5	8.91
Time references (e.g., now, yesterday)	4.52	0	25	25	4.29
URLs and email addresses	0.03	0	1.46	1.46	0.17
Past tense (e.g., ran, walked)	54.92	0	100	100	27.55
Non-finite verb -ing forms (e.g., running)	21.53	0	62.38	62.38	13.43
Non-finite -ed verb forms (e.g., eaten)	11.95	0	50	50	9.87
Imperatives (e.g., Go there!)	0.59	0	10.45	10.45	1.59
Present tense (e.g., runs, walks)	49.49	0	93.33	93.33	25.37
Direct WH-questions (e.g., What is that?)	0.49	0	10.42	10.42	1.45
WH subordinate clauses	10.05	0	34.72	34.72	7.26
Negation (e.g., no, not)	6.06	0	30	30	5.96
Yes/no questions	0.05	0	0.96	0.96	0.15
Comparatives	0.41	0	2.69	2.69	0.47
Prepositions not having additional tags	13.98	6.04	20.45	14.41	2.1
Attributive adjectives without additional descriptors	0.12	0	1.85	1.85	0.33
Attributive adjectives with no specific tags	12.62	0	33.33	33.33	6.19
Adjectives related to color	0.1	0	3.4	3.4	0.58
Epistemic adjectives without specific tags	0.39	0	3.7	3.7	0.62
Evaluative adjectives	0.49	0	4.81	4.81	0.86
Predicative adjectives without additional tags	11.31	0	42.86	42.86	7.52
Relational adjectives	1.81	0	7.65	7.65	1.62
Size-related adjectives	0.5	0	5.83	5.83	0.78
Time-related adjectives	0.6	0	3.26	3.26	0.73
Topical adjectives	0.49	0	4.25	4.25	0.81
All modals of possibility	4.54	0	22.73	22.73	4.83
All modals of prediction	6.95	0	46.15	46.15	8.75
Nouns related to abstract processes	14.36	1.9	32.28	30.37	6.68
Cognitive-related nouns	1.28	0	7.89	7.89	1.25
Concrete nouns	2.39	0	14.74	14.74	2.43

Universiti Utara Malaysia

Group nouns	3.55	0	16.34	16.33	3.49
Nouns referring to humans	7.47	0	31.58	31.58	5.38
Proper nouns	31.1 6	0	83.15	83.15	22.09
Nouns referring to places	2.8	0	8.5	8.5	2.12
Quantifying nouns	2.59	0	14.82	14.82	2.55
Technical nouns	0.93	0	7.41	7.41	1.2
Nouns without specific tags	6.72	1.14	13.22	17.09	2.17
Nominalizations	4.26	0	11.98	11.98	2.59
Stance-related nouns without prepositions	1.31	0	5.68	5.68	1.21
All passive constructions	16.5 8	0	58.82	58.82	10.82
All first-person pronouns	13.7 2	0	90.52	90.52	20
All third-person pronouns	22.9 6	0	90	90	15.68
Prepositions used with stance-related nouns	0.77	0	3.68	3.68	0.83
Adverbs with no specific tags	1.42	0	4.31	4.31	1
factive adverbs	0.04	0	0.53	0.53	0.09
Adverbs expressing likelihood	0	0	0.18	0.18	0.02
Non-factive adverbs	0.81	0	0.41	0.41	0.09
All stance-related adverbs	0.02	0	0.53	0.53	0.11
Superlatives	0.15	0	0.85	0.85	0.21
That relative clauses without additional tags	2.89	0	16	16	3.61
That complement clauses not preceded by stance adjectives or verbs	3.09	0	15.79	15.79	3.55
That subordinate clauses preceded by attitudinal adjectives	0.08	0	7.14	7.14	0.71
That subordinate clauses preceded by evaluative adjectives	0.09	0	4.17	4.17	0.52
That subordinate clauses preceded by factive adjectives	0.1	0	3.85	3.85	0.47
That subordinate clauses preceded by likelihood adjectives	0	0	0	0	0
That subordinate clauses preceded by stance adjectives, nouns, or verbs	0.21	0	7.89	7.89	1.08
That relative clauses preceded by attitudinal nouns	0	0	0.33	0.33	0.03
That relative clauses preceded by factive nouns	0	0	0	0	0
That relative clauses preceded by likelihood nouns	0.01	0	0.57	0.57	0.07
That relative clauses preceded by non-factive nouns	0	0	0	0	0
That complement clauses preceded by stance-related nouns	0.01	0	0.57	0.57	0.07
That complement clauses not preceded by stance-related adjectives, nouns, and verbs	0.43	0	3.57	3.57	0.63
That subordinate clauses preceded by attitudinal verbs	0.24	0	2	2	0.34
That subordinate clauses preceded by communicative verbs	4.25	0	33.33	33.33	7.76
That subordinate clauses preceded by factive verbs	0.64	0	5.71	5.71	1.28
That subordinate clauses preceded by likelihood verbs	0.14	0	3.23	3.23	0.48
That subordinate clauses preceded by stance-related verbs	3.11	0	33.33	33.33	7.63
To-clauses preceded by ability-related adjectives	0.01	0	0.55	0.55	0.07
To-clauses preceded by certainty-related adjectives	0.01	0	0.15	0.15	0.03
To-clauses preceded by adjectives of ease	0.01	0	0.28	0.28	0.04
To-clauses preceded by factive adjectives	0	0	0.4	0.4	0.04
To-clauses preceded by evaluative adjectives	0.01	0	0.52	0.52	0.05
To-clauses preceded by stance-related adjectives	0.05	0	0.55	0.55	0.1
To-clauses preceded by stance-related verbs	0.07	0	1.03	1.03	0.19
To-clauses preceded by mental verbs	0.11	0	2.08	2.08	0.38
To-clauses preceded by verbs of probability	0.21	0	3.36	3.36	0.72
To-clauses preceded by speech-related verbs	0.01	0	0.98	0.98	0.08
To-clauses preceded by stance-related verbs	1.53	0	10	10	2.34
Attitudinal verbs in other contexts	0.01	0	0.98	0.98	0.08
factive verbs in other contexts	0.52	0	7.14	7.14	1.36
Likelihood verbs in other contexts	0.04	0	2.13	2.13	0.26
WH complement clauses not preceded by stance-related verbs	9.76	0	31.94	31.94	7.08
WH subordinate clauses preceded by attitudinal verbs	0	0	0	0	0
WH subordinate clauses preceded by communicative verbs	0.07	0	5.26	5.26	0.51
WH subordinate clauses preceded by factive verbs	0.21	0	4.76	4.76	0.67
WH subordinate clauses preceded by likelihood verbs	0.01	0	1.1	1.1	0.09
WH subordinate clauses preceded by stance-related verbs	0.29	0	5.26	5.26	0.82

Universiti Utara Malaysia

Table 7 Linguistic Distribution of Native English Educational Blogs

Descriptors	mean	min	max	Range	std
Average word length	5.00	3.93	6.06	2.13	0.38
Type-token ratio	0.54	0.41	0.76	0.36	0.04
Lexical density	0.52	0.37	0.69	0.32	0.05
Use of "be able to"	0.60	0.00	8.00	8.00	1.10
Activity verbs (e.g., run, think)	31.32	14.29	65.71	51.43	9.71
Amplifiers (e.g., very, absolutely)	0.12	0.00	1.17	1.17	0.17
Aspectual verbs (e.g., begin, continue)	3.55	0.00	23.81	23.81	3.13
Be as main verb	18.27	6.19	100.00	93.81	8.26
Causative verbs (e.g., make, cause)	6.16	0.00	26.42	26.42	4.56
Coordinating conjunctions (e.g., and, or, but)	124.45	22.22	53.52	19.05	143.48
Numbers (e.g., one, two)	1.40	0.00	5.43	5.43	0.94
Communication verbs (e.g., say, ask)	12.60	0.00	43.90	43.90	7.11
Concessive conjunctions (e.g., although)	1.09	0.00	7.35	7.35	1.39
Conditional conjunctions (e.g., if, unless)	2.44	0.00	12.12	12.12	2.10
Verbal contractions (e.g., isn't, can't)	0.65	0.00	20.83	20.83	2.34
Causal conjunctions (e.g., because, since)	1.51	0.00	6.41	6.41	1.53
Demonstrative pronouns and articles (e.g., this)	1.01	0.00	2.67	2.67	0.48
Discourse/pragmatic markers (e.g., well, you know)	0.13	0.00	0.71	0.71	0.12
DO auxiliary (e.g., do, does, did)	2.84	0.00	11.86	11.86	2.51
Determiners (e.g., the, a, an)	25.05	6.45	43.81	37.36	5.84
Downtoners (e.g., slightly, somewhat)	0.03	0.00	0.30	0.30	0.06
Elaborating conjunctions (e.g., moreover)	1.70	0.00	11.29	11.29	1.86
Emoji or emoticons	0.01	0.00	0.47	0.47	0.05
Emphatics (e.g., really, absolutely)	0.09	0.00	1.13	1.13	0.15
Existential "there" (e.g., There is a book)	1.80	0.00	12.50	12.50	1.93
Existential verbs (e.g., exist, occur)	5.36	0.00	25.00	25.00	4.33
Filled pauses and interjections (e.g., uh, um)	0.09	0.00	3.11	3.11	0.28
Frequency references (e.g., always, often)	3.22	0.00	14.45	14.45	2.88
Going to constructions	0.30	0.00	3.92	3.92	0.74
Hedges (e.g., perhaps, maybe)	0.07	0.00	0.42	0.42	0.11
HAVE got constructions	0.06	0.00	1.96	1.96	0.26
Hashtags	0.00	0.00	0.29	0.29	0.03
Prepositions (e.g., in, on, at)	13.83	10.21	17.50	7.29	1.34
Attributive adjectives (e.g., red car)	19.36	7.97	35.47	27.50	5.24
Predicative adjectives (e.g., The car is red)	20.29	4.76	57.14	52.38	8.12
Modal "can"	6.25	0.00	28.00	28.00	5.00
Modal "could"	1.15	0.00	7.02	7.02	1.56
Modals "may" and "might"	1.97	0.00	10.26	10.26	2.26
Necessity modals (e.g., must, need to)	4.08	0.00	20.00	20.00	3.48
Modal "would"	1.76	0.00	9.76	9.76	2.04
Modals "will" and "shall"	3.08	0.00	23.81	23.81	3.58
Mental verbs (e.g., know, believe)	20.42	0.00	62.07	62.07	9.49
Noun compounds (e.g., toothpaste)	11.27	3.95	25.32	21.37	3.64
Total nouns (including proper nouns)	29.36	13.16	50.93	37.77	5.51
Occurrence verbs (e.g., happen, occur)	5.65	0.00	33.33	33.33	4.30
BE-passives (e.g., was written)	7.66	0.00	28.51	28.51	5.97
Perfect aspect (e.g., has eaten)	5.81	0.00	33.33	33.33	4.88
GET-passives (e.g., got caught)	0.36	0.00	2.99	2.99	0.71
It pronoun reference	8.66	0.00	23.68	23.68	4.54
Place references (e.g., here, there)	3.93	0.00	58.33	58.3	5.84

Universiti Utara Malaysia

Third person singular male pronouns (e.g., he)	1.53	0.00	14.69	14.69	2.94
Third person plural or singular "they"	15.32	0.00	56.99	56.99	10.46
Progressive aspect (e.g., is running)	4.25	0.00	16.67	16.67	3.25
Quantifiers (e.g., many, few)	4.96	0.83	19.05	18.22	2.49
Quantifying pronouns (e.g., some)	1.99	0.00	10.00	10.00	2.13
Question tags (e.g., isn't it?)	0.03	0.00	3.77	3.77	0.30
Other adverbs	2.34	0.51	4.56	4.05	0.74
Particles (e.g., look up)	3.87	0.00	19.05	19.05	3.14
Split auxiliaries and infinitives (e.g., to boldly go)	6.84	0.00	16.95	16.95	3.33
Stranded prepositions (e.g., Where are you from?)	0.25	0.00	2.66	2.66	0.55
Subordinator that omission	1.73	0.00	9.52	9.52	1.99
That relative clauses	6.30	0.00	21.64	21.64	4.28
That subordinate clauses	5.39	0.00	19.72	19.72	3.77
Time references (e.g., now, yesterday)	3.70	0.00	14.29	14.29	2.69
URLs and email addresses	0.01	0.00	0.42	0.42	0.05
Past tense (e.g., ran, walked)	19.61	0.00	67.77	67.77	17.24
Non-finite verb -ing forms (e.g., running)	25.57	1.96	68.57	66.61	12.40
Non-finite -ed verb forms (e.g., eaten)	11.32	0.00	52.17	52.17	9.11
Imperatives (e.g., Go there!)	3.80	0.00	37.93	37.93	5.59

Universiti Utara Malaysia

Present tense (e.g., runs, walks)	58.30	19.01	83.12	64.11	14.39
Direct WH-questions (e.g., What is that?)	1.40	0.00	18.31	18.31	2.22
WH subordinate clauses	14.11	0.00	33.77	33.77	5.94
Negation (e.g., no, not)	5.04	0.00	15.87	15.87	3.25
Yes/no questions	0.10	0.00	0.93	0.93	0.15
Comparatives	0.65	0.00	2.49	2.49	0.50
Prepositions not having additional tags	13.10	9.54	16.86	7.32	1.36
Attributive adjectives without additional descriptors	0.12	0.00	1.90	1.90	0.30
Attributive adjectives with no specific tags	13.21	4.76	25.45	20.69	4.21
Adjectives related to color	0.06	0.00	2.03	2.03	0.24
Epistemic adjectives without specific tags	0.84	0.00	7.14	7.14	1.06
Evaluative adjectives	0.62	0.00	4.76	4.76	0.81
Predicative adjectives without additional tags	15.93	2.04	44.05	42.01	7.19
Relational adjectives	1.45	0.00	5.30	5.30	1.00
Size-related adjectives	0.70	0.00	3.13	3.13	0.59
Time-related adjectives	1.04	0.00	8.57	8.57	1.18
Topical adjectives	0.58	0.00	6.93	6.93	1.02
All modals of possibility	9.37	0.00	30.67	30.67	5.92
All modals of prediction	5.15	0.00	28.57	28.57	4.49
Nouns related to abstract processes	17.94	3.05	36.44	33.40	5.80
Cognitive-related nouns	2.17	0.00	12.45	12.45	1.69
Concrete nouns	2.91	0.00	13.24	13.24	2.25
Group nouns	3.64	0.00	14.86	14.86	2.93
Nouns referring to humans	9.67	0.00	26.13	26.13	4.74
Proper nouns	13.83	0.00	70.81	70.81	11.06
Nouns referring to places	2.99	0.00	10.97	10.97	1.88
Quantifying nouns	3.61	0.00	26.50	26.50	3.01
Technical nouns	1.36	0.00	14.32	14.32	1.87
Nouns without specific tags	7.29	2.51	13.58	11.02	2.03
Nominalizations	3.83	0.00	10.59	10.59	2.10
Stance-related nouns without prepositions	1.70	0.00	8.46	8.46	1.39
All passive constructions	8.02	0.00	28.51	28.51	5.90
All first-person pronouns	22.24	0.00	87.21	87.21	20.50
All third-person pronouns	19.01	0.00	56.99	56.99	11.74
Prepositions used with stance-related nouns	0.86	0.00	3.73	3.73	0.68

That complement clauses not preceded by specific adjectives or verbs

That subordinate clauses preceded by attitudinal adjectives

That subordinate clauses preceded by evaluative adjectives

That subordinate clauses preceded by factive adjectives

That subordinate clauses preceded by likelihood adjectives

Universiti Utara Malaysia

That subordinate clauses preceded by stance adjectives, nouns, or verbs	0.24	0.00	2.80	2.80	0.55
	0.00	0.00	0.41	0.41	0.03
That relative clauses preceded by attitudinal nouns That relative clauses preceded by factive nouns	0.01	0.00	0.75	0.75	0.07
	0.01	0.00	0.42	0.42	0.06
	0.00	0.00	0.16	0.16	0.01
That relative clauses preceded by likelihood nouns That relative clauses preceded by non-factive nouns	0.03	0.00	0.85	0.85	0.11
	0.25	0.00	0.94	0.94	0.23
	0.38	0.00	4.67	4.67	0.79
That complement clauses preceded by stance-related nouns	0.85	0.00	5.21	5.21	1.37
	1.14	0.00	5.21	5.21	1.32
	0.20	0.00	4.00	4.00	0.62
That complement clauses preceded by stance-related adjectives, nouns, and verbs	2.39	0.00	9.86	9.86	2.33
	0.02	0.00	0.26	0.26	0.05
That subordinate clauses preceded by attitudinal verbs That subordinate clauses preceded by communicative verbs	0.02	0.00	0.32	0.32	0.06
	0.03	0.00	0.32	0.32	0.06
	0.01	0.00	0.47	0.47	0.05
	0.04	0.00	0.64	0.64	0.09
	0.13	0.00	0.95	0.95	0.15
That subordinate clauses preceded by factive verbs That subordinate clauses preceded by likelihood verbs That subordinate clauses preceded by stance-related verbs	0.25	0.00	1.90	1.90	0.38
	0.42	0.00	1.55	1.55	0.28
	1.26	0.00	7.27	7.27	1.68
	0.60	0.00	4.76	4.76	0.99
	0.16	0.00	2.31	2.31	0.49
	0.31	0.00	9.43	9.43	1.12
	0.03	0.00	1.89	1.89	0.20
To-clauses preceded by ability-related adjectives To-clauses preceded by certainty-related adjectives To-clauses preceded by adjectives of ease	2.36	0.00	11.32	11.32	2.28
	0.03	0.00	2.60	2.60	0.23
	1.47	0.00	6.90	6.90	1.63
	0.04	0.00	4.00	4.00	0.33
	13.13	0.00	29.82	29.82	5.65
	0.04	0.00	1.75	1.75	0.23
To-clauses preceded by factive adjectives	0.23	0.00	3.95	3.95	0.57
To-clauses preceded by evaluative adjectives	0.69	0.00	4.76	4.76	1.04
To-clauses preceded by stance-related adjectives To-clauses preceded by stance-related nouns	0.03	0.00	1.56	1.56	0.18
	0.99	0.00	5.61	5.61	1.26
To-clauses preceded by stance-related adjectives, nouns, or verbs					
To-clauses preceded by verbs of desire					
To-clauses preceded by effort-related verbs To-clauses preceded by mental verbs					
To-clauses preceded by verbs of probability To-clauses preceded by speech-related verbs To-clauses preceded by					

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Table 8 Explained Variance Ratio across Pakistani English Educational Blogs

Components	Explained Variance Ratio
Component_1	0.13
Component_2	0.05
Component_3	0.04
Component_4	0.03
Component_5	0.03
Component_6	0.02
Component_7	0.02
Component_8	0.02
Component_9	0.02
Component_10	0.02
Component_11	0.02
Component_12	0.02
Component_13	0.02
Component_14	0.02
Component_15	0.02
Component_16	0.02
Component_17	0.02
Component_18	0.02
Component_19	0.01
Component_20	0.01
Component_21	0.01
Component_22	0.01
Component_23	0.01
Component_24	0.01
Component_25	0.01
Component_26	0.01
Component_27	0.01
Component_28	0.01
Component_29	0.01
Component_30	0.01
Component_31	0.01
Component_32	0.01
Component_33	0.01
Component_34	0.01
Component_35	0.01
Component_36	0.01
Component_37	0.01
Component_38	0.01
Component_39	0.01
Component_40	0.01

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Table 9 Explained Variance Ratio across Native English Educational Blogs

Components	Explained Variance Ratio
Component 1	0.09
Component 2	0.05
Component 3	0.04
Component 4	0.04
Component 5	0.03
Component 6	0.03
Component 7	0.03
Component 8	0.02
Component 9	0.02
Component 10	0.02
Component 11	0.02
Component 12	0.02
Component 13	0.02
Component 14	0.02
Component 15	0.02
Component 16	0.02
Component 17	0.02
Component 18	0.02
Component 19	0.01
Component 20	0.01
Component 21	0.01
Component 22	0.01
Component 23	0.01
Component 24	0.01
Component 25	0.01

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Table 9 Proposed Factors across Pakistani English Educational Blogs

Sr.	Linguistic Features	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
1	Average word length	-0.13	-0.19	0.06	0.02	-0.15	0.02	-0.04	0.01	-0.02	0.01
2	Lexical diversity	-0.06	0.04	0.12	0.00	-0.03	0.16	0.14	-0.05	-0.06	-0.05
3	Lexical density	-0.19	-0.11	0.07	0.06	0.01	0.03	0.02	0.04	-0.03	0.03
4	be able to	0.02	0.03	0.00	0.02	-0.19	-0.02	-0.04	-0.02	-0.04	-0.05
5	Activity verbs	0.04	-0.02	0.13	-0.01	-0.03	0.10	0.02	-0.10	0.05	0.11
6	Amplifiers										
7	Aspectual verbs	0.04	-0.03	0.15	-0.09	0.12	0.06	-0.15	-0.12	0.10	-0.11
8	Be as main verb	0.13	-0.07	-0.09	0.09	0.01	-0.03	-0.02	0.11	0.01	-0.02
9	Facilitation and causative verbs	0.02	-0.04	0.10	0.05	-0.08	0.07	0.01	-0.06	0.07	-0.02
10	Coordinating conjunctions	-0.12	-0.14	0.11	-0.04	-0.04	-0.03	0.03	0.03	-0.03	0.03
11	Numbers	-0.02	-0.12	-0.07	-0.09	0.15	0.05	-0.06	-0.14	0.06	0.02
12	Communication verbs	-0.13	0.15	0.06	0.09	-0.12	0.03	-0.01	0.01	-0.05	0.00
13	Concessive conjunctions	0.04	-0.04	-0.02	0.02	-0.02	0.09	-0.06	-0.10	-0.05	0.08
14	Conditional conjunctions	0.10	0.01	-0.10	0.08	0.00	0.05	0.04	-0.13	-0.04	0.00
15	Verbal contractions	0.01	-0.02	0.01	0.06	0.06	-0.03	0.08	0.00	0.19	-0.19
16	Causal conjunctions	0.05	0.02	-0.11	0.07	0.02	-0.02	-0.05	-0.08	-0.02	-0.03
17	Demonstratives	0.10	0.08	0.03	0.00	-0.04	-0.06	-0.05	-0.13	-0.14	-0.01
18	Discourse/pragmatic markers	0.10	0.04	0.06	-0.01	0.15	-0.08	-0.01	0.04	-0.16	0.09
19	DO auxiliary	0.12	0.05	-0.04	0.01	0.01	0.13	0.06	0.11	0.04	-0.11
20	Determiners	0.14	0.01	-0.07	0.05	-0.08	-0.01	0.01	-0.12	0.01	-0.06
21	Downtoners	0.05	-0.03	0.02	-0.01	-0.04	0.00	-0.03	-0.01	-0.12	0.05
22	Elaborating conjunctions	0.03	-0.11	0.01	-0.01	0.01	0.00	0.04	-0.04	0.04	-0.15
23	Emphatics	0.10	0.10	0.00	-0.07	0.05	0.01	0.01	-0.03	-0.17	0.06
24	Existential there	0.04	-0.09	-0.11	0.07	0.00	0.04	0.07	0.08	0.02	0.06
25	Existential or relationship verbs	-0.01	-0.12	0.04	-0.01	-0.15	0.05	0.05	-0.03	-0.10	0.03
26	Filled pauses and interjections	0.01	0.15	0.02	-0.06	0.05	0.05	-0.04	0.02	-0.12	0.10
27	Frequency references	-0.09	0.00	-0.03	0.03	-0.04	-0.07	0.05	0.04	0.03	-0.05
28	Going to constructions	0.00	0.11	-0.02	0.07	0.07	0.10	0.00	-0.08	0.10	0.02
29	Hedges	0.04	-0.01	-0.04	-0.06	0.03	-0.08	-0.01	0.08	-0.04	0.05
30	HAVE got constructions	0.00	0.03	-0.02	-0.02	0.06	0.02	-0.07	-0.02	0.11	-0.03
31	Prepositions	0.04	-0.16	-0.08	-0.13	-0.11	-0.02	-0.04	0.02	0.16	0.06
32	Necessity modals	0.05	0.00	-0.16	0.09	0.02	0.00	0.03	0.06	0.01	-0.04
33	modal would	-0.02	0.11	0.06	0.02	-0.14	-0.04	-0.09	-0.15	0.04	-0.06
34	will and shall modals	-0.03	-0.02	0.03	0.11	-0.05	-0.02	0.08	-0.25	0.05	0.10
35	Mental verbs	0.10	0.05	0.08	-0.07	-0.02	-0.02	0.09	0.03	0.07	-0.01
36	Noun compounds	0.04	-0.11	0.05	0.12	0.01	0.06	-0.10	-0.13	0.13	0.03
37	Occurrence verbs	0.06	-0.04	-0.02	0.17	-0.08	0.08	0.06	0.04	-0.01	0.18
38	Verb features	-0.07	-0.10	-0.10	-0.02	0.10	-0.10	0.04	-0.25	0.04	-0.03
39	Perfect aspect	-0.04	-0.07	-0.05	-0.11	0.17	0.01	0.01	-0.08	-0.01	-0.03
40	it pronoun reference	0.09	-0.11	0.03	0.00	-0.03	-0.04	0.14	-0.10	-0.07	-0.04
41	Place references	0.00	-0.01	0.07	0.00	-0.01	-0.03	-0.05	-0.04	-0.06	0.11
42	Politeness markers	0.01	-0.02	0.01	0.03	-0.02	0.14	0.13	0.15	0.12	-0.12
43	s-genitives	0.05	-0.04	0.03	-0.13	-0.05	0.00	-0.05	-0.02	-0.03	-0.08
44	Reference to the speaker/writer and other(s)	0.09	0.11	0.01	-0.07	0.04	0.15	-0.03	0.07	0.12	-0.06
45	Reference to the	0.07	0.21	0.08	-0.15	0.01	0.03	-0.01	-0.01	0.03	0.10

