Conciseness and Persuasion in Academic Writings of Native and Non-Native Writers: A Comparative Grammatical Metaphor Analysis

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Abstract: *Academic writing is an integral part of academic success and international demands. It requires concise, persuasive, and contextual construction of sentences. This study aims to investigate the construction of concise, persuasive and generic patterns in twenty-five native and twenty-five Pakistani research articles' abstracts. Using a mixed-method approach, fifty articles have been collected through a stratified random sampling technique. Five native journals (American Journal of Education, Applied Linguistics Journal, British Journal of Learning Disabilities, Journal of the Acoustical Society of America, and British Journal of Educational Studies) and five Pakistani journals (Pakistani Journal of Language and Translation, Al-Qualm, Humdard Islamic us, NUML Journal of Critical Inquiry, and Pakistan Journal of Social Sciences) are used for data collection. The instruments for analysis include percentages, qualitative analysis, Bitchener's move model (2010), and AntConc. The study showed that the native and Pakistani writers equally used move structures, but differences occurred in the application of grammatical metaphor (GM) that was high in native writings. The study has provided insights into better and improved writing techniques that are required for concise and formal writing. These implications serve as a useful guide for English teachers and syllabus designers to include GM in course content for better writing skills.*

Keywords: *Academic writing, concise, persuasive, generic patterns, move structures*

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Introduction

Academic writing has formal features and style. It is structured, complex, formal, depersonalized, concise, and objective; and does not require the construction of long sentences. The abstracts, in research, also follow a concise and condensed

structure with stages. They provide extensive knowledge minimally. The academic genre of an abstract requires the condensed and compact organization of information into nominal group constituents rather than the projection and expansion of clauses (Ezeifeka, 2015).

The grammatical metaphor expresses similar meanings through different wordings, and it is significantly realized in nominal groups. It is realized in nominal groups replacing clauses or elements of the nominal group itself. The development of GM is attached to language teaching and education. ESL writers are not capable of using GM effectively as compared to proficient writers and logical metaphors are usually employed after developing a sense of experiential GM. Many countries have adopted SFL theories to accomplish contextual goals in their different territories (Devrim, 2015; Mohan & Beckett, 2001). Thus, grammatical metaphor is the paradigmatic grammatical transference to change the order of syntagmatic semantic roles of the clause structures or to change the natural expression of form to convey meaning more concisely.

Generally, non-native writers face difficulties in achieving the quality of writing for high-quality journals. Various studies have been regulated to find similarities and comparisons between the writers of two different non-native territories or different grade levels of similar territories (Liardet, 2013; Cengiz, 2016) and non-native writing structures and quality in comparison to natives (Davaei & Karbalaei, 2013; Marta & Ursa, 2015; Memari, 2016).

Pakistani writers face similar difficulties because they are often considered incompetent in writing for recognized journals and they are sometimes unaware of writing stages, called genres of text construction. As a consequence, Pakistani articles deviate from rhetorical choices and face rejection from reputable journals. This problem is deeply linked to global requirements and standardization of

staged text orientation of non-native writers.

Therefore, based on Bukhari (2020), this study intends to cover the gap by exploring the demerits of Pakistani writers' abstract construction and incapability to write according to a move-model of the genre by comparing with the structures of the abstracts written by native writers. The examination of the move model and grammatical metaphor in the writing of research abstracts covers the double-edged gap in the Pakistani context because the present literature has not dealt with it.

Research Objectives

The objectives of the study have been given below:

1. To analyze the move structures applied by native and non-native writers in abstracts

2. To find out the use of lexically dense experiential metaphors by Pakistani writers as compared to native writers

3. To evaluate the use of logical metaphors by native and Pakistani writers.

Research Questions

The study answers the following questions:

1. How many phases or move structures have been applied by native and non-native writers in abstracts?

2. To what extent have lexically dense experiential grammatical metaphors been used by Pakistani writers as compared to proficient writers?

3. Which type of logical metaphors are used by native and non-native writers to create cause-and-effect relations or persuasion in the text?

Significance of the Study

The study is significant for academicians, whether teachers or students, who are involved in academic writing. The study can also be useful for ESL teachers in teaching academic writing to students. In addition, the study can be used to assess the differences in the writings of ESL and ENL professionals. Furthermore, it can

be used by future researchers interested in the area.

Literature Review

Language is the use of structured words to identify or deliver information. This information is organized and conceived through grammatical structures (Zelenski, 2008). EFL learners find difficulty in organizing ideas into text through appropriate vocabulary as text communicates to readers, the social purpose should be kept in mind before text construction. Therefore, every text is meant to be written in a context of situation and culture realizing schematic patterns and linguistic structure of the text in it. Genre-based pedagogy does not only include multiple ways of writing but also the contextual model, distinctive features, organization, rhetorical structure, and text type according to the situation to extract meaning (Nagao, 2019).

Studies of grammatical metaphors took a rising point after the introduction of the term. The analysis of genre was incorporated into it with time

as the demands of academic writing helped in combining genre analysis with grammatical metaphor.

Making an allowance for genre pedagogy in the linguistic framework, many studies have been conducted. Focusing on the contextual approach of systemic functional linguistics, Imtihani (2012) links the structure of language with cultural context to achieve the meaning of the text. Fakhruddin and Hassan (2018) have also investigated genre approaches in linguistic traditions. This view involves cultural context as a field, mode, tenor, and apprehension in text. Genre helps to categorize text according to the situation of occurrence.

Chandler (2000) has presented theoretical definitions of genres and specifies the function of the genre as "genre analysis takes into account the textual and contextual factors of a text" (p.10). Imtihani (2012) further elaborates on culturally different, staged, and goal-oriented concepts of genre.

Multi-functionality of language helped to organize numerous studies in

different fields and different contexts regarding SFL and GM. The multi-functionality of language expanded the application of the theoretical framework of SFL. The study of GM did not remain limited to academic context only. For example, Nabifar (2012) analyzed ideational grammatical metaphors in two chapters of the renowned and globally famous fiction of Harry Potter and the Prisoner of Azkaban. Through the tool of nominalisation, GM has been identified along with the presence of process types. The qualitative analysis of the study noticed a great occurrence of nominalisation with the material process. GM has been identified as an ideal tool for constructing literal discourse.

