



RHETORICAL VARIATION IN THE RESEARCH ARTICLE ABSTRACTS WRITTEN BY NATIVE (L1) AND NON-NATIVE (ESL & EFL) RESEARCHERS

Dr. Shahla Qasim, Government College Women University, Faisalabad, Pakistan

Dr. Humaira Sarvat, Government College Women University, Faisalabad, Pakistan

Farah Naz, Government College Women University, Faisalabad, Pakistan

Abstract- Genre analysis has gained significant attention in the last two decades. The studies on the generic analysis of research articles in various contexts and academic fields are abound, however, scant attention has been paid toward the comparative analysis of RA abstracts written by native and non-native researchers. The present study aims to fill this gap and sets out to investigate the rhetorical variation in the research article abstracts written by native (L1) and non-native (ESL & EFL) researchers. For this purpose, 60 RA abstracts were selected, 20 from each of the selected (American, Pakistani and Chinese) contexts. The generic analysis of the abstracts was performed by following the famous five-move model presented by Hyland (2000). Findings revealed that the native (L1) researchers were more efficient than the non-native (ESL and EFL) researchers in following the rhetorical structure of RA abstracts. Moreover, the comparison between the RA abstracts of ESL and EFL (Pakistani and Chinese) researchers reflected that the ESL (Pakistani) writers were more careful in adhering to the rhetorical structure of the abstracts of research articles. The study emphasizes the importance of observing the appropriate rhetorical structure of abstracts to come up to the accepted conventions of this discourse at international level. The study also facilitates the ESL and EFL researchers by providing basic knowledge about the rhetorical structure of RA abstract.

Keywords: genre analysis, rhetorical structure, moves, abstract, research article

I. INTRODUCTION

Genre analysis has been increasingly becoming popular in the field of English for Specific Purposes (ESP) since 1980s. It can be defined as a thick description of academic and professional texts. It has become a powerful tool to arrive at significant form-function correlations which can be utilized for a number of applied linguistic purposes. In the recent years, there has been a considerable interest in genre-based analysis of different types of texts. It has been used extensively in the field of (ESP). Genre analysis not only checks the influence of communicative purpose on the choice of grammatical forms that have been used in a text, but also takes into consideration the rhetorical functions of the selected grammatical forms. The most influential research in genre analysis has been conducted by Swales (1990). According to him, research articles as a genre are complexly distanced reconstructions of research activities, rather than simple narratives of investigations. (Swales, 1990)

Several studies have been conducted to analyze the organizational patterns of different sections of research articles such as introduction section, methods section, and the discussion section. The researchers have also become interested in the comparative genre analysis of research articles. Taylor & Chen (1991) highlighted the importance of move analysis in Contrastive Rhetoric in order to find out the cultural variation in discourse structure because the cultural background of the writer might lead to variation in the rhetorical structures of texts.

The concept of internalization has been growing rapidly in the academic community and the ESL & EFL researchers want to gain awareness of the writing standards which are set by the expert academic community. It has been noticed that these non-native scholars of English face difficulties while presenting the findings of their research works at international level (Nasseri & Nematollah, 2014). Due to the lack of structural knowledge, the non-native writers often use self-strategies in their writing of research articles which can lead to lack of creativity, critical thinking, subjectivity, and innovations (Abarghooeinezhad & Simin, 2015). As a result, the research articles of ESL and EFL researchers are often rejected by international journals due to the deviations in rhetorical structure.

The most significant part of a research article is the abstract section that defines the whole research. Lores (2004) described research abstract as a brief and accurate representation of the whole document, preferably prepared for publication by its author. He also added that RA abstract is considered as the doorway that persuades the readers of specific discourse community to admit or discard the research article. As a number of non-native (ESL & EFL) researchers seem unaware of the standard conventions of academic writing employed by native (L1) researchers, therefore the present study aims to facilitate them by showing their shortcomings through the comparison of the rhetorical structure of RA abstracts written by native (L1) and non-native (ESL & EFL) researchers.

Research questions

- i. What are the differences and similarities in the rhetorical structure of RA abstracts written by native (L1) and non-native (ESL & EFL) researchers?
- ii. Whether the native (L1) researchers follow the rhetorical structure of RA abstract better than the non-native (ESL & EFL) writers?
- iii. Which of the ESL and EFL categories is more efficient in following the proper rhetorical structure while writing RA abstracts?