												0.01
60	Quantifiers	0.16	0.11	0.00	-0.02	0.05	-0.08	0.01	-0.04	0.01	0.00	
61	Quantifying pronouns	0.07	0.11	-0.01	0.04	0.04	0.00	0.07	0.09	0.10	0.02	
62	Question tags	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

63	Other adverbs	0.19	0.07	0.02	-0.04	-0.02	0.06	0.05	0.01	-0.05	0.05	
64	Particles	0.04	0.05	0.10	-0.04	-0.08	0.08	0.02	-0.12	-0.07	0.09	
65	Split auxiliaries and infinitives	0.07	0.00	0.03	-0.01	-0.04	0.05	0.11	-0.15	0.06	-0.09	
66	Stranded prepositions	0.06	0.00	0.05	0.04	-0.09	0.07	0.08	0.05	-0.04	0.10	
67	Subordinator that omission	-0.02	0.08	0.11	0.07	-0.17	-0.07	0.07	-0.06	0.05	0.06	
68	that relative clauses	0.04	-0.08	0.25	0.02	-0.10	-0.01	-0.07	0.02	-0.15	0.07	
69	that subordinate clauses (other than relatives)	-0.09	0.20	-0.08	0.25	-0.03	0.04	-0.10	-0.04	-0.02	0.07	
70	Time references	0.02	0.05	0.05	-0.04	0.09	-0.07	0.06	0.05	0.06	0.15	
71	Past tense	-0.14	0.16	0.08	-0.10	-0.07	0.02	0.03	-0.04	-0.05	0.02	
72	Non-finite verb -ing forms	-0.01	-0.12	0.16	-0.02	-0.21	0.15	0.02	0.00	-0.08	0.05	
73	Non-finite -ed verb forms	-0.05	-0.15	0.16	-0.05	-0.07	-0.02	-0.01	-0.05	-0.03	0.00	
74	Imperatives	0.06	-0.05	0.11	0.09	0.12	0.08	-0.03	0.02	0.09	0.20	
75	Present tense	0.15	-0.17	-0.09	0.02	0.09	0.00	-0.06	0.12	0.02	0.00	
76	Direct WH-questions	0.08	0.05	0.08	-0.01	0.15	0.00	-0.02	0.04	0.02	0.01	
77	WH subordinate clauses	0.15	0.05	-0.02	-0.08	-0.01	0.15	-0.05	-0.08	0.09	0.17	
78	Negation	0.11	-0.05	-0.14	0.06	0.03	0.05	0.01	0.01	0.00	0.15	
79	Yes/no questions	0.09	0.09	0.05	-0.06	0.08	-0.05	0.04	-0.05	-0.10	0.11	
80	Comparatives	0.08	-0.07	-0.02	0.08	-0.06	0.08	-0.06	0.07	0.02	0.07	
81	Prepositions having no additional tag	0.01	-0.17	-0.08	-0.14	-0.08	0.00	-0.06	0.03	0.16	0.06	
82	Attitudinal adjectives without a that clause after	0.06	-0.02	-0.05	-0.05	0.05	0.13	0.00	0.00	-0.11	0.10	
83	Attributive adjectives having no additional tag	0.14	-0.12	-0.08	0.07	-0.11	-0.05	-0.10	0.01	-0.05	0.03	
84	Adjectives related to color	0.02	0.07	0.02	0.01	0.00	-0.05	0.03	-0.06	-0.01	0.10	
85	Epistemic adjectives without a that clause after	0.07	0.03	0.02	0.09	0.06	-0.11	0.03	0.03	-0.05	-0.03	
86	Evaluative adjectives	0.10	0.03	-0.10	0.04	0.05	-0.02	-0.07	0.08	-0.04	-0.01	
87	Predicative adjectives having no additional tag	0.10	-0.08	0.14	0.19	-0.01	-0.02	-0.04	-0.05	0.05	-0.01	
88	Relational adjectives	0.07	-0.08	-0.08	0.05	0.07	0.01	-0.13	-0.07	0.01	-0.04	
89	Size related adjectives	0.09	0.02	-0.02	0.04	-0.02	-0.09	0.00	-0.10	-0.12	0.02	
90	Time related adjectives	0.05	0.00	-0.03	0.00	-0.04	-0.03	0.10	0.03	0.00	-0.06	
91	Topical adjectives	0.05	-0.09	0.03	0.06	0.03	0.00	0.09	0.00	-0.15	-0.11	
92	All modals of possibility	0.11	0.00	0.00	0.21	0.07	-0.08	0.13	0.00	0.06	0.12	
93	Nouns abstract and process	0.15	-0.08	-0.12	0.08	-0.06	-0.01	-0.08	0.03	0.00	0.03	
94	Nouns cognitive	0.08	0.00	0.02	0.04	-0.02	0.02	0.00	0.00	-0.05	-0.11	
95	Nouns concrete	0.08	0.06	-0.04	-0.02	0.05	-0.04	0.09	0.00	0.08	0.07	
96	Nouns group	0.08	0.01	-0.05	0.03	-0.01	0.18	-0.09	-0.08	0.18	-0.01	

												0.07
109	All third person references	-0.03	0.17	0.02	-0.04	-0.12	-0.13	-0.05	0.17	-0.02	-0.04	
	Prepositions preceded by stance nouns	0.09	0.04	-0.03	-0.05	-0.06	0.04	-0.05	-0.06	-0.04	0.00	
112	Adverbs having no additional tag	0.09	-0.02	-0.06	-0.04	0.08	0.04	-0.01	-0.08	-0.14	0.05	

113	Factive adverbs	0.05	-0.01	0.05	-0.03	-0.03	0.05	-0.09	-0.07	0.08	-0.02	
114	Non-factive adverbs	0.05	-0.03	-0.02	-0.02	0.03	-0.18	-0.05	0.15	-0.14	0.05	
115	All adverbs related to stance	0.09	-0.05	-0.05	-0.05	0.07	-0.03	-0.04	-0.01	-0.10	0.06	
116	Superlatives	0.09	-0.05	-0.05	-0.05	0.07	-0.03	-0.04	-0.01	-0.10	0.06	
117	that relative clauses not preceded by a stance noun	0.01	-0.01	0.05	0.11	-0.02	-0.12	-0.20	0.04	-0.05	0.15	
118	that complement clauses not preceded by a stance adjective or verb	0.04	-0.08	0.24	0.02	-0.09	0.00	-0.06	0.02	-0.15	0.07	
119	that subordinate clause (other than relatives) preceded by attitudinal adjectives	0.01	0.10	-0.05	0.01	0.00	0.17	-0.05	-0.03	-0.01	0.07	
120	that subordinate clauses (other than relatives) preceded by adjectives of evaluation	0.05	0.02	0.19	0.03	0.19	-0.01	-0.05	0.02	-0.03	0.12	
121	that subordinate clauses (other than relatives) preceded by factive adjectives	0.02										
122	that subordinate clauses (other than relatives) preceded by likelihood adjectives	0.01	-0.04	0.04	0.08	-0.13	0.16	0.13	0.13	0.02	-0.09	
123	All that complement clauses preceded by stance adjectives, nouns, and verbs	0.02	-0.05	0.06	0.10	-0.02	0.17	-0.05	0.04	-0.05	0.13	
124	that subordinate clauses (relative clause) preceded by attitudinal nouns	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
125	that subordinate clauses (relative clause) preceded by factive nouns	0.00	-0.01	0.05	0.21	-0.05	0.28	0.03	0.05	-0.03	0.09	
126	that subordinate clauses (relative clause) preceded by likelihood nouns	0.01	-0.01	-0.02	-0.03	-0.09	-0.09	-0.11	0.10	0.05	-0.04	
127	that subordinate clauses (relative clause) preceded by non factive nouns	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
128	All that complement clauses preceded by stance nouns	0.02	0.00	-0.04	0.01	-0.19	-0.08	-0.11	-0.06	0.04	0.00	
129	All that complement clauses preceded by stance adjectives, nouns, and verbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	that subordinate clauses (other than relatives preceded by attitudinal verbs	0.02	0.00	-0.04	0.01	-0.19	-0.08	-0.11	-0.06	0.04	0.00	
131	that subordinate clauses (other than relatives) preceded by communicative verbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
132	that subordinate clauses (other than relatives) preceded by factive verbs	0.02	0.00	-0.04	0.00	-0.20	-0.11	-0.15	-0.02	0.06	-0.01	
133	that subordinate clauses (other than relatives preceded by likelihood verbs	0.09	0.19	-0.08	0.27	-0.02	-0.03	-0.09	-0.01	-0.03	0.06	
134	All that complement clauses preceded by stance verbs	0.03	0.07	0.03	-0.01	-0.15	-0.10	-0.02	-0.16	0.09	0.06	

	to clauses preceded by ability adjectives	0.01	0.08	0.06	-0.04	-0.09	-0.05	-0.06	-0.06	0.19	-0.03
136	to clauses preceded by ability adjectives	—	—	—	—	—	—	—	—	—	—
137	to clauses preceded by adjectives of ease	0.05	-0.01	0.04	0.04	0.01	-0.04	-0.05	0.01	—	0.04
138	to clauses preceded by factive adjectives	—	—	—	—	—	—	—	—	0.13	—
139	to clauses preceded by factive adjectives	0.07	-0.03	0.18	0.09	0.16	-0.10	0.00	-0.06	0.11	0.00
140	All to infinitive clauses preceded by stance adjectives	-0.02	0.00	0.03	-0.01	-0.09	-0.09	-0.09	0.07	0.02	-0.04
141	To clauses preceded by stance nouns	0.04	0.00	-0.01	-0.01	0.04	-0.12	0.02	-0.08	—	0.08
142	All to infinitive clauses preceded by stance adjectives, nouns, and verbs	—	—	—	—	—	—	—	—	0.05	—
143	to clauses preceded by verbs of desire	0.06	0.03	0.14	0.01	0.00	-0.18	-0.08	-0.07	0.13	0.01
144	to clauses preceded by verbs of effort	0.08	-0.01	-0.02	-0.01	-0.04	-0.04	-0.08	-0.01	—	0.04
145	to clauses preceded by mental verbs	—	—	—	—	—	—	—	—	0.02	—
146	to clauses preceded by verbs of probability	0.14	0.05	0.09	0.02	-0.08	-0.14	0.12	0.05	0.11	-0.04
147	to clauses preceded by verbs of speech	—	—	—	—	—	—	—	—	—	—
148	All to infinitive clauses preceded by stance verbs	0.04	0.03	0.03	0.02	-0.17	-0.03	0.19	0.16	0.11	0.02
151	WH complement clauses not preceded by a stance verb	—	—	—	—	—	—	—	—	—	—
152	WH subordinate clauses preceded by attitudinal verbs	0.04	-0.02	0.09	0.01	0.05	0.01	-0.04	-0.02	0.07	-0.07
153	WH subordinate clauses preceded by communicative verbs	0.08	0.05	0.03	0.02	0.01	-0.11	0.10	-0.02	0.06	0.11
154	WH subordinate clauses preceded by factive verbs	0.07	-0.01	-0.02	0.03	0.02	-0.10	0.19	-0.02	—	—
155	WH subordinate clauses preceded by inanimate verbs	—	—	—	—	—	—	—	—	0.12	0.11
156	All WH complement clauses preceded by stance verbs	0.02	-0.01	-0.01	-0.01	0.04	-0.03	0.18	-0.12	—	—
157		0.09	0.02	0.06	0.03	-0.10	-0.07	0.20	0.10	0.08	—
		—	—	—	—	—	—	—	—	0.17	0.17
		0.13	0.05	-0.05	-0.08	-0.02	0.12	-0.02	-0.09	—	0.07
		—	—	—	—	—	—	—	—	0.08	—
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
		—	0.03	0.07	-0.03	0.03	0.16	-0.06	0.04	—	0.00
		0.01	—	—	—	—	—	—	—	0.12	0.15
		—	—	—	—	—	—	—	—	—	—
		0.08	0.01	0.25	0.03	0.12	-0.04	-0.12	0.04	—	—
		—	—	—	—	—	—	—	—	0.03	0.10
		0.00	0.00	0.01	-0.02	-0.01	-0.02	0.02	0.04	—	0.01
		0.05	0.02	0.24	0.01	0.11	0.06	-0.14	0.06	0.08	—
										0.10	0.01

Table 10 Proposed Factors across Native English Educational Blogs

Sr.	Linguistic Features	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
1	Average word length	-0.24	0.06	0.06	-0.01	-0.03	0.04	0.05	-0.01	0	-0.03
2	Lexical diversity	-0.08	0.01	-0.04	0	0.07	-0.12	0.2	0.01	-0.06	-0.07
3	Lexical density	-0.25	0.04	-0.03	0	-0.04	-0.03	0.04	0.02	0.02	-0.04
4	be able to	0.05	-0.01	0.02	0.09	-0.03	0.23	-0.04	0.05	-0.03	0.09
5	Activity verbs	0.01	0.1	-0.05	0.02	-0.05	0.06	-0.12	0	0.19	-0.05
6	Amplifiers	0.05	-0.02	0.06	-0.04	0.16	-0.04	0	-0.03	0.06	0.13
7	Aspectual verbs	0.01	0.03	0.02	0.08	-0.03	-0.12	-0.1	-0.12	0.19	0.06
8	Be as main verb	0	0.09	0.01	0.06	0.1	-0.03	0.07	0.12	-0.07	0.05
9	Facilitation and causative verbs	-0.04	0.12	-0.04	0.14	-0.16	0.01	0.04	-0.1	-0.02	-0.04
10	Coordinating conjunctions	-0.18	0.1	0.03	0.03	0.03	0.06	0	0	0.04	-0.03
11	Numbers	-0.04	-0.06	0.02	0	-0.02	-0.16	-0.12	0.08	0.1	-0.03
12	Communication verbs	-0.02	-0.09	-0.01	-0.08	-0.11	0	0.07	0	-0.01	0.08
13	Concessive conjunctions	0	-0.08	0.1	-0.01	0.19	0.06	-0.12	0	-0.02	-0.05
14	Conditional conjunctions	0.09	0.1	0.11	0	-0.04	-0.07	-0.1	0.06	0.08	-0.01
15	Verbal contractions	0.04	0	-0.02	-0.04	0	0.03	0.14	-0.09	0	0.11
16	Causal conjunctions	0.05	0	0.09	0.02	-0.06	0.01	0.1	0	-0.04	-0.16
17	Demonstratives	0.1	0.01	0.04	-0.04	0.04	-0.08	0	-0.04	0.05	0.17
18	Discourse/pragmatic markers	0.03	0	0.05	-0.05	0.07	-0.08	0.05	0.05	0.12	-0.05
19	DO auxiliary	0.11	0.03	-0.01	-0.13	0.01	-0.08	0.04	0.02	-0.01	-0.01
20	Determiners	0.13	-0.08	0.12	0.04	0.05	0.06	-0.05	-0.12	-0.1	0.04
21	Downtoners	-0.02	-0.06	-0.03	-0.01	0.05	-0.06	-0.03	0.08	-0.03	-0.09
22	Elaborating conjunctions	-0.05	0.03	0.09	-0.08	0.07	0.08	-0.14	-0.03	0.04	-0.13
23		-0.06	0.09	-0.02	0.04	-0.03	-0.03	0.03	-0.1	0.05	0.16
24	Emphatics	0.12	-0.05	-0.02	0.15	0.05	0.12	0.02	0.09	-0.03	0.04
25	Existential there	0.01	-0.02	0.1	-0.04	0.14	0.02	-0.1	-0.03	-0.08	0.09
26	Existential or relationship verbs	-0.14	0.06	0.06	0.11	0.04	0.04	0.1	0	-0.16	0.04

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33	Prepositions	-0.1	-0.1	0.1	0.05	-0.01	0.16	-0.11	-0.05	0.1	-0.04
39	Necessity modals	0	0.09	0.07	-0.01	0.1	0.08	0.02	0.03	-0.18	0.13
40	modal would	0.04	-0.11	0.04	0.18	-0.06	-0.07	0.07	-0.07	-0.04	0.02
41	will and shall modals	-0.02	0.03	0.05	0.16	-0.11	-0.11	-0.12	-0.05	0.0	0
42	Mental verbs	0.11	0.05	-0.09	-0.05	-0.08	0.16	0.09	-0.08	0.1	-0.07
43	Noun compounds	-0.08	0.01	-0.03	0.03	-0.1	-0.17	-0.06	-0.01	0.0	-0.09
45	Occurrence verbs	-0.09	0.03	0	0.03	-0.01	0.11	-0.04	0.02	0.0	-0.07
46	Verb features	-0.14	-0.07	0.09	0.01	0.05	0.05	-0.07	-0.09	0.0	0.07
47	Perfect aspect	-0.05	-0.15	0.06	0.01	0.03	0.08	-0.07	-0.01	0.0	0.08
49	it pronoun reference	0.06	0.04	0.13	0.04	0.03	-0.12	-0.1	0.01	-0.08	0.03
50	Place references	-0.06	0.04	-0.06	0.16	-0.04	0.11	0.06	-0.03	-0.03	0.13
51	Politeness markers	0.02	-0.04	-0.04	-0.01	0.04	-0.01	0.13	-0.04	-0.07	0.03
52	s-genitives	-0.04	-0.09	0.1	-0.06	0.04	-0.06	-0.01	0	-0.02	0.02
53	Reference to the speaker/writer and other(s)	0.01	0.02	0.05	-0.06	0.03	0.08	0.05	-0.05	0.1	0.02
54	Reference to the speaker/writer	0.15	-0.13	-0.05	0.13	0.04	0.07	0.07	0.01	0.07	-0.05
55	Reference toaddressee(s)	0.12	0.19	-0.06	0.05	0	-0.04	-0.06	0.05	0.08	0.09

56	Single, female third person reference	-0.01	-0.13	-0.13	-0.05	-0.02	-0.06	-0.07	0.07	-0.07	0.03
57	Single, male third person reference	0.02	-0.18	-0.07	-0.08	-0.02	-0.07	0.07	-0.07	0.09	0.05
58	Reference to more than one non-interactant and single they reference	0.05	0.08	-0.02	-0.17	-0.17	0.06	-0.01	-0.01	-0.08	-0.1
59	Progressive aspect	0	-0.01	-0.06	-0.04	-0.01	-0.04	-0.04	-0.12	-0.02	0.12
60	Quantifiers	0.18	0	-0.03	0.1	0.02	0.03	-0.02	-0.01	-0.12	0.05
61	Quantifying pronouns	0.12	-0.03	-0.03	0.06	0.04	0.07	0.02	0.06	-0.11	-0.02
62	Question tags	-0.01	-0.06	-0.08	-0.01	0	-0.1	0.04	-0.05	0.06	-0.02
63	Other adverbs	0.17	0.01	0.08	0.02	0.05	-0.15	0.02	0.05	-0.08	0.15
64	Particles	0.06	-0.03	-0.04	0.13	-0.06	-0.14	-0.02	-0.14	0.05	0.05
65	Split auxiliaries and infinitives	0.05	0.01	0.03	0.04	0.02	-0.13	-0.14	-0.06	-0.02	0.04
66	Stranded prepositions	0.02	-0.03	0.01	-0.01	-0.01	0.01	0.01	0.01	0.02	-0.01
67	Subordinator that omission	0.09	-0.07	-0.07	0.06	0.02	-0.05	0	-0.03	-0.05	0.01
68	that relative clauses	-0.08	0.08	0.05	0.12	-0.07	0.01	0.25	0.04	-0.12	0.21
69	that subordinate clauses (other than relatives)	0.05	-0.09	0.26	-0.12	-0.18	-0.01	0.02	0.01	-0.04	0.01
70	Time references	-0.04	-0.06	-0.06	0.14	-0.02	-0.12	-0.08	-0.13	0.09	0.13
72	Past tense	0.05	-0.27	-0.06	0.05	-0.01	-0.01	0.02	-0.03	0.06	0
73	Non-finite verb -ing forms	-0.11	0.08	0.02	0.12	-0.07	0.09	-0.02	0.01	0.03	-0.13
74	Non-finite -ed verb forms	-0.17	0.07	-0.03	0.05	-0.02	0.01	0.1	-0.12	0.06	0
75	Imperatives	0.03	0.18	-0.09	-0.04	-0.02	0.05	-0.07	0.11	0.15	-0.03
76	Present tense	-0.08	0.14	0.08	-0.09	0.06	0	0.02	0.06	-0.08	0.06

83	Attitudinal adjectives without a that clause after	0	0.03	0.1	0	0.12	-0.04	0.04	0	-0.11	0.12
84	Attributive adjectives having no additional tag	0.1	0.17	0.03	0.2	0.06	0.02	-0.03	-0.06	0.07	0.09
85	Adjectives related to color	-0.01	0	0.04	-0.02	-0.05	-0.1	-0.06	0.17	0.02	0.07
86	Epistemic adjectives without a that clause after	0.1	0.05	0.05	0	-0.02	-0.02	-0.02	-0.12	-0.03	0.04
87	Evaluative adjectives	0.13	0.09	0.02	-0.01	0.09	0.04	0.07	0.05	0.08	-0.03
88	Predicative adjectives having no additional tag	-0.04	0.22	0.08	0.07	0.08	-0.1	0.03	0.08	0.06	-0.02
89	Relational adjectives	0	0	0.05	-0.01	0.08	-0.08	-0.15	-0.07	-0.01	0.08
90	Size related adjectives	0.08	-0.03	0	0.02	0.1	0	0	-0.1	-0.06	0.12
91	Time related adjectives	0.09	-0.01	-0.03	0.12	0	0.11	-0.06	0.03	-0.06	0.13
92	Topical adjectives	-0.04	0.05	0.01	0.01	0.01	0.02	0.02	0.16	0.09	0.05
93	All modals of possibility	0.04	0.23	-0.01	-0.07	-0.09	0.02	-0.02	-0.13	-0.06	0.04
95	Nouns abstract and process	0.03	0.07	0.16	0.01	-0.03	0.17	0.01	-0.04	0.04	-0.04