Furthermore, Thomas and To (2016) analyzed Tasmanian students' persuasive writings choices by the source of nominalisation in primary and secondary years with significant recommendations for teachers to teach persuasive writing in the educational context. As nominalised condensed information is an effective way to create persuasiveness in text and a source of successful writing for mature writers. To identify the presence of persuasiveness in text, nominalisation of verbs and adjectives was found first and nominalised instances were calculated against the total number of words. Because of limited data, results were not generalizable but it also indicated that all texts showed instances of nominalisation five to ten times with a high ratio for verbal nominalisation.

In addition, Zhang (2018) has examined the role of grammatical metaphors to improve the formality, objectivity, and cohesiveness of academic writing. The theoretical framework of grammatical metaphor is considered a crucial tool for academic competence and teachers are supposed to develop instructional methods for the application of grammatical metaphor in the organization of formal content. With this, knowledge of explicit and multiple roles of grammatical metaphor is necessary to teach writing proficiency at advanced levels.

The ideational grammatical metaphor has also been comparatively analyzed in political and scientific texts. Twenty texts from both genres have been investigated by Behnam (2012). Through a complete reading of the text, instances of ideation GM were counted in which nominalisation dominated in both genres. With the dominance of relational and material processes, Ideational GM was present with similar frequency in both texts to provide the compact, technical, and condensed performance of writing. But the material process is mostly used in political texts. The study indicated that grammatical metaphor increases the quality of text in every genre by packing information. With other disciplines, scientific and political texts also employ Gm to improve the quality of writing. The study is significant for the writers as well to write political and scientific texts accordingly to pace with the increasing demands of formal and conventional academic writing.

Many studies focused on GM in the context of first-language users and learners of English (Nys, 2016) but the shift of focus added analysis of second or foreign-language users' writing in the analysis sphere of grammatical metaphor (Promwinai, 2010). Liardét (2013) has explored the writings of first and fourth-year Chinese EFL learners enrolled in a university and its effectiveness through the employment of GM. Analysis of six texts went through the genre stages of each text. Anaphoric re-construal, cause and effect, an elaborated noun group, and meaning accumulation were the patterns to analyze writings. First-year students acquired a shorter length in comparison to fourth-year students. But five students out of six employed genre stages and their writings with the stages showed the presence of interpersonal, experiential, and logical metaphors. Final-year students comparatively showed control over the use of metaphorical realizations. Although the writers were not taught about grammatical metaphors, their writings showed a frequency of the presence of grammatical metaphors. The study

indicated that an elaborated framework of instructions to teach grammatical metaphors to the learners is compulsory to accomplish formal writing demands.

Language in schooling presumably carries different features and functions. For successful language construction, a grammatical metaphor is a stylistic feature to organize information and knowledge. Grammatical metaphors are analyzed in the context of Turkish classrooms by Çakira (2016). For the analysis of the presence of grammatical metaphors in secondary-level classrooms, 8 teachers who taught similar curricula were video-recorded in 6th and 7th grades in different randomly selected schools. The recorded video was transcribed to find the implication of GM. The variables of experience and gender were also included. The frequency of nominalisation was related to the experience of the teacher and the presence of nominalisation in the experienced teachers' students showed high frequency during interaction with the teacher. Female teachers used more nominalisations than male teachers. The study reflected that students' classroom experiences tend to help them more with academic structures and improvement in formal writing. The limited experimental data from 6th and 7th grade helped out to give a sight of Turkish school classrooms.

In the context of Pakistan, this area remains neglected. The present study covers this gap and comparatively studies conciseness and persuasion in the academic writings of native and non-native writers.

Research Methodology

Corpus of the Study

Journals of medical and social sciences contain editorials, case reports, review articles, or research articles. The present study comprises native and non-native research articles with a standard pattern of research articles having abstracts, introductions, theoretical framework, methodology, and results. A total of ten journals have been selected. From the population of fifteen journals, articles of either native speakers or native countries have been selected from

five high-index factor journals (American Journal of Education, applied linguistics journal, British Journal of learning disabilities, Journal of the acoustical society of America, and British journal of educational studies). From the population of twelve journals, articles are selected from five 'X' or 'Y' category journals (Pakistan Journal of Language and Translation Studies, Al-Qalam, Humdard Islamicus, NUML Journal of Critical Inquiry, and Pakistan Journal of Social Sciences). From each journal, five articles are selected. All fifty articles (twenty-five from native and twenty-five from non-native).

To present the content validity of the move analysis phase, the applied linguistics journal of the native population has been used earlier in Morale's (2016) study of the move analysis of methodology section. All the journals of samples are easily accessible online. The criteria of native and non-native journal selection were free accessibility to articles, high index factors of native journals, 'X' and 'Y' categories of non-native journals, and the non-specific nature of all journals in which articles of law, politics, science, and language are included.

Sampling

The samples include 50 articles categorized into native and Pakistani non-native groups. Each group consisted of 25 randomly selected articles. The sample is gathered from 10 journals (five native and five Pakistani).

Process of Sample Selection

In this random sampling, all articles were easily accessible. From the population of 100 articles, fifty articles were randomly selected from ten above-mentioned journals. An equal number of articles, i.e. five articles from each journal were randomly selected without specifying monthly or yearly journal publications. Through stratified random sampling, all the articles were selected from the years 2017 to 2020 from each journal.

Instrumentation

In the present study, two different models for two different phases of analysis have been applied. For the move analysis phase,

Bitchener's (2010) move model has been applied whereas the second phase of analysis is achieved by the model of ideational grammatical metaphor presented by Halliday and Matthiessen in 2013.

Model 1: Bitchener's Move Model

For the first phase of analysis, Bitchener's (2010) move model has been applied. Text is typically organized through a series of moves. Moves contain sub-moves or steps to fulfill the communicative purpose of a text or genre. The content of the abstract has a separate organizational pattern which is identified through its moves and sub-moves. Bitchener has identified five moves of abstract with its sub-moves.

