

Genre Analysis of Nursing and ELT Academic Written Discourse

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Abstract—Since Swales' CARS model (1981, 1990) work on the move structure of research article, studies on genre analysis have been carried out so far among which works on different parts of research article in various disciplines has gained a considerable literature. The present study aims to examine the move structure of research article conclusion sections in two fields of ELT and Nursing based on Yang and Allison's (2003) model of move structure in conclusion sections. Each corpus of the current study contains 25 research articles related specifically to the field under study. The results of data analysis indicated that both corpora contained the moves proposed in Yang and Allison's (2003) model and almost no significant differences were observed in the rhetorical structure of the afore-mentioned fields. Therefore, the authors of both ELT and Nursing had a great tendency to apply this model in the conclusion sections of their articles. The obtained findings of the current study can be useful for linguistic researchers in Foreign Language Teaching (FLT) by providing them with a holistic and unitary pattern as an authentic language in use through enriching their understandings and knowledge about the true nature and structure of different disciplines.

Index Terms—corpus analysis, move structure, research article conclusions

I. INTRODUCTION

In recent years, academic writing has received wide spread attention as a particular means of communication. Research article (RA) as an example of academic writing that has a central role in academic discourse communities has been considered as a separate genre. According to Swales (1990) "a genre is a communicative vehicle for the achievement of goals and the purpose shapes the schematic structure of the discourse and influences the choice of content and style" (p. 7). In fact, genre analysis is claimed to be related to discourse analysis resulting in a number of practical changes in academic and scientific texts for more than two decades. "The findings of genre analysis, however, bring together the insights of earlier approaches to text analysis, but also a greater sophistication in the examination of the writer's purpose" (Dudley-Evans, 1998, P.4).

Genre analysis in academic texts has resulted in a considerable number of studies concerned with English in various genres such as dissertations, thesis, lectures, and research articles. From among these genres, research articles have known to be an important and a key genre used by researchers of various fields for the circulation of scientific and academic knowledge (Peacock, 2002). Therefore, a substantial number of studies have examined the overall structure and organization of different parts of the research article including abstract, introduction, result section.

Recently, there has been an increasing interest and attention in conducting studies and research on one of the genre-based approaches known as "move analysis" concerning to analyze the structural frameworks of written discourse. Swales (2004) states that "move" is a particular segment of discourse having a specific communicative function. Since Swales' CARS model (1981, 1990) work on the move structure of research article introductions, there has been a considerable attention for analyzing the rhetorical structure and organization of different sections of research article.

This model is known to be the most frequently used analytical tool for exploring the organizational structure of research articles. Most disciplines are in line with the moves and steps of this model; however, interesting variations such as omitting particular steps or moves and varying the order of moves and steps are found in some disciplines. According to this model introduction sections of research articles is examined in terms of having different moves and steps.

Previous studies have been carried out to explore the structural organization of various parts of research articles, for example, Introduction sections by (Swales, 1990; Samraj 2002), the Method sections by (Harwood, 2005; Lim, 2006; Bruce, 2008), Results sections by (Thompson, 1993; William, 1999; Yang and Allison, 2003), and the discussion sections by (Peacock, 2002; Yang and Alison, 2003).

A brief review of the literature reveals that few research studies aimed to explore the organizational structure of research article conclusion due to the fact that conclusion section is considered to be one of the components of the discussion section in a research article. "Conclusion" is one of the most important part of a research article in which the author has the opportunity to review the main topic of the study, indicating the limitations of the study and outline the findings of the study. One of the most important research study that has analyzed the rhetorical structure of conclusion sections of research articles is carried out by Yang and Allison (2003) who wanted to find out how authors in applied linguistics move from results to conclusion. "They found Conclusion section in 13 of 20 research articles (65%) on empirical research, and 6 final sections (30%) on pedagogic implications" (Bunton, 2005, p.209). This study is a pioneering genre-based work that aimed to discover the common features of the structures of research article conclusion section. Their findings about the moves and steps of the research articles under study are presented in Table1.

TABLE 1:
MOVES AND STEPS IN RESEARCH ARTICLE CONCLUSION SECTION

Move 1	Summarizing the study
Move 2	Evaluating the study
Step 1	Indicating significance/advantage
Step 2	Indicating limitations
Step 3	Evaluating methodology
Move 3	Deduction from the research
Step 1	Recommending further research
Step 2	Drawing pedagogical implications

A. Previous Studies Analyzing Conclusion Section

In the last two decades, conducting research studies that are concerned with genre analysis has received an increasing interest among researchers. The early form of genre analysis, which was based on linguistic descriptions, has changed in recent years to the discourse analysis level, providing a larger organizational picture. Different studies have been carried out to examine different parts of research articles. In this section the studies aimed to investigate the rhetorical structure of research article conclusions are presented briefly.