96	Nouns cognitive			0.06	-0.07	-0.03	0.12	0.05	-0.09	0.0	0.03
97	Nouns concrete	0.07	0.1							7	
98	Nouns group										
99	Nouns human	0.05	0.09	-0.09	-0.06	0.03	-0.07	-0.01	-0.02	-0.11	0.11
100	Proper nouns										
101	Nouns place	0.03	-0.02	0.06	0.1	-0.02	-0.06	0.01	0.16		
102	Nouns quantity									0.06	0.03
103	Nouns technical										
104	Nouns having no additional tag	0.12	0.02	-0.06	-0.12	-0.14	0.08	0.05	0.06	-0.08	0.01
105	Nominalizations										
106	Stance nouns without prepositions	-0.14	-0.17	-0.07	0.03	0.05	-0.01	0	0.11	0.0	0.14
107	All be and ge passives									7	
108	All first person references	0.09	0.02	0.02	0.05	0.08	0.09	-0.08	-0.07		0.08
109	All third person references									0.11	
110	Prepositions preceded by stance nouns										
111	Adverbs having no additional tag	0.16	0.04	0.01	0.12	0.02	-0.01	-0.03	0.03		
112										0.02	0.05
113	Factive adverbs										
114	Non factive adverbs	0	0.08	0.01	0.02	-0.03	-0.06	-0.03	-0.04		
115	All adverbs related to stance									0.04	0.05
116	Superlatives										
117	that relative clauses not preceded by a stance noun		0.06		-0.05	0.02	-0.1	0.03	-0.16		
118	that complement clauses not preceded by a stance adjective or verb	0.12		0.07						0.02	0.12
119	that subordinate clauses (other than relatives) preceded by attributival adjectives		0.03	0.16	-0.01	0.1	-0.05	0.09	-0.08	0	0.12
120	that subordinate clauses (other than relatives) preceded bysubjectives of evaluation	0.08									
121	that subordinate clauses (other than relatives) preceded by factive adjectives	0.04	0.04	0.01	-0.05	0.02	0.15	-0.01	-0.01	0.0	0.02
122	that subordinate clauses (other than relatives) preceded by likelihood adjectives	-0.14	-0.06	0.08	0.04	0.05	0.06	-0.07	-0.09	0.0	0.07
123	All that complement clauses preceded by stance adjectives, nouns, and verbs	0.15	-0.12	-0.02	0.09	0.05	0.1	0.09	-0.02	0.1	0.04
124	the subordinate clause (relative clauses) preceded by attributival nouns	0.02	-0.04	-0.12	-0.19	-0.17	0	0	0	0.08	0.06
125	that subordinate clauses (relative clauses) preceded by factive nouns	0.05	0.01	0.1	-0.03	-0.02	0.16	-0.01	-0.03	0.1	0.08
126	the subordinate clause (relative clause) preceded by likelihood nouns	0.1	-0.03	0.13	-0.01	0.03	-0.12	0.17	0	0.13	0.06
		0.02	0.03	-0.05	-0.08	0	0.04	0.01	0.1	0.0	0.07
		0.03	-0.03	0.07	-0.06	0.01	0.03	0.05	-0.01	0.0	0.01
		0.1	-0.04	0.13	-0.03	0.05	-0.09	0.17	0.02	0.1	0.07
		0.05	0.04	-0.04	0.04	0.11	0.01	0.15	0.06	-0.01	0.06
		-0.08	0.08	0.04	0.13	-0.09	0.02	0.24	0.04	-0.13	0.2

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0	-0.05	-0.01	-0.03	0.01	-0.08	0.03	0.15	0	0.02
0.02	-0.02	0.03	0.05	-0.12	0.01	-0.03	0.26	0.05	0.08
-0.01	0.05	-0.01	-0.04	0.01	-0.02	-0.05	-0.04	-0.09	0.04
0.02	0.02	0.07	-0.03	0.15	0	0.13	0.03	0.16	0.11
-0.03	0	0.08	-0.01	0.06	-0.04	0.15	-0.01	0.04	0.15

		0.01						7	0.14
0.11	-0.02	-0.09	-0.08	0.03	0.04	-0.01	-0.08	0.13	0.06
0.03	0.04	0.03	-0.05	0.07	0.05	0.01	-0.03	0.1	0.04

127	that subordinate clauses (relative clauses) preceded by non factive nouns	-0.02	0.01	0.06	0.01	0.04	-0.01	0.08	0.05	-0.01	0.09
128	All that complement clauses preceded by stance nouns	-0.01	0.03	0.09	-0.03	0.14	-0.02	0.16	0	0.1	0.18
129	All that complement clauses preceded by stance adjectives, nouns, and verbs	0.06	-0.07	0.24	-0.08	-0.23	-0.01	0.06	0.08	-0.03	0.05
130	that subordinate clauses (other than relatives)preceded by attributional verbs	0.02	0.02	0.09	0.07	-0.18	-0.01	0	-0.06	-0.05	-0.04
131	that subordinate clauses (other than relatives) preceded by communicative verbs	-0.03	-0.1	0.19	-0.08	-0.14	0.02	0	0.07	-0.03	0
132	that subordinate clauses (other than relatives) preceded by factive verbs	0.07	-0.05	0.17	-0.1	-0.17	-0.03	0	0.05	-0.04	0.01
133	that subordinate clauses (other than relatives)preceded by likelihood verbs	-0.01	-0.02	0.19	-0.01	-0.03	0.01	0.15	-0.11	0.08	0.06
134	All that complement clauses preceded by stance verbs	0.02	-0.07	0.26	-0.07	-0.23	0	0.03	0.01	-0.03	0
135	to clauses preceded by ability adjectives	0.04	0.03	0.01	0.01	-0.03	-0.05	-0.05	0.03	0.07	0.06
136	to clauses preceded by ability adjectives	0.02	0.08	0.03	0.04	-0.04	-0.04	-0.06	0.13	0.05	-0.07
137	to clauses preceded by adjectives of ease	0.07	0.12	0.03	0.01	-0.01	-0.12	-0.01	-0.01	-0.01	0.15
138	to clauses preceded by factive adjectives	0.06	0.04	-0.03	0.1	0.03	0.02	-0.03	0.07	0.07	0.03
139	to clauses preceded by factive adjectives	0.03	0.11	0.07	-0.02	-0.07	0.01	-0.07	0.1	0.15	0.05
140	All to infinitive clauses preceded by stance adjectives	0.09	0.17	0.06	0.04	-0.06	-0.07	-0.1	0.14	0.15	0.06
141	To clauses preceded by stance nouns	0.03	-0.01	0.07	0.03	-0.1	0.18	-0.02	-0.03	-0.02	0.1
142	All to infinitive clauses preceded by stance adjectives, nouns, and verbs	0.12	0.08	0.04	0.15	-0.16	0.04	0.07	-0.04	0.12	-0.05
143	to clauses preceded by verbs of desire	0.08	-0.06	-0.09	0.08	-0.05	0.09	0.13	-0.07	0.09	-0.12
144	to clauses preceded by verbs of effort										
145	to clauses preceded by mental verbs										
146	to clauses preceded by verbs of probability										
147	to clauses preceded by verbs of speech										
148	All to infinitive clauses preceded by stance verbs										
152	WH complement clauses not preceded by a stance verb										
153	WH subordinate clauses preceded by attributional verbs										
154	WH subordinate clauses preceded by communicative verbs	0	0	0	-0.07	-0.04	0.03	-0.09	-0.14	0.04	0.02
155	WH subordinate clauses preceded by factive verbs WH subordinate clauses preceded by likelihood verbs All WH complement clauses preceded by stance verbs	0.07	0.1	0	-0.09	0.01	-0.05	-0.05	-0.17	-0.04	0.12
156		0.03	0.04	-0.01	-0.08	-0.02	0	-0.06	-0.02	-0.14	0.01
157		0.06	0.1	0	-0.12	0	-0.03	-0.09	-0.23	-0.01	0.12

Table 11 Component Matrix of Native English Educational Blogs

Descriptors	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
Average word length	-0.24	0.06	0.06	-0.01	0.03	0.04	0.05	0.01	0	-0.03
Type-token ratio	-0.08	0.01	-0.04	0	0.07	-0.12	0.2	0.01	-0.06	-0.07
Lexical density	-0.25	0.04	-0.05	0	-0.04	0.03	0.04	0.02	0.02	-0.04
Use of 'be able to'	0.05	-0.01	0.02	0.09	-0.03	0.25	-0.04	0.05	-0.05	0.09
Activity verbs (e.g., run, think)	0.01	0.1	-0.05	0.02	-0.05	0.06	-0.12	0	0.19	-0.05
Amplifiers (e.g., very, absolutely)	0.05	-0.02	0.06	-0.04	0.16	-0.04	0	-0.03	0.06	0.13
Aspectual verbs (e.g., begin, continue)	0.01	0.03	0.02	0.08	-0.03	-0.12	-0.1	-0.12	0.18	0.08
Be as main verb Causative verbs (e.g., make, cause)	0.04	0.09	0.01	0.06	0.1	-0.03	0.07	0.12	-0.07	0.05
Coordinating conjunctions (e.g., and, or, but) Numbers (e.g., one, two)	0.04	0.12	-0.04	0.14	-0.16	0.01	0.04	-0.1	-0.02	-0.04
Communication	0.18	0.1	0.03	0.02	0.03	0.06	0	0	0.04	-0.03
	0.04	-0.06	0.02	0	-0.02	-0.16	-0.12	0.08	0.1	-0.03
	0.02	-0.09	0.01	-0.08	-0.11	0	0.07	0	-0.01	0.08
	0	-0.08	0.1	-0.01	0.19	0.06	-0.12	0	-0.02	-0.05
	0.09	0.1	0.11	0	-0.04	-0.07	-0.1	0.06	0.08	-0.01
	0.04	0	-0.02	-0.04	0	0.03	0.14	-0.09	0	0.11

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(e.g., isn't, can't) Causal conjunctions (e.g., because, since) Demonstrative pronouns and articles (e.g., this) Discourse/pragmatic markers (e.g., well,

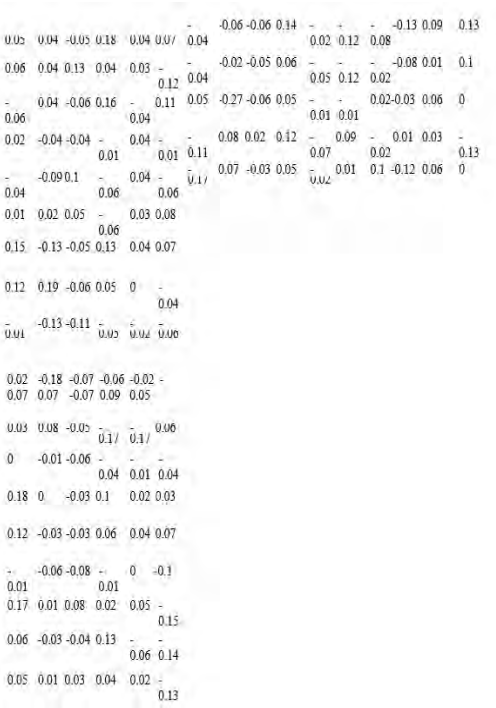
you know) DO auxiliary (e.g., do, does, did) Determiners (e.g., the, a, an) Downtoners (e.g., slightly, somewhat) Elaborating conjunctions (e.g., moreover) Emoji or emoticons Emphatics (e.g., really, absolutely) Existential "there" (e.g., There is a book) Existential verbs (e.g., exist, occur) Filled pauses and interjections (e.g., uh, um) Frequency references (e.g., always, often) Going to constructions Hedges (e.g., perhaps, maybe) HAVE got constructions Hashtags Prepositions (e.g., in, on, at) Attributive

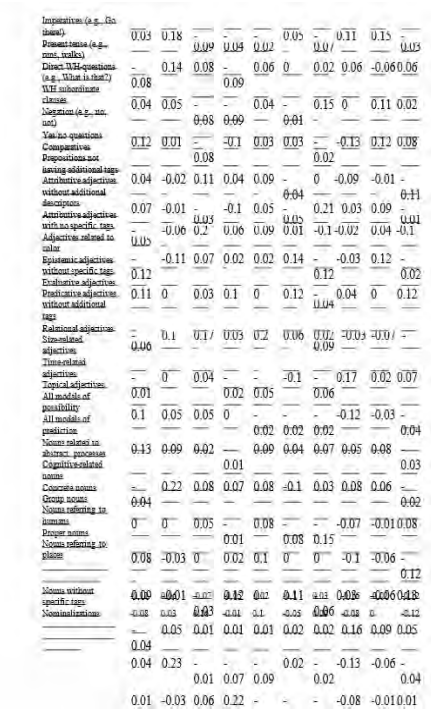
must, need to) Modal "would" Modals "will" and "shall"
Mental verbs (e.g., know, believe) Noun compounds (e.g., toothpaste) Total nouns (including proper nouns)
Occurrence verbs (e.g., happen, occur) BE-passives (e.g., was written)
Perfect aspect (e.g.,

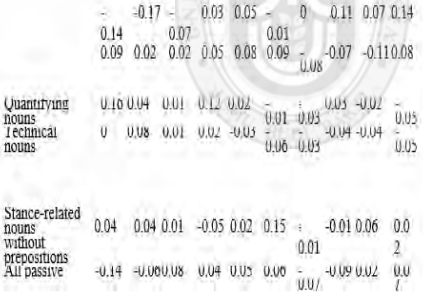
).11	0.03	-0.01	-0.13	0.01	-	-0.08	0.01	-0.03	0.03	-0.1	-0.17	-0.06	-0.01	0.06	-0.09
).08	0.04	0.02	-0.01	-0.01		-0.25	-0.04	-0.07	-0.02	-0.04	-0.03	0.01	0.05	0.03	0
).13	-0.08	0.12	0.04	0.05	0.06										
-0.02	-0.06	-0.03	-0.01	0.05	-0.06	-0.09	0.03	0	0.03	-0.01	0.11	-0.04	0.02	0.04	-0.07
-0.05	0.03	0.09	-0.08	0.07	0.08	-0.14	-0.07	0.09	0.01	0.05	0.05	-0.07	-0.09	0.01	0.07
						-0.05	-0.15	0.06	0.01	0.03	0.08	-0.07	-0.01	0.06	0.08
-0.06	0.09	-0.02	0.04	-0.03	-0.03										
).12	-0.05	-0.02	0.15	0.05	0.12										
).01	-0.02	0.1	-0.04	0.14	0.02										
-0.14	0.06	0.06	0.11	0.04	0.04										
)	0	0.01	-0.03	0.09	0.04										
).1	-0.01	-0.03	-0.03	0.12	0.1										
).06	-0.01	0.02	0.05	0	-0.1										
).04	-0.05	0.06	0.02	0.02	-0.14										
).08	-0.02	-0.03	0.07	0	0.01										
)	-0.03	-0.01	0.02	0.06	-0.08										
-0.1	-0.1	0.1	0.05	-0.01	0.16										
-0.01	0.08	0.2	0.08	0.23	0.07										
-0.02	0.22	0.09	0.07	0.09	-0.1										
).01	0.24	-0.03	-0.04	-0.07	0										
).05	-0.07	0	0.1	0.01	0.02										

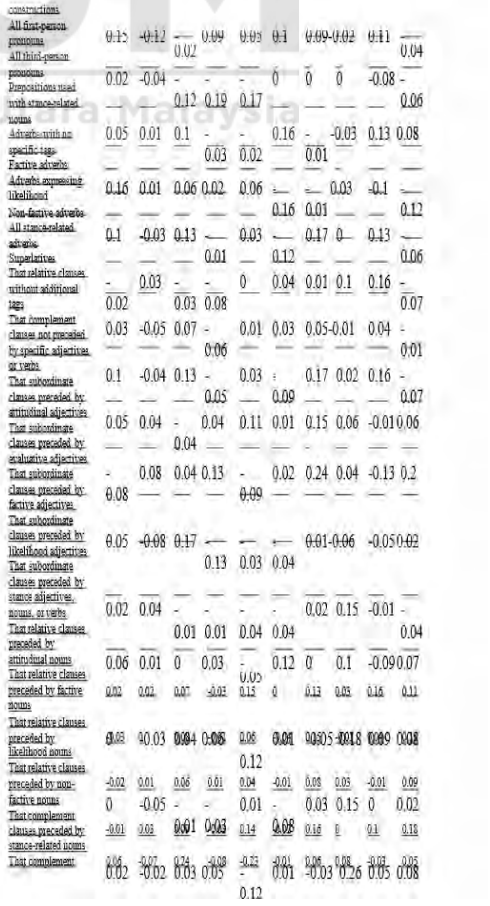
has eaten) GET-passives (e.g., got caught) It pronoun reference Place references (e.g., here, there) Politeness markers (e.g., please) s-genitives (e.g., John's book) First person plural pronouns (e.g., we) First person singular pronouns (e.g., I) Second person pronouns (e.g., you) Third person singular female pronouns (e.g., she) Third person singular male pronouns (e.g., he) Third person plural or singular "they" Progressive aspect (e.g., is running) Quantifiers (e.g., many, few) Quantifying pronouns (e.g.,

prepositions (e.g., Where are you from?)
Subordinator that omission
That relative clauses That subordinate clauses
Time references (e.g., now, yesterday) URLs and em
addresses
Past tense (e.g., ran, walked)
Non-finite verb -ing forms (e.g., running) Non-finite -
verb forms (e.g., eaten)









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clauses preceded by stance-related adjectives, nouns, and verbs	0.02	0.02	0.09	0.07	-0.18	-0.01	0	-0.06	-0.05	-0.04
That subordinate clauses preceded by attitudinal verbs	-0.03	-0.1	0.19	-0.08	-0.14	0.02	0	0.07	-0.03	0
That subordinate clauses preceded by communicative verbs	0.07	-0.05	0.17	-0.1	-0.17	0.03	0	0.05	-0.04	-0.01
That subordinate clauses preceded by factive verbs	-0.01	-0.02	0.19	-0.01	-0.05	0.01	0.15	-0.11	0.08	0.06
That subordinate clauses preceded by likelihood verbs	0.02	-0.07	0.20	-0.07	-0.23	0	0.03	0.01	-0.05	0
To-clauses preceded by stance-related adjective, noun, or verb										
To-clauses preceded by attitudinal verbs										
To-clauses preceded by effort-related verbs										
To-clauses preceded by mental verbs	0.04	0.03	0.01	0.01	-0.03	-0.05	-0.05	0.05	0.07	-0.06
To-clauses preceded by verbs of probability										
To-clauses preceded by speech-related verbs	0.02	0.08	0.03	0.04	-0.04	-0.04	-0.06	0.13	0.05	-0.07
To-clauses preceded by stance-related	0.07	0.12	0.03	0.01	-0.01	-0.12	-0.01	-0.01	-0.01	0.15
	0.06	0.04	-0.03	0.1	0.03	0.02	-0.03	0.07	0.07	0.03

	0.08	-0.06	-0.09	0.08	-0.05	0.09	0.13	-0.07	0.09	-0.12
	-0.03	0.1	0.08	0.11	-0.09	-0.09	0.06	-0.1	0.12	0.03
	0.04	0.02	-0.05	0.15	-0.05	0.1	-0.06	0.01	0.02	-0.05
	-0.03	0.01	0.07	0.13	-0.09	-0.03	0.12	-0.14	-0.13	-0.12
	0.01	-0.04	-0.01	-0.03	0.03	-0.12	0.12	-0.07	0.1	-0.01
	0.04	0.01	-0.01	0.2	-0.13	0.02	0.18	-0.17	0.07	-0.14

verbs										
Attitudinal verbs in other contexts	0.03	-0.02	0.02	-0.05	0.01	0.03	-0.05	-0.12	-0.04	0.05
Factive verbs in other contexts	-0.1	0.1	-0.02	-0.12	0.06	0.1	0.04	0	0.12	0
Likelihood verbs in other contexts	0.02	-0.06	0.1	-0.03	0	0.1	0	-0.03	0.04	0.06
WH complement clauses not preceded by stance-related verbs	0.04	-0.02	0.09	0.08	0.03	0.04	-0.01	0.08	-0.13	0.06
WH subordinate clauses preceded by attitudinal verbs	0.03	0.04	0.03	-0.05	0.07	0.05	0.01	-0.03	0.1	0.04
WH subordinate clauses preceded by communicative verbs	0	0	0	-0.07	-0.04	0.03	-0.09	0.14	-0.04	0.02
WH subordinate clauses preceded by factive verbs	0.07	0.1	0	-0.09	0.01	0.05	-0.05	0.17	-0.04	0.12
WH subordinate clauses preceded by likelihood verbs	0.03	0.04	-0.01	-0.06	-0.02	0	-0.06	0.02	-0.14	0.01
WH subordinate clauses preceded by stance-related verbs	0.06	0.1	0	-0.12	0	-0.04	-0.09	0.21	-0.01	0.12

Coordinating conjunctions (e.g., and, or, but)	-0.12	-0.14	0.1	-0.04	-0.04	-0.03	0.0	0.0	-0.03	-0.03
Numbers (e.g., one, two)	-0.02	-0.12	-0.07	-0.09	0.15	0.05	-0.06	-0.14	0.0	0.02

Table 12 Component Matrix of Pakistani English Educational

Descriptors	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
Average word length	-0.13	-0.19	0.06	0.02	-0.02	-0.02	-0.04	0.01	-0.02	0.01
Type-token ratio	-0.06	0.04	0.12	0	-0.03	0.16	0.14	-0.05	-0.06	-0.05
Lexical density	-0.19	-0.11	0.07	0.06	0.01	0.03	0.02	0.04	-0.03	0.03
Use of 'be able to'	0.02	0.05	0	0.02	-0.1	-0.02	-0.04	-0.02	-0.04	-0.11
Activity verbs (e.g., run, think)	0.04	-0.02	0.13	-0.01	-0.1	0.02	-0.1	0.05	-	0.03
Amplifiers (e.g.,				0.03						