Table 3.1: *Abstract Move and Sub-Moves (Adapted from Bitchener, 2010)*

Moves	Sub-moves
1- Introduction	a- Provide background/context of research b- Identify motivation for research c- Explain the significance/centrality of research d- Identify the research gap of the research tradition
2- Purpose	a- Identify the aim, question or hypothesis b- Develop aim, question or hypothesis
3- Method	a- Identify/justify the overall approach and method b- Identify key design c- Identify data source d- Identify the data analysis process
4- Product	a- Present the main findings/results of key aims/ questions b- Present main findings of the subsidiary, additional aims, questions
5- Conclusion	a- Suggest significance/importance of findings beyond research, considering the contribution to theory and practice b- Suggest applications (for practice) and implication (for further research)

This model has helped to identify the organization of text according to moves.

Model 2: Grammatical Metaphor Approach

The second phase of analysis is carried out through the framework of systemic functional linguistics. According to Halliday and Matthiessen (2013), nominalisation, and experiential grammatical metaphor is a tools to construct concise writing piece and logical metaphor is a tool to construct persuasion in writing. These grammatical metaphors are sub-types of ideational grammatical metaphors.

Data Analysis

Two phases of analysis are differentiated according to the procedures.

Phase I Analysis

In the first phase of analysis, the process to distinguish different moves is managed by differentiating the purpose of the text and their relevance to a move. Firstly, sentence by sentence was separated according to the move to get a proper understanding of move application in sentences. The sentence combining two moves is separated and put into the different relevant moves. Secondly, the number of different moves and sub-moves are counted and analyzed through the moves of Bitchener. Ershadi & Farnia (2015) have conducted similar research by identifying moves into clauses and sentences.

Phase II Analysis

The second phase of analysis consists of ideational grammatical metaphor analysis. In which experiential and logical metaphor falls. Analysis of experiential GM is carried out through nominalisation of a verb, quality, and conversion of the head to the modifier.

Logical Metaphors

The structure of 'unit complexes' is used to express logical meanings (Halliday, 1978). These unit complexes include hypotactic and paratactic structures of clauses. In this taxis system, parataxis shows the independent relationship of clauses in a sentence and hypotaxis shows the dependency status of a clause to the main clause. Through the taxis system, the information in a text is packed in different clause combinations. The logical embodiment of clauses constructs argumentation

which leads to persuasion. High grammatical intricacy is a feature of spoken whereas high lexical density is attached with written language features. For this, two points are also analyzed: grammatical intricacy and lexical density.

Grammatical Intricacy

The high frequency of grammatical intricacy is a feature of spoken language that is created by the high frequency of independent clauses joined by conjunctions. The written language embodies hypotactic clauses to create the complex and formal nature of the text and embedded complex clauses pack detailed information in a single clause (Promwinai, 2010). Thus, the number of clauses is divided by the number of sentences in a text to find out grammatical intricacy.

Lexical Density

Grammatical and lexical items are counted separately to determine lexical density. Lexical items are content-carrying words known as nouns, verbs, adverbs, and adjectives. The presence of lexical items determines a concise, formal, and complex writing system (Promwinai, 2010). For the identification of lexical density, the total number of lexical items is divided by the total number of words. For this purpose, a corpus tool, AntConc (3.5.8) is used in which token words are divided by word types. The total frequency is further divided by 100 for the percentage of lexical items. Conciseness is achieved with lexically dense writing. In Ure's study (1971, as cited in Promwinai, 2010), 52.8% is considered the standard frequency for lexical density.

Table 3.2: *Identification of Ideational GM (Experiential and logical)*

Experiential GM	Process ⟶ Entity Quality ⟶ Entity head ⟶ Modifier
Logical GM	Relator ⟶ Quality Relator ⟶ Process Relator ⟶ Entity Relator ⟶ Circumstance

Consequently, experiential and logical metaphors help to construct conciseness and persuasion in formal and academic writing. Through qualitative and quantitative analysis, native and Pakistani non-native writings are analyzed. The presence of GM through lexical density was analysed as Lexical density is a quantitative analysis tool for GM.

Results and Discussion

The current study strived to compare the writing quality and generic moves of abstracts in native and Pakistani non-native research articles published in different journals through the move analysis tradition and grammatical metaphor. The move analysis phase is accomplished through John Bitchener's move model (2010) to comparatively analyze different moves and their sub-moves in research abstracts of two groups from ten different journals (each consisting of five randomly selected articles). In the second phase, ideational and logical grammatical metaphors along with lexical density and lexical intricacy are analyzed through the tradition of SFL. The results are carried out according to research questions. The result of the study is also discussed in light of the previous research studies.

First Phase: Move Analysis

Based on the questions of the study, this phase comparatively analyzes the moves of abstracts in different journals and articles. The first question deals with the frequency of moves and sub-moves used in abstracts. The results are divided into two parts: native and Pakistani non-native. By analyzing the sentences qualitatively, the total number of moves and sub-moves is compared.

Move Analysis of Pakistani Research Abstracts

In the first part, the result of abstract moves of research articles of the year 2019-2020 from the Pakistan Journal of Social Sciences is displayed according to the frequencies of sentences per move.

Table 1.1: *Results of Move Analysis in Research Abstracts of Pakistan Journal of Social Sciences*

Moves	Number of clauses per sub-moves				Total number of clauses per move
1. Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	
	3	5	8	0	16
2. Purpose	A (Identity aim)	B (Develop hypotheses)			
	17	0			17
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	
	8	15	9	16	48
4. Product	A (findings of questions)	B (findings of hypotheses)			
	23	4			27
5. Conclusion	A (significance)	B (Application)			
	10	8			18

The frequencies of each move have been analyzed qualitatively. The results show that the introduction move is applied in 16 clauses, purpose in 17, methodology in 48, resulting in 27, and significance in 18 clauses. The methodology section has been depicted in more detail than all other sections. In the first move, all five articles of this journal have not discussed the gap of previous studies which is relatively necessary to make readers aware of the significant contribution of the present research. The absence of a gap in the articles reflects the inadequacy of research purposes and raises doubts about the contribution of present research in the applicable world. The high frequency of moves in the

methodology section displays the behaviour of researchers. Through a strong description of the methodology, researchers have tried to cover the incapability of research applicability and new contribution to the previous research.