With regard to analyzing the discourse structure of research article conclusions, Aslam and Mehmood (2014) examined the conclusion section of Pakistani research articles in Natural and Social sciences to discover the common features shared by the conclusion sections of different disciplines. The results of their analysis revealed that Move1 titled as summarizing the study was the most frequently occurring move with 100% occurrence in the conclusions of both disciplines. Following this, Move2 and Move3 were interpreted as optional moves in the conclusion sections of the fields under study.

In a research conducted by Tabatabaei and Azimi (2015), an analysis of research article conclusions between English and Persian research articles in the field of social studies. According to the research findings, in spite of the existence of a unitary pattern in the moves across the two languages, there were significant differences in both frequency and the occurrence order of moves in both languages.

Another research accounting for discourse analysis of research article conclusions is conducted to investigate the moves in the conclusion sections of research articles in the two fields of Mechanical Engineering and Applied Linguistics (Jahangard, Rajabi-Kondlaji, & Khalaji, 2014). The final results of their study show that there is no significant difference in the conclusion sections across the afore-mentioned disciplines.

A brief review of relevant studies in the field reveals that the move structure of the conclusion sections across English Language Teaching (ELT) and Nursing has not been investigated specifically and comprehensively so far. The present study intends to analyze the conclusion sections of the research articles from the fields of ELT and Nursing to find out whether they are in accordance with Yang and Allison's (2003) model of move structure in conclusion sections.

With regard to the pedagogical implications, the obtained results of the current study can be useful for instructing the academic discourse to non-native speakers of English. Additionally, the findings of the present study can also be helpful for language learners' understanding of genre structure.

B. Corpus

The theoretical framework for the move analysis of the present study was Yang and Allison's (2003) model of move structure in conclusion sections. The data for this study was collected from two fields of study i.e. ELT and Nursing. To this end a total number of 50 research article were employed. Each field included 25 research articles that were randomly selected from different journals.

II. METHODOLOGY

The present research is exploratory in nature. It intends to offer a move structural analysis of research article conclusions in two fields of ELT and Nursing. To this end, the study takes a qualitative approach to investigate the detailed rhetorical structure of the conclusion section of a considerable number of articles from these two fields. Methodology adopted in the current study examines the extent to which the authors of the articles have written the

conclusion sections based on Yang and Allison’s (2003) model of move structure in conclusion sections. Additionally, this detailed conclusion structural analysis may further serve as an indication to reveal the trends employed by authors of specific disciplines when writing the research conclusion section.

Data Collection and Data Analysis

In the present study, Yang and Allison’s (2003) model of move structure in conclusion sections is used as the central and structural framework to examine the constructive organization and rhetorical structure of the research article conclusions. Since the present study aims to analyze the rhetorical structure of conclusion sections of the disciplines under study (i.e. ELT and Nursing), a total number of 50 articles were selected randomly in which each field included 25 articles. The articles were selected from a range of different journals which were specific and central in the fields under investigation.

The collected conclusion sections were subsequently analyzed in terms of the moves and steps and also the order in which they were written in the texts. Following this, the resulting list of moves and steps, and the order of these moves were screened and coded by two trained raters independently in order to ensure the inter-rater reliability and to increase the objectivity of the study. One of the raters is the first author of the present study and the other rater holds a master degree in TEFL. Then the individual codifications were discussed and compared by the raters to find out to what extent these two codifications are consistent and wherever there was a disagreement about the codification differed of a specific move or step, the raters tried to reach an agreement through a discussion. However, the comparison revealed that the codifications were highly consistent and there was an overlap between the results reported by the two raters.

The results of the analyses carried out by two raters to uncover the structural characteristics of the introduction sections in the fields under study are presented in the following section.

III. RESULTS AND DISCUSSION

A. Results

To make a comparison between the move structures of conclusion sections of the two corpora, the conclusion move analysis model proposed by Yang and Allison (2003) was used. As can be seen from data presented in Table 2, almost all moves and steps that were identified by Yang and Allison’s (2003) model were observed in both corpora. As illustrated in Table 2, the frequency occurrence of each move was estimated to be higher in ELT corpus compared to the Nursing corpus. According to the percentage referring to occurrence of the moves, one can conclude that all three moves in both datasets were considered as conventional moves rather than optional moves. Table 2 shows the frequency of moves and steps along with their percentage identified in conclusion sections of the two corpora.