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Communication verbs (e.g., say, ask)	-0.13	0.13	0.06	0.09	-0.12	0.05	-0.01	0.01	-0.05	0	-
Concessive conjunctions (e.g., although)	0.04	-0.04	-0.02	0.02	-0.02	0.09	-0.06	-0.1	-0.05	0.08	-
Conditional conjunctions (e.g., if, unless)	0.1	0.01	-0.1	0.08	0	0.05	0.04	-0.13	-0.04	0	-
Verbal contractions (e.g., isn't, can't)	0.01	-0.02	0.01	0.06	0.03	-0.08	0	0.19	0.19	-	-
Causal conjunctions (e.g., because, since)	0.05	0.02	-0.11	0.07	0.02	0.05	-0.08	-0.02	-0.03	-	-
Demonstrative pronouns and articles (e.g., this)	0.1	0.08	0.03	0	-0.04	-0.06	-0.05	-0.13	-0.14	-0.01	-
Discourse/pragmatic markers (e.g., well, you know)	0.1	0.04	0.06	-0.01	0.13	0.08	0.01	0.04	-0.10	0.09	-
DO auxiliary (e.g., do, does, did)	0.12	0.05	-0.04	0.01	0.01	0.13	0.06	0.11	0.04	-0.11	-
Determiners (e.g., the, a, an)	0.14	0.01	-0.07	0.05	-0.08	-0.01	0.01	-0.12	0.01	-0.06	-
Downtoners (e.g., slightly, somewhat)	0.05	-0.05	0.02	-0.01	-0.04	0	-0.05	-0.01	-0.12	0.05	-
Elaborating conjunctions (e.g., moreover)	0.05	-0.11	0.01	0.01	0.01	0	0.04	-0.04	0.04	0.12	-
Emoticons or emoticons	0.02	-0.06	0.25	0.09	0.17	0.06	0.14	0	0.08	-0.16	-
Emphatics (e.g., really, absolutely)	0.1	0.1	0	-0.07	0.05	0.01	0.01	-0.05	-0.17	0.06	-
Existential "there" (e.g., There is a book)	0.04	-0.09	-0.11	0.07	0	0.04	0.07	0.08	0.02	0.06	-
Existential verbs (e.g., exist,	-0.01	-0.12	0.04	-0.01	-0.15	0.05	0.05	-0.05	-0.1	0.05	-

Hedges (e.g., perhaps, maybe)	0.04	-0.01	-0.04	-0.06	0.03	0.08	-0.01	0.08	-0.04	0.05	-
HAVE got constructions	0	0.05	-0.02	0.02	0.06	0.02	-0.07	-0.02	0.11	-0.03	-
Hashtags	0	-0.05	0.05	-0.05	-0.1	0.04	-0.06	0.04	0	-0.05	-
Prepositions (e.g., in, on, at)	0.04	-0.10	-0.08	0.13	-0.11	-0.02	-0.04	0.02	0.16	0.06	-
Attributive adjectives (e.g., red car)	0.16	-0.12	-0.09	0.1	-0.08	-0.05	-0.11	0	-0.06	0	-
Predicative adjectives (e.g., The car is red)	0.13	-0.09	0.12	0.19	0.03	0.02	-0.05	-0.02	0.04	-0.02	-
Modal "can"	0.11	-0.09	0	0.18	0.1	0.02	-0.07	0.08	0.08	0.14	-
Modal "could"	0.02	0.14	0.03	0.08	-0.02	0.02	0	-0.03	0.02	0.1	-
Modals "may" and "might"	0.07	0.03	-0.03	0.04	-0.01	-0.12	0.16	-0.05	-0.05	-0.06	-

Necessity modals (e.g., must, need to)	0.05	0	-0.16	0.09	0.02	0	0.03	0.06	0.01	0.04	-
Modal "would"	-0.02	0.11	0.06	0.02	-0.14	-0.04	-0.09	-0.15	0.04	-0.06	-
Modals "will" and "shall"	-0.03	0.02	0.03	0.1	-0.05	-0.02	0.08	-0.25	0.05	0.1	-
Mental verbs (e.g., know, believe)	0.1	0.05	0.08	-0.07	-0.02	-0.02	0.09	0.05	0.07	-0.01	-
Noun compounds (e.g., toothpaste)	0.04	-0.11	0.05	0.12	0.01	0.06	-0.1	-0.13	0.13	0.03	-
Total nouns (including proper nouns)	-0.2	-0.08	0.04	-0.02	0.02	-0.02	0.05	0.05	-0.01	-0.01	-
Occurrence verbs (e.g., happen, occur)	0.06	-0.04	-0.02	0.1	-0.08	0.08	0.06	0.04	-0.01	0.18	-
BE-passives (e.g., was written)	-0.07	-0.1	-0.1	-0.02	0.1	-0.1	0.04	-0.25	0.04	0.05	-
Perfect aspect (e.g., has eaten)	-0.04	-0.07	-0.05	0.11	0.17	0.01	0.01	-0.08	-0.01	0.05	-
GET-passives (e.g., got caught)	0.05	0.03	0.01	-0.02	-0.01	0.03	-0.06	-0.06	-0.14	0.13	-
It pronoun	0.09	-0.11	0.03	0	-0.05	-0.04	0.1	-0.1	-0.07	-0.04	-
Third person singular reference (e.g., he, she, it)	0	0.11	0.07	0	-0.01	-0.05	-0.02	-0.04	0.06	1	-
Third person plural references (e.g., they, them)	-0.12	-0.07	-0.04	0.04	0.02	-0.12	-0.02	0.18	-0.05	-0.01	-
Politeness markers	0.11	0.07	0.06	-0.08	-0.2	-0.03	-0.05	0.04	0.06	-0.08	-
Progressive aspect (e.g., is eating)	0.03	-0.02	0.01	0.0	-0.02	0.14	0.1	0.15	0.12	-0.02	-
Quantifiers (e.g., many, some)	0.05	0.08	-0.02	0.03	0.05	0.25	3.9	-0.02	0.08	0.02	-
Quantifying verbs (e.g., have, book)	0.05	-0.04	0.03	-0.02	-0.05	-0.08	0	0.01	-0.04	-0.02	-
Quantifying pronouns	0.15	0.11	0	-0.02	0.05	-0.08	0	0.01	-0.04	-0.01	-
First person pronouns (e.g., I, me)	0.07	0.11	-0.01	0.13	0.04	0	0.05	0.09	0.1	0.05	-
Shared pronouns (e.g., we, us)	0.06	0.11	0.01	-0.04	0.15	-0.05	0.05	0.09	0.1	0.08	-
Singular nouns	0.19	0.07	0.02	0.04	-0.02	0.06	0.02	0.01	-0.05	0.03	-
Plural nouns (e.g., books)	0.06	0.03	0.1	-0.04	-0.08	0.08	0.05	0.15	-0.07	-0.08	-
First person singular pronouns (e.g., I)	0.07	0.21	0.09	-0.15	0.01	0.05	-0.01	-0.01	0.05	0.10	-
Second person pronouns (e.g., you)	0.07	0	0.05	-0.01	-0.04	0.05	0.11	0.15	0.06	-0.08	-
Prepositions (e.g., on, with)	0.06	-0.02	0.05	0.12	0.11	-0.08	0.02	0.05	0.05	-0.1	-
Stranded prepositions	0.09	0	0.03	0.04	0.02	0.05	0.11	0.05	0.08	-0.1	-
Third person singular female pronouns (e.g.,	-0.02	0.16	0.05	-0.14	0.02	-0.02	-0.08	-0.03	-0.05	0.17	-

(e.g., Where are you from?)											
Subordinator that omission	-0.02	0.08	0.11	0.07	-0.17	-0.07	0.07	-0.06	0.03	0.06	-
That relative clauses	0.04	-0.08	0.25	0.02	-0.1	-0.01	0.07	0.02	-0.15	0.07	-
That subordinate clauses	-0.09	0.2	-0.08	0.22	-0.05	0.04	-0.1	-0.05	-0.04	-0.07	-
Time references (e.g., now, yesterday)	0.02	0.05	0.03	-0.04	0.09	-0.06	0.05	0.06	0.15	-	-
URLs and email addresses	-0.05	-0.01	0.01	-0.05	0.01	0.04	-0.04	-0.06	0.07	-0.06	-
Past tense (e.g., ran, walked)	-0.14	0.16	0.08	-0.1	-0.07	0.02	0.03	-0.04	-0.05	-0.02	-
Non-finite verb -ing forms (e.g., running)	-0.01	-0.12	0.10	-0.02	-0.21	0.15	0.02	0	-0.08	0.05	-
Non-finite -ed verb forms (e.g., eaten)	-0.05	-0.15	0.16	-0.05	-0.07	-0.02	0.01	-0.05	-0.05	0	-
Imperatives (e.g., Go there!)	0.06	-0.05	0.11	0.09	0.13	0.08	-0.05	0.02	0.09	-0.2	-
Present tense (e.g., runs, walks)	0.13	-0.17	-0.09	0.02	0.09	0	-0.06	0.12	0.02	0	-
Direct WH-questions (e.g., What is that?)	0.08	0.05	0.08	-0.01	0.15	0	-0.02	0.04	0.07	-0.01	-
WH subordinate clauses	0.13	0.05	-0.02	-0.01	0.13	-0.02	-0.08	-0.09	-0.03	0.17	-
Negation (e.g., no, not)	0.11	-0.05	-0.14	0.06	0.05	0.05	0.01	0.01	0	-0.15	-
Yes/no questions	0.09	0.09	0.05	-0.06	0.08	-0.04	-0.05	-0.1	0.11	-	-
Comparatives	0.08	-0.07	-0.02	0.08	-0.06	0.08	-0.06	0.07	0.02	0.07	-
Prepositions not having additional tags	0.01	-0.17	-0.09	0.14	-0.09	-0.06	0	0.05	0.10	0.06	-
Attributive adjectives without additional descriptors	0.02	0.06	-0.02	0.05	-0.05	0.05	0.13	0	0	-0.11	-
Attributive adjectives with no specific tags	0.14	-0.12	-0.08	0.07	-0.11	-0.05	-0.1	0.01	-0.05	0.05	-

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Relational adjectives	0.07	-0.08	-0.08	0.05	0.07	0.01	-0.13	-0.02	0.07	-0.04	
Size-related adjectives	0.09	0.02	-0.02	0.04	-0.02	-0.09	0	-0.1	-0.12	0.02	
Time-related adjectives	0.05	0	-0.03	0	-0.04	-0.03	0.1	0.03	0	-0.06	
Topical adjectives	0.05	-0.09	0.03	0.06	0.05	0	0.09	0	-0.15	-0.11	
All modals of possibility	0.11	0	0	0.21	0.07/0.08		-0.13	0	0.06	0.12	
All modals of prediction	-0.04	0.04	0.05	0.11	-0.1/0.02		-0.03	-0.29	0.07	0.06	
Nouns related to abstract processes	0.15	-0.08	-0.12	0.08	-0.06	-0.01	-0.08	0.03	0	0.03	

Cognitive-related nouns	0.08	0	-0.02	0.04	-0.02	0.02	0	0	0.05	0.11	
Concrete nouns	0.08	0.06	-0.04	0.02	0.05	-0.04	0.09	0	0.08	0.07	
Group nouns	0.08	0.01	-0.05	0.03	-0.01	0.18	-0.09	0.08	0.18	-0.01	
Nouns referring to humans	0.12	0.1	0.06	-0.09	-0.11	-0.12	-0.06	0.04	0.11	-0.03	
Proper nouns	-0.21	0	0.02	-0.03	0.08	0	0.03	0.04	-0.05	0.02	
Nouns referring to places	0.08	0	0.08	-0.02	0	0.05	-0.24	0.04	0.04	0.07	
Quantifying nouns	0.11	0.06	-0.01	0.1	0.02	0.06	0.01	-0.02	0.07	0.08	
Technical nouns	0.03	0.0	0.06	0	-0.03	0.1	-0.05	0.05	0.0		
Nouns without specific tags	0.05	0.09	0.06	0.08	-0.08	0.06	-0.02	-0.1	0.04	0.03	
Nominalizations	0.1	0.09	0.05	0.01	-0.15	-0.05	0.0	-0.04	0.13	0.02	
Stance-related nouns without prepositions	0.09	0.0	0.08	0.0	0.01		0.0	-0.05	0.06	0.04	
All passive constructions	-0.06	-0.1	-0.1	0.02	-0.1	-0.01	0.04	-0.26	0.04	0.02	
All first-person pronouns	0.1	0.21	0.07	-0.14	0.05	0.11	-0.03	0.04	0.09	0.0	
All third-person pronouns	-0.05	0.17	0.02	-0.04	-0.12	-0.13	0.05	0.17	-0.02	0.04	
Prepositions used with stance-related nouns											
Adverbs with no specific tags	0.09	0.04	0.03	0.05	-0.06	0.04	-0.05	-0.06	-0.04	0	
Factive adverbs	0.18	0.08	0.02	0.05	-0.01	0.07	0.06	0.01	-0.04		
Adverbs expressing likelihood	0.09	0.02	0.06	0.04	0.08	0.04	0.01	0.08	0.14	0.05	
Non-factive adverbs	0.05	0.01	0.03	0.05	0.05		0.09	0.08	0.03		
All stance-related	0.03	0.03	0.02	0.02	0.14		-0.03	0.15	-0.14		

preceded by specific adjectives or verbs											
That subordinate clauses preceded by attitudinal adjectives	-0.02	0.05	0.02	0.19	0.03	0.19	-0.01	-0.05	-0.05	0.12	
That subordinate clauses preceded by evaluative adjectives	0.01	-0.04	0.04	0.08	-0.13	0.16	0.13	0.13	0.02	-0.09	
That subordinate clauses preceded by factive adjectives	0.02	-0.05	0.06	0.1	-0.02	0.17/0.13	-0.05	0.04	-0.05		
That subordinate clauses preceded by likelihood adjectives	0	0	0	0	0	0	0	0	0	0	
That subordinate clauses preceded by stance adjectives,	0	-0.01	0.03	0.21	-0.03	0.28/0.09	0.03	0.03	-0.03		

nouns, or verbs											
That relative clauses preceded by attributional nouns	0.01	-0.01	-0.02	-0.03	-0.09	-0.08	-0.11	0.1	0.05	-0.04	
That relative clauses preceded by factive nouns	0	0	0	0	0	0	0	0	0	0	
That relative clauses preceded by likelihood nouns	0.02	0	-0.04	-0.01	-0.19	-0.08	-0.11	-0.06	0.04	0	
That relative clauses preceded by non-factive nouns	0	0	0	0	0	0	0	0	0	0	
That complement clauses preceded by stance-related nouns	0.02	0	-0.04	0	-0.2	-0.11	-0.15	-0.02	0.06	-0.01	
That complement clauses preceded by stance-related adjectives, nouns, and verbs	-0.09	0.19	-0.08	0.27	-0.02	-0.03	-0.09	-0.01	-0.03	-0.06	
That subordinate clauses preceded by attitudinal verbs	0.03	0.07	0.03	-0.01	-0.15	-0.1	-0.02	-0.16	0.09	0.06	
That subordinate clauses preceded by communicative verbs	-0.12	0.18	-0.06	0.2	0.01	-0.06	0.07	-0.04	0.04	-0.07	
That subordinate clauses preceded by factive verbs	0.06	0.04	-0.07	0.01	0.05	-0.05	-0.09	0.03	0.09	-0.01	
That subordinate clauses preceded by likelihood verbs	0.05	0	-0.01	0.04	0.05	-0.02	0.01	-0.16	0.03	0.06	
That subordinate clauses preceded by stance-related verbs	-0.11	0.18	-0.07	0.2	-0.02	-0.06	0.09	-0.05	0.02	-0.07	
To-clauses preceded by ability-related adjectives	0.01	0.08	0.06	-0.04	-0.09	-0.05	-0.06	-0.06	0.19	-0.03	
To-clauses preceded by											

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To-clauses preceded by evaluative adjectives	0.04	0	-0.01	-0.01	0.04 0.12	-0.02	-0.08	-0.05	0.08	
To-clauses preceded by stance-related adjectives	0.06	0.03	0.14	0.01	0	-0.18	-0.08	-0.07	0.13	0.01
To-clauses preceded by stance-related nouns	0.08	-0.01	-0.02	-0.01	-0.04	-0.04	-0.08	-0.01	-0.02	0.04
To-clauses preceded	0.14	0.05	0.09	0.02	-0.08	-0.14	0.12	0.05	0.11	-0.04

by stance-related adjectives, nouns, or verbs										
To-clauses preceded by verbs of desire	0.04	0.03	0.03	0.02 0.05	-0.17	-0.19	0.16	0.11	-0.02	
To-clauses preceded by effort-related verbs	0.04	-0.02	0.09	0.01	0.05	0.01	-0.04	-0.02	0.07	-0.07
To-clauses preceded by mental verbs	0.08	0.05	0.03	0.02 0.11	0.01	-0.1	-0.02	0.06	0.11	
To-clauses preceded by verbs or probability	0.07	-0.01	-0.02	0.03	0.02	-0.1	0.19	-0.02	-0.12	-0.11
To-clauses preceded by speech-related verbs	0.02	-0.01	-0.01	-0.01 0.05	0.04	-0.18	-0.12	-0.17	-0.17	
To-clauses preceded by stance-related verbs	0.09	0.02	0.06	0.03 0.07	-0.1	-0.2	0.1	0.08	-0.07	
Attitudinal verbs in other contexts	0.02	-0.01	-0.01	-0.01 0.05	0.04	-0.18	-0.12	-0.17	-0.17	
Factive verbs in other contexts	0.03	0	0.08	0.05 0.06	-0.03	-0.16	0.02	0.04	0.2	
Likelihood verbs in other contexts	0.01	0.09	0.02	-0.01	0.01	0.01	-0.01	0.06	-0.01	-0.01
WH complement clauses not preceded by stance-related verbs	0.13	0.05	-0.05	-0.08	-0.02	0.12	-0.02	-0.09	-0.08	-0.18
WH subordinate clauses preceded by attitudinal verbs	0	0	0	0	0	0	0	0	0	0
WH subordinate clauses preceded by communicative verbs	-0.01	0.03	0.07	-0.05	0.05	0.16	-0.06	0.04	-0.12	0.15
WH subordinate clauses preceded by factive verbs	0.08	0.01	0.25	0.03 0.04	0.12	-0.17	0.04	-0.03	-0.1	

Table 13 Linguistic Features across Factor 1 of Pakistani English Educational Blogs

Factor 1	
Linguistic Features	**Positive Loading**
HAVE got constructions	8.71
will and shall modals	7.95
Numbers	7.66
Average word length	7.08
Reference to the speaker/writer	6.98
Communication verbs	6.84
Conditional conjunctions	6.67
WH subordinate clauses preceded by communicative verbs	6.59
to clauses preceded by verbs of speech	6.36
WH subordinate clauses preceded by attitudinal verbs	6.24
that subordinate clauses (other than relatives) preceded by communicative verbs	6.11
Occurrence verbs	5.93
modal would	5.75
s-genitives	5.41
to clauses preceded by ability adjectives	5.37
Be as main verb	5.35
to clauses preceded by factive adjectives	5.14
that subordinate clauses (relative clauses) preceded by likelihood nouns	5.12
Lexical density	5.02
WH subordinate clauses	4.92
Necessity modals	4.89
Facilitation and causative verbs	4.8
Prepositions	4.8
Quantifiers	4.7
to clauses preceded by ability adjectives	4.65
Verbal contractions	4.6
Amplifiers	4.45
it pronoun reference	4.33
Perfect aspect	4.3
Frequency references	4.24
All that complement clauses preceded by stance adjectives, nouns, and verbs	4.21
that subordinate clauses (other than relatives) preceded by factive verbs	4.19
Mental verbs	3.89
that subordinate clauses (other than relatives)preceded by attitudinal verbs	3.88
Place references	3.62
Subordinator that omission	3.58
to clauses preceded by verbs of desire	3.55
Aspectual verbs	3.53
DO auxiliary	3.52
Going to constructions	3.52
to clauses preceded by mental verbs	3.39
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	3.35
Existential or relationship verbs	3.2
To clauses preceded by stance nouns	3.17
Hedges	3.12
Question tags	3.12
All that complement clauses preceded by stance verbs	2.92
Activity verbs	2.72
be able to	2.5
Demonstratives	2.48
Single, male third person reference	2.43
All to infinitive clauses preceded by stance verbs	2.34
Quantifying pronouns	2.17
that subordinate clauses (relative clauses) preceded by factive nouns	1.9
All that complement clauses preceded by stance nouns	1.9
Politeness markers	1.69
Reference to more than one non-interactant and single they reference	1.31
Coordinating conjunctions	1.21
Single, female third person reference	1.16
Relational adjectives	1.03
Evaluative adjectives	0.98
Progressive aspect	0.86
to clauses preceded by adjectives of ease	0.61
Existential there	0.54
Discourse pragmatic markers	0.53
Elaborating conjunctions	0.51
Linguistic Features	**Negative Loading**
that subordinate clauses (relative clauses) preceded by non factive nouns	-0.39
Downtoners	-0.41
All third person references	-0.6
to clauses preceded by factive adjectives	-0.68
that subordinate clauses (relative clauses) preceded by attitudinal nouns	-0.79
WH complement clauses not preceded by a stance verb	-0.81
Past tense	-0.84
Nouns having no additional tag	-1.06
Prepositions preceded by stance nouns	-1.48
Reference toaddressee(s)	-1.69
Nouns human	-2.31
Epistemic adjectives without a that clause after	-2.32
All be and get passives	-2.35
Imperatives	-2.4
Verb features	-2.42

Universiti Utara Malaysia

Size related adjectives	-2.97
Prepositions having no additional tag	-3.11
Yes/no questions	-3.19
Determiners	-3.3
that subordinate clauses (other than relatives) preceded by factive adjectives	-3.4
Direct WH-questions	-3.46
Emphatics	-3.5
Topical adjectives	-3.76
Predicative adjectives having no additional tag	-3.8
Time related adjectives	-3.81
Attributive adjectives having no additional tag	-3.94
Superlatives	-3.96
Non factive adverbs	-3.97
Particles	-4.16
Comparatives	-4.16
to clauses preceded by verbs of effort	-4.16
Nouns abstract and process	-4.22
Attitudinal adjectives without a that clause after	-4.27
Lexical diversity	-4.36
that subordinate clauses (other than relatives)preceded by likelihood verbs	-4.4
that subordinate clauses (other than relatives)	-4.41
Proper nouns	-4.41
Time references	-4.45
Present tense	-4.56
All adverbs related to stance	-4.57
that subordinate clauses (other than relatives) preceded by attitutidinal adjectives	-4.62
Stance nouns without prepositions	-4.68
Nouns cognitive	-4.92
All first person references	-4.94
Negation	-5.01
Causal conjunctions	-5.05
Adverbs having no additional tag	-5.17
that complement clauses not preceded by a stance adjective or verb	-5.26
Other adverbs	-5.3
that relative clauses	-5.3
All that complement clauses preceded by stance adjectives, nouns, and verbs	-5.53
Concessive conjunctions	-5.74
Nouns group	-5.84
Stranded prepositions	-5.91
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-5.91
Split auxiliaries and infinitives	-5.94
Nouns technical	-5.94
Non-finite verb -ing forms	-6.19
Nominalizations	-6.54
All modals of possibility	-6.59
Factive adverbs	-6.83
Nouns concrete	-6.88
Adjectives related to color	-7.07
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	-7.11
Nouns quantity	-7.81

Table 14 Linguistic Features across Factor 7 of Pakistani English Educational Blogs

Factor 7	
Linguistic Features	**Positive Loading**
Mental verbs	10.62
Nominalizations	7.27
modal would	7
Place references	6.7
Perfect aspect	6.25
Occurrence verbs	5.75
Negation	5.36
it pronoun reference	5.05
Other adverbs	4.61
that relative clauses	4.61
Adverbs having no additional tag	4.29
Nouns quantity	4.13
HAVE got constructions	4.09
Noun compounds	4.05
Non-finite verb -ing forms	3.78
Stranded prepositions	3.64
that subordinate clauses (other than relatives) preceded by likelihood adjectives	3.64
Prepositions having no additional tag	3.45
will and shall modals	3.17
Nouns place	3.08
Comparatives	3.02
Be as main verb	2.8
Attitudinal adjectives without a that clause after	2.78
Politeness markers	2.73
Time references	2.47
Facilitation and causative verbs	2.36
Factive adverbs	2.15
Epistemic adjectives without a that clause after	1.91
Average word length	1.83
Nouns technical	1.76
Quantifiers	1.71
WH subordinate clauses preceded by communicative verbs	1.67
Past tense	1.63
Nouns human	1.47
Non factive adverbs	1.44
Nouns concrete	1.44
that subordinate clauses (relative clauses) preceded by attitudinal nouns	1.37