On the other side, all abstracts lack the hypothesis which simultaneously predicts the lack of predictions about variables and research questions. For a specific direction, hypotheses are necessary to reach predictable or unpredictable results. Only two articles have provided the context and background of the study which shows the deficit of knowledge of research setting and motivation. The background or context of the study reveals the inspiration for research whether it is from a community, problem, culture, group, or country. The research seems more valid and applicable when all moves are followed.

Table 4.2: *Results of Move Analysis in Al-Qalam*

Moves	Number of clauses per sub-moves				Total clauses per move
1.Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	24
	6	4	9	5	
2.Purpose	A (Identify aim)	B (Develop hypotheses)			13
	13	0			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	32
	10	9	8	5	
4.product	A (findings of questions)	B (findings of hypotheses)			16
	16	0			
5.Conclusion	A (significance)	B (Application)			11
	5	6			

Through qualitative analysis of abstracts for the frequencies of move/sub-moves, differences in the application of moves are noticed

between the two journals. Research abstracts in Al-Qalam focused more on the context of research which followed the purpose move. All abstracts started with the aim of the study in it and the length is no more than 150-180 words per abstract. But the similarity is found in the method move because the frequency of the method move is higher than all other moves. From highest to lowest move order in abstracts is organized as a methodology- product-purpose. The underlying reason is that the students in Pakistan are taught research in course content in which research framework and research types are focused more on different types of research designs, data collection techniques, and sampling techniques. On the other side, the identification of research context is not focused properly which can be comprehended through research abstracts.

Table 4.3: *Results of Move Analysis of Humdard Islamicus*

Moves	Number of clauses per sub-moves				Total clauses per move
1. Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	29
	10	7	9	3	
2. Purpose	A (Identify aim)	B (Develop hypotheses)			15
	15	0			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	32
	9	12	7	4	
4. Product	A (findings of questions)	B (findings of hypotheses)			16
	13	0			
5.Conclusion	A (significance)	B (Application)			7
	5	2			

Comparing it with other abstracts, it has only focused on methodology and introduction move/sub-move. The context of the

study is focused highly on methodology. But like other journals, it has also not discussed the hypothesis and its result. The high focus on methodology indicates the importance of research key design for Pakistani researchers as they focus more on research design rather than other moves. The dominant move is again method like other research abstracts of Pakistani journals. The more number of sentences or clauses per move suggests a more dominant move.

Table 4.4: *Results of Move Analysis of NUML*

Moves	Number of clauses per sub-moves				Total number of clauses per move
1.Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	13
	5	4	9	5	
2.Purpose	A (Identify aim)	B (Develop hypotheses)			14
	14	0			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	37
	9	10	11	7	
4. Product	A (findings of questions)	B (findings of hypotheses)			13
	13	0			
5. Conclusion	A (significance)	B (Application)			7
	1	6			

The dominant move sequence is method-introduction-product which is slightly different from the above research abstracts. But a quite similar frequency has been noticed in all abstracts which are a high focus of method move. It indicates the significant importance of methodology for Pakistani students. Finding similarity with other journals, the abstracts do not show the presence of seven single sentences for hypothesis which is a negative point in all research abstracts. But in comparison with other journal

abstracts, the number of sentences per move is not comparatively high.

Table 4.5: *Results of Move Analysis of Pakistan Journal of Language and Translation*

Moves	Number of clauses per sub-moves				Total clauses per move
1. Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	19
	7	7	5	0	
2. Purpose	A (Identify aim)	B (Develop hypotheses)			13
	13	0			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	45
	12	14	11	8	
4. Product	A (findings of questions)	B (findings of hypotheses)			14
	14	0			
5.Conclusion	A (significance)	B (Application)			5
	3	2			

The sequence of frequency from high to low in five research abstracts of this journal is methodology-introduction-product-purpose which is similar to Table 4.4. Research abstracts in this journal focused more than all other articles from Pakistani journals presented in the study. The study conducted by Moghadam and Meihami (2016) has also resulted in this sequence of moves in which the methodology section is focused more.

All Pakistani researchers focused more on methodology, sampling, data collection, and data analysis procedures. All research abstracts lack hypotheses. The practicality of research and its contribution to society is an important factor of any research which needs to be presented in abstracts because it is a concise summary of the whole research. But the Pakistani researcher has not discussed it widely. On the other hand, research follows a hypothesis to identify predictability but Pakistani researchers

have not identified and discussed their expected dimensions of research results. Moves specify the rhetorical features of a genre and research abstracts also follow particular moves. All moves should be equally applied in the genre of abstract to function properly. But method move is more dominant in Pakistani research abstracts and two sub-moves are completely neglected. For the recognizable patterns of abstracts, the presence and sequence of all moves are necessarily needed. All rhetorical stages are combined to achieve a function. So, it is important to use an equal number of sentences for each sub-move. The excessive amount of sentences in method move shows the inadequacy of Pakistani researchers towards other moves and it shows the importance of the move method for Pakistani researchers.

Move Analysis of Native Research Abstracts

The occurrence of moves/sub-moves is analyzed through the qualitative analysis of every sentence.

Table 4.6: *Results of Move Analysis of the Journal of Acoustics*

Moves	Number of clauses per sub-moves				Total number of clauses per move
1. Introduction	A (context) 12	B (motivation) 7	C (significance) 7	D (Gap) 8	34
2. Purpose	A (Identify aim) 14	B (Develop hypotheses) 0			14
3. Method	A (overall approach) 12	B (key design) 5	C (Data source) 9	D (Analysis procedures) 8	34
4. Product	A (findings of questions) 14	B (findings of hypotheses) 0			14
5. Conclusion	A (significance) 6	B (Application) 3			9

In the native abstracts, the introduction move is highly focused and all articles in this journal have discussed the research gap in previous studies which they wanted to fill through their research. But a similar point is noticed in the absence of hypotheses in native articles as well. Articles in this journal discussed the overall research design for a better understanding of the reader.

Table 4.7: *Results of Move Analysis of British Journal of Learning Disabilities*

Moves	Number of clauses per sub-moves				Total number of clauses per move
1. Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	24
	11	5	3	5	
2. Purpose	A (Identify aim)	B (Develop hypotheses)			16
	14	2			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	33
	7	7	9	10	
4.Product	A (findings of questions)	B (findings of hypotheses)			13
	13	0			
5.Conclusion	A (significance)	B (Application)			8
	3	5			

The research abstracts in British journals are comparatively short and it has used fewer sentences per move. Only one abstract has discussed the research hypothesis but the answer to the hypothesis is not presented. The sequence of frequency from high to low is methodology-introduction-purpose.

