Genre Analysis of ELT and Nursing Academic Written Discourse through Introduction

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Abstract

Since Swales' (1981, 1990) CARS model work on the move structure of research articles, studies on genre analysis have been carried out amongst which works on different parts of research articles in various disciplines has gained a considerable literature. This study aims to investigate the rhetorical structure of the Introduction sections of articles in two fields of English Language Teaching (ELT) and Nursing, based on two corpora. Each corpus contains 25 research articles related specifically to the field under study. This study initially identified the structural organization of the Introduction sections of the articles. The results of this analysis revealed that both corpora contained the moves proposed in CARS model and almost no significant differences were observed in the move structures of articles in the afore-mentioned fields. Therefore, there is a considerable tendency for both ELT and Nursing to use CARS model. The findings from the analysis could provide linguistic researchers in Foreign Language Teaching (FLT) with a holistic and unitary methodology as an authentic model of language in use through enriching their understandings and knowledge about the true nature and organization of different disciplines.

Introduction

Genre analysis is clearly related to discourse analysis; it has accounted for a number of theoretical and practical changes in academic and scientific texts for more than two decades. This approach has been used extensively by researchers in the field of English for Specific Purposes (ESP) in order to identify the structures, social constructions, and the historical evolutions of academic writings. Dudley Evans and John (1998) state that "one of the main advantages of genre analysis is its ability to relate textual findings to features of the discourse community within which a genre is produced" (p. 91).

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 been 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 and even the Conclusion section.

In addition to examining various parts of the research articles, others studied further intend to provide some lexico-grammatical features of these parts in terms of linguistic structures including aspects of tense choice and the use of I/We pronouns.

From amongst different aspects of the research article, Introduction is known to be the most researched section. Introduction section has started to attract considerable attention of the researchers since Swales' (1981, 1990) work on the move structure of research article introductions. The move structure of research article introductions proposed by Swales (1981, 1990), is known as Create a Research Space (CARS) model. According to CARS model, most Introductions have a characteristic discourse (rhetorical) pattern which is describable in terms of a number of moves.

To Create a Research Space (CARS) model

The CARS model, which is particularly Swales' (1990) version, is the most frequently used analytical tool for examining the organization and the discourse structure of research article Introductions. According to Swales' (1990), an Introduction is characterized in terms of having obligatory (move) and optional (step) elements. Swales' CARS model for research article Introductions is presented in Table 1.

Table 1. The CARS model for research article introductions

Move 1	Establishing a Territory
Step 1	Claiming centrality
	and / or
Step 2	Making topic generalization
	and / or
Step 3	Reviewing items of previous research
Move 2	Establishing a Niche
Step 1 A	Counter-claiming
	or
Step 1 B	Indicating a gap
	or
Step 1 C	Question-raising
	or
Step 1 D	Continuing a tradition
Move 3	Occupying the Niche
Step 1 A	Outlining purposes
	or
Step 1 B	Announcing present research
Step 2	Announcing principal findings
Step 3	Indicating RA (Research Article) structure

As presented in Table 1, a research article writer takes three moves to create an organized research article Introduction. In move 1, entitled establishing a territory, the researcher establishes the general topic to clarify the research area. This move which includes three different steps is claimed to be the most important move for attracting the reader's interest by referring to central characteristics of the issue being discussed.

Move 2, establishing a niche, functions in one way or another to challenge the previous research conducted in the research area by opening up research space. It is in this move that the limitations and failures in other researches are indicated and the researcher takes a stance opposite to those of previous studies.

Finally, move 3, entitled occupying the niche, states the need for the current research and explains how the research gap is going to be filled by the researcher. This move represents the specific purposes and the probable findings of the current study too.

Previous studies using CARS model

Conducting studies concerning genre analysis has gained an increasing interest among the researchers for more than two decades. 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. The CARS model

has been used to examine and analyze different kinds of scientific and academic written discourse including thesis, dissertations, research articles, and different types of materials that students need to read for various courses (Swales, 1990).

Although the CARS model was proposed to specifically examine the Introduction section of research articles, different types of this model have been used for other sections of the research article as well. Therefore, there have been a number of studies on different sections of research articles such as that by Samraj (2005) on the Abstract section, Wood (1982) on the Methodology section, Williams (1999) on the Result section, and Holmes (1997) on the discussion section, etc.

With regard to analyzing the discourse structure of research article Introductions, Choe and Hwang (2014) examined the particular linguistic patterns that Korean graduate students often employ but possibly use improperly, to provide them with patterns favored by experts, the employment of which may help to refine their language use in delivering their findings (p. 4). The result of their analysis revealed that although the native and non-native speakers of English share common structures for their scientific and academic writings, they may have some distinctive characteristic features of exemplary academic writings.

Another study applying CARS model for analyzing the rhetorical structure of the research article Introduction can refer to that by Chahal (2014) in which the researcher examined the discourse structure of six research article Introductions (RAIs) from the field of Cultural Studies (CS). This study intended to investigate whether Swales' CARS model was applicable to the examined Introductions of this relatively recent and little studied Humanities area, and it furthers discussed the implications that the findings of the results might have on the conceptions of written discourse knowledge construction in CS and on English Language Teaching (ELT) pedagogy.