II. LITERATURE REVIEW

The first genre-based analysis was done by John Swales in 1981 who investigated research article introductions from different fields of science and offered a four-move model in which each move consists of several steps and it was later named as Create a Research Space (CARS) model. Since then, a huge amount of researches have been conducted to analyze the move structure of research articles. The publication of research article at international level is considered as a source of providing evidence of international involvement in knowledge exchange and the internationally published RAs have become one of the criteria of evaluation for the quality and recognition of individual researchers. Moreover, a number of studies on English research articles written by non-native researchers (e.g. Sionis, 1995; Flowerdew, 1999, 2000) have pointed out various problems faced by non-native English RA writers in their attempts to get published internationally. Therefore, the genre analysts have been taking keen interest in the rhetorical structure of research articles.

Previous Research on the Rhetorical Structures of the Different Sections of Research Article

Various cross-cultural and cross-disciplinary studies have been carried out that provided proper rhetorical models to be followed in each sections of research article such as abstract, introduction, literature review, method, results and discussion, and conclusions (e.g. Fredrickson & Swales, 1994; Kwan, 2006; Pho, 2008; Lim, 2006; Salager-Meyer, 1998; Yang & Allison, 2003). Some of the genre-based studies on different RA sections included the analysis of move structure and the use of references in introductions (Fredrickson & Swales, 1994). The literature review has not received adequate attention by genre analysts and only a few studies have investigated the LR section including a seminal study by Kwan (2006) who examined the rhetorical structure of LRs and compared it to Bunton's revised CARS model. The findings revealed that many of the LR chapters have an Introduction-Body-Conclusion format and found a few new steps in the move structure. Lim (2006) conducted an influential study to analyze the rhetorical structure of RA methodology section to explain how the linguistic choices fulfill the writer's communicative purpose and indicated a new move "preview the results" in the methodology section. Several studies have been conducted on cross-disciplinary and cross-cultural analyses of the results, discussion and conclusion sections (e.g. Yang & Allison, 2003; Ghazanfari et al. 2016).

Previous Research on the Rhetorical Structure of the Abstract Section of Research Article

The genre analysis of RA abstracts is integral for a quality work and a very useful practice as it provides the researchers with the recent trends in abstract writing. Therefore, various researches have been conducted to analyze the generic structure of RA abstracts.

Al Khasawneh (2017) investigated the difference of moves in the abstracts written by native and non-native speakers of English by using Hyland (2000) model. The results revealed that both native and non-

native writers included the three moves (Purpose, Method, and Conclusion) but the non-native writers ignored the other two moves (introduction and conclusion) in their abstracts. Marefat and Mohammadzadeh (2013) compared the Persian and English RA abstracts by using IMRD and CARS model by Swales and reported that the norms of a particular community are the contributing factor in the writing styles of the researchers. Behnam and Golpour (2014) conducted a comparative study on English and Iranian RA abstracts to investigate the cross-linguistic and cross-disciplinary and explained the significance of move step analysis as an analytical tool for understanding cultural differences in the rhetorical structure of RA abstracts. Darabad (2016) presented a cross-disciplinary analysis of RA abstracts from three different fields, Applied Linguistics, Applied Mathematics, and Applied Chemistry by following Hyland's (2000) model and found that the textual structure and organization of an abstract could be influenced due to the variations in disciplines. El-Dakhs (2018) compared the RA abstracts of more and less prestigious journals by using Hyland (2000) move structure model with Hyland (2005) taxonomy of meta-discourses. He found that the abstracts of less prestigious journals contained longer move structures for introduction, purpose and method while the more prestigious journal abstracts contained longer structure for the findings move. In the meta-discourse analysis, it showed that the abstracts in less prestigious journals employ significantly more transitions, frame markers and evidences whereas the abstracts in more prestigious journals exhibit a higher use of hedges, boosters, code glosses and self-mentions. Ebadi et al. (2018) conducted a study to investigate the rhetorical differences and similarities in the abstracts and introduction sections of MA theses produced by Iraqi and international students. The analysis revealed that Iraqi students included the steps of "Research hypotheses" and "Outlining thesis structures" whereas the international students ignored these features in the abstracts. In the introduction section, both Iraqi and international MA students utilized the moves with similar frequencies, however the international students utilized various steps for the realization of Move 1 and Move 3 of introduction. Khurshied et al. (2016) investigated the rhetorical structure of RA abstracts written in Urdu in Pakistani context using move structure model of Swales and the results revealed certain discipline and culture specific traits at both micro and macro structure level and some breaches to the set pattern of descriptive abstracts. Moreover, the analysis of the grammatical structures and literary features of abstracts were also the subject of some studies (e.g. Lim, 2006; Pho, 2008).