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Linguistic Features	Negative Loading
Imperatives	1.27
Determiners	1.13
Aspectual verbs	1.03
Predicative adjectives having no additional tag	0.9
Hedges	0.8
Causal conjunctions	0.77
s-genitives	0.73
that relative clauses not preceded by a stance noun	0.71
All be and get passives	0.61
Reference to the speaker/writer	0.58
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	0.57
Conditional conjunctions	0.56
Stance nouns without prepositions	0.52
Communication verbs	0.51
to clauses preceded by verbs of speech	0.46
Relational adjectives	0.43
to clauses preceded by verbs of probability	0.43
Size related adjectives	0.41
All to infinitive clauses preceded by stance adjectives	-0.36
All that complement clauses preceded by stance adjectives, nouns, and verbs	-0.39
All modals of possibility	-0.43
WH complement clauses not preceded by a stance verb	-0.48
be able to	-0.54
Direct WH-questions	-0.61
to clauses preceded by factive adjectives	-0.64
that subordinate clauses (other than relatives)	-0.64
that subordinate clauses (other than relatives) preceded by likelihood verbs	-0.65
Coordinating conjunctions	-0.66
WH subordinate clauses preceded by attitudinal verbs	-0.68
DO auxiliary	-0.79
Verbal contractions	-0.85
that subordinate clauses (other than relatives) preceded by factive adjectives	-0.9
to clauses preceded by mental verbs	-0.94
Single, male third person reference	-0.94
Subordinator that omission	-1.02
Necessity modals	-1.07
Frequency references	-1.08
to clauses preceded by ability adjectives	-1.1
that subordinate clauses (other than relatives) preceded by factive verbs	-1.13
All adverbs related to stance	-1.14
Existential or relationship verbs	-1.19
Nouns cognitive	-1.25
Demonstratives	-1.26
All that complement clauses preceded by stance nouns	-1.33
Emphatics	-1.42
All that complement clauses preceded by stance adjectives, nouns, and verbs	-1.42
Non-finite -ed verb forms	-1.46
that subordinate clauses (other than relatives) preceded	-1.48
Amplifiers	-1.71
that subordinate clauses (relative clauses) preceded by likelihood nouns	-1.75
Numbers	-1.76
Verb features	-1.78
Particles	-1.78
to clauses preceded by verbs of effort	-1.78
Nouns group	-1.79
Lexical density	-1.82
Present tense	-1.83
Activity verbs	-1.85
Topical adjectives	-1.87
Adjectives related to color	-1.87
Nouns having no additional tag	-1.91
Going to constructions	-2.12
Discourse pragmatic markers	-2.13
Nouns abstract and process	-2.16
that subordinate clauses (other than relatives) preceded by communicative verbs	-2.22
Question tags	-2.23
to clauses preceded by verbs of desire	-2.4
Time related adjectives	-2.42
Downtoners	-2.44
to clauses preceded by factive adjectives	-2.45
All that complement clauses preceded by stance verbs	-2.61
All third person references	-2.63
To clauses preceded by stance nouns	-2.65
Existential there	-2.65
Yes/no questions	-2.68
Prepositions preceded by stance nouns	-2.69
Progressive aspect	-2.74
Quantifying pronouns	-2.78
that subordinate clauses (relative clauses) preceded by non factive nouns	-2.8
to clauses preceded by adjectives of ease	-2.83
Elaborating conjunctions	-2.83
Split auxiliaries and infinitives	-3
Prepositions	-3.06
Reference to the speaker/writer and other(s)	-3.08
Attributive adjectives having no additional tag	-3.25
Single, female third person reference	-3.74
Evaluative adjectives	-3.81
Reference to more than one non-interactant and single they reference	-3.82
that subordinate clauses (relative clauses) preceded by factive nouns	-3.94
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-4.66
Reference (addressee(s))	-4.67
Lexical diversity	-5.79
to clauses preceded by ability adjectives	-6.08

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Table15 Linguistic Features across Factor 3 of Pakistani English Educational Blogs

Factor 3	
Linguistic Features	**Positive Loading**
to clauses preceded by ability adjectives	17.18
All adverbs related to stance	5.96
Adjectives related to color	4.18
it pronoun reference	4.08
Yes/no questions	3.96
Nouns having no additional tag	3.78
Attributive adjectives having no additional tag	3.37
All third person references	3.28
Reference to the speaker/writer	3.1
will and shall modals	3.07
Filled pauses and interjections	3.01
to clauses preceded by verbs of probability	2.93
Causal conjunctions	2.82
Perfect aspect	2.75
that subordinate clauses (relative clauses) preceded by factive nouns	2.6
Noun compounds	2.59
modal would	2.43
Numbers	2.42
Single, male third person reference	2.26
HAVE got constructions	2.24
Reference toaddressee(s)	2.16
that subordinate clauses (other than relatives)	2.15
that subordinate clauses (other than relatives)preceded by likelihood verbs	2.15
that subordinate clauses (other than relatives) preceded bydjectives of evaluation	2.04
Hedges	1.96
Comparatives	1.91
Coordinating conjunctions	1.65
Lexical diversity	1.5
Mental verbs	1.45
All first person references	1.44
Quantifiers	1.34
Single, female third person reference	1.34
to clauses preceded by adjectives of ease	1.26
All modals of possibility	1.21
All be and get passives	1.2
that complement clauses not preceded by a stance adjective or verb	1.15
Conditional conjunctions	1.12
All to infinitive clauses preceded by stance adjectives, nouns, and	1.11
Nouns technical	0.97
Present tense	0.94
s-genitives	0.8
Verb features	0.79
Predicative adjectives having no additional tag	0.73
Question tags	0.71
Reference to more than one non-interactant and single they reference	0.69
Nouns abstract and process	0.64
Prepositions	0.6
All that complement clauses preceded by stance adjectives, nouns, and verbs	0.58
Concessive conjunctions	0.48
WH complement clauses not preceded by a stance verb	0.47
Frequency references	0.4
Occurrence verbs	0.37
All to infinitive clauses preceded by stance verbs	0.37
Topical adjectives	0.34
Nouns place	0.33
Linguistic Features	**Negative Loading**
Place references	-0.33
Nouns human	-0.34
WH subordinate clauses	-0.41
Nouns cognitive	-0.44
that subordinate clauses (relative clauses) preceded by likelihood nouns	-0.51
Discourse/pragmatic markers	-0.56
Determiners	-0.61
to clauses preceded by factive adjectives	-0.61
Time references	-0.64
Factive adverbs	-0.7
Superlatives	-0.75
WH subordinate clauses preceded by attitudinal verbs	-0.76
Average word length	-0.77
All to infinitive clauses preceded by stance adjectives	-0.8
WH subordinate clauses preceded by communicative verbs	-0.83
Particles	-0.83
to clauses preceded by verbs of effort	-0.83
Non-finite verb -ing forms	-0.85
Non factive adverbs	-0.94
Time related adjectives	-0.94
Verbal contractions	-1
Attitudinal adjectives without a that clause after	-1.01
Nouns group	-1.05
Nouns concrete	-1.07
Other adverbs	-1.11
that relative clauses	-1.11
To clauses preceded by stance nouns	-1.2
Prepositions preceded by stance nouns	-1.2
Subordinator that omission	-1.25
Demonstratives	-1.28
Stranded prepositions	-1.32
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-1.32
Existential there	-1.32
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-1.35
that subordinate clauses (other than relatives) preceded by factive adjectives	-1.38
Nominalizations	-1.4
All that complement clauses preceded by stance nouns	-1.42
Downtoners	-1.43
Aspectual verbs	-1.45
Reference to the speaker/writer and other(s)	-1.58
Lexical density	-1.67
Progressive aspect	-1.72
Necessity modals	-1.75
to clauses preceded by ability adjectives	-1.8
that subordinate clauses (relative clauses) preceded by non factive nouns	-1.87
Existential or relationship verbs	-1.88
Facilitation and causative verbs	-1.9
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-2
that subordinate clauses (relative clauses) preceded by attitudinal nouns	-2.19
DO auxiliary	-2.31
Split auxiliaries and infinitives	-2.41
Activity verbs	-2.47
Prepositions having no additional tag	-2.49
Negation	-2.53
be able to	-2.59
that subordinate clauses (other than relatives) preceded by factive verbs	-2.8
that subordinate clauses (other than relatives) preceded by communicative verbs	-2.85
Amplifiers	-3.04
Quantifying pronouns	-3.1
Past tense	-3.14
All that complement clauses preceded by stance verbs	-3.14
to clauses preceded by mental verbs	-3.24
to clauses preceded by verbs of desire	-3.38
Elaborating conjunctions	-3.41
Imperatives	-3.48
Going to constructions	-3.75
Be as main verb	-4.31

Table 16 Linguistic Features of Factor 4 across Pakistani English Educational Blogs

Factor 4	
Linguistic Features	**Positive Loading**
Nominalizations	9.73
Adverbs having no additional tag	5.55
to clauses preceded by ability adjectives	4.79
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	4.64
Nouns having no additional tag	4.01
Numbers	4
Negation	3.76
Time references	3.27
Question tags	3.24
Other adverbs	3.24
that relative clauses	3.24
Nouns human	3.2
Coordinating conjunctions	2.72
Non-finite verb -ing forms	2.6
Attributive adjectives having no additional tag	2.57
Nouns quantity	2.32
s-genitives	2.17
that complement clauses not preceded by a stance adjective or verb	2.06
Past tense	1.96
that subordinate clauses (other than relatives) preceded by factive adjectives	1.94
All that complement clauses preceded by stance verbs	1.91
WH subordinate clauses	1.9
Prepositions	1.76
Single, female third person reference	1.75
Reference to more than one non-interactant and single they reference	1.75
Verbal contractions	1.74
Frequency references	1.71
to clauses preceded by ability adjectives	1.69
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	1.55
Factive adverbs	1.46
to clauses preceded by verbs of desire	1.45
Conditional conjunctions	1.34
Stranded prepositions	1.31
that subordinate clauses (other than relatives) preceded by likelihood adjectives	1.31
Yes/no questions	1.21
that subordinate clauses (relative clauses) preceded by attitudinal nouns	1.21
Stance nouns without prepositions	1.17
that subordinate clauses (other than relatives) preceded by factive verbs	1.14
WH subordinate clauses preceded by attitudinal verbs	0.97
Progressive aspect	0.96
Nouns concrete	0.92
that subordinate clauses (other than relatives) preceded by	0.89

Universiti Utara Malaysia

non factive nouns	
All first person references	0.82
Communication verbs	0.81
Prepositions having no additional tag	0.8
Average word length	0.77
Nouns technical	0.76
WH subordinate clauses preceded by communicative verbs	0.76
Determiners	0.75
to clauses preceded by adjectives of ease	0.72
Comparatives	0.68
Reference to the speaker/writer and other(s)	0.68
Going to constructions	0.62
Time related adjectives	0.61
Be as main verb	0.61
Epistemic adjectives without a that clause after	0.61
Discourse pragmatic markers	0.52
All to infinitive clauses preceded by stance adjectives	0.52
Imperatives	0.46
to clauses preceded by verbs of speech	0.36
Linguistic Features	**Negative Loading**
Demonstratives	-0.33
HAVE got constructions	-0.35
Concessive conjunctions	-0.39
Size related adjectives	-0.49
that subordinate clauses (other than relatives) preceded by attitutidinal verbs	-0.51
Nouns place	-0.54
Amplifiers	-0.55
Attitudinal adjectives without a that clause after	-0.64
to clauses preceded by factive adjectives	-0.66
Reference to the speaker/writer	-0.69
Non factive adverbs	-0.7
Single, male third person reference	-0.71
Non-finite -ed verb forms	-0.76
Lexical diversity	-0.89
To clauses preceded by stance nouns	-0.9
to clauses preceded by factive adjectives	-0.97
Noun compounds	-0.99
DO auxiliary	-1.01
Evaluative adjectives	-1.04
Nouns cognitive	-1.05
Direct WH-questions	-1.06
Emphatics	-1.07
to clauses preceded by verbs of probability	-1.24
Existential there	-1.3
Proper nouns	-1.34
WH complement clauses not preceded by a stance verb	-1.36
Filled pauses and interjections	-1.44
Present tense	-1.44

Subordinator that omission	-1.46
to clauses preceded by mental verbs	-1.59
Necessity modals	-1.6
Facilitation and causative verbs	-1.62
All that complement clauses preceded by stance nouns	-1.72
Prepositions preceded by stance nouns	-1.83
it pronoun reference	-1.95
Causal conjunctions	-2.05
Adjectives related to color	-2.17
Nouns abstract and process	-2.18
Superlatives	-2.18
Verb features	-2.2
Perfect aspect	-2.35
modal would	-2.38
Place references	-2.46
All third person references	-2.49
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	-2.49
Particles	-2.58
to clauses preceded by verbs of effort	-2.58
Occurrence verbs	-2.85
Politeness markers	-3.15
All modals of possibility	-3.27
Topical adjectives	-3.4
Split auxiliaries and infinitives	-3.42
Nouns group	-3.78
All that complement clauses preceded by stance adjectives, nouns, and verbs	-4.08
Mental verbs	-4.52
All be and get passives	-5.07

Table 17 Linguistic Features of Factor 5 across Pakistani English Educational Blogs

	Factor 5
Linguistic Features	**Positive Loading**
to clauses preceded by ability adjectives	8.52
Facilitation and causative verbs	3.85
Conditional conjunctions	3.68
Split auxiliaries and infinitives	3.68
All modals of possibility	3.08
Numbers	3.04

Attitudinal adjectives without a that clause after	2.97
Particles	2.9
to clauses preceded by verbs of effort	2.89
Question tags	2.77
Elaborating conjunctions	2.74
Mental verbs	2.59
Hedges	2.53
HAVE got constructions	2.49
Coordinating conjunctions	2.37
Nouns group	2.18
Occurrence verbs	2.1
to clauses preceded by factive adjectives	2.05
Downtoners	1.72
Nominalizations	1.7
WH subordinate clauses preceded by communicative verbs	1.68
will and shall modals	1.67
Factive adverbs	1.5
Existential there	1.49
All that complement clauses preceded by stance verbs	1.48
Time related adjectives	1.35
Imperatives	1.35
Activity verbs	1.35
Other adverbs	1.34
that relative clauses	1.34
To clauses preceded by stance nouns	1.21
Nouns abstract and process	1.15
Concessive conjunctions	1.09
modal would	1.06
Politeness markers	1.06
Frequency references	1.01
that subordinate clauses (other than relatives) preceded by communicative verbs	0.91
to clauses preceded by verbs of desire	0.83
Prepositions having no additional tag	0.82
Relational adjectives	0.8
Time references	0.78
Nouns concrete	0.72
Nouns cognitive	0.72
All that complement clauses preceded by stance nouns	0.71
to clauses preceded by ability adjectives	0.67
Superlatives	0.62
Prepositions preceded by stance nouns	0.61
Adverbs having no additional tag	0.59
that subordinate clauses (other than relatives) preceded by attitutidinal adjectives	0.58
to clauses preceded by mental verbs	0.57
Causal conjunctions	0.53
Stranded prepositions	0.51
that subordinate clauses (other than relatives) preceded by likelihood adjectives	0.51

Present tense	0.5
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	0.49
Necessity modals	0.46
Nouns having no additional tag	0.45
Lexical diversity	0.45
Existential or relationship verbs	0.37
Amplifiers	0.34
that relative clauses not preceded by a stance noun	0.32
Past tense	0.31
WH subordinate clauses	0.3
Linguistic Features	**Negative Loading**
Average word length	-0.31
Proper nouns	-0.31
Reference to the speaker/writer and other(s)	-0.32
to clauses preceded by factive adjectives	-0.32
Emphatics	-0.32
All that complement clauses preceded by stance adjectives, nouns, and verbs	-0.32
Filled pauses and interjections	-0.34
WH complement clauses not preceded by a stance verb	-0.35
Progressive aspect	-0.37
All first person references	-0.38
Single, female third person reference	-0.41
All that complement clauses preceded by stance adjectives, nouns, and verbs	-0.42
Stance nouns without prepositions	-0.46
Epistemic adjectives without a that clause after	
-0.51 that subordinate clauses (other than relatives) preceded by factive verbs	-0.52
that subordinate clauses (other than relatives) preceded by factive adjectives	-0.55
Direct WH-questions	-0.66
Nouns human	-0.68
it pronoun reference	-0.68
Non factive adverbs	-0.71
Quantifiers	-0.71
Going to constructions	-0.81
Reference to more than one non-interactant and single they reference	-0.83
WH subordinate clauses preceded by attitudinal verbs	-0.86
All to infinitive clauses preceded by stance adjectives	-0.88
Topical adjectives	-0.91
Communication verbs	-1.05
that subordinate clauses (other than relatives)	
1.08 that subordinate clauses (other than relatives)preceded by likelihood verbs	-1.09
to clauses preceded by adjectives of ease	-1.1

Universiti Utara Malaysia

factive nouns	
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-1.43
Reference to the speaker/writer	-1.43
Perfect aspect	-1.43
Single, male third person reference	-1.52
Non-finite -ed verb forms	-1.52
that complement clauses not preceded by a stance adjective or verb	-1.73
that subordinate clauses (relative clauses) preceded by likelihood nouns	-1.76
Nouns technical	-1.87
DO auxiliary	-2.03
Demonstratives	-2.17
Discourse/pragmatic markers	-2.26
Nouns quantity	-2.27
Prepositions	-2.4
Predicative adjectives having no additional tag	-3.02
Noun compounds	-3.09
Yes/no questions	-3.25
Attributive adjectives having no additional tag	-3.9
Subordinator that omission	-4.3
Reference toaddressee(s)	-4.3
Comparatives	-4.42
s-genitives	-5.18
All third person references	-5.19
Be as main verb	-5.46
All adverbs related to stance	-5.94
Aspectual verbs	-5.99

Table 18 Linguistic Features across Factor 6 of Pakistani Educational

Factor 6	
Linguistic Features	**Positive Loading**
Politeness markers	7.41
Nouns having no additional tag	7.23
s-genitives	6.89
Nominalizations	5.54
Coordinating conjunctions	3.68
Causal conjunctions	3.68
Mental verbs	3.27
Occurrence verbs	2.4

All modals of possibility	0.47
Attitudinal adjectives without a that clause after	0.4
Factive adverbs	0.38
will and shall modals	0.36
that subordinate clauses (relative clauses) preceded by attitudinal nouns	0.36
Nouns abstract and process	0.35
To clauses preceded by stance nouns	0.3
Linguistic Features	**Negative Loading**
Quantifiers	-0.31
Nouns quantity	-0.33
Quantifying pronouns	-0.38
WH subordinate clauses preceded by attitudinal verbs	-0.43
Nouns concrete	-0.44
that subordinate clauses (other than relatives) preceded by communicative verbs	-0.46
to clauses preceded by verbs of probability	-0.51
Evaluative adjectives	-0.56
Nouns human	-0.57
Reference toaddressee(s)	-0.61
that subordinate clauses (other than relatives) preceded by factive verbs	-0.64
All that complement clauses preceded by stance adjectives, nouns, and verbs	-0.71
Stance nouns without prepositions	-0.71
Going to constructions	-0.82
Negation	-0.86
WH subordinate clauses	-0.93
WH subordinate clauses preceded by communicative verbs	-0.94
Predicative adjectives having no additional tag	-0.98
Communication verbs	-1.01
WH complement clauses not preceded by a stance verb	-1.11
that relative clauses not preceded by a stance noun	-1.13
to clauses preceded by factive adjectives	-1.23
Stranded prepositions	-1.25
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-1.25
Hedges	-1.3
that subordinate clauses (relative clauses) preceded by likelihood nouns	-1.3
Question tags	-1.33
Verbal contractions	-1.46
Average word length	-1.69
Non-finite verb -ing forms	-1.7
All third person references	-1.72
HAVE got constructions	-1.73
All adverbs related to stance	-1.75
to clauses preceded by verbs of speech	-1.75
Demonstratives	-1.87

Verb features	2.35
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	2.31
Attributive adjectives having no additional tag	2.2
Reference to the speaker/writer and other(s)	2.1
Place references	2.02
Necessity modals	1.99
Activity verbs	1.92
All be and get passives	1.91
to clauses preceded by adjectives of ease	1.87
Lexical diversity	1.85
Discourse/pragmatic markers	1.84
that subordinate clauses (other than relatives) preceded by factive adjectives	1.79
that subordinate clauses (other than relatives) preceded by attitudinal verbs	1.4
Relational adjectives	1.32
Past tense	1.32
be able to	1.3
Noun compounds	1.21
Filled pauses and interjections	1.04
All that complement clauses preceded by stance nouns	0.99
Downtoners	0.98
Single, male third person reference	0.98
Non factive adverbs	0.9
Present tense	0.87
to clauses preceded by mental verbs	0.83
Perfect aspect	0.83
Amplifiers	0.79
All that complement clauses preceded by stance adjectives, nouns, and verbs	0.71
Frequency references	0.7
Prepositions preceded by stance nouns	0.68
Imperatives	0.66
Epistemic adjectives without a that clause after	0.65
that subordinate clauses (other than relatives)	0.61
that subordinate clauses (other than relatives)preceded by likelihood verbs	0.61
All that complement clauses preceded by stance verbs	0.59
to clauses preceded by verbs of desire	0.59
Progressive aspect	0.57
Other adverbs	0.56
that relative clauses	0.56
Topical adjectives	0.53
that subordinate clauses (relative clauses) preceded by non factive nouns	0.53
All first person references	0.52
Reference to more than one non-interactant and single they reference	0.52
Prepositions	0.51
Lexical density	0.5

DO auxiliary	-1.94
Concessive conjunctions	-2
Time references	-2.22
Split auxiliaries and infinitives	-2.62
All to infinitive clauses preceded by stance adjectives	-2.62
Be as main verb	-2.74
to clauses preceded by ability adjectives	-2.81
Aspectual verbs	-2.82
to clauses preceded by ability adjectives	-2.84
Adverbs having no additional tag	-2.87
Existential or relationship verbs	-3.3
Numbers	-3.43
Nouns group	-3.46
modal would	-3.58
Nouns technical	-3.85
Conditional conjunctions	-4.23
Subordinator that omission	-4.31
Comparatives	-4.89

Table 19 Linguistic Features of Factor 7 across Pakistani Educational Blogs

Factor 7	
Linguistic Features	**Positive Loading**
to clauses preceded by factive adjectives	7.81
s-genitives	6.31
Numbers	4.69
All adverbs related to stance	4.63
WH subordinate clauses	4.09
Question tags	3.72
modal would	2.97
to clauses preceded by ability adjectives	2.78
Communication verbs	2.65
DO auxiliary	2.64
Emphatics	2.58
Coordinating conjunctions	2.5
Direct WH-questions	2.45
Perfect aspect	2.43
Adverbs having no additional tag	2.28
WH subordinate clauses preceded by attitudinal verbs	2.21
Non-finite -ed verb forms	2.17
Time references	2.14
All modals of possibility	1.92
Predicative adjectives having no additional tag	1.87