In a study conducted by Jalilifar (2010), an analysis of research article Introductions from three related sub disciplines of English for Specific Purposes (ESP), English for General Purposes (EGP), and Discourse Analysis (AD) was reported. According to the research findings, "the comparison of this type allows one to see how a genre is treated in a more stablished or in a less stablished sub discipline" (p. 31).

Another CARS model based research was an attempt to represent a detailed analysis of research article Introductions in economics (Lakic, 1997). According to the research findings, the Introduction sections of economic articles were in accordance with the CARS model proposed by Swales (1990); however, some variations and characteristics were derived from the discipline itself.

Another research accounting for discourse analysis of research article Introductions was conducted to find out the rhetorical structures of Introductions across three disciplines of English for Specific Purposes (ESP), Sociolinguistics, and Psycholinguistics (Habibi, 2008). The final results of their study showed that there

was no significant difference in the Introduction sections across the afore-mentioned disciplines with regard to Swales' (1990) CARS model.

A brief review of relevant studies in the field reveals that the rhetorical structure of the Introduction sections across English Language Teaching (ELT) and Nursing has not been investigated specifically and comprehensively so far. The present study intends to analyze the article Introductions from two fields of ELT and Nursing to find out whether they are in accordance with Swales' (1990) CARS model.

The results of the current study can have some pedagogical implications while teaching the academic discourse to non-native speakers of English. Furthermore, the results of studies of this type can be helpful for learners' understanding of genre structure. By comparing the written discourse of different disciplines having the same genre, one can have a better understanding of textual organizations and characteristics that derive from disciplinary norms.

Corpus

The theoretical framework of the present study was Swales' (1990) CARS model. 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 articles were employed. Each field included 25 research articles that were randomly selected from different journals.

Methodology

The present study is exploratory in nature. It intends to offer a rhetorical structure analysis of research article Introductions in two fields of ELT and Nursing. To this end, the study takes a qualitative approach to analyze the detailed structure of a considerable number of texts from these two fields. Methodology adopted in the current study investigates the extent to which the authors of the articles have written the Introduction section according to CARS model. Furthermore, this detailed Introduction structural analysis may further serve as an indication to reveal the trends employed by authors of specific disciplines when writing the research Introduction.

Data analysis

In the present study, Swales' (1990) CARS model is used as the central and structural framework to examine the constructive organization of the research article Introductions. Since the present study aims to investigate the rhetorical structure 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 journals which were specific and central in the fields under investigation. After the selection of the articles, the researcher identified the

Introductions and then excluded other sections of research articles including abstract, methodology, results, etc. from the analysis.

The collected Introduction sections were subsequently analyzed in terms of the moves and steps. These moves were screened and coded by two trained raters independently in order to achieve inter-rater reliability and to increase the objectivity of the study. One of the raters is the first author of the current study and the other rater holds a master's degree in TEFL. Then the individual codifications were discussed and compared by the raters to find to what extent these two codifications were consistent and wherever the codifications differed in some specific points, the raters tried to reach an agreement through 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 the two raters to uncover the structural characteristics of the Introduction sections in the fields under study are presented in the following section.

Results and Discussion

Results

Two independent raters were asked to code the data based on moves. Table 2 compares the measure of agreement between the two raters.

Table 2. Comparing the measure of agreement between two raters

Moves	Steps	Kappa in ELT	Kappa in Nursing
Move 1	Step 1	100	100
	Step 2	86.5	100
	Step 3	91.5	100
Move 2	Step 1 A	70	99
	Step 1 B	71.9	100
	Step 1 C	100	100
	Step 1 D	100	100
Move 3	Step 1 A	99	85.5
	Step 1 B	86.5	77.7
	Step 2	99	100
	Step 3	95	79.9

As illustrated in Table 2, there is a nearly high agreement between the two raters. Kappa 70 and more shows favorable agreement. More agreement can be seen in the field of Nursing.

To analyze data in three moves, Mann-Whitney *U* Test was employed. The Mann-Whitney *U* test is utilized in order to compare differences between two independent groups when the dependent variable is ordinal, but not normally distributed.

Table 3. Moves used in ELT and Nursing

Moves and Steps	ELT N (percent)	Nursing
Move 1		
Step 1	25 (100%)	25 (100%)
Or		
Step 2	5 (20%)	6 (24%)
Or		
Step 3	17 (68%)	12 (48%)
Move 2		
Step 1 A	1 (4%)	1 (4%)
Step 1 B	18 (72%)	16 (64%)
Step 1 C	2 (8%)	0 (0%)
Step 1 D	0 (0%)	0 (0%)
Move 3		
Step 1 A	25 (100%)	14 (56%)
Step 1 B	5 (20%)	5 (20%)
Step 2	1 (4%)	2 (8%)
Step 3	0 (0%)	1 (4%)

Table 3 shows that Step 1 in Move 1 (*Claiming centrality*) has been fulfilled in all ELT and Nursing articles. However, as can be seen, none of the articles in ELT or in Nursing considered Step 1 D in Move 2 (*Continuing a tradition*). On the other hand, Step 1 C in Move 2 (*Question-raining*) and Step 3 in Move 3 (*Indicating RA structure*) have also been used less than other steps in both ELT and Nursing articles. It seems that ELT articles utilized Step 1 A in Move 3 (*Outlining purposes*) more than in Nursing ones.

