Rhetorical Structure in the Problem Statement Section of Iranian Postgraduate Students' Research Projects

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Abstract

This paper reports the results of a study that investigated the structure of the Problem Statement (PS) section, following Swales' (1990) Create-A-Research-Space (CARS) model as the first objective. Move analysis was used to analyze the rhetorical moves of the PS sections of the research projects. The second objective was the identification of the specific types of linguistic features associated with each move and step based on Pho's (2013) classification. Following Pho (2013), the linguistic features as important signals of moves were identified. For this purpose, 30 research projects written by Iranian master's students were purposively selected. The findings showed that the obligatory moves were Moves 1 'Establishing a Territory' and 2 'Establishing a Niche'. All moves and steps were identified linguistically although their sequence and arrangement were not the same as what was anticipated by the model. Although the cyclic and embedded moves were defined in the rhetorical structure of the PSs, most of them were anomalous or ill-structured. The study has theoretical contributions, the most significant one of which is that the CARS model is applicable to define and analyze the rhetorical structure of the PS section.

Keywords: Genre analysis, problem statement, rhetorical structure, Swales' CARS model.

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1. INTRODUCTION

The English language is the medium of instruction and assessment used in the delivery of the programs and scholarly communication in most international universities with users from different backgrounds (Sheldon, 2013). English as a Foreign/Second Language (EFL/ESL) as the members of the discourse community come from diverse cultural backgrounds that influence their language activities like writing. This may be revealed in the non-natives' text organization and the rhetorical preferences in writing which are not the same as those of the English language (Sheldon, 2013). This matter can also be for the interference of the non-natives' first language instructions with the English writing instruction that "a standard schema is needed to write one successfully" (Yasin & Qamariah, 2014, p. 30). In this regard, an accurate and specific rhetorical framework is needed to clarify the scopes and dimensions of how to write various genres for specific academic purposes (Rizki et al., 2019; Salmani-Nodoushan, 2020) which can acknowledge all English writers in the discourse community (Swales, 1990). Discourse communities are "socio-rhetorical networks that form to work towards sets of common goals" (Swales, 1990, p. 9). Having knowledge about specific genres is the essential feature of being a member of these communities. Swales defines a genre as a possession of the discourse communities. For Swales (1990), genres refer to communicative events including texts whether written or spoken. That is, "a collocation with the communicative event; a genre is some shared set of communicative purposes" (Swales, 1990, p. 46).

In the area of academic writing, thesis writing is a challenging task for ESL and EFL learners. Despite many studies conducted on the rhetorical structures of EFL/ESL students' writing, "L2 postgraduate thesis remains something of a neglected genre" (Hyland, 2004, p. 134). Furthermore, despite its fundamental role in a study, only a small number of investigations have been conducted on the PS section (Ibrahim & Nambiar, 2011). Obviously, the PS section constitutes a crucial part of a research project. Samraj (2008) has pointed out that the M.A. and Ph.D. students should be aware of this.

The PS is "the crystallization of the issue, the essence of what I am doing" (Metoyer-Duran & Hernon, 1994, p. 107). In a PS section, the problem must be established and supported by evidence from the previous literature (Creswell, 2014). In other words, the writer must provide a response to the query: What do I want to prove? This points to the importance of the PS. Everything that goes into a study must be done by the presentation, exploration, and proof of the PS (Nenty, 2009). Nenty (2009) emphasizes that "a strong start for any research is possible when the researchers begin with an unmistakably clear statement of the problem" (p. 21).

This study draws its data from an investigation and focuses on the structure of PS since it is rarely considered as an independent section in earlier research. Admittedly, the subject of the problem statement has been addressed by previous researchers; for example, Gol and Rashid (2013) explored Iranian and Malaysian students' writing difficulties. However, their focus was not on a specific part of students' theses. Furthermore, they collected their data through interviews with students and teachers rather than through genre analysis. Samraj (2008) analyzed the Introduction sections of M.A. theses using Swales' (1990) CARS model with only a partial focus on the PS section. Therefore, this study addresses the aforesaid gap in the literature by identifying the rhetorical moves in the PS sections of theses.

1.1   Objective and Research Questions

This study is an attempt to define the moves and steps of the rhetorical structure of the PS section linguistically. To address this objective the following research questions were posed:
1. What is the rhetorical structure of the PS sections in Iranian TEFL students' M.A. research projects?
2. What are the linguistic features which signal each move and step in the PS sections of Iranian TEFL students' M.A. research projects?