Universiti Utara Malaysia

	Hedges	1.69	
	Nouns abstract and process	1.58	
evaluation	that subordinate clauses (other than relatives) preceded by adjectives of	1.5	
	Yes/no questions	1.39	
	Prepositions preceded by stance nouns	1.36	
	All to infinitive clauses preceded by stance adjectives	1.27	
	Place references	1.17	
	Discourse/pragmatic markers	1.15	
	Attributive adjectives having no additional tag	1.12	
	Stance nouns without prepositions	1.11	
	Occurrence verbs	1.09	
	WH complement clauses not preceded by a stance verb	1.03	
	Verbal contractions	0.96	
	Nouns human	0.78	
	Verb features	0.72	
	that subordinate clauses (other than relatives) preceded by factive adjectives	0.71	
	Average word length	0.69	
	Comparatives	0.67	
	Present tense	0.6	
	Particles	0.54	
	to clauses preceded by verbs of effort	0.54	
	Demonstratives	0.52	
	Existential or relationship verbs	0.52	
	Lexical diversity	0.51	
	Noun compounds	0.51	
	Progressive aspect	0.51	
	Downtoners	0.44	
	To clauses preceded by stance nouns	0.42	
	Nouns cognitive	0.39	
	Quantifying pronouns	0.37	
	to clauses preceded by verbs of probability	0.37	
	Size related adjectives	0.34	
	Factive adverbs	0.3	
	Linguistic Features	**Negative Loading**	
	Lexical density	-0.31	
	Filled pauses and interjections	-0.43	
	that relative clauses not preceded by a stance noun	-0.43	
	Nouns group	-0.48	
	All first person references	-0.49	
verbs	All that complement clauses preceded by stance adjectives, nouns, and	-0.51	
	Existential there	-0.53	
	Imperatives	-0.54	
	Prepositions	-0.56	
	All that complement clauses preceded by stance adjectives, nouns, and	-0.69	
	Frequency references	-0.69	
	Amplifiers	-0.7	
	that subordinate clauses (relative clauses) preceded by attitudinal nouns	-0.7	
	Other adverbs	-0.78	
	that relative clauses	-0.78	
	Concessive conjunctions	-0.81	
	that subordinate clauses (other than relatives)	-0.9	
	that subordinate clauses (other than relatives)preceded by likelihood verbs	-0.91	
	Single male third person reference	-0.92	
	Conditional conjunctions	-1.03	
	that subordinate clauses (relative clauses) preceded by likelihood nouns	-1.04	
	Superlatives	-1.05	
	that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-1.14	
	Evaluative adjectives	-1.16	
	Politeness markers	-1.25	
	Reference to the speaker/writer and other(s)	-1.25	
	All that complement clauses preceded by stance verbs	-1.25	
	to clauses preceded by adjectives of ease	-1.36	
	Activity verbs	-1.42	
	Elaborating conjunctions	-1.43	
	All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-1.52	
	Causal conjunctions	-1.54	
	to clauses preceded by mental verbs	-1.54	
	Past tense	-1.55	
	Going to constructions	-1.57	
	Non-finite verb -ing forms	-1.62	
	Aspectual verbs	-1.74	
	Negation	-1.83	
	Attitudinal adjectives without a that clause after	-1.85	
	Nouns quantity	-1.9	
	Stranded prepositions	-2.05	
	that subordinate clauses (other than relatives) preceded by likelihood adjectives	-2.05	
be able to		-2.12	
	that subordinate clauses (other than relatives) preceded by communicative verbs	-2.14	

Universiti Utara Malaysia

Table 20 Linguistic Features of Factor 8 across Pakistani Educational Blogs

Factor 8	
Linguistic Features	**Positive Loading**
Nouns group	6.2
s-genitives	4.51
Subordinator that omission	4.35
Coordinating conjunctions	3.68
Emphatics	3.49
All that complement clauses preceded by stance adjectives, nouns, and verbs	3.13
WH subordinate clauses preceded by communicative verbs	2.77
Non-finite verb -ing forms	2.68
that relative clauses not preceded by a stance noun	2.61
Prepositions	2.58
Direct WH-questions	2.45
that subordinate clauses (other than relatives) preceded by factive adjectives	2.32
to clauses preceded by verbs of speech	2.3
Nouns technical	2.27
Hedges	2.26
Prepositions preceded by stance nouns	2.26
Non factive adverbs	2.15
Predicative adjectives having no additional tag	2.13
Attributive adjectives having no additional tag	2.08
Verbal contractions	1.97
Noun compounds	1.86
Conditional conjunctions	1.81
to clauses preceded by ability adjectives	1.78
Prepositions having no additional tag	1.77
Progressive aspect	1.73
Amplifiers	1.73
WH complement clauses not preceded by a stance verb	1.62
Causal conjunctions	1.58
Other adverbs	1.52
that relative clauses	1.52
All third person references	1.52
Nouns having no additional tag	1.41
Nouns place	1.38
Nouns concrete	1.29
Factive adverbs	1.27
Quantifiers	1.25
that subordinate clauses (relative clauses) preceded by attitudinal nouns	1.24

Reference to more than one non-interactant and single they reference	1.24
Filled pauses and interjections	1.18
Negation	1.14
will and shall modals	1.08
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	1.05
Single, female third person reference	0.94
Imperatives	0.92
Facilitation and causative verbs	0.92
Determiners	0.8
that subordinate clauses (other than relatives)	0.8
that subordinate clauses (other than relatives)preceded by likelihood verbs	0.8
HAVE got constructions	0.74
Going to constructions	0.71
Time references	0.69
Be as main verb	0.68
Stance nouns without prepositions	0.62
Politeness markers	0.59
Adjectives related to color	0.53
that subordinate clauses (relative clauses) preceded by non factive nouns	0.53
that subordinate clauses (other than relatives)preceded by attitudinal verbs	0.52
Activity verbs	0.48
All adverbs related to stance	0.47
Elaborating conjunctions	0.43
Verb features	0.42
Concessive conjunctions	0.35
Present tense	0.3
All first person references	0.3
Linguistic Features	**Negative Loading**
to clauses preceded by adjectives of ease	-0.31
Superlatives	-0.4
Numbers	-0.43
Downtoners	-0.43
Quantifying pronouns	-0.46
Frequency references	-0.46
modal would	-0.51
to clauses preceded by mental verbs	-0.53
that subordinate clauses (other than relatives) preceded by factive verbs	-0.62
WH subordinate clauses	-0.67
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-0.68
that subordinate clauses (other than relatives) preceded by adjectives of evaluation	-0.7
Necessity modals	-0.72
Demonstratives	-0.79
Nouns cognitive	-0.79
Reference to the speaker/writer	-0.8
to clauses preceded by factive adjectives	-0.84
Existential there	-0.85
DO auxiliary	-0.86
Mental verbs	-0.88
to clauses preceded by verbs of effort	-1.08
Attitudinal adjectives without a that clause after	-1.23
Nouns quantity	-1.4
Single, male third person reference	-1.41
Reference toaddressee(s)	-1.56
be able to	-1.61
Nouns abstract and process	-1.67
that subordinate clauses (relative clauses) preceded by factive nouns	-1.73
Topical adjectives	-1.76
Epistemic adjectives without a that clause after	-1.82
All that complement clauses preceded by stance nouns	-
1.83 All that complement clauses preceded by stance adjectives, nouns, and verbs	-
1.91 Comparatives	-
1.97	-
Past tense	-1.97
Stranded prepositions	-2
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-
2 To clauses preceded by stance nouns	-
2.04	-
Existential or relationship verbs	-2.05
All be and get passives	-2.09
that subordinate clauses (other than relatives) preceded by communicative verbs	-
2.21 Average word length	-
2.31	-
it pronoun reference	-2.52
Non-finite -ed verb forms	-2.58
Proper nouns	-2.77
Discourse/pragmatic markers	-2.78
that complement clauses not preceded by a stance adjective or verb	-3.2
Nominalizations	-3.46
Aspectual verbs	-3.65
Evaluative adjectives	-3.71
Lexical diversity	-3.77
to clauses preceded by factive adjectives	-5.02
Adverbs having no additional tag	-5.25
Time related adjectives	-5.4

Table 21 Linguistic Features of Factor 9 across Pakistani English Educational Blogs

Factor 9	
Linguistic Features	**Positive Loading**
Question tags	7.8
Comparatives	4.51
Attitudinal adjectives without a that clause after	4.4
it pronoun reference	4.05
Coordinating conjunctions	3.37
to clauses preceded by ability adjectives	3.27
Prepositions preceded by stance nouns	2.78
Politeness markers	2.46
Place references	2.46
Subordinator that omission	2.22
Numbers	2.12
Time related adjectives	2.05
Direct WH-questions	2.03
Topical adjectives	1.94
Frequency references	1.92
Amplifiers	1.82
Progressive aspect	1.76
s-genitives	1.75
Predicative adjectives having no additional tag	1.75
Activity verbs	1.71
Be as main verb	1.63
Emphatics	1.55
Non-finite -ed verb forms	1.51
will and shall modals	1.41
Adverbs having no additional tag	1.35
Split auxiliaries and infinitives	1.35
Noun compounds	1.28
modal would	1.23
to clauses preceded by mental verbs	1.14
Epistemic adjectives without a that clause after	1.11
Lexical diversity	1.11
Nouns abstract and process	1.05
Perfect aspect	1.02
be able to	1
Nouns cognitive	0.99
Stance nouns without prepositions	0.97
Existential there	0.96
Verb features	0.93
Discourse/pragmatic markers	0.85
Imperatives	0.83
Aspectual verbs	0.81
Past tense	0.72
Existential or relationship verbs	0.69
that subordinate clauses (relative clauses) preceded by non factive nouns	0.63
Elaborating conjunctions	0.62
Nouns technical	0.56
Size related adjectives	0.53
Present tense	0.48
that subordinate clauses (relative clauses) preceded by factive nouns	0.45
Downtoners	0.42
All that complement clauses preceded by stance verbs	0.42
Relational adjectives	0.35
WH subordinate clauses preceded by attitudinal verbs	0.34

Universiti Utara Malaysia

Facilitation and causative verbs	0.33
that subordinate clauses (other than relatives)preceded by attitudinal verbs	0.33
Linguistic Features	**Negative Loading**
All to infinitive clauses preceded by stance verbs	-0.31
WH subordinate clauses	-0.36
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-0.38
that complement clauses not preceded by a stance adjective or verb	-0.42
to clauses preceded by ability adjectives	-0.43
Particles	-0.43
to clauses preceded by verbs of effort	-0.43
Evaluative adjectives	-0.45
DO auxiliary	-0.47
WH subordinate clauses preceded by communicative verbs	-0.5
Factive adverbs	-0.53
Verbal contractions	-0.54
All modals of possibility	-0.55
to clauses preceded by adjectives of ease	-0.58
that subordinate clauses (relative clauses) preceded by attitudinal nouns	-0.59
Nouns concrete	-0.62
Reference to more than one non-interactant and single they reference	-0.63
Single, female third person reference	-0.67
Reference to the speaker/writer and other(s)	-0.71
Nouns place	-0.75
that subordinate clauses (other than relatives)	-0.79
that subordinate clauses (other than relatives)preceded by likelihood verbs	-0.79
Quantifiers	-0.8
Nouns quantity	-0.82
Prepositions	-0.84
to clauses preceded by verbs of desire	-0.86
Determiners	-0.88
Other adverbs	-0.95
that relative clauses	-0.95
to clauses preceded by factive adjectives	-1.01
Quantifying pronouns	-1.05
to clauses preceded by verbs of speech	-1.06
All be and get passives	-1.1
Stranded prepositions	-1.12
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-1.12
HAVE got constructions	-1.19
Nouns group	-1.27
Non-finite verb -ing forms	-1.32
Filled pauses and interjections	-1.32
Single, male third person reference	-1.32
Concessive conjunctions	-1.39
Negation	-1.6
Average word length	-1.6
to clauses preceded by verbs of probability	-1.63
All first person references	-1.65
Adjectives related to color	-1.71
Yes/no questions	-1.74
All to infinitive clauses preceded by stance adjectives	-1.81
that subordinate clauses (other than relatives) preceded by adjectives of evaluation	-1.83
that subordinate clauses (other than relatives) preceded by communicative verbs	-1.84
Non factive adverbs	-1.89
Nouns having no additional tag	-1.92
To clauses preceded by stance nouns	-2.08
All that complement clauses preceded by stance nouns	-2.25
that subordinate clauses (relative clauses) preceded by likelihood nouns	-2.38
Attributive adjectives having no additional tag	-2.52
Hedges	-2.6
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-2.64
Causal conjunctions	-2.73
WH complement clauses not preceded by a stance verb	-3.2
Reference to the speaker/writer	-4.86
Mental verbs	-5.21
Conditional conjunctions	-6.11
to clauses preceded by factive adjectives	-6.79

Table 22 Linguistic Features of Factor 10 Loadings in Pakistani Educational Blogs

Factor 10	
Linguistic Features	**Positive Loading**
Question tags	7.28
Mental verbs	5.68
Nouns having no additional tag	5.11
modal would	4.39
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	2.51
that complement clauses not preceded by a stance adjective or verb	2.36
Yes/no questions	2.19
All that complement clauses preceded by stance adjectives, nouns, and verbs	2.15
Nouns group	2.05
Emphatics	2.02
Nominalizations	2.02
Numbers	1.89
Nouns cognitive	1.87
to clauses preceded by adjectives of ease	1.85
Quantifying pronouns	1.8
Causal conjunctions	1.73
Determiners	1.71
All adverbs related to stance	1.59
Reference to the speaker/writer and other(s)	1.56
Single, male third person reference	1.55
Facilitation and causative verbs	1.49
Perfect aspect	1.31
Reference toaddressee(s)	1.31
Activity verbs	1.18
Time related adjectives	1.17
Evaluative adjectives	1.16
that subordinate clauses (relative clauses) preceded by factive nouns	1.14
Conditional conjunctions	1.08
Frequency references	1.03
Amplifiers	0.79
Reference to more than one non-interactant and single they reference	0.79
To clauses preceded by stance nouns	0.79
Size related adjectives	0.75
Direct WH-questions	0.69
Elaborating conjunctions	0.69
Adjectives related to color	0.69
Going to constructions	0.66
Attributive adjectives having no additional tag	0.63
All to infinitive clauses preceded by stance verbs	0.6
Predicative adjectives having no additional tag	0.59
to clauses preceded by ability adjectives	0.59
to clauses preceded by factive adjectives	0.59
WH subordinate clauses	0.58
Filled pauses and interjections	0.56
that subordinate clauses (relative clauses) preceded by likelihood nouns	0.5
Aspectual verbs	0.45
that subordinate clauses (relative clauses) preceded by non factive nouns	0.45
Single, female third person reference	0.45
All that complement clauses preceded by stance nouns	0.45
Prepositions	0.42
All that complement clauses preceded by stance adjectives, nouns, and verbs	0.42
Verb features	0.4
WH complement clauses not preceded by a stance verb	0.4
that subordinate clauses (other than relatives) preceded by factive adjectives	0.38
Nouns human	0.35
Relational adjectives	0.32
Linguistic Features	**Negative Loading**
Topical adjectives	-0.3
be able to	-0.32
Non-finite verb -ing forms	-0.33
Existential or relationship verbs	-0.34
Particles	-0.38
to clauses preceded by verbs of effort	-0.38

Universiti Utara Malaysia

to clauses preceded by verbs of desire	-0.42
Average word length	-0.51
to clauses preceded by verbs of speech	-0.52
Nouns technical	-0.53
Non factive adverbs	-0.53
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-0.54
that subordinate clauses (other than relatives) preceded by factive verbs	-0.54
Reference to the speaker/writer	-0.56
it pronoun reference	-0.59
Stance nouns without prepositions	-0.63
Nouns place	-0.64
Lexical diversity	-0.66
Discourse/pragmatic markers	-0.67
Imperatives	-0.67
Factive adverbs	-0.74
Nouns concrete	-0.76
to clauses preceded by mental verbs	-0.78
Stranded prepositions	-0.79
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-0.79
Comparatives	-0.81
Downtoners	-0.82
WH subordinate clauses preceded by communicative verbs	-0.84
Place references	-0.85
that relative clauses not preceded by a stance noun	-0.86
HAVE got constructions	-0.9
Attitudinal adjectives without a that clause after	-0.92
Other adverbs	-0.97
that relative clauses	-0.97
All to infinitive clauses preceded by stance adjectives	-0.97
Be as main verb	-1.06
Lexical density	-1.06
Prepositions preceded by stance nouns	-1.09
Hedges	-1.09
Demonstratives	-1.35
Proper nouns	-1.35
All first person references	-1.37
Subordinator that omission	-1.44
Negation	-1.45
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-1.48
Quantifiers	-1.52
WH subordinate clauses preceded by attitudinal verbs	-1.57
Coordinating conjunctions	-1.58
Verbal contractions	-1.58
All modals of possibility	-1.62
Prepositions having no additional tag	-1.88
All third person references	-2.12
Epistemic adjectives without a that clause after	-2.52
Nouns quantity	-2.52
All be and get passives	-2.86

DO auxiliary	-2.96
Past tense	-3.53
Politeness markers	-5.2
s-genitives	-5.32
to clauses preceded by ability adjectives	-6.41
to clauses preceded by factive adjectives	-6.71

Table 23 Linguistic Features of Factor 1 Loading in Native Educational Blogs

Factor 1	
Linguistic Features	**Positive Loading**
Adjectives related to color	10.33
Time related adjectives	8.63
Past tense	8.26
Filled pauses and interjections	8.02
Nominalizations	7.04
Nouns human	6.72
Proper nouns	6.72
Topical adjectives	6.59
HAVE got constructions	5.64
that subordinate clauses (relative clauses) preceded by non factive nouns	5.59
Progressive aspect	5.48
Nouns technical	4.98
Negation	4.94
that subordinate clauses (relative clauses) preceded by likelihood nouns	4.85
Downtoners	4.73
that relative clauses	4.69
To clauses preceded by stance nouns	4.23
Elaborating conjunctions	4.18
Nouns having no additional tag	4.17
that complement clauses not preceded by a stance adjective or verb	4.16
modal would	4
that subordinate clauses (other than relatives) preceded by communicative verbs	3.86
Nouns quantity	3.84
Single, female third person reference	3.8
Non-finite -ed verb forms	3.77
be able to	3.53
Factive adverbs	3.4
Concessive conjunctions	3.07
Aspectual verbs	3.03
Time references	2.92
Question tags	2.56

Reference toaddressee(s)	2.4
that subordinate clauses (other than relatives)	2.34
Quantifiers	2.26
All modals of possibility	2.23
that subordinate clauses (other than relatives) preceded by factive verbs	2.18
Nouns group	2.15
that subordinate clauses (other than relatives)preceded by likelihood verbs	2.04
Average word length	2.03
Politeness markers	2.03
Particles	1.89
Discourse/pragmatic markers	1.76
Activity verbs	1.74
Superlatives	1.73
DO auxiliary	1.69
to clauses preceded by verbs of probability	1.67
Size related adjectives	1.63
Non-finite verb -ing forms	1.44
Nouns cognitive	1.39
that relative clauses not preceded by a stance noun	1.16
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	1.16
Split auxiliaries and infinitives	1.12
Prepositions having no additional tag	1.12
WH subordinate clauses	1.01
Facilitation and causative verbs	0.98
Be as main verb	0.97
Non factive adverbs	0.86
Imperatives	0.78
to clauses preceded by verbs of effort	0.78
Nouns place	0.75
Reference to the speaker/writer and other(s)	0.65
All first person references	0.62
Stranded prepositions	0.61
Perfect aspect	0.51
Lexical diversity	0.47
Yes/no questions	0.39
Linguistic Features	**Negative Loading**
Evaluative adjectives	-0.33
to clauses preceded by factive adjectives	-0.4
Adverbs having no additional tag	-0.41
that subordinate clauses (other than relatives) preceded by factive adjectives	-0.44
Direct WH-questions	-0.48
Reference to more than one non-interactant and single they reference	-0.53
All to infinitive clauses preceded by stance adjectives	-0.53
Existential there	-0.6
Hedges	-0.62
Comparatives	-0.65
Lexical density	-0.72
Coordinating conjunctions	-0.74
Reference to the speaker/writer	-0.76

All that complement clauses preceded by stance verbs	-0.77
Numbers	-0.79
Single, male third person reference	-0.79
Demonstratives	-0.83
Nouns abstract and process	-0.85
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-0.87
Existential or relationship verbs	-0.96
All third person references	-1.23
Mental verbs	-1.26
Present tense	-1.26
will and shall modals	-1.31
Stance nouns without prepositions	-1.33
that subordinate clauses (relative clauses) preceded by factive nouns	-1.35
Prepositions	-1.39
Place references	-1.4
WH subordinate clauses preceded by likelihood verbs	-1.4
All that complement clauses preceded by stance adjectives, nouns, and verbs	-1.42
Subordinator that omission	-1.56
Causal conjunctions	-1.72
to clauses preceded by ability adjectives	-1.77
to clauses preceded by factive adjectives	-1.86
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-1.99
Verb features	-2.14
Emphatics	-2.21
to clauses preceded by adjectives of ease	-2.21
it pronoun reference	-2.3
Going to constructions	-2.51
Frequency references	-2.56
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-2.65
All to infinitive clauses preceded by stance verbs	-2.68
All be and get passives	-2.78
WH subordinate clauses preceded by attitudinal verbs	-2.95
WH subordinate clauses preceded by factive verbs	-2.99
All adverbs related to stance	-3.02
that subordinate clauses (relative clauses) preceded by attitudinal nouns	-3.06
Verbal contractions	-3.29
Conditional conjunctions	-3.51
Predicative adjectives having no additional tag	-3.7
Prepositions preceded by stance nouns	-3.73
Relational adjectives	-3.98
Occurrence verbs	-4.04
Other adverbs	-4.04
to clauses preceded by verbs of speech	-4.27
Quantifying pronouns	-4.28
Noun compounds	-4.36
All that complement clauses preceded by stance adjectives, nouns, and verbs	-4.47
to clauses preceded by verbs of desire	-4.63
Determiners	-4.64
All to infinitive clauses preceded by stance adjectives, nouns, and	-4.72

Universiti Utara Malaysia

All that complement clauses preceded by stance nouns	-5.01
Communication verbs	-5.31
WH subordinate clauses preceded by communicative verbs	-5.53
WH complement clauses not preceded by a stance verb	-5.6
Nouns concrete	-6.56
All WH complement clauses preceded by stance verbs	-7.2
to clauses preceded by mental verbs	-9.98

Table 24 Linguistic Features of Factor 2 Loadings in Native Educational Blogs

Factor 2	
Linguistic Features	**Positive Loading**
Nominalizations	8.77
All that complement clauses preceded by stance nouns	7.12
All modals of possibility	6.6
to clauses preceded by mental verbs	5.94
to clauses preceded by ability adjectives	5.2
to clauses preceded by factive adjectives	5.16
DO auxiliary	5.14
Discourse/pragmatic markers	5.05
Time related adjectives	4.5
Stranded prepositions	4.49
Quantifying pronouns	4.46
Demonstratives	4.3
Relational adjectives	4.26
Past tense	4.03
Downtoners	3.93
Non-finite -ed verb forms	3.78
Reference to the speaker/writer and other(s)	3.68
Nouns concrete	3.63
Nouns cognitive	3.61
Non factive adverbs	3.33
Communication verbs	3.22
WH subordinate clauses	3.13
Superlatives	2.94
Reference to the speaker/writer	2.94
that subordinate clauses (relative clauses) preceded by likelihood nouns	2.82
Coordinating conjunctions	2.66
Facilitation and causative verbs	2.64
Be as main verb	2.64
Lexical density	2.46
Nouns having no additional tag	2.32
Stance nouns without prepositions	2.32
to clauses preceded by factive adjectives	2.28