TABLE 2.
FREQUENCY AND PERCENTAGE OF MOVES AND STEPS IN CONCLUSION SECTIONS OF THE TWO CORPORA

Moves (M) and Steps (S)	ELT		Nursing	
	Frequency	Percentage	Frequency	Percentage
M 1: Summarizing the study	25	100%	22	88%
M 2: Evaluating the study	23	92%	14	56%
S 1: Indicating significance/advantage	18	72%	9	36%
S 2: Indicating limitations	8	32%	7	28%
S 3: Evaluating methodology	7	28%	3	12%
M 3: Deduction from the research	21	84%	18	72%
S 1: Recommending further research	12	48%	11	44%
S 2: Drawing pedagogical implications	9	36%	4	16%

To provide a clear picture of structural pattern of the move structure in conclusion sections of the two corpora, moves along with their functions and one example from the original text of each corpus are presented in the following section.

Move 1: Summarizing the study

The primary function of this move is to provide a summary of the research through emphasizing the central findings of the study. Since this move is frequently occurred at the beginning of the conclusion section, it can be easily identified and analyzed by spotting the parts that account for a brief review of the study, objectives, and the findings of the research. This move was found to be the most frequent and also the dominant move in the conclusion sections of research articles of the two corpora. In this move, authors usually use statements that are written in present or past simple tense.

Examples:

ELT (M1) **The study presented here highlights** the complexity and hybrid nature of young people’s language including literacy practices in a multilingual educational setting ...

Nursing (M1) **This paper explored** the perspectives of ART patients and nurses on what constitutes good clinical care...

M 2: Evaluating the study

In this move authors often justify their studies through applying three steps including ‘indicating significance/advantage’, ‘indicating limitations’, and ‘evaluating methodology’. According to the results of the current

study, this move was as frequent as move 1 with a total number of 23 and 20 attestations in ELT and Nursing, respectively.

Examples:

Move 2, Step 1: Indicating significance/advantage

ELT (M2, S1) **The results reached in this study show that** L2 materials developers ignored learner's native culture quite frequently and ...

Nursing (M2, S1) **In addition, this is especially important and helpful** in that new models emphasize and the effectiveness ...

Move 2, Step 2: Indicating limitations

ELT (M2, S2) **The findings of this study are limited to a small group of students and also restricted** to just one junior high school. Studying on larger groups and areas would...

Nursing (M2, S2) **The limitations of the Safewards trial**, stated above, were the large quantity of missing data and the limited degree to which...

Move 2, Step 3: Evaluating methodology

ELT (M2, S3) To present the general pattern of learner's favorable attitudes toward language learning in mobile-mediated environment, **it was necessary to have**...

Nursing (M2, S3) **We included a diverse range of study designs and report** fully how we used...

M 3: Deduction from the research

In this move, the author states that to what extent the results of the study contribute to the existing knowledge in the field under investigation. This move could be easily identified by two steps titled as 'recommending further research' and 'drawing pedagogical implications'. According to the results of the current study, in both corpora, the authors preferred to articulate this move by using Step 1 "recommending further research".

Move 3, Step 1: Recommending further research

Examples:

ELT (M3, S1) For those who are interested in studying the effects of using L1 in L2 learning, **it is recommended to consider other** ...

Nursing (M3, S1) **Future use of this measure** within QI implementation and QI research will determine ...

Move 3, Step 2: Drawing pedagogical implications

ELT (M3, S 2) **This paper provided an insight** on the inferential abilities and pragmatic knowledge to be developed in ESL classes ...

Nursing (M3, S2) **The findings of this study may inform the** academic and clinical nurse leaders to support the use of both ...

1. The analysis of move structure in conclusion sections of the two datasets

According to research findings, three structure patterns of the research conclusion sections were shared by the two corpora including M1-M2-M3, M1-M2, and M1-M3. From among these patterns, it was found that ELT corpus used the first pattern (the linear one) more frequently accounting for about 72%. Following this, M1-M2 and M1-M3 were occurred with total percentage of 20% and 8%, respectively. In the Nursing corpus, as the ELT corpus the most frequently used pattern was M1-M2-M3 accounting for 60% of the conclusion sections. Following this M1-M3 and M1-M2 were the second and the third frequently occurring patterns with total percentage of 28% and 12%, respectively.