2.   LITERATURE REVIEW

There is an agreement among social scientists that the inadequate performance of university students to write in English for academic purposes is the result of their lack of preparation (Varghese & Abraham, 1998). Explicit instruction is needed to prepare them to write in English which has a different rhetorical structure from their L1. In recent years, there has been an increasing interest to compare the rhetorical structure of texts written by EFL writers and native writers (Afshar & Ranjbar, 2017; Loi & Evans, 2010; Ozturk, 2007; Sheldon, 2011; Validi et al., 2016). There are also studies on Iranian EFL postgraduate students' writing abilities in academic settings (Gol & Rashid, 2013; Karimnia, 2013; Khodabandeh, 2014; Namvar et al., 2012). A majority of contrastive research has emphasized Iranian students' difficulties in academic writing. These difficulties are represented by genre analysis which reveals that the process of English academic writing is very complex and challenging for Iranian students (Gol & Rashid, 2013).

Kanoksilapatham (2015) states that the way of analyzing a genre as a "discourse framework is inherently semantically driven because text segmentation is determined by how an analyst interprets its communicative function" (p. 76). Likewise, researchers use genre analysis as an instrument to understand communally located language use, which also explains what a specific text involves.

Hyland (2002) points out that "genre analysis significantly influences teaching writing to ESL/EFL writers/learners" (p. 20). Defining a specific effective framework for a genre may be difficult because it is 'ill structured' and because the types of rhetorical framework generated by experts are so varied (Kellogg, 2006). Ill-structured writing includes multiple goals with no coherence as opposed to the structure of an expert's writing (Kellogg, 2006). Accordingly, a large and growing body of literature has tried to identify the distinctive lexico-grammatical structures and rhetorical forms of specific genres (Hyland, 2007a). Crookes (1990) states that 'genres' which make heavy use of formulaic expressions are better suited for analysis.

Yasin and Qamariah (2014) compared the rhetorical structure of three research article (RA) introductions written by professional writers with seven RAs written by postgraduate students majoring in English Language Education at Syiah Kuala University. The aim of this study was to examine the application of the Swales' (2004) model. The results of their study showed that the CARS model can show the structure of scientific papers and it could be used as a framework by novice writers in structuring the introduction section of their academic texts.

In all the studies reviewed, the Swales' (1990-2004) CARS model has been mostly used as the framework to analyze the introduction section in research articles. Also, most of them had compared the English writing rhetorical structure with the rhetorical structure of other languages or among various disciplines/sub-disciplines that showed differences or similarities.

The framework proposed by Swales is a well-known rhetorical model which has been used to examine and teach academic discourse for three decades (Swales, 1990). In fact, Swales focuses on the communicative purpose of discourse which is based on the investigation of fundamental parts or 'moves' in academic writing, especially "the organization of the content of the research papers" (Connor, 1996, p. 126).

In addition to Swales' analytical framework (1990, 2004), the Lexico-grammatical realizations are also commonly used including single words, collocations, lexical bundles, and other vocabulary-based discourse units such as 'however', 'few' 'but little' purposes', and so on. These linguistic features are widely exemplified to distinguish each move and step.

The Create-A-Research-Space in Academic (CARS) proposed by Swales (1990) is an analytical framework or tool that helps scholars look up academic passages with searched move functions as well as linguistics features as keywords. The result obtained from analyzing the PS section based on the CARS model is supposed to provide valuable pedagogical experiences and implications to postgraduate investigators for having an appropriate framework that can simplify the writing.

3. METHODS

In the present study, the qualitative research design was adopted to collect data through purposive sampling to help the researchers develop an in-depth exploration of the rhetorical structure of the PS section in M.A. research projects.

3.1 Samples

The samples were the PS sections in M.A. research projects written by Iranian EFL postgraduate students provided by the libraries of one public university in Tehran and one private university in Karaj, two cities in Iran. The samples were collected from these two universities as they are ranked as the best and largest universities of their kind in Iran. Both universities are known for being very selective and stringent. The samples (n=30) were purposively collected from M.A. projects from one public university (n=18) and one private university (n=12) in the EFL context of Iran. The number of samples collected from the two universities was initially equal. However, later some of the samples had to be removed since their PS sections were terse or lacking. This is the reason for the uneven sizes of the samples collected from the two settings.