Three articles from this journal have started with the overall methodology framework which is quite different from other journals. Some sentences in the method move are higher which is similar to the Pakistani researcher's quality.

Table 4.8: *Results of Move Analysis of British Journal Educational Studies*

Moves	Number of clauses per sub-moves				Total number of clauses per move
1. Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	
	7	5	4	6	22
2. Purpose	A (Identify aim)	B (Develop hypotheses)			15
	12	3			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	35
	3	7	13	12	
4. Product	A (findings of questions)	B (findings of hypotheses)			17
	14	3			
5. Conclusion	A (significance)	B (Application)			
	5	3			8

Three articles from this journal have discussed hypotheses and presented their results. Sub-moves of different moves have been merged in the abstracts of this journal. For example, 3c is merged with 1c in one sentence and 4a is merged with 5b. Research abstracts in this journal have followed the rhetorical pattern by using all moves and the number of sentences per move is moderate. All moves use an equal number of sentences. But two articles have not discussed the future applicability of research which leaves a negative impact on the reader.

Table 4.9: *Results of Move Analysis of American Journal of Education*

| Moves	Number of clauses per Sub-Moves				Total clauses per move
1. Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	
	7	0	5	5	17
2. Purpose	A (Identify aim)	B (Develop hypotheses)			12
	12	0			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	30
	3	7	13	7	
4. Product	A (findings of questions)	B (findings of hypotheses)			11
	11	0			
5. Conclusion	A (significance)	B (Application)			9
	0	9			

The results show that abstracts in American journals have also focused on methodology like Pakistani researchers. It also lacks hypotheses and significance of research which leaves a high negative impact. The introduction move is focused on afterward.

Table 4.10: *Results of Move Analysis of Applied Linguistics Journal*

Moves	Number of clauses per sub-moves				Total clauses per move
1. Introduction	A (context)	B (motivation)	C (significance)	D (Gap)	28
	12	5	5	8	
2. Purpose	A (Identify aim)	B (Develop hypotheses)			12
	12	0			
3. Method	A (overall approach)	B (key design)	C (Data source)	D (Analysis procedures)	27
	5	5	10	7	
4. Product	A (findings of questions)	B (findings of hypotheses)			12
	12	0			
5. Conclusion	A (significance)	B (Application)			8
	3	5			

Abstracts are shorter in length in this journal and it has focused more on the introduction especially the context of the study. All moves have not been applied in research abstracts and the significance of the research is not detailed.
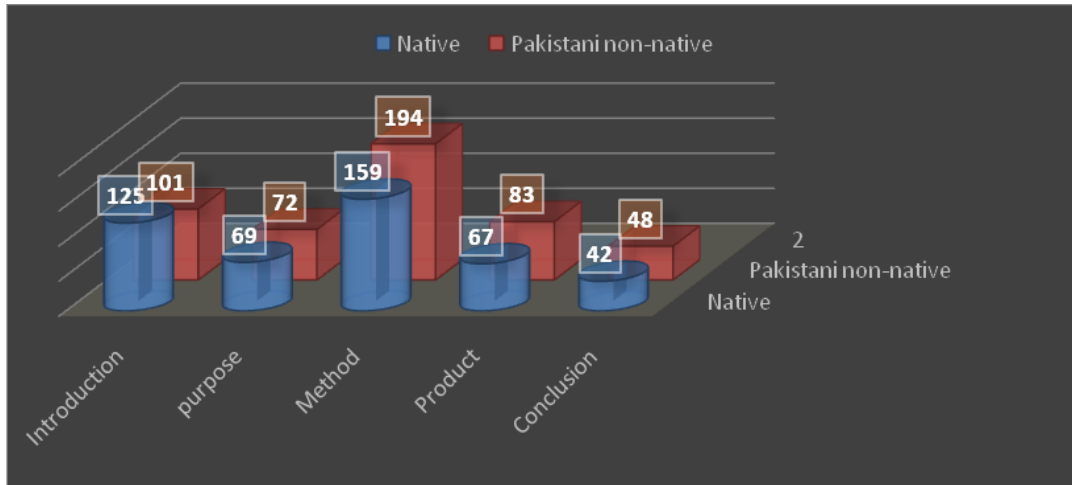
Figure 4.1: *Comparative Analysis of Move Frequency*

The length of Pakistani non-native research abstracts is comparatively high than native abstracts. A significant difference is seen in the methodology move in which Pakistani researchers have used a maximum number of sentences in the method move. Similarly, the number of sentences is higher to depict the results in Pakistani abstracts. But on the other hand, the introduction move has been discussed in detail in native abstracts comparatively. Keeping in view the length of abstracts, there is not a huge difference in the move application on both sides except for method move which is extensively touched in Pakistani abstracts. According to the most used rhetorical moves/sub-moves, the sequential pattern from high to low in non-native Pakistani research abstracts is method-introduction-product-purpose-conclusion whereas methodology-introduction-purpose-

product-conclusion is seen in native abstracts. Considering the sequential pattern, there is not a huge difference in the application of moves on both sides. The rhetorical moves followed by native researchers are very similar to the move patterns followed by Pakistani researchers. In native and non-native abstracts, the method and introduction move are more extensively discussed than other moves. In Pakistani abstracts, 21% of sentences are used in the introduction move whereas 27% have been used in native. On the other hand, 41% of sentences explain the method of move in Pakistani abstracts and 34% in native research abstracts. Except for these two moves, there is not a huge difference in the application of moves in native and Pakistani research abstracts.

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On the whole, the results showed that methodology, introduction, and purpose moves were the most used moves on both sides with the difference in the total number of sentences per move. The results are compatible with Moghadam and Meihami (2016). The results showed the answer to the first research question.

Grammatical Intricacy and Lexical Density For Conciseness

To answer the second question, lexical density needs to be higher and grammatical intricacy needs to be lower.