An overview of all these works exhibits that there have been a lot of studies on cross-cultural and cross-disciplinary analysis of RA abstracts. But if we look at the studies conducted in the field of research articles, we will discover a dearth of research performed on the abstract section. Moreover, this significant part of research article is not found to be adequately researched in Pakistan. The previous studies in the field of genre analysis in Pakistan are either based on the other components of research articles or have been done on the research articles of different academic disciplines. Moreover, abstract and introduction are often misconceived as similar genre by the non-native academic. This unawareness of the standard rhetorical structure of abstracts results in their failure to achieve the international level. Therefore, a comparative study on the RA abstracts of native and non-native writers is required to highlight the shortcomings in the rhetorical structure of non-native RA abstracts. To fill this gap, the present study compares the generic structure of RA abstracts written by native (L1) and non-native (ESL & EFL) speakers of English in order to examine the differences and similarities across them.

III. METHODOLOGY

Data Collection

For this study, sixty abstracts of research articles have been selected from the field of applied linguistics. The data was consisted of three groups, each containing 20 abstracts in which one group of abstracts was selected from the research articles of L1 (American) category and other two groups were selected from ESL and EFL (Pakistani and Chinese) categories. The data was collected from latest research articles published during the year (2017 to 2020) in five well-reputed journals of Applied Linguistics namely, International Journal of Applied Linguistics, American Journal of Applied Linguistics, Journal of English Linguistics, Pakistan Journal of Language Studies, Chinese Journal of Applied Linguistics. The analysis was conducted on the macro level following the famous and well-tested five-move model presented by Hyland (2000) to explore the differences and similarities in the rhetorical structure of RA abstracts of the native (L1) and non-native (ESL & EFL) researchers.

Data Analysis

The objective of the study was twofold: to compare the RA abstracts of native (L1) and non-native (ESL & EFL) researchers in order to investigate the point which has been made by the previous researchers that the native writers follow the proper rhetorical structure whereas the non-native writers mostly ignore it in their abstracts and also to find out the cultural variations in the generic structure of all the three (L1, ESL and EFL) categories.

To fulfill these objectives, the study required an appropriate model for analysis. Therefore, the famous models that were used in the previous studies for the analysis of rhetorical structure of abstract were examined. The CARS model by Swales which he developed for the generic analysis of *introduction* section was adopted in various studies investigating the structure of the *abstract* section. Another model proposed by Bhatia (1994) was also acknowledged by many scholars (e.g. Salager-Meyer, 1992; Santos, 1996; Swales, 1990). According to him, every abstract should provide information on four features of the research article that they intend to describe (purpose, methodology, result and conclusion). Finally, Hyland's (2000) model was found which was more elaborated and has been influential for several studies. In this model, five moves are included: Introduction, Purpose, Method, Product, and Conclusion. Each move represents the realization of a particular communicative purpose. In contrast to the other models, Hyland's (2000) five-move model distinguished the purpose move from the introduction move to keep proper space to describe the purpose of the study clearly. Therefore, the present study employed Hyland's (2000) five-move model to identify the rhetorical structure of the selected corpus. Table 1 presents the linear order of Hyland's model.

Table 1. Hyland's (2000) Five-move Model

Moves	Functions
Introduction	Builds the context of the study and motivates the research or discussion.
Purpose	Describes the purpose, hypothesis and outlines the intention behind the paper.
Method	Provides details about the design, data, models, procedures, approach, etc.
Product	Reports the main findings or results, argument, discussion etc.
Conclusion	Interprets the results, draw inferences from the findings, points to wider implications.

Following this model, each abstract was analyzed separately in order to identify the moves correctly. The frequency of occurrence of moves was calculated to trace out the similarities and differences in the abstracts.