3.2 Data Analysis

A review of the literature shows previous genre analysis studies used various models proposed by linguists such as Swales (1990, 2004), Bhatia (1996), Dudley-Evans (2000), Hyland (2004), and Fazilatfar and Naseri (2014). For the purpose of the

present study, we found Swales' (1990) CARS model more appropriate than the other available frameworks. CARS model includes 3 moves each of which has its own related steps. Steps with an occurrence of less than 50% are considered optional while others are obligatory. Some steps can be replaced with other steps. For instance, M1 'Establishing a Territory' can be represented by S1 'Claiming-Centrality' and/or S2 'Making Topic Generalization'.

Table 1. CARS Model for RA Introductions (Swales, 1990, p. 141).

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

Although the CARS model has been used in much genre-based research, numerous studies also examine the linguistic realization. According to Pho (2013), the typical linguistic features in each move should be investigated after identifying the move based on its function.

In this study, the data were arranged and converted from PDF to text files. The samples were analyzed by using a 'top-down' approach which is essential to verify the move structure according to the Swales' (1990) model. This helped the researchers realize the basic function of the moves in the text.

The analysis was done manually by the first author and an expert coder, as the independent analyst, holding a Ph.D. in Applied Linguistics. The moves and steps were analyzed, coded, and tabulated. Moreover, after identifying the linguistic features, they were bolded and underlined to code the moves and steps.

At first, the moves and steps were identified based on their communicative functions in the text. Then, the PSs were divided into meaningful discoursal units or segments and classified. At that point, the realization for each segment was a sentence that was highlighted and coded. Each move and its related steps were color-coded. The identified segments were classified in a table for quantification purposes.

The Moves and Steps were coded as follows: M1 (S1, S2, S3); M2 (S1A, S1B, S1C, S1D); M3 (S1A, S1B, S2, S3). For instance, <M2S1D> which signifies Continuing a Tradition. In addition, each PS sample was numbered; for instance, PS1 means the problem statement sample 1. The coding of the moves and steps was conducted on the 30 samples. Finally, to minimize subjectivity, although the study had one coder for data analysis apart from the first author, an expert also verified the accuracy of the analysis.

4. RESULTS AND DISCUSSION

The results are reported in order of the research questions in this section.

4.1 Moves and Steps in the PS Samples

The PS samples were analyzed to address the first research question. Table 2 demonstrates the frequency (*f*) and percentage values of each move and step through qualitative analysis of communicative functions.

Table 2. Frequency of the moves and steps in PSS.

	Move 1			Move 2				Move 3	
	Step1	Step2	Step3	Step1A	Step1B	Step1C	Step1D	Step1A	Step1B
f	32	18	52	13	53	8	17	11	14
%	31	18	51	14	58	9	19	47	56
Total	102			91				25	

Note: Move/steps with percentage values <50% considered obligatory

The occurrence related to each move is shown in Table 2. M1 '*Establishing a Territory*' has the most frequency and the second most frequent move in the PSs is M2 '*Establishing a Niche*'. The remaining move is M3 '*Occupying the Niche*' as the optional move. Swales (1990) points out obligatory and optional moves. The obligatory move is a move or step that has a frequency of more than 50%. He has specified two steps as the obligatory steps of two moves: S3 'Reviewing items of Previous Research' in M1 and S1A *'Outlining Purposes'* in 'M3.

To identify the moves and steps, the coding was done based on communicative/functional categories regarding Swales' (1990) CARS model. Then, the texts were segmented and classified based on the linguistic realizations of each unit (Pho, 2013). This provided the description of discourse categories and text structure. One of the samples is shown below which presents segmentation and coding.

Sample 1:

*Derived mostly from the works of **Vygotsky (1978)**, two **major** learning theories –psycholinguistic theory and sociocultural theory– support collaboration in learning and claim that learning is a social activity.* **M1S1**
*Among these approaches include the notions of interaction hypothesis and ZPD which highlight the **importance** of collaboration as well as social interaction in learning. These movements brought about some new roles for teachers.***M1S2**
*They **needed to investigate** the best methods and techniques to incorporate into their classrooms the goal of which was improving autonomy, reflectivity, and critical thinking practices among learners (Vygotsky 1978; Brown, H. D., 2004).* **M2S1D**
*The efforts to improve classroom testing, also accompanied by other issues such as collaboration, shaped our current understanding of effective assessment, and still "the development of communicative performance-based assessment **continues to challenge** both assessment experts and language teachers" (Brown, 2004, p. 11).* **M2S1A**
*Regarding the notion of performance-based assessment, different studies (**Parti, 2002; Reinersten & Wells, 1993; Roskams, 1999; Stout, 1993; Twardy, 2005; Warren & Cheng, 2005**) have been **conducted** some new findings advocating the role of collaborative learning, peer feedback, self and peer assessment as well as other factors in improving students' speaking ability.* **M1S3**
The study of assessment with regard to different kinds of feedback will thus give pedagogical suggestions to instruction particularly in a process-oriented speaking class where students need to assess and revise their previous self-assessment or peer-assessment.