To clauses preceded by stance nouns	2.07
Reference toaddressee(s)	2.06
that relative clauses not preceded by a stance noun	2.05
Determiners	2.04
Quantifiers	2.01
Other adverbs	1.97
Present tense	1.77
Split auxiliaries and infinitives	1.45
Attitudinal adjectives without a that clause after	1.45
Aspectual verbs	1.29
Place references	1.23
WH subordinate clauses preceded by likelihood verbs	1.23
to clauses preceded by adjectives of ease	1.2
Occurrence verbs	1.2
Mental verbs	1.16
to clauses preceded by verbs of desire	1.13
All that complement clauses preceded by stance adjectives, nouns, and verbs	1.12
will and shall modals	1.11
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	1.1
Noun compounds	1.07
s-genitives	1.03
that subordinate clauses (relative clauses) preceded by attitudinal nouns	0.96
Adverbs having no additional tag	0.94
All be and get passives	0.87
Causal conjunctions	0.74
to clauses preceded by verbs of probability	0.6
Particles	0.59
WH subordinate clauses preceded by factive verbs	0.57
Verbal contractions	0.53
Reference to more than one non-interactant and single they reference	0.47
Going to constructions	0.46
that subordinate clauses (other than relatives) preceded by likelihood adjectives	0.4
Nouns place	0.36
Linguistic Features	**Negative Loadings**
Existential or relationship verbs	-0.36
Existential there	-0.39
Adjectives related to color	-0.46
Nouns technical	-0.47
Prepositions having no additional tag	-0.57
Perfect aspect	-0.58
it pronoun reference	-0.6
All adverbs related to stance	-0.7
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-0.71
Time references	-0.76
Attributive adjectives having no additional tag	-0.81
that subordinate clauses (relative clauses) preceded by factive nouns	-0.83
that subordinate clauses (other than relatives)	-0.84
All to infinitive clauses preceded by stance adjectives	-0.87
Topical adjectives	-0.92

Average word length	-1.18
Politeness markers	-1.18
Filled pauses and interjections	-1.24
to clauses preceded by verbs of effort	-1.27
Prepositions	-1.29
Nouns group	-1.3
Negation	-1.34
modal would	-1.45
Evaluative adjectives	-1.46
Single, female third person reference	-1.51
Predicative adjectives having no additional tag	-1.52
Amplifiers	-1.61
that subordinate clauses (other than relatives) preceded by factive adjectives	-2.03
Hedges	-2.07
Verb features	-2.12
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	-2.32
Single, male third person reference	-2.36
WH subordinate clauses preceded by attitudinal verbs	-2.48
Factive adverbs	-2.53
All first person references	-2.56
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-2.57
Epistemic adjectives without a that clause after	-2.64
to clauses preceded by verbs of speech	-2.66
Conditional conjunctions	-2.72
Necessity modals	-2.88
Non-finite verb -ing forms	-2.92
HAVE got constructions	-2.96
Prepositions preceded by stance nouns	-3
Nouns quantity	-3.08
Comparatives	-3.36
Activity verbs	-3.54
Question tags	-3.71
Nouns abstract and process	-3.71
that subordinate clauses (other than relatives)preceded by likelihood verbs	-3.84
Yes/no questions	-3.92
that complement clauses not preceded by a stance adjective or verb	-3.95
that subordinate clauses (other than relatives) preceded by factive verbs	-4.09
WH subordinate clauses preceded by communicative verbs	-4.14
to clauses preceded by ability adjectives	-4.55
Imperatives	-4.93
All that complement clauses preceded by stance verbs	-4.95
Elaborating conjunctions	-5
Emphatics	-5.12
All WH complement clauses preceded by stance verbs	-5.66
that subordinate clauses (other than relatives) preceded by communicative verbs	-5.93
All third person references	-5.93

Table 25 Linguistic Features of Factor 3 Loadings in Native Educational Blogs

Factor 3	
Linguistic Features	**Positive Loading**
Reference to the speaker/writer and other(s)	8.32
All WH complement clauses preceded by stance verbs	7.73
Single, male third person reference	7.07
Verbal contractions	5.16
Reference to more than one non-interactant and single they reference	4.61
WH subordinate clauses preceded by attitudinal verbs	4.28
Non-finite -ed verb forms	4.06
Elaborating conjunctions	3.71
Nominalizations	3.7
All that complement clauses preceded by stance adjectives, nouns, and verbs	3.52
Existential there	3.4
Place references	3.26
WH subordinate clauses preceded by likelihood verbs	3.26
All to infinitive clauses preceded by stance verbs	3.26
s-genitives	3.15
All to infinitive clauses preceded by stance adjectives	3.15
Frequency references	3.15
Average word length	3.04
Politeness markers	3.04
to clauses preceded by verbs of speech	2.98
Imperatives	2.91
Nouns having no additional tag	2.86
Nouns quantity	2.79
that subordinate clauses (relative clauses) preceded by likelihood nouns	2.57
to clauses preceded by adjectives of ease	2.53
that subordinate clauses (other than relatives)preceded by attitudinal verbs	2.47
Progressive aspect	2.37
Topical adjectives	2.3
Numbers	2.3
to clauses preceded by verbs of effort	2.21
to clauses preceded by verbs of desire	2.19
Yes/no questions	2.13
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	2.03
WH complement clauses not preceded by a stance verb	1.98
that subordinate clauses (relative clauses) preceded by non factive nouns	1.73
that subordinate clauses (other than relatives) preceded by factive adjectives	1.71
Amplifiers	1.68
Causal conjunctions	1.67
Reference to the speaker/writer	1.62
Predicative adjectives having no additional tag	1.51
Conditional conjunctions	1.48
that relative clauses	1.43
to clauses preceded by factive adjectives	1.31
Time references	1.28

Universiti Utara Malaysia

Relational adjectives	1.18
be able to	1.16
that subordinate clauses (other than relatives) preceded by adjectives of evaluation	1.02
All adverbs related to stance	0.71
Concessive conjunctions	0.65
Quantifying pronouns	0.59
Stance nouns without prepositions	0.58
that subordinate clauses (other than relatives)	0.39

Linguistic Features	Negative Loading
Past tense	-0.31
that subordinate clauses (other than relatives)preceded by likelihood verbs	-0.35
Going to constructions	-0.37
will and shall modals	-0.38
that complement clauses not preceded by a stance adjective or verb	-0.4
Prepositions	-0.46
Hedges	-0.51
All modals of possibility	-0.52
Aspectual verbs	-0.52
Adverbs having no additional tag	-0.59
Facilitation and causative verbs	-0.61
Size related adjectives	-0.63
that subordinate clauses (other than relatives) preceded by communicative verbs	-0.68
DO auxiliary	-0.74
Discourse/pragmatic markers	-0.75
to clauses preceded by ability adjectives	-0.81
Existential or relationship verbs	-0.85
that subordinate clauses (other than relatives) preceded by factive verbs	-0.87
Direct WH-questions	-0.94
Verb features	-0.99
Nouns place	-1.02
Coordinating conjunctions	-1.05
to clauses preceded by ability adjectives	-1.1
Determiners	-1.17
Non-finite verb -ing forms	-1.19
HAVE got constructions	-1.31
WH subordinate clauses	-1.33
Non factive adverbs	-1.34
Necessity modals	-1.37
Adjectives related to color	-1.38
Lexical diversity	-1.42
that relative clauses not preceded by a stance noun	-1.43
All that complement clauses preceded by stance nouns	-1.45
Reference toaddressee(s)	-1.48
Lexical density	-1.52
that subordinate clauses (relative clauses) preceded by attitudinal nouns	-1.59
Nouns cognitive	-1.61
Prepositions having no additional tag	-1.64
Downtoners	-1.78
Epistemic adjectives without a that clause after	-1.79

All that complement clauses preceded by stance adjectives, nouns, and verbs	-2.12
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-2.16
to clauses preceded by mental verbs	-2.19
Evaluative adjectives	-2.2
Subordinator that omission	-2.24
WH subordinate clauses preceded by communicative verbs	-2.26
Perfect aspect	-2.3
Nouns human	-2.46
Proper nouns	-2.46
Nouns concrete	-2.54
it pronoun reference	-2.55
Present tense	-2.68
to clauses preceded by verbs of probability	-2.69
Nouns technical	-2.69
Attributive adjectives having no additional tag	-2.69
WH subordinate clauses preceded by factive verbs	-2.76
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-2.76
Time related adjectives	-3.18
Activity verbs	-3.23
Quantifiers	-3.38
All first person references	-3.38
Nouns group	-3.61
Demonstratives	-3.64
Prepositions preceded by stance nouns	-3.75
Emphatics	-4.03
Communication verbs	-4.06
Factive adverbs	-4.47
All be and get passives	-5.15
All third person references	-6.43

Table 26 Linguistic Features of Factor 4 Loadings in Native Educational Blogs

Factor 4	
Linguistic Features	**Positive Loading**
Adjectives related to color	9.62
to clauses preceded by verbs of desire	7.85
All to-infinitive clauses preceded by stance adjectives, nouns, and verbs	7.81
Nouns human	6.15
Proper nouns	6.15
Time related adjectives	5.85
Past tense	4.67
Imperatives	4.38

that subordinate clauses (other than relatives)preceded by likelihood verbs	3.85
that subordinate clauses (relative clauses) preceded by attitudinal nouns	3.57
All that complement clauses preceded by stance adjectives, nouns, and verbs	3.22
All that complement clauses preceded by stance nouns	3.14
Facilitation and causative verbs	3.07
to clauses preceded by mental verbs	2.94
Necessity modals	2.73
Nouns quantity	2.67
that complement clauses not preceded by a stance adjective or verb	2.64
Nouns concrete	2.58
that subordinate clauses (other than relatives) preceded by communicative verbs	2.23
Occurrence verbs	2.11
Aspectual verbs	2.09
Noun compounds	2.09
Elaborating conjunctions	2.01
Negation	1.9
Quantifying pronouns	1.84
Relational adjectives	1.82
Average word length	1.5
Politeness markers	1.5
to clauses preceded by adjectives of ease	1.46
Conditional conjunctions	1.32
that relative clauses not preceded by a stance noun	1.29
All to infinitive clauses preceded by stance verbs	1.21
Reference to the speaker/writer	1.2
Existential or relationship verbs	1.15
Mental verbs	1.14
Activity verbs	1.13
will and shall modals	1.06
Causal conjunctions	1.05
to clauses preceded by ability adjectives	1.03
Reference to more than one non-interactant and single they reference	1.01
Verbal contractions	0.92
Verb features	0.87
Question tags	0.82
Frequency references	0.76
Filled pauses and interjections	0.7
that subordinate clauses (other than relatives) preceded by factive verbs	0.63
s-genitives	0.59
Nouns abstract and process	0.52
DO auxiliary	0.51
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	0.5
Discourse/pragmatic markers	0.47
All to infinitive clauses preceded by stance adjectives	0.42
Topical adjectives	0.42
Split auxiliaries and infinitives	0.4
WH complement clauses not preceded by a stance verb	0.39
that subordinate clauses (relative clauses) preceded by non factive nouns	0.37

Evaluative adjectives	-0.35
to clauses preceded by verbs of effort	-0.42
Hedges	-0.43
All third person references	-0.43
Time references	-0.49
that subordinate clauses (relative clauses) preceded by factive nouns	-0.52
Emphatics	-0.53
WH subordinate clauses preceded by factive verbs	-0.57
Yes/no questions	-0.68
Nouns having no additional tag	-0.7
Numbers	-0.81
Single, female third person reference	-0.82
Nouns technical	-0.83
HAVE got constructions	-0.85
WH subordinate clauses preceded by attitudinal verbs	-0.89
Determiners	-0.91
be able to	-0.93
Epistemic adjectives without a that clause after	-0.94
modal would	-0.97
All first person references	-0.98
Going to constructions	-1.01
Direct WH-questions	-1.02
Perfect aspect	-1.05
Attributive adjectives having no additional tag	-1.14
WH subordinate clauses preceded by communicative verbs	-1.32
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-1.36
All WH complement clauses preceded by stance verbs	-1.37
to clauses preceded by verbs of speech	-1.38
WH subordinate clauses	-1.38
that relative clauses	-1.42
to clauses preceded by verbs of probability	-1.49
Amplifiers	-1.5
Place references	-1.56
WH subordinate clauses preceded by likelihood verbs	-1.56
All modals of possibility	-1.62
that subordinate clauses (other than relatives)	-1.63
that subordinate clauses (other than relatives) preceded by factive adjectives	-1.72
Attitudinal adjectives without a that clause after	-1.74
Non-finite verb -ing forms	-1.77
Concessive conjunctions	-1.86
All that complement clauses preceded by stance adjectives, nouns, and verbs	-1.87
Predicative adjectives having no additional tag	-1.9
Coordinating conjunctions	-1.9
Nouns cognitive	-1.93
Nouns place	-1.95
Superlatives	-1.96
All be and get passives	-2.01
Downtoners	-2.14
Size related adjectives	-2.19
it pronoun reference	-2.2
Non-finite -ed verb forms	-2.32

Universiti Utara Malaysia

Reference toaddressee(s)	-2.37
Lexical density	-2.37
All adverbs related to stance	-2.48
Lexical diversity	-2.61
Non factive adverbs	-2.72
Prepositions	-2.76
Stance nouns without prepositions	-2.78
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	-2.85
to clauses preceded by ability adjectives	-2.86
Nouns group	-2.87
Reference to the speaker/writer and other(s)	-2.93
Prepositions having no additional tag	-2.99
Be as main verb	-3.14
Existential there	-3.31
Factive adverbs	-3.36
Single, male third person reference	-3.42
Progressive aspect	-3.66
Particles	-3.74
Demonstratives	-4.25
Subordinator that omission	-4.27

Table 27 Linguistic Features of Factor 4 Loadings in Native Educational Blogs

Factor 4	
Linguistic Features	**Positive Loading**
Adjectives related to color	9.62
to clauses preceded by verbs of desire	7.85
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	7.81
Nouns human	6.15
Proper nouns	6.15
Time related adjectives	5.85
Past tense	4.67
Imperatives	4.38
Prepositions preceded by stance nouns	4.14
that subordinate clauses (other than relatives)preceded by likelihood verbs	3.85
that subordinate clauses (relative clauses) preceded by attitudinal nouns	3.57
All that complement clauses preceded by stance adjectives, nouns, and verbs	3.22
All that complement clauses preceded by stance nouns	3.14
Facilitation and causative verbs	3.07
to clauses preceded by mental verbs	2.94
Necessity modals	2.73
Nouns quantity	2.67
that complement clauses not preceded by a stance adjective or verb	2.64
Nouns concrete	2.58
that subordinate clauses (other than relatives) preceded by communicative verbs	2.23
Occurence verbs	2.11
Aspectual verbs	2.09
Noun compounds	2.09
Elaborating conjunctions	2.01
Negation	1.9
Quantifying pronouns	1.84
Relational adjectives	1.82
Average word length	1.5
Politeness markers	1.5
to clauses preceded by adjectives of ease	1.46
Conditional conjunctions	1.32
that relative clauses not preceded by a stance noun	1.29
All to infinitive clauses preceded by stance verbs	1.21
Reference to the speaker/writer	1.2
Existential or relationship verbs	1.15
Mental verbs	1.14
Activity verbs	1.13
will and shall modals	1.06
Causal conjunctions	1.05
to clauses preceded by ability adjectives	1.03
Reference to more than one non-interactant and single they reference	1.01
Verbal contractions	0.92
Verb features	0.87
Question tags	0.82
Frequency references	0.76
Filled pauses and interjections	0.7
that subordinate clauses (other than relatives) preceded by factive verbs	0.63
s-genitives	0.59
Nouns abstract and process	0.52
DO auxiliary	0.51
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	0.5
Discourse/pragmatic markers	0.47
All to infinitive clauses preceded by stance adjectives	0.42
Topical adjectives	0.42
Split auxiliaries and infinitives	0.4
WH complement clauses not preceded by a stance verb	0.39
that subordinate clauses (relative clauses) preceded by non factive nouns	0.37
Adverbs having no additional tag	0.36
Other adverbs	0.35
Linguistic Features	**Negative Loading**
Evaluative adjectives	-0.35
to clauses preceded by verbs of effort	-0.42
Hedges	-0.43
All third person references	-0.43
Time references	-0.49
that subordinate clauses (relative clauses) preceded by factive nouns	-0.52
Emphatics	-0.53
WH subordinate clauses preceded by factive verbs	-0.57
Yes/no questions	-0.68
Nouns having no additional tag	-0.7
Numbers	-0.81
Single, female third person reference	-0.82
Nouns technical	-0.83
HAVE got constructions	-0.85
WH subordinate clauses preceded by attitudinal verbs	-0.89
Determiners	-0.91
be able to	-0.93
Epistemic adjectives without a that clause after	-0.94
modal would	-0.97
All first person references	-0.98
Going to constructions	-1.01
Direct WH-questions	-1.02
Perfect aspect	-1.05
Attributive adjectives having no additional tag	-1.14
WH subordinate clauses preceded by communicative verbs	-1.32
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-1.36
All WH complement clauses preceded by stance verbs	-1.37
to clauses preceded by verbs of speech	-1.38
WH subordinate clauses	-1.38
that relative clauses	-1.42
to clauses preceded by verbs of probability	-1.49
Amplifiers	-1.5
Place references	-1.56
WH subordinate clauses preceded by likelihood verbs	-1.56
All modals of possibility	-1.62
that subordinate clauses (other than relatives)	-1.63
that subordinate clauses (other than relatives) preceded by factive adjectives	-1.72
Attitudinal adjectives without a that clause after	-1.74
Non-finite verb -ing forms	-1.77
Concessive conjunctions	-1.86
All that complement clauses preceded by stance adjectives, nouns, and verbs	-1.87
Predicative adjectives having no additional tag	-1.9
Coordinating conjunctions	-1.9
Nouns cognitive	-1.93
Nouns place	-1.95
Superlatives	-1.96
All be and get passives	-2.01
Downtoners	-2.14
Size related adjectives	-2.19
it pronoun reference	-2.2
Non-finite -ed verb forms	-2.32
Reference toaddressee(s)	-2.37
Lexical density	-2.37
All adverbs related to stance	-2.48
Lexical diversity	-2.61
Non factive adverbs	-2.72
Prepositions	-2.76
Stance nouns without prepositions	-2.78
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	-2.85
to clauses preceded by ability adjectives	-2.86
Nouns group	-2.87
Reference to the speaker/writer and other(s)	-2.93
Prepositions having no additional tag	-2.99
Be as main verb	-3.14
Existential there	-3.31
Factive adverbs	-3.36
Single, male third person reference	-3.42
Progressive aspect	-3.66
Particles	-3.74
Demonstratives	-4.25
Subordinator that omission	-4.27

Table 28 Linguistic Features of Factor 5 Loadings in Native Educational Blogs

Factor 5	
Linguistic Features	**Positive Loading**
Nouns having no additional tag	8.41
All to infinitive clauses preceded by stance verbs	5.98
WH complement clauses not preceded by a stance verb	5.44
Reference to the speaker/writer and other(s)	4.54
Particles	4.39
Hedges	4.13
WH subordinate clauses preceded by attitudinal verbs	3.86
to clauses preceded by verbs of speech	3.26
Noun compounds	3.2
To clauses preceded by stance nouns	3.2
Numbers	3.13
Nouns human	3.09
Proper nouns	3.09
Negation	3.07
Verbal contractions	2.9
Nouns group	2.82
Nouns concrete	2.79
Reference to the speaker/writer	2.75
Filled pauses and interjections	2.72
Downtoners	2.69
WH subordinate clauses preceded by communicative verbs	2.4
Verb features	2.37
Time related adjectives	2.32
Average word length	2.32
Politeness markers	2.32
Determiners	2.18
Causal conjunctions	2.15
WH subordinate clauses preceded by factive verbs	1.99
Aspectual verbs	1.85
All that complement clauses preceded by stance adjectives, nouns, and verbs	1.81

Universiti Utara Malaysia

that complement clauses not preceded by a stance adjective or verb	1.76
Going to constructions	1.75
WH subordinate clauses	1.73
Nouns place	1.71
Stranded prepositions	1.45
Nouns quantity	1.37
that subordinate clauses (relative clauses) preceded by factive nouns	1.35
Perfect aspect	1.31
Nouns cognitive	1.25
Factive adverbs	1.17
Prepositions having no additional tag	1.12
All modals of possibility	1
Prepositions	0.96
Size related adjectives	0.95
to clauses preceded by verbs of effort	0.87
that relative clauses not preceded by a stance noun	0.84
to clauses preceded by ability adjectives	0.84
s-genitives	0.78
Stance nouns without prepositions	0.69
Demonstratives	0.65
All be and get passives	0.6
that subordinate clauses (other than relatives)preceded by factive verbs	0.58
Subordinator that omission	0.56
Comparatives	0.55
Evaluative adjectives	0.52
Non-finite verb -ing forms	0.45
that subordinate clauses (other than relatives)	0.39
All that complement clauses preceded by stance adjectives, nouns, and verbs	0.38
to clauses preceded by factive adjectives	0.36
Other adverbs	0.31
Linguistic Features	**Negative Loading**
Nouns technical	-0.31
All WH complement clauses preceded by stance verbs	-0.31
Non factive adverbs	-0.39
Emphatics	-0.4
All third person references	-0.45
will and shall modals	-0.46
Mental verbs	-0.54
All that complement clauses preceded by stance verbs	-0.58
Topical adjectives	-0.61
Attitudinal adjectives without a that clause after	-0.64
that subordinate clauses (other than relatives)preceded by likelihood verbs	-0.7
Discourse/pragmatic markers	-0.72
modal would	-0.75
DO auxiliary	-0.79
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-0.81
Present tense	-0.82
Single, female third person reference	-0.85
Yes/no questions	-0.88
that subordinate clauses (relative clauses) preceded by	-0.9

that subordinate clauses (other than relatives) preceded by factive adjectives	-0.99
Activity verbs	-1.03
Predicative adjectives having no additional tag	-1.07
All to infinitive clauses preceded by stance adjectives	-1.26
Communication verbs	-1.32
to clauses preceded by verbs of probability	-1.48
Direct WH-questions	-1.54
that subordinate clauses (relative clauses) preceded by attitudinal nouns	-1.59
HAVE got constructions	-1.59
be able to	-1.59
to clauses preceded by mental verbs	-1.71
Occurrence verbs	-1.71
Lexical density	-1.77
Quantifying pronouns	-1.91
Adverbs having no additional tag	-1.91
Elaborating conjunctions	-1.96
to clauses preceded by ability adjectives	-1.96
Conditional conjunctions	-1.98
Amplifiers	-1.98
Question tags	-1.99
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-2.01
Split auxiliaries and infinitives	-2.17
to clauses preceded by factive adjectives	-2.18
it pronoun reference	-2.22
Prepositions preceded by stance nouns	-2.27
Concessive conjunctions	-2.27
Nouns abstract and process	-2.41
Relational adjectives	-2.6
Existential there	-2.63
Facilitation and causative verbs	-2.7
Be as main verb	-2.88
Reference toaddressee(s)	-2.94
Nominalizations	-2.98
Superlatives	-3.03
Coordinating conjunctions	-3.18
All adverbs related to stance	-3.29
Frequency references	-3.6
Place references	-3.6
WH subordinate clauses preceded by likelihood verbs	-3.6
Non-finite -ed verb forms	-3.74
Lexical diversity	-3.98
to clauses preceded by verbs of desire	-4.26
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-4.32
Single, male third person reference	-4.34
Imperatives	-4.48
that subordinate clauses (relative clauses) preceded by non-factive nouns	-6.26