IV. THE ANALYSIS OF DATA

This section begins with discussing the similarities and variations across the RA abstracts of native and non-native writers. It compares the abstracts of three groups against each move and step defined in Hyland's (2000) model. Finally, it is wrapped up by pointing out the overall differences between them.

Descriptive Statistics

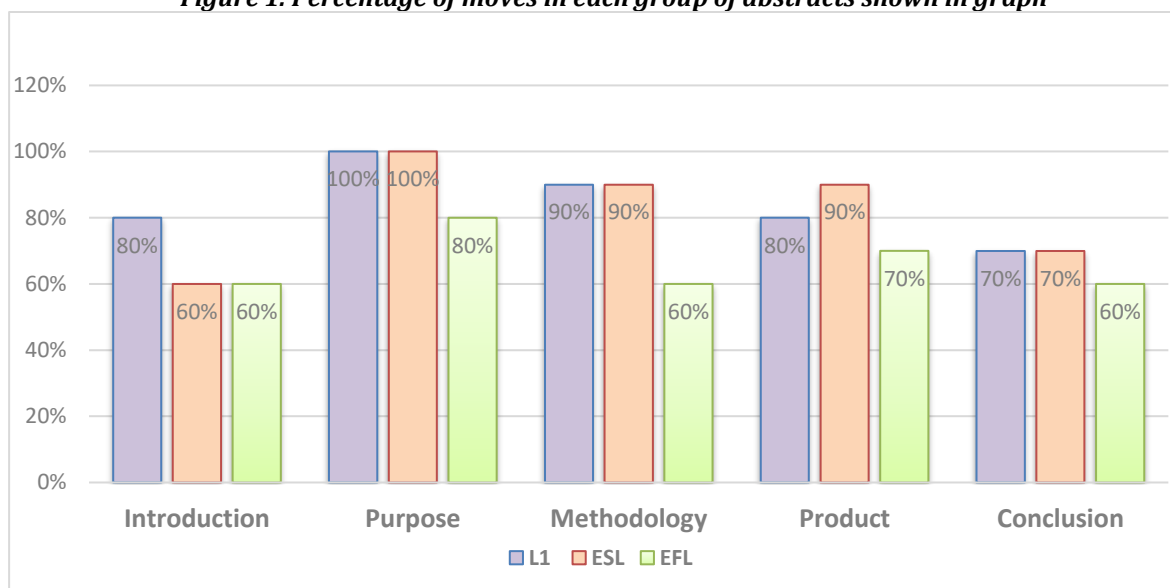
The frequency and percentage of moves in each group and the total percentage of each move in selected data is presented in *Table 2*.

Table 2. Frequency and Percentage of each move across the three groups

Moves	L1 (American)	EFL (Chinese)	ESL(Pakistani)	Total % of moves
Introduction (I)	16 (80%)	12 (60%)	12 (60%)	66%
Purpose (P)	20 (100%)	16 (80%)	20(100%)	93%

Method (M)	18 (90%)	12 (60%)	18 (90%)	80%
Product (P)	16 (80%)	14 (70%)	18 (90%)	80%
Conclusion (C)	14 (70%)	12 (60%)	14 (70%)	66%