Some conclusion sections in both corpora were found to be longer which highlights the existence of a feature called cyclical occurrence of the moves. In all, a total number of 11 research articles in the present datasets, had a longer conclusion section due to the occurrence of the cyclical structures such as M1-M2-M3-M2 and M1-M3-M2-M3 with frequencies of 6 and 5, respectively.

B. Discussion

As mentioned before, the primary objective of this study is to compare the rhetorical structure of conclusion sections of the two datasets (i.e. ELT and Nursing) and also to determine to what extent the conclusion move structure of these fields are in line with the conclusion move structure proposed by Yang and Allison (2003). Based on the research findings, with regard to move occurrence and move pattern, similarities and differences were identified in the two corpora. One similarity is that in both corpora, Move 1 was found to be the prominent and the conventional move. This finding confirms what Morales (2012) stated in his study regarding the conclusion move structure, in which he concluded that Move 1 was employed with a total frequency of 75% and 100% in Filipino and Japanese corpora, respectively. Additionally, Move 3 was occurred frequently in both corpora; therefore, one can conclude that authors of both areas refer to Move 3 as a substantial and conventional move for research articles to be published in journals which are specific and central in the fields under investigation. Also, based on the move analysis of the conclusion sections, it can be assumed that the move patterns of both fields are in line with the proposed model of Yang and Allison (2003). One other interesting finding of this study is the methods employed by the authors of the two datasets to begin the conclusion sections. Almost all conclusion sections in these corpora began this section through statements referring to background and the primary objectives of the study. In other words, authors preferred to open this section by restating the background of the study before providing the central findings.

One distinctive difference between the two datasets is that Move 2 was found to be the least frequent move in Nursing. As can be seen from results analysis, only 14 Nursing conclusion sections contained Move 2 (56%), while this move was observed with a total frequency of 23 attestations (92%) in ELT. This finding about the conclusion move structure in Nursing is not conformed to the results proposed by Morales (2012). In his study, he concluded that Move 2 was estimated as an obligatory move, in which Step 1 titled as ‘indicating significance /advantage’, gained 100% frequency occurrence among the Filipino authors. Following this, the next two steps i.e. Step 2: indicating limitations and Step 3: evaluating methodology, were commonly occurred in Japanese articles accounting for 63% and 50%, respectively.

An important finding of this study that marks a difference between the model proposed by Yang and Allison (2003) and the results of the present study, refers to cyclical occurrence of the moves. In their study, Yang and Allison (2003) concluded that Move 1 (summarizing the results), was the most cyclical move; however, in this study Move 2 and Move 3 were found to have cyclical occurrence.

IV. CONCLUSION

The aim of the current study was to make a comparison between the rhetorical structure of the conclusion sections in two fields of ELT and Nursing. According to results analysis, the move structures in both corpora conformed to the move structures proposed by Yang and Allison (2003); however, there was a difference in the frequency of occurrence of each move in the two datasets. Pedagogically, the study has provided some new information about the move patterns in the two areas of ELT and Nursing. The identification of structural pattern and differences among research article conclusions across different disciplines are considered as essential information that enrich our understanding and knowledge about the true nature and organization of these disciplines which eventually leads to a unified and full-fledged model that can be applied for different genres and disciplines and it is hoped that the findings of the present study will also help non-professional EFL writers to write their research articles in a way that is textually organized. Therefore, writing pedagogy can be developed both in primary and advanced levels. The findings are also likely to provide linguistic researchers in Foreign Language Teaching (FLT) with a holistic and unitary pattern as an authentic model of language in use. Furthermore, English for Academic Purposes (EAP) courses can benefit from the findings of research of this type to raise the awareness of non-native speakers of English and graduate students of different fields of studies about the rhetorical move structures and organizational patterns of research articles.

Like all other works, the current research had a limitation. It refers to the size of datasets used for the analyses purpose; therefore, because of the limited number of articles used in this study, the findings may not be generalized to the total population of academic writers. The findings of the current study obtained from the analysis of 50 research articles of two corpora. Further research with a larger sample size is recommended to provide a better understanding of the rhetorical structure of not only this section, but also all sections of research articles. Because comprehensive studies of such type, can determine how the structure of each section in a research article is related to other sections in order to come up with a clear picture of overall textual organization.

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