Grammatical Intricacy

Grammatical intricacy is a feature of spoken language. Promwinai (2010) has suggested that 2.07-2.40 scores are the highest in grammatical intricacy. But he has analyzed 56 sentences. The present research also indicates low and high intricacy in different Pakistani and native journals comparatively.

Table 4.11: *Grammatical Intricacy in Pakistani Research Abstracts*

Pakistan Journal of Social Sciences				
Analyzed Sentences	**Simplex clauses**	**Complex Clauses**		**Grammatical intricacy**
49	29	*Hypotactic*	*Paratactic*	1.57
		11	17	
Total number of clauses	77			
NUML Journal				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
36	19	*Hypotactic*	*Paratactic*	1.1
		14	9	
Total number of clauses	42			
Humdard Islamicus				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
49	22	*Hypotactic*	*Paratactic*	1.2
		20	17	
Total number of clauses	59			
Pakistan Journal of Language and Translation				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
44	22	*Hypotactic*	*Paratactic*	1.4
		16	24	
Total number of clauses	62			
Al-Qalam				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
38	19	*Hypotactic*	*Paratactic*	1.44
		17	19	
Total number of clauses	55			

The scores of grammatical intricacy are consistent to some extent. It scores high in the Pakistan Journal of Social Sciences and Al-Qalam. All

research articles in journals use an almost similar amount of simplex clauses. In NUML and Humdard Islamicus, the lowest count of grammatical metaphor is observed in which clause complexes and clause simplexes occur at a similar ratio to some extent.

Table 4.12: *Grammatical Intricacy in Native Research Abstracts*

Journal of Acoustics				
Analyzed Sentences	**Simplex clauses**	**Complex Clauses**		**Grammatical intricacy**
32	16	*Hypotactic*	*Paratactic*	1.25
		7	17	
Total number of clauses	40			
Grammatical Intricacy in the British Journal of Learning Disabilities				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
36	23	*Hypotactic*	*Paratactic*	1.47
		15	15	
Total number of clauses	62			
Grammatical Intricacy in British Journal of Educational Studies				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
38	27	*Hypotactic*	*Paratactic*	1.1
		8	9	
Total number of clauses	55			
Grammatical Intricacy in Applied Linguistics Journal				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
29	11	*Hypotactic*	*Paratactic*	1.1
		7	14	
Total number of clauses	32			
Grammatical intricacy in American Journal of Education				
Analyzed Sentences	Simplex clauses	Complex Clauses		Grammatical intricacy
38	9	*Hypotactic*	*Paratactic*	1.2
		26	14	
Total number of clauses	49			

Looking at the results of native and non-native research abstracts, a huge difference is not identified. Pakistani research abstracts show very similar scores of grammatical intricacy in all journals. The highest scores of intricacy in native are 1.47 whereas 1.57 are the highest intricacy score of Pakistani research abstracts. In all abstracts, the number of clauses is higher in sentences which leads to the researchers' inadequacy to write concisely in sentences through condensed information which is a quality of academic or argumentative writing. The high number of conjunctions to join different clauses in a single sentence is used in native articles more than in non-native.

Pakistani researchers focused on simple sentence structure but the details are not concise in a sentence and it is made longer in two to three sentences to avoid more clauses in the sentence. The simplex clauses include nouns and verbs but clause complex is described through the system of taxis. In taxis, hypotaxis is the dependency status of clauses and parataxis is the equality or independent relationship of clauses in a sentence. The number of complex clauses in a sentence contributes to the grammatical intricacy. The results also indicate that the difference between native and Pakistani non-native is not comparatively high because all abstracts achieved similar scores in grammatical intricacy.
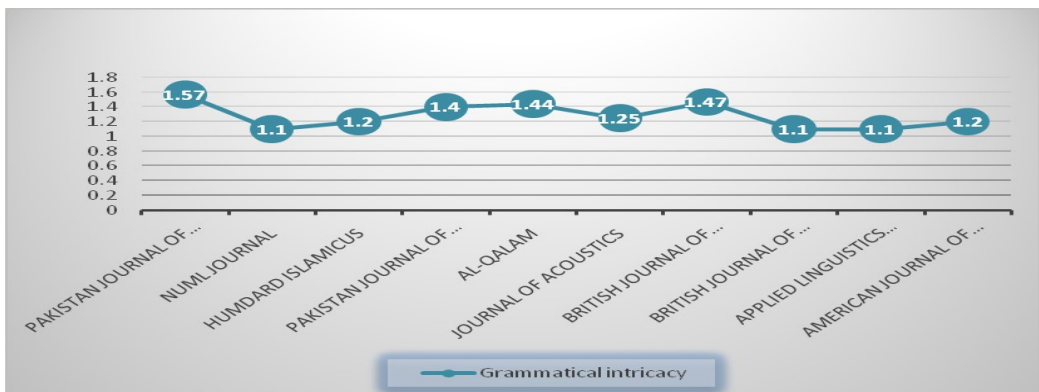

Figure 4.2: *Grammatical Intricacy Scores*

The results do not show a high difference between native and non-native research abstracts. All scores are side by side in native and non-native. It focused that non-native research abstracts are not as grammatically intricate as it is considered.

Table 4.14: *Lexical Density in Pakistani Research Abstracts*

Journal's names	Words	Lexical items	Lexical density
Pakistan Journal of Social Sciences	660	306	2.1
NUML	715	318	2.2
Humdard Islamicus	694	347	2
Pakistan Journal of Language & Translation	703	333	2.1
Al-Qalam	510	266	1.9
Total	3282	1570	2.0

Lexical Density

The high scores of lexical density represent the feature of academic writing. It is conventionalized, an indicator of academic writing. The presence of lexical items contributes to lexical density. It is achieved by dividing token words with word types.