Figure 1. Percentage of moves in each group of abstracts shown in graph



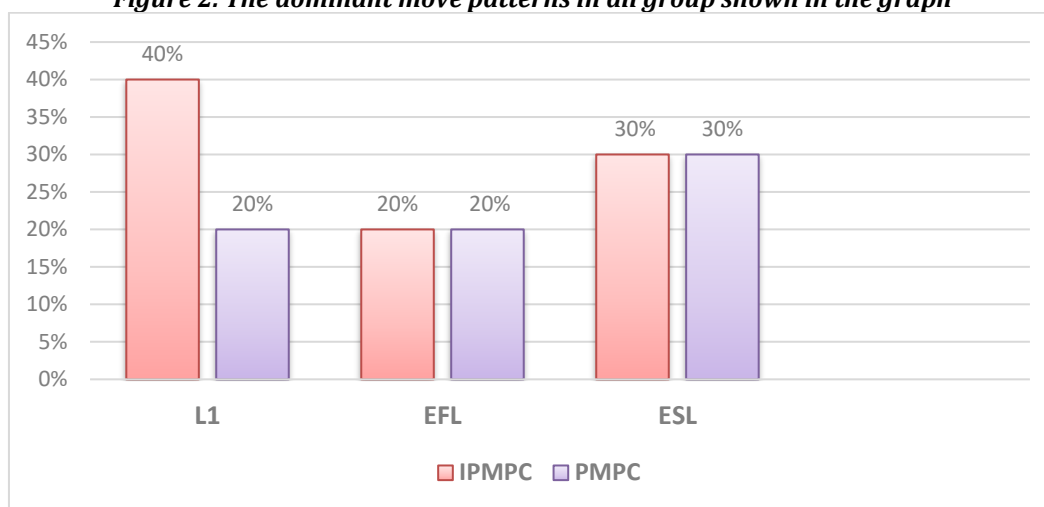
As it is defined in the *Table 2*, some significant and shared features were found in the three groups of abstracts. The most frequent move in all groups was *purpose* move that was used in total 56 abstracts. This move was included in all abstracts of (L1) American and ESL (Pakistani) RA abstracts and in 16 abstracts of EFL (Chinese) research articles. Then, the least frequent moves in these groups were *introduction* and *conclusion* which were included in total 40 out of 60 abstracts. The *introduction* move was included in only 16 L1 (American), 12 EFL (Chinese), and 12 ESL (Pakistani) abstracts and the *conclusion* move was included in only 14 L1 (American), 12 EFL (Chinese) and 14 abstracts of ESL (Pakistani) research articles. Then, The *methodology* move was used in total 48 (80%) abstracts in which 18 L1 (American), 18 ESL (Pakistani) abstracts and 12 EFL (Chinese) abstracts are included and the next move *product* was also used in 48 (80%) abstracts in which 16 L1 (American), 14 EFL (Chinese) and 18 ESL (Pakistani) abstracts were included. The graph shows the results clearly that the *purpose* move was the most frequent move in all groups of abstracts. The total percentage of *methodology* and *product* moves is same (80%), but their frequency in each group is different which is also clear in the graph. The *introduction* and *conclusion* moves have the lowest frequency level as compared to the other moves that is 66% only.

The Dominant Move Pattern

Table 3. The dominant move patterns in all groups

Dominant Move Patterns	Native (American)	Non-native (Chinese)	Non-native (Pakistan)
IPMPC	8 (40%)	4 (20%)	6 (30%)
PMPC	4 (20%)	4 (20%)	6 (30%)

Figure 2. The dominant move patterns in all group shown in the graph



In examining the move patterns in all groups of abstracts, the dominant move patterns turned out to be IPMPC and PMPC. The IPMPC move pattern has occurred 8 times in the abstracts of L1 (American), 4 in EFL (Chinese) and 6 times in ESL (Pakistani) researchers and the PMPC move pattern was used in 4 abstracts of L1 (American), 4 abstracts of EFL (Chinese) and 6 abstracts of ESL (Pakistani) abstracts. The graph shows that the frequency level of the proper move pattern (IPMPC) in L1 (American) RA abstracts is higher than both of the non-native (ESL & EFL) RA abstracts. The frequency of this move-pattern (IPMPC) in ESL and EFL categories shows that it was followed more efficiently by ESL (Pakistani) researchers as compared to EFL (Chinese) researchers. The second move pattern (PMPC) was used most frequently by ESL (Pakistani) researchers as compared to both L1 and EFL (American and Chinese) researchers.

Detailed Analysis of Each Move

Move 1: Introduction

According to the findings, the frequency of occurrence of *introduction move* in L1, EFL and ESL abstracts was 16, 12 and 12, respectively. In all the three groups of abstracts, the abstracts of native (L1) researchers contained the highest frequency of *introduction move* whereas the both non-native (ESL & EFL) researchers have included this first move in only 12 abstracts. An important point was noticed during the analysis of the *introduction move* that is the abstracts of native (L1) researchers contained the proper background/context of the study and also described the niche before coming toward the purpose of the study that motivates the study whereas the non-native (ESL & EFL) researchers introduced the area of their study briefly without describing its proper context.