According to Swales' CARS model, at least one step in both Move 1 and Move 2 should be used. On the other hand, three steps should be utilized in Move 3. Therefore, the total score for each article could be 5.

Table 4. Overall mean comparison between ELT and Nursing

	mean±SD	p value
ELT	2.9±0.44	
		0.05
Nursing	2.4±0.86	

As illustrated in Table 4, the mean of ELT articles exceeds the one of Nursing. Mann-Whitney *U* Test shows a difference between ELT and Nursing articles.

Discussion

An important finding of this study was that Move1 is more frequently performed by the researchers while writing the Introductions of the fields under study. That is, the authors of the corpora emphasized the importance of establishing the research territory to confirm that the research is located within a significant research area. This is mostly achieved through claiming centrality (Move 1, Step 1), which proves the importance, central character, and interest in the research area. Besides claiming centrality, the authors of both corpora, stablished a territory primarily by reviewing items of previous research (Move 1, Step 3). That is, by referring to works of other researchers, they specified the findings of the previous researches or offered a stance toward those findings.

In both corpora, the authors established a niche to challenge the previous researches predominantly through indicating a gap which indicates the limitation of research carried out in the field and is outlined as one of the four steps in Move 2. Following this, ELT authors applied counter-claiming, i.e. to suggest the previous research is erroneous and question-raising, i.e. to pick up a question suggested by previous research in a limited number of articles with about two attestations for each.

As for the last move of CARS model, Move 3 entitled as occupying the niche was performed predominantly through Step1A i.e. outlining the purposes of the research in both corpora.

According to the findings of the current study, one characteristic feature of loner Introductions in the present corpora is the cyclical occurrence of the different moves. This finding is in line with Swales' (1990) claim, in which he identified that cyclical occurrence of moves are more frequently observed in longer Introduction sections; however, this should not be regarded as a rule. With regard to the findings of the study, this characteristic feature was mostly observed in Move 3, Step1A of both corpora.

Some of the common and frequently-used phrases and constructions for indicating different moves in the Introduction sections of the two corpora are classified as below:

Move 1:
(1A) Investigating … is a continuing concern
(1B) … is a major area of interest
(1C) … is an increasingly important area of research
(1D) Recent development in …

Move 2:

(2A) There has been little agreement on …

(2B) Previous studies of … have not dealt with …

(2C) There exist to be a paucity of knowledge that …

(2D) Relatively little research …

Move 3:

(3A) The aim of the present paper is to …

(3B) The main purpose of this study is to …

(3C) This study was carried out to find out …

(3D) This study aims to …

Conclusion

The present study has offered a comparative examination of the structural patterns of CARS model use in the Introduction sections of the two fields of ELT and Nursing. The aim of the study was to raise awareness about differences and similarities in the Introduction sections' rhetorical structures among afore-mentioned disciplines and how information is organized within a text structure.

According to the approximate result findings of the current study the Introduction sections in ELT are longer and more complicated than those of Nursing. The structure analysis of the research article Introductions revealed that both corpora contained the moves proposed in CARS model and almost no significant differences were observed in the move structure of the afore-mentioned fields. Therefore, there was a considerable tendency for both ELT and Nursing to use CARS model. One possible reason might be the fact that the two different disciplines are gradually moving toward a unified model known as the standard model. However, the detailed examination of the results uncovered the fact that in corpora used in the present study, the move structure of CARS model was not fully applied in the formation of the research article Introductions.

Recommendations and implications

The study has provided some new information about the use of CARS model in ELT and Nursing. The examination and identification of the rhetorical move structure and differences among the research article Introductions across different fields and 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.

The instruction of English for Specific Purposes (ESP) and English for Academic Purposes (EAP) and the material development mostly affected by

discourse analyses which students are required to learn and produce and the comprehension of textual organizations in various genres enable researchers of different fields to provide students seeking for membership in a specific disciplinary community with a better instruction (Samraj, 2002). According to Martin (2003), the researchers and scholars need to be familiar with the general and standard conventions of the research area, in order to be accepted as members of scientific communities.

The findings are also likely to provide linguistic researchers in Foreign Language Teaching (FLT) with a holistic and unitary methodology as an authentic model of language in use. Furthermore, English for Academic Purposes (EAP) courses can benefit from the findings of a research of this type to raise the awareness of the non-native speakers of English and the graduate students of different fields of studies about the rhetorical move structures and organizational patterns of the research articles.

Suggestions for future research

In general, one of the limitations of the present study was the sample size of the corpora used for the analyses. Larger corpora would provide more information and allow for more precise and comprehensive observations and analyses to be made. Furthermore, identifying research article Introduction is considered as one of the steps in the analysis of various genres. Further studies can examine other genres including dissertations, newspapers, letters, academic writings, etc.

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