Table 29 Linguistic Features of Factor 5 Loadings in Native Educational Blogs

Factor 6	
Linguistic Features	**Positive Loading**
Adjectives related to color	10.01
All WH complement clauses preceded by stance verbs	5.13
Communication verbs	4.19
WH subordinate clauses preceded by attitudinal verbs	3.67
that subordinate clauses (other than relatives)	3.53
to clauses preceded by factive adjectives	3.21
Facilitation and causative verbs	2.86
Split auxiliaries and infinitives	2.74
Non factive adverbs	2.66
Reference toaddressee(s)	2.64
Nouns having no additional tag	2.63
All to infinitive clauses preceded by stance verbs	2.6
Coordinating conjunctions	2.45
Demonstratives	2.39
Nouns cognitive	2.36
Imperatives	2.25
Superlatives	2.12
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	2.1
Subordinator that omission	2.08
Present tense	2.02
Nouns human	1.96
Proper nouns	1.96
Lexical density	1.93
Perfect aspect	1.82
All be and get passives	1.8
that subordinate clauses (relative clauses) preceded by factive nouns	1.69
Nouns place	1.68
Elaborating conjunctions	1.65
that subordinate clauses (relative clauses) preceded by non factive nouns	1.63
s-genitives	1.52
Progressive aspect	1.51
Nouns quantity	1.5
Nouns technical	1.48
Determiners	1.46
All that complement clauses preceded by stance adjectives, nouns, and verbs	1.28
that subordinate clauses (other than relatives)preceded by attitudinal verbs	1.25
Particles	1.21
Reference to more than one non-interactant and single they reference	1.18

Question tags	1.1
to clauses preceded by verbs of speech	1.05
Numbers	1.05
Lexical diversity	1.01
All that complement clauses preceded by stance verbs	1
Place references	1
WH subordinate clauses preceded by likelihood verbs	1
Going to constructions	0.97
Topical adjectives	0.92
Filled pauses and interjections	0.89
Size related adjectives	0.83
that subordinate clauses (other than relatives) preceded by likelihood adjectives	0.83
Prepositions having no additional tag	0.82
Non-finite -ed verb forms	0.73
Noun compounds	0.71
to clauses preceded by adjectives of ease	0.52
WH complement clauses not preceded by a stance verb	0.48
that subordinate clauses (relative clauses) preceded by attitudinal nouns	0.47
that subordinate clauses (other than relatives)preceded by likelihood verbs	0.45
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	0.43
All that complement clauses preceded by stance adjectives, nouns, and verbs	0.37
Stance nouns without prepositions	0.34
Linguistic Features	**Negative Loading**
Quantifiers	-0.31
Attitudinal adjectives without a that clause after	-0.32
All adverbs related to stance	-0.33
WH subordinate clauses preceded by factive verbs	-0.35
Verbal contractions	-0.36
that subordinate clauses (other than relatives) preceded by communicative verbs	-0.37
Single, male third person reference	-0.38
Yes/no questions	-0.39
Predicative adjectives having no additional tag	-0.43
to clauses preceded by factive adjectives	-0.46
Nouns group	-0.66
to clauses preceded by mental verbs	-0.66
to clauses preceded by verbs of desire	-0.71
Amplifiers	-0.74
Concessive conjunctions	-0.74
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-0.75
Other adverbs	-0.81
Past tense	-0.85
to clauses preceded by ability adjectives	-0.95
Non-finite verb -ing forms	-1.34
All modals of possibility	-1.38
that subordinate clauses (other than relatives) preceded by factive adjectives	-1.41
Adverbs having no additional tag	-1.41
Reference to the speaker/writer	-1.42
it pronoun reference	-1.5
that complement clauses not preceded by a stance adjective or	-1.53

Universiti Utara Malaysia

Time related adjectives	-1.59
Nouns abstract and process	-1.61
Aspectual verbs	-1.66
that subordinate clauses (other than relatives) preceded by factive verbs	-1.69
Time references	-1.88
Frequency references	-1.89
Quantifying pronouns	-1.94
to clauses preceded by verbs of effort	-1.98
Occurrence verbs	-2
Causal conjunctions	-2.03
modal would	-2.03
be able to	-2.04
All first person references	-2.09
Conditional conjunctions	-2.12
Downtoners	-2.19
Negation	-2.21
Single, female third person reference	-2.23
that relative clauses not preceded by a stance noun	-2.39
Existential there	-2.42
All to infinitive clauses preceded by stance adjectives	-2.6
Necessity modals	-2.62
Discourse/pragmatic markers	-2.79
DO auxiliary	-2.84
Relational adjectives	-2.88
that subordinate clauses (relative clauses) preceded by likelihood nouns	-2.92
Stranded prepositions	-2.96
Emphatics	-2.98
Reference to the speaker/writer and other(s)	-2.99
Hedges	-3.04
To clauses preceded by stance nouns	-3.09
Attributive adjectives having no additional tag	-3.49
Average word length	-4.06
Politeness markers	-4.06
All that complement clauses preceded by stance nouns	-5.19
All third person references	-6.1
Prepositions preceded by stance nouns	-6.72

Table 30 Linguistic Features of Factor 7 Loadings in Native Educational Blogs

Factor 7	
Linguistic Features	**Positive Loading**
Reference to the speaker/writer and other(s)	8.43
All be and get passives	6.85
Nouns concrete	5.43
Single, male third person reference	5.22

to clauses preceded by adjectives of ease	-0.36
Occurrence verbs	-0.38
Elaborating conjunctions	-0.41
All adverbs related to stance	-0.43
that subordinate clauses (other than relatives)preceded by factive verbs	-0.44
All WH complement clauses preceded by stance verbs	-0.46
Superlatives	-0.46
Subordinator that omission	-0.5
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-0.51
Particles	-0.52
Evaluative adjectives	-0.52
Nouns cognitive	-0.54
Attributive adjectives having no additional tag	-0.54
Adverbs having no additional tag	-0.61
Yes/no questions	-0.69
Epistemic adjectives without a that clause after	-0.71
to clauses preceded by verbs of effort	-0.74
be able to	-0.75
Other adverbs	-0.78
All first person references	-0.78
Non factive adverbs	-0.85
Lexical density	-0.86
Emphatics	-0.87
Comparatives	-0.91
WH complement clauses not preceded by a stance verb	-0.95
Existential or relationship verbs	-0.96
Average word length	-0.97
Politeness markers	-0.97
Adjectives related to color	-1
Negation	-1.01
Quantifying pronouns	-1.02
Perfect aspect	-1.06
will and shall modals	-1.07
Size related adjectives	-1.16
Mental verbs	-1.17
that subordinate clauses (relative clauses) preceded by factive nouns	-1.2
that subordinate clauses (relative clauses) preceded by likelihood nouns	-1.34
Relational adjectives	-1.37
Reference to the speaker/writer	-1.45
Attitudinal adjectives without a that clause after	-1.66
WH subordinate clauses preceded by communicative verbs	-1.66
WH subordinate clauses preceded by factive verbs	-1.69
DO auxiliary	-1.7
Imperatives	-1.73
Non-finite -ed verb forms	-1.73
Discourse/pragmatic markers	-1.73
Determiners	-1.85
Coordinating conjunctions	-1.87
Be as main verb	-1.87
Aspectual verbs	-1.88
All that complement clauses preceded by stance adjectives, nouns, and verbs	-2.07

Topical adjectives	4.69
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	4.69
to clauses preceded by verbs of desire	4.64
Verbal contractions	4.53
Filled pauses and interjections	3.91
to clauses preceded by mental verbs	3.12
Amplifiers	3.02
Causal conjunctions	2.95
that relative clauses	2.82
Nouns having no additional tag	2.53
All third person references	2.49
Conditional conjunctions	2.45
Factive adverbs	2.45
WH subordinate clauses	2.33
Direct WH-questions	2.3
Hedges	2.18
All that complement clauses preceded by stance adjectives, nouns, and verbs	1.96
Demonstratives	1.93
Facilitation and causative verbs	1.86
Lexical diversity	1.82
Noun compounds	1.68
Nouns technical	1.65
Non-finite verb -ing forms	1.32
that subordinate clauses (other than relatives)preceded by likelihood verbs	1.29
modal would	1.12
Nouns quantity	1.08
Necessity modals	1.03
Single, female third person reference	1.02
Stranded prepositions	0.95
Stance nouns without prepositions	0.93
Nouns human	0.91
Proper nouns	0.91
Place references	0.84
WH subordinate clauses preceded by likelihood verbs	0.84
Downtoners	0.73
Question tags	0.71
Communication verbs	0.62
that subordinate clauses (other than relatives) preceded by communicative verbs	0.54
it pronoun reference	0.45
Nouns group	0.44
HAVE got constructions	0.43
Present tense	0.4
Predicative adjectives having no additional tag	0.4
to clauses preceded by factive adjectives	0.38
Split auxiliaries and infinitives	0.37
Prepositions	0.36
Existential there	0.32
Activity verbs	0.31
that subordinate clauses (other than relatives) preceded bysubjectives of evaluation	0.3
Linguistic Features	**Negative Loading**

that relative clauses not preceded by a stance noun	-2.07
Frequency references	-2.11
Nominalizations	-2.3
to clauses preceded by ability adjectives	-2.42
All to infinitive clauses preceded by stance adjectives	-2.48
that subordinate clauses (relative clauses) preceded by non factive nouns	-2.59
that subordinate clauses (other than relatives) preceded by factive adjectives	-2.6
All modals of possibility	-2.62
Time references	-2.78
s-genitives	-2.79
Progressive aspect	-2.84
Concessive conjunctions	-2.94
All to infinitive clauses preceded by stance verbs	-3.58
WH subordinate clauses preceded by attitudinal verbs	-3.73
to clauses preceded by verbs of speech	-3.77
Prepositions preceded by stance nouns	-4.67
Time related adjectives	-5.03

Table 31 Linguistic Features of Factor 8 Loadings in Native Educational Blogs

Factor 8	
Linguistic Features	**Positive Loading**
Frequency references	6.54
Nouns concrete	5.42
Hedges	5.16
Existential there	5.16
Adverbs having no additional tag	4.93
Demonstratives	4.25
Direct WH-questions	4.04
Occurrence verbs	3.67
All adverbs related to stance	3.26
Time related adjectives	3.13
Discourse/pragmatic markers	3.1
DO auxiliary	3.02
Mental verbs	2.65
will and shall modals	2.58
Nouns human	2.46
Proper nouns	2.46
Place references	2.18
WH subordinate clauses preceded by likelihood verbs	2.18
Reference toaddressee(s)	2.01
to clauses preceded by ability adjectives	1.98

Universiti Utara Malaysia

Adjectives related to color	1.97
Causal conjunctions	1.89
Noun compounds	1.86
Emphatics	1.84
HAVE got constructions	1.64
Attributive adjectives having no additional tag	1.59
that relative clauses not preceded by a stance noun	1.53
All to infinitive clauses preceded by stance adjectives	1.45
Verbal contractions	1.4
Non factive adverbs	1.35
Facilitation and causative verbs	1.27
Communication verbs	1.2
Nouns abstract and process	1.2
Epistemic adjectives without a that clause after	1.12
Going to constructions	0.86
to clauses preceded by factive adjectives	0.72
Determiners	0.65
it pronoun reference	0.64
WH subordinate clauses preceded by attitudinal verbs	0.61
Stance nouns without prepositions	0.54
Elaborating conjunctions	0.54
WH complement clauses not preceded by a stance verb	0.52
Comparatives	0.47
Nominalizations	0.45
Conditional conjunctions	0.43
All that complement clauses preceded by stance adjectives, nouns, and verbs	0.43
Numbers	0.35
that subordinate clauses (other than relatives)preceded by likelihood verbs	0.34
Filled pauses and interjections	0.33
Linguistic Features	**Negative Loading**
Stranded prepositions	-0.3
Non-finite verb -ing forms	-0.35
All that complement clauses preceded by stance verbs	-0.36
Lexical density	-0.37
Lexical diversity	-0.39
to clauses preceded by adjectives of ease	-0.39
that subordinate clauses (other than relatives)preceded by attitudinal verbs	-0.4
Reference to more than one non-interactant and single they reference	-0.41
Negation	-0.42
that subordinate clauses (other than relatives) preceded by communicative verbs	-0.47
Other adverbs	-0.47
Evaluative adjectives	-0.48
Imperatives	-0.49
Quantifying pronouns	-0.57
to clauses preceded by verbs of effort	-0.58
Verb features	-0.64
Size related adjectives	-0.68
Topical adjectives	-0.76
to clauses preceded by verbs of speech	-0.78
that subordinate clauses (other than relatives) preceded by factive verbs	-0.79

Relational adjectives	-0.8
Amplifiers	-0.84
that subordinate clauses (relative clauses) preceded by non-factive nouns	-0.85
Yes/no questions	-0.87
to clauses preceded by factive adjectives	-0.88
Single, male third person reference	-0.89
To clauses preceded by stance nouns	-0.91
Prepositions	-0.92
All WH complement clauses preceded by stance verbs	-0.98
All to infinitive clauses preceded by stance verbs	-0.99
Reference to the speaker/writer	-1.01
Quantifiers	-1.02
Existential or relationship verbs	-1.15
that subordinate clauses (other than relatives)	-1.18
that subordinate clauses (relative clauses) preceded by factive nouns	-1.19
Nouns cognitive	-1.22
Non-finite -ed verb forms	-1.25
Nouns place	-1.25
All that complement clauses preceded by stance adjectives, nouns, and verbs	-1.26
Prepositions having no additional tag	-1.28
Particles	-1.42
Split auxiliaries and infinitives	-1.43
Perfect aspect	-1.52
Be as main verb	-1.6
Aspectual verbs	-1.78
to clauses preceded by ability adjectives	-1.83
to clauses preceded by verbs of probability	-1.9
s-genitives	-2.01
All modals of possibility	-2.02
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-2.19
Coordinating conjunctions	-2.36
Activity verbs	-2.37
that relative clauses	-2.42
Average word length	-2.44
Politeness markers	-2.44
All that complement clauses preceded by stance nouns	-2.5
Past tense	-2.59
All third person references	-2.6
Subordinator that omission	-2.75
All be and get passives	-2.79
Nouns group	-2.92
that subordinate clauses (relative clauses) preceded by likelihood nouns	-2.95
to clauses preceded by mental verbs	-3.08
Present tense	-3.09
Question tags	-3.74
Prepositions preceded by stance nouns	-4.14
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-4.49
to clauses preceded by verbs of desire	-4.54
Progressive aspect	-5.01

Table 32 Linguistic Features of Factor 9 Loadings in Native Educational Blogs

Factor 9	
Linguistic Features	**Positive Loading**
Demonstratives	7.72
Nouns having no additional tag	5.37
All that complement clauses preceded by stance nouns	4.5
Nominalizations	4.37
that subordinate clauses (other than relatives)preceded by likelihood verbs	4.28
s-genitives	4.15
Reference to the speaker/writer and other(s)	3.56
Occurrence verbs	3.1
Prepositions preceded by stance nouns	3.08
Communication verbs	3.05
All third person references	2.93
to clauses preceded by ability adjectives	2.56
Non-finite -ed verb forms	2.5
Question tags	2.4
All WH complement clauses preceded by stance verbs	1.94
will and shall modals	1.92
Subordinator that omission	1.9
Mental verbs	1.89
Non-finite verb -ing forms	1.82
All adverbs related to stance	1.8
Existential or relationship verbs	1.76
that subordinate clauses (other than relatives) preceded by factive adjectives	1.76
Nouns cognitive	1.73
Past tense	1.67
Topical adjectives	1.65
that subordinate clauses (other than relatives) preceded by communicative verbs	1.62
Split auxiliaries and infinitives	1.62
that relative clauses	1.59
Progressive aspect	1.51
Activity verbs	1.44
Attitudinal adjectives without a that clause after	1.39
Frequency references	1.37
Nouns quantity	1.27
that subordinate clauses (other than relatives) preceded by factive verbs	1.2
Imperatives	1.05
Nouns human	1.04
Proper nouns	1.04

WH subordinate clauses preceded by communicative verbs	0.93
that complement clauses not preceded by a stance adjective or verb	0.92
Predicative adjectives having no additional tag	0.88
Single, male third person reference	0.84
All to infinitive clauses preceded by stance adjectives	0.79
Present tense	0.76
Hedges	0.71
WH subordinate clauses	0.63
Necessity modals	0.62
Reference to the speaker/writer	0.61
Discourse/pragmatic markers	0.6
DO auxiliary	0.59
Adverbs having no additional tag	0.56
Nouns abstract and process	0.55
Superlatives	0.55
that subordinate clauses (relative clauses) preceded by factive nouns	0.53
Factive adverbs	0.46
All that complement clauses preceded by stance adjectives, nouns, and verbs	0.44
that subordinate clauses (relative clauses) preceded by non factive nouns	0.42
Prepositions	0.4
Quantifiers	0.39
Perfect aspect	0.36
Nouns technical	0.35
Lexical density	0.32
Linguistic Features	**Negative Loading**
Reference toaddressee(s)	-0.32
to clauses preceded by verbs of effort	-0.35
Comparatives	-0.36
to clauses preceded by factive adjectives	-0.41
to clauses preceded by verbs of probability	-0.44
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-0.44
HAVE got constructions	-0.49
Stranded prepositions	-0.49
All that complement clauses preceded by stance verbs	-0.5
Downtoners	-0.51
Reference to more than one non-interactant and single they reference	-0.52
Coordinating conjunctions	-0.58
Causal conjunctions	-0.59
Verbal contractions	-0.6
All be and get passives	-0.63
All that complement clauses preceded by stance adjectives, nouns, and verbs	-0.66
Other adverbs	-0.68
Relational adjectives	-0.69
Size related adjectives	-0.73
Emphatics	-0.82
Facilitation and causative verbs	-0.82
Verb features	-0.83
Elaborating conjunctions	-0.84

Universiti Utara Malaysia

All to infinitive clauses preceded by stance verbs	-0.95
Going to constructions	-1.02
All first person references	-1.16
Direct WH-questions	-1.22
that subordinate clauses (relative clauses) preceded by likelihood nouns	-1.23
WH complement clauses not preceded by a stance verb	-1.33
to clauses preceded by factive adjectives	-1.33
Aspectual verbs	-1.35
Nouns group	-1.4
Amplifiers	-1.48
be able to	-1.54
Negation	-1.74
that subordinate clauses (relative clauses) preceded by attitudinal nouns	-1.77
WH subordinate clauses preceded by factive verbs	-1.8
Evaluative adjectives	-1.82
Attributive adjectives having no additional tag	-1.88
Lexical diversity	-1.91
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	-2.05
Non factive adverbs	-2.41
Numbers	-2.52
Conditional conjunctions	-2.58
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-2.6
to clauses preceded by verbs of desire	-2.63
Epistemic adjectives without a that clause after	-2.68
Stance nouns without prepositions	-2.7
Place references	-2.78
WH subordinate clauses preceded by likelihood verbs	-2.78
to clauses preceded by adjectives of ease	-2.95
Single, female third person reference	-3.67
Particles	-3.73
modal would	-3.74
All modals of possibility	-3.81
Concessive conjunctions	-3.9
to clauses preceded by ability adjectives	-4.03
Prepositions having no additional tag	-4.05
Adjectives related to color	-4.25
Nouns concrete	-5.39

Table 33 Linguistic Features of Factor 10 Loadings in Native Educational Blogs

Factor 10	
Linguistic Features	**Positive Loading**
Adjectives related to color	6.56
Nouns group	4.57
All that complement clauses preceded by stance nouns	4.54
to clauses preceded by mental verbs	4.35
Verbal contractions	4.16
Progressive aspect	3.51
Nouns having no additional tag	3.47
Comparatives	3.46
that relative clauses not preceded by a stance noun	3.42
All be and get passives	3.39
Nominalizations	3.2
Amplifiers	3.11
Prepositions preceded by stance nouns	2.99
Reference to the speaker/writer and other(s)	2.94
Time related adjectives	2.92
Frequency references	2.91
All WH complement clauses preceded by stance verbs	2.77
that subordinate clauses (relative clauses) preceded by likelihood nouns	2.63
Nouns abstract and process	2.12
Nouns concrete	2.04
Subordinator that omission	2.03
Attitudinal adjectives without a that clause after	1.94
to clauses preceded by ability adjectives	1.88
Topical adjectives	1.72
that relative clauses	1.64
WH subordinate clauses preceded by communicative verbs	1.61
All modals of possibility	1.51
Hedges	1.39
Time references	1.32
that subordinate clauses (other than relatives)preceded by attitudinal verbs	1.28
that subordinate clauses (other than relatives) to clauses preceded by factive adjectives	1.16 1.15
Conditional conjunctions	1.13
Epistemic adjectives without a that clause after	1.1
Adverbs having no additional tag	1.03
to clauses preceded by factive adjectives	1.02
Emphatics	1.01
Perfect aspect	0.99
Reference toaddressee(s)	0.96
that subordinate clauses (other than relatives) preceded byadjectives of evaluation	0.85
Non-finite -ed verb forms	0.82
to clauses preceded by ability adjectives	0.77
All first person references	0.35

HAVE got constructions	0.52
Mental verbs	0.51
will and shall modals	0.46
Single, male third person reference	0.45
Predicative adjectives having no additional tag	0.44
Verb features	0.44
Prepositions having no additional tag	0.42
Yes/no questions	0.42
be able to	0.41
Facilitation and causative verbs	0.4
Prepositions	0.38
Linguistic Features	**Negative Loadings**
that subordinate clauses (relative clauses) preceded by non-factive nouns	-0.31
Factive adverbs	-0.33
Attributive adjectives having no additional tag	-0.36
that subordinate clauses (other than relatives)preceded by likelihood verbs	-0.38
Lexical diversity	-0.41
Size related adjectives	-0.48
Non-finite verb -ing forms	-0.55
that subordinate clauses (other than relatives) preceded by attitudinal adjectives	-0.55
Coordinating conjunctions	-0.59
that subordinate clauses (relative clauses) preceded by factive nouns	-0.62
Nouns technical	-0.64
To clauses preceded by stance nouns	-0.68
that subordinate clauses (other than relatives) preceded by likelihood adjectives	-0.68
Place references	-0.71
WH subordinate clauses preceded by likelihood verbs	-0.71
All that complement clauses preceded by stance adjectives, nouns, and verbs	-0.72
Downtoners	-0.77
Direct WH-questions	-0.78
Past tense	-0.79
that subordinate clauses (other than relatives) preceded by factive verbs	-0.79
Negation	-0.82
Reference to more than one non-interactant and single they reference	-0.85
All third person references	-0.86
Necessity modals	-0.87
Be as main verb	-0.89
to clauses preceded by verbs of effort	-0.93
Evaluative adjectives	-0.98
Present tense	-1.04
Going to constructions	-1.07
Existential there	-1.17
that complement clauses not preceded by a stance adjective or verb	-1.22
Superlatives	-1.22
Concessive conjunctions	-1.22
Causal conjunctions	-1.28
Lexical density	-1.41
Occurrence verbs	-1.51
Quantifiers	-1.64

Stranded prepositions	-1.67
Reference to the speaker/writer	-1.68
Office adverbs	-1.71
All that complement clauses preceded by stance adjectives, nouns, and verbs	-1.78
Nouns quantity	-1.79
Relational adjectives	-1.8
WH subordinate clauses	-1.84
Question tag	-1.92
WH complement clauses not preceded by a stance verb	-2.06
Quantifying pronouns	-2.09
Communication verbs	-2.1
that subordinate clauses (other than relatives) preceded by communicative verbs	-2.1
Average word length	-2.16
Politeness markers	-2.16
Filled pauses and interjections	-2.2
to clauses preceded by adjectives of ease	-2.26
Split auxiliaries and infinitives	-2.34
Existential or relationship verbs	-2.37
s genitives	-2.38
Nouns human	-2.38
Proper nouns	-2.38
All to infinitive clauses preceded by stance adjectives	-2.45
All to infinitive clauses preceded by stance verbs	-2.68
Numbers	-2.73
All to infinitive clauses preceded by stance adjectives, nouns, and verbs	-2.77
to clauses preceded by verbs of desire	-2.83
Determiners	-3.36
Demonstratives	-3.41
Stance nouns without prepositions	-3.74

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