Move 2: Purpose

The analysis of the abstracts revealed that this move was employed through the direct statement of the purpose in all the 20 RA abstracts of L1 and ESL researchers and in 16 RA abstracts of EFL researchers. A defining characteristic of this move was its integration with some other moves in some of the non-native abstracts. Sometimes this integration was observed in a purpose-method mode and in other cases a purpose- introduction mode to formulate a single move. The L1 and ESL researchers included this move properly by clearly describing the purpose of study. Some of the EFL researchers repeated this move after the methodology move along with the description of some background which should be described within the *introduction move* and sometimes the sequence of the moves is not followed properly in the EFL abstracts.

Move 3: Methodology

The methodology move was included in 18 L1, 12 EFL and 18 ESL abstracts of research articles. The L1 researchers have described every step of this move properly. The whole procedure of data collection, analysis and the detail of models which had been used in the study were described accurately. Moreover, the moves were interwoven in the abstracts of L1 researchers and every move was used to motivate the study. The analysis of the abstracts of EFL researchers showed that they were more concerned about describing the *purpose* and *product* of their study and paid less attention towards the other three important moves in which methodology is an essential move to be included before describing the results of the research. The analysis of the abstracts of ESL researchers showed better results as compared to the RA abstracts of EFL researchers as they have used this move in most of their abstracts but sometimes the data collection step was ignored and only the model or tools of analysis were described or sometimes the data collection step was merged with the purpose move.

Move 4: Product

The analysis shows that the product move was included in 16 L1, 14 EFL and 18 ESL abstracts. In one abstract of the L1 researchers, the *product* move was added in the *conclusion* but the other abstracts in which this move was included have shown proper following of steps and the main findings are described briefly. The analysis of the RA abstracts of ESL researchers have shown surprising results that they have used the *product* move more frequently than the L1 and EFL researchers and also described the findings properly. The EFL researchers have used least frequency of this move in their abstracts as compared to the L1 and ESL researchers. In some of the EFL abstracts, a brief detail of the findings was included in the *conclusion* move and sometimes half of the abstract was based upon the *product* move only.

Move 5: Conclusion

The analysis showed that 40 abstracts ended with *conclusion* move. Among them were 14 abstracts from L1, 12 abstracts from EFL, and 14 abstracts are from ESL research articles. The three steps that represent the *conclusion move* include: deducing conclusions from the results, evaluating the value of the research, and presenting recommendations for future researches. The conclusion move, in all the three groups, was mainly realized through the first step, in some cases through the second one, and rarely through the last one. The L1 researchers included the last step in the *conclusion* move but the non-native (ESL & EFL) researchers ignored it in some of their RA abstracts.

V. RESULTS AND DISCUSSION

By finding the differences and similarities in the rhetorical structure of RA abstracts of L1, ESL and EFL researchers, this study attempted to fulfill two objectives. Firstly, it evaluates the claim of previous researchers that the native researchers follow the rhetorical structure of RA abstract better than the non-native writers. Secondly, it finds out which of the two (ESL & EFL) categories is closer to the level of native (L1) writers in following the rhetorical structure of RA abstracts.

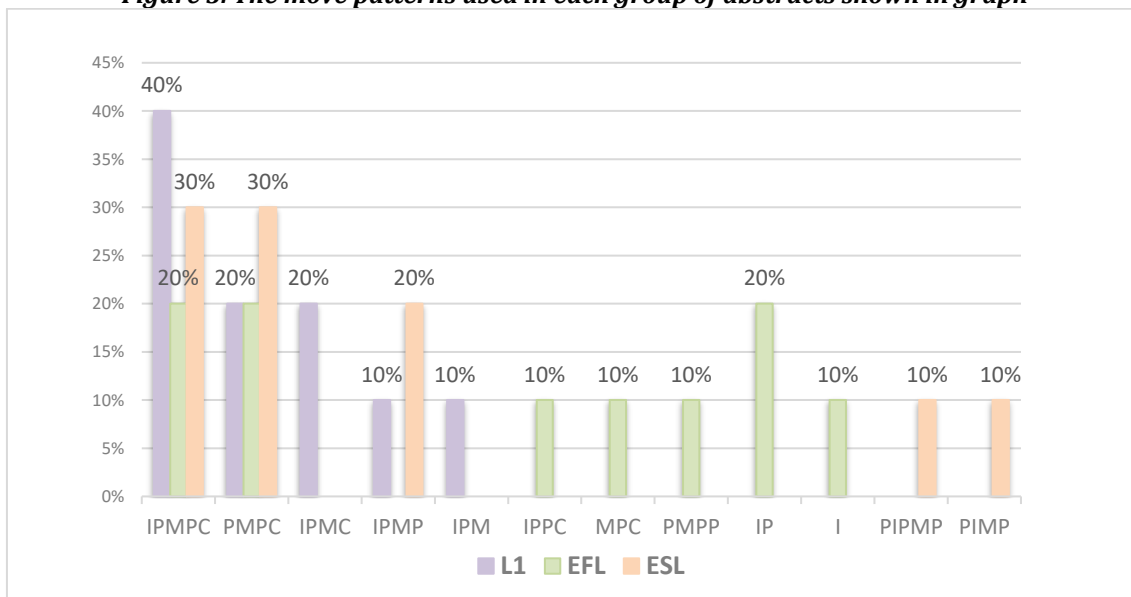
A number of differences and similarities had been identified while analyzing the research article abstracts. These differences were observed in move patterns, number of moves, repetition and sequence of moves in abstracts. The results of the analysis of move patterns are shown below in Table 3.