Table 4.15: *Lexical Density in Native Research Abstracts*

Journal's names	Words	Lexical items	Lexical density
Journal of acoustics	525	276	1.9
British Journal of learning disabilities	586	258	2.2
British Journal Educational Studies	822	372	2.2
Applied linguistics Journal	505	281	1.7
American Journal of Education	570	266	2.1
Total	3008	1453	2.0

Through the overall observation and quantitative analysis of all abstracts, it is identified that there is no difference in lexical density. It is perceived that non-native writer's writings are grammatically intricate and lexical density is missing but non-native writers have applied an equal number of words and lexical items in all abstracts. On the other side, the total words in non-native abstracts are more than in native abstracts. The tables showed unexpected results in which nom-native writers wrote as precisely as native writers in abstracts. By packing the meanings, a compact construction is achieved. The number of grammatical items is comparatively low in both cases while lexical items are applied in high numbers. So, the abstracts in both cases show lexical density. Because of the concise nature of abstracts, lexical density is higher on both sides and the

Nominalisation: A GM Analysis for Conciseness and Persuasion

In the study, the purpose of qualitative analysis of GM was to determine the conciseness and

structure of pre-and post-modification is not applied to a larger extent.

The overall results indicate that the NUML journal scored lowest according to lexical density because the number of grammatical items is higher than lexical items. And British journals achieved the lowest scores in lexical density. The unexpected results have occurred in which native and Pakistani researchers stand on equal points because lexical density is neither higher in native nor in Pakistani research abstracts. The word count is higher for grammatical items as conjunctions, articles, and determiners are more than other lexical items like nouns, adjectives and adverbs. As abstracts are considered more concise and need more lexical items to achieve the whole purpose but all fifty abstracts high frequency of grammatical items.

persuasion in native and non-native research abstracts. The instances of grammatical metaphor are found in

nominal groups which are converted from verbs or adjectives. The presence of nominalisation in writing indicates lexical density and conciseness at hand and persuades the reader to accept the fact because logical metaphors present a consequential response to a fact. This helps to enhance the reader's positive response and acceptability of fact or argument. The examples of GM are underlined and made bold. And logical metaphors are presented in a box.

Table 4.16: *Grammatical Metaphors in Pakistani Journals*

	Grammatical Metaphors in Pakistan Journal of Social Sciences	Total numbers
1	It explores emotional intelligence of students and its relationship with their **academic achievement**.	6
2	The study finds out **the effect of line managers' environmental attitude** on organizational citizenship.	
3	**Moderating effect of top management awareness for environment** has been tested on the link.	
4	It aims to develop **academic writing assistance** for writing introduction section.	
5	**The developed templates** have broadened the scope of study and are important addition to **established knowledge.**	
	Grammatical metaphor in Al-Qalam	
1	Article ends up with suggestions of **replacement of paper currency** to other medium of exchange.	7
2	Ideological background of issues leads to declaring admissible in poor basis.	
3	Policies suggest that special education system in Pakistan seems to organize around **pre-determined pervasive categories of disability**.	
4	It draws implications on **inclusion of children with disability** in mainstream education of Pakistan.	
5	The content of speeches is analyzed to observe **top leadership emphasis** on many issues.	
6	English has become international language and is desirable all over world because of **increased connectivity** worldwide.	
	Grammatical Metaphor in Humdard Islamicus	
1	The work concludes that the developers of statutes of community of indigenous minorities limit themselves by **consideration of normative prescription of law.**	2
2	Government has favored minimalist approach so as not to stiffen **innovation and development of crypto-currency** in country.	
	Grammatical Metaphor in NUML	
1	The study presents **suppression of Palestinians living** within Palestine and as well as in exile.	3
2	Instead of focusing over **autobiographical excursion**, it focused…….	
3	The study revealed **prototypicality of metadiscoure employment** in Pakistani discourse.	
	Grammatical Metaphor in Pakistan journal of language and translation	

1 2 3	**A mixture of qualitative and quantitative** methods was adopted. The strategies accounted well for **transfer of cultural expression.** Multilingual code mixing leads to language death.	3
Total numbers		21

The results showed that research abstracts in Al-Qalam and the Journal of social sciences have used GM more than other research abstracts. Humdard Islamicus has used lengthy nominal groups with pre-and post-modifiers. The sentences are made concise through it. For example, sentence 2 in Al-Qalam can be written in this way *'The article concluded with a suggestion that paper currency can also be exchanged with some other source than old one'*. In this way, the sentence is made longer without the application of nominalisation. And sentence 1 in the last journal can also be described in this way '*The study has used a mixed-method approach in which qualitative and quantitative research approaches are combined'*. Therefore, nominalisation has helped to construct concise sentences.

Considering persuasion, research articles lack this quality. Only two examples are found in 25 research abstracts. The absence of logical metaphors indicates a weak persuasive technique to grab the reader's attention and acceptance of the argument. As logical metaphors help to increase the validity of the argument but Pakistani writers do not possess the quality to force the reader to accept the presented argument.

Table 4.17: *GM in Native Journals*

	Grammatical Metaphor in British Journal of learning disabilities	**Total numbers**
1	Forty three met **exclusion criteria** that results in two articles which included adolescent voices.	4
2	The study attempted to replicate findings with two groups, with and without **diagnosis of learning disability.**	
3	**The early writing development** and **effective interventions for struggling students** are important points to discuss.	
	Grammatical metaphor in British journal of education	

|		
1	**Opportunities for professional development** focused on developing technology use.	12
2	**Level of formal recognition** seems beneficial to take lead among senior colleagues.	
3	**The contrasting effects** were compared to find out frequency.	
4	**Detached interpersonal style is** preferred by chemistry writers by opting predominantly for periphrastic passives.	
5	**The adoption of different interpersonal strategies within disciplines** encouraged **the use of authorial references** in selected disciplines, particularly in **the relatively unexplored disciplines.**	
6	Applications are motivated by **distinct theoretical concerns**, united by **shared understanding** where language is predicted on **the instability in linguistic system** which comes from **intra-speaker variation. The close examination of intra-speaker variation** is the study of potential language change.	
Grammatical metaphor in Applied linguistics journal		
1	**Despite continually growing number of non-native English speaking teachers**, the profession leads under discussion.	5
2	Ideology leads to perception.	
3	Broader implications are for institutional stakeholders to be cognizant of **the prevalence of native speakerism** in L2 writing contexts	
4	Similarity can influence **the ease of acquisition.**	
5	**The influential strategies** are explored.	
6	Findings suggest opportunities for **professional development.**	
Grammatical Metaphor in American journal of Education		
1	**For examination of leader**, Bell's **conceptualization of racial fortuity** is used.	10
2	**Debate participation** can contribute to **participants' acquisition** of different forms.	
3	**Elimination of ACE2** may underline **the exaggerated vulnerability of hypertensive disease**.	
4	**Association of life-course socioeconomic status** with **hypertensive prevalence** has been examined.	
5	**Coverage of essential interventions** can be caused by under nutrition and **childhood wasting.**	
Grammatical Metaphor in Applied linguistic journal		
1	Ideological construction of cultures results in intersubjectivity.	5
2	It fails to address nature of ideological construction of culture.	
3	Unpacking overall conceptions, **recognizing dangers** of **essentialism resistances** enable paradigm change.	
Total numbers		36

In the first example of GM, 'opportunities for professional development focused on developing technology use' can be unpacked in this way 'The use of technology has advanced because the opportunities in

the professions have developed. The number of words has lessened and writing is being made formal by nominalizing the verb from 'developing' into 'development'. In another example, the sentence 'despite continually growing number of non-native English speaking teachers, the profession leads under discussion' could be unpacked in the way 'the profession of English language teaching is still discussed even when the numbers of non-native English speaking teachers have increased with time. It could be more formal this way, the discussions over the profession of growing non-native English-speaking teachers are held. By using GM, a sentence structure can be made more formal which is a basic requirement of academic writing.

Unlike the results of other analysis phases, a huge difference is analyzed in the application of GM. The overall length of Pakistani research abstracts is higher than non-native but the number of GM is higher in native research abstracts. Answering the last question, native researchers have applied logical metaphors of verb type in which a process is applied rather than conjunctions. The conjunctions are realtors that relate the cause to its effect but its presence creates grammatical intricacy which is a feature of spoken language. The native writers have a command over persuasion as they invite the rate of high acceptability of argument. Another noticeable observation is that American journals have more concisely constructed sentences than research abstracts in other journals. The native writers provided an insightful manner of writing to L2 writers. Abstract writing is considered more concise than all other parts of research and it requires a high ratio of presence of GM.
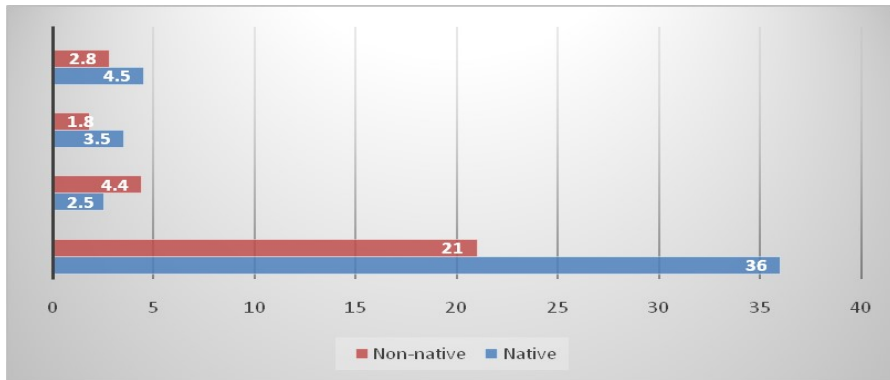
Figure 4.3: *Frequency of GM*

The non-native writings have applied 216 sentences whereas 173 have been applied by natives. Keeping in view the overall sentence numbers, the percentage of native GM is quite higher than non-native researchers. The results revealed that 9.7% is the occurrence ratio of GM in non-native and 20% is found in native writers. The differences appear in 11%. The most frequent use is found in the moves of product and introduction. All sentences have not used adjectival nominalizations. The detailed analysis has revealed both strengths and weaknesses on both sides which native and Pakistani researchers have brought in the construction of research abstracts. In move analysis, the expected difference was not found because the frequency of move application was similar. In the second phase of lexical density and grammatical intricacy, both types of researchers used more grammatical items than lexical items. The ratio was 2.0 on both sides. So, similar numbers of grammatical items are found. In the last phase of analysis, a difference in logical and experiential GM occupiers was native writers have used 10% higher concise sentences than Pakistani researchers. The positive point is found in Pakistani researcher's writing which is the limited application of conjunctions in causal effect relationships. British learners have fewer sentences than natives but still, they share an equivalent ratio of grammatical intricacy which is a

negative point in native but positive in Pakistani researcher's writings.

Briefly, GM is very useful for learners to condense their writing into more complex, elaborated nominal classes connected in cause-and-effect networks, density at the cost of clarification would only disadvantage the student and result in unsuccessful texts. Although guidance initially concentrates on packaging grammatically complex phrases into lexically dense structures, it should also provide a revision stage that includes a simple 'unpacking' of the newly introduced GMs to ensure that the language remains consistent to the reader in both 'packed' and 'unpacked' states.

Researchers have identified grammatical metaphor's presence in effective language as foundational for constructing text features such as lexical density, continuity, and argument growth, and it is also regarded as a vital linguistic resource for achieving valued academic texts.

Conclusion

The study aimed to investigate the construction of concise, persuasive, and generic patterns in twenty-five native and twenty-five Pakistani research articles' abstracts. In the first phase of analysis, the process to distinguish different moves was managed by differentiating the purpose of the text and their relevance to a move. Firstly, sentence by sentence was separated according to the move to get a proper understanding of move application in sentences. The sentences combining two moves were separated and put into the different relevant moves. Secondly, the number of different moves and sub-moves were counted and analyzed through the moves of Bitchener. The second phase of analysis consisted of ideational grammatical metaphor analysis in which experiential and logical metaphor falls. Analysis of experiential GM was carried out through nominalisation of the verb, quality and conversion of the head to the modifier.

However, for grammatical intricacy, the clauses were divided by the number

of sentences in a text. For the identification of lexical density, the total number of lexical items was divided by the total number of words. For this purpose, a corpus tool, AntConc (3.5.8) was used to calculate frequencies. The total frequency was further divided by 100 for the percentage of lexical items. The results showed that native and non-native researchers applied a similar amount of moves and achieved equal frequency in grammatical intricacy and lexical density. The difference of 11% was witnessed in the application of logical and experiential metaphors. The study concluded that the academic writings of native professional writers were more concise and persuasive as the number of metaphors used by native speakers was more than the number of non-native writers.

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