Table 3. The overall result of move patterns recognized in each group of abstracts

Sr.no.	L1 (American)	EFL (Chinese)	ESL (Pakistani)
1	IPMPC 40%	IPMPC 20%	IPMPC 30%
2	PMPC 20%	PMPC 20%	PMPC 30%
3	IPMC 20%	IPPC 10%	IPMP 20%
4	IPMP 10%	MPC 10%	PIPMP 10%
5	IPM 10%	PMPP 10%	PIMP 10%

6		IP 20%	
7		I 10%	

Figure 3. The move patterns used in each group of abstracts shown in graph



As a first important difference, various move patterns were found in the selected abstracts. The L1 and ESL abstracts employed 5 different move patterns and the EFL abstracts followed 7 different move patterns. The results for the match with the Hyland's (2000) five- moves model illustrated that the highest frequency of this move pattern was found in the abstracts of L1 writers which is 40% whereas the non-native (ESL & EFL) writers could not reach this level. Thus, the frequency of this move pattern in Pakistani and Chinese abstracts is 30% and 20% respectively. The results revealed that the EFL writers deviated from the proper rhetorical structure more than the ESL writers.

The next difference involves the number of the maximum and minimum used moves in all the three (L1, ESL and EFL) groups, regardless of the repeated moves. The analysis showed that all abstracts contained maximum 5 moves but the number of the minimum moves was different in each group. The ESL abstracts consisted of minimum 4 moves whereas the L1 abstracts had 3 minimum moves and EFL abstracts included minimum 1 move. Here, the ESL abstracts have shown surprising results that their ratio of minimum moves is more than the ratio of moves in the abstracts of L1 writers.

The number of maximum and minimum number of moves in each group have been discussed above. Now, the move patterns which have been used in minimum and maximum number in each group will be discussed. Firstly, the least frequent move-patterns were examined in each group. So, the analysis of the L1 abstracts showed that one of the abstract has used only 3 moves pattern (IPM) in which introduction, purpose and methodology of the study were described. The ESL abstracts used minimum 4 moves pattern which are IPMP and PIMP whereas the EFL abstracts included only 2 moves (Introduction and Purpose) and one of the abstracts contained only one move (introduction) in which the background and significance of the study was described in detail. The most frequent move patterns were IPMPC and PMPC, in which the move-pattern (IPMPC) was used in 8 abstracts of L1, 6 abstracts of ESL and 4 abstracts of EFL abstracts. The second most frequent move-pattern was PMPC, which was used in 4 L1, 6 ESL and 4 EFL abstracts. An important point is that the proper rhetorical structure (IPMPC) which is presented in the five-move model of Hyland (2000) was found to be the most frequent pattern.

The comparison of native (L1) and non-native (ESL & EFL) RA abstracts showed that the standard rhetorical structure was followed most efficiently by the native (L1) researchers as compared to the non-native (ESL & EFL) researchers. Then, the non-native RA abstracts were compared to each other which showed that the ESL researchers followed this standard move-pattern in their abstracts more efficiently than the EFL researchers.

The next difference in this analysis was the repetition of a specific move in the same abstract. This case was found only in non-native (ESL & EFL) abstracts. In one of the EFL abstracts, there was repetition of the *purpose* move after the *methodology* move and the move pattern was (PMPP). The repetition of *purpose* move was used to describe the importance of the study by elaborating its purpose again. Then, there is repetition of the same *purpose* move in one of the ESL abstracts following the pattern (PIPMP) in which the gap in the previous research works and purpose of the study was described as a third move in the abstract.

The last important difference was noticed in the sequence of moves in the abstracts. The L1 and EFL researchers ignored some moves but the sequence of the moves was not disturbed. The ESL researchers did not follow the sequence of moves properly. In ESL abstracts, the 2nd move (*purpose*) was used before the introduction move that disturbed the sequence of the move-pattern.

All the major and minor differences in the rhetorical structure of RA abstracts of the three (L1, ESL and EFL) categories have been discussed in detail. This detailed discussion helped in finding the answers of the research questions. Thus, the first question to deal with in the present study was whether the native writers follow the rhetorical structure of RA abstract better than the non-native writers. The results for the match with Hyland's (2000) model proved that the native writers followed this move pattern better than the non-native writers. However, the results of the move analysis of ESL abstracts were found closer to the level of native (L1) abstracts in following the move pattern. The second question was to find out which of the two non-native (ESL & EFL) categories is more efficient in following the proper rhetorical structure of RA abstract. The findings revealed that the ESL writers have followed the move pattern more carefully than the EFL writers.

These results are highly consistent with the views of the previous researchers including (Al-Khasawneh, 2017) who found that the native writers fulfill the criteria of writing the RA abstract by following the rhetorical structure properly, whereas the non-native writers were somehow ignorant or unaware of the international standards of writing RA abstract. The reasons behind the ignorance of non-native writers might be that they were not the native speakers of English. In the case of EFL (Chinese) writers, the reason might be that they learn English mainly to communicate with the speakers of other languages. Therefore, they do not pay enough attention towards the standard writing conventions or rhetorical structures. The ESL (Pakistani) abstracts have shown better results than the Chinese abstracts, however, they are lacking in the perfect adherence of standard pattern. In Pakistan, although English is learnt as a second language yet, unfortunately, the Pakistani ESL learners are still ignorant about the rhetorical structure of RA abstracts. The reason might be that there is dearth of competent teachers who have proper knowledge of the rhetorical structures and international writing standards. Due to these shortcomings, the non-native (ESL & EFL) researchers often fail to achieve the international level like the native (L1) writers.

There are also some limitations in this study as the researcher selected only 60 RA abstracts for analysis due to lack of time. Moreover, the RA abstracts were selected from the only one field of Applied Linguistics. However, despite these limitations, the study has adequately attempted to fill the gap in the existing literature by comparing the rhetorical structure of RA abstracts written by native and non-native researchers in order to highlight the shortcomings of non-native writers, particularly the Pakistani writers. Moreover, it provides some necessary knowledge of the well-accepted generic structure of abstract to the non-native and novice researchers, so that they can prove themselves at international level by following the proper rhetorical structures and international writing standards. Further studies may be conducted by selecting abstracts randomly from different academic fields, thus increasing possibilities of producing more reliable and authenticated results.

VI. CONCLUSION

This study investigated the variations in the rhetorical structure of three groups of abstracts written by native (L1) and non-native (ESL & EFL) researchers. The findings of this study revealed differences between native and non-native groups and also between the ESL and EFL group in writing their research abstracts in the textual organization level. The findings revealed that the native (L1) researchers followed the rhetorical structure of RA abstract better than the non-native (ESL & EFL) researchers, thus fulfilled the international standard of academic discourse community. The non-native writers have given more importance to the *Purpose* move, considering it the basic element of the abstract. Moreover, the ESL

category was found closer to the native (L1) category in following the proper rhetorical structure while writing the abstract section of research article.

Future Recommendations

The findings of the present study could help the novice writers in their academic writing. As Hyland (2000) pointed out that the improvement of genre knowledge would help novice writers in becoming active members in their disciplinary community. Further research is implied to analyze the difference of linguistic features between the native and non-native RA abstracts as well as between ESL & EFL categories. The findings might be a guide for novice writers in realizing their shortcomings in terms of move pattern, moves' sequence, and the function of each move in the RA abstract. Through this awareness, the ESL and EFL researchers can improve their writing standard and become successful at the international level.

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