> *Thus, there is a **gap** having no idea about the best way of conducting feedback-based assessment in improving the oral performance of EFL learners in speaking classes and **a need** of conducting research to fill this **gap** is felt. **M2S1D** It seems **necessary to carry out some studies** investigating differences in the oral performance of learners. **M2S1D***
>
> *So, it will be the **goal** **of the present study to investigate** and compare the effects of peer feedback-based assessment, teacher feedback-based assessment, and self-feedback-based assessment on oral performance of EFL learners in the case of 14 Points for Public Speaking based on Yamashiro & Johnson, 1997 which have been modified to the current study (14 points are specified in chapter 3). **M3S1A** Also**, the aim** of this study includes learners' attitudes toward these different ways of feedback and assessment. **M3S1A***

As the analysis of this sample shows, the moves in Swales' (1990) model have emerged.

4.1.1 Move 1 (Establishing a territory)

Findings showed the percentage of occurrence of moves; M1 with the highest and both M2 and M3 and their steps with relatively lower occurrences. According to the results, most of the samples were included M1 and its three steps. This was in parallel with the results of Jalilifar et al.'s (2011) findings. This reveals that the writers were aware of indicating and establishing the territory of their studies. As Swales' (1990) model shows the beginning of introductions is usually with a move that establishes the general topic being (Samraj, 2008).

In M1, the author tries to show the presented topic is important or worth investigating. Swales (1990) explains that there are three strategies that authors use to establish the area of the research study: S1, S2, and S3. S1 introduces the topic of the study as useful, important, and worth investigating. The frequency of S1 (n=32) is near one-third of the total data which is contrary to previous studies (Jalilifar et al., 2011; Samraj, 2008). Table 2 shows that the occurrence of S1 is 31%. The occurrence of this step shows a positive outcome, but it is the opposite of Swales' (1990) statement that introductions often begin with this step since S3 has the highest frequency.

From another point of view, according to the results of the current study, the frequency of S1 is 31% which is less than 50%. This shows that this step does not have a frequent structure in the samples of this study. Thus, M1S1 is not seen as an obligatory step.

M1S2 with 18% frequency is on contrary to the Jalilifar et al.'s (2011) research finding which indicated a large percentage of the samples. The function of this step is to show the general research area (Geçıklı, 2013), however, the small number of this step supports this that it is not as important as the other steps.

The third step of M1 with 51% frequency is in line with Jalilifar et al.'s (2011) finding with 79 frequency. The high frequency of this step is also in line with Swales' claim on the significance of this step. According to Swales (1990), the importance of this step is for supporting M1S2 (Samraj, 2008). It also "demonstrates that the proposed research contributes to the overall body of knowledge and ensures intertextuality" (Levy & Ellis, 2006, p. 182, as cited in Jalilifar et al., 2011).

S3 with a frequency of 52 occurrences, further supports the idea of Swales (1990) as the crucial step in M1 which the authors must relate what has been found, done, or claimed with who has found it. In contrast to earlier findings (Jalilifar et al, 2011; Samraj, 2008), however, S3 has the highest frequency among three steps of M1 in this study. It can be claimed that S3 is an obligatory step of M1 which demonstrates the

importance of this step. Hence, the authors have a general introduction in M1 by S1, and/or S2, and/or S3. However, these three steps of M1 were reduced to one step by Swales in 2004. In Swales' (2004) CARS model, M1 has only one step. Swales (1990) has merged the two steps of M1 proposed in his earlier model.

4.1.2 Move 2 (Establishing a niche)

M2 includes one step which can be stated by one of the 4 options 'S1A, S1B, S1C, or S1D' (Swales, 1990). According to the literature of this study, the importance of the PS is for introducing an academic issue which is the main reason for conducting a study. The academic issue may emerge from previous studies, shortcomings, or deficiencies in the academic setting or real-world (Creswell, 2014). By considering an earlier analytical framework, called 'A problem-solution model of article introductions' by Zappen (1983), Swales (1990) claims that M1 is "coterminous with a goal and current capacity, M2 with problem and M3 with a solution of criteria of evaluation" (p. 142). In other words, M3 "delineates exactly what this article will accomplish in relation to M2, and gives the reader a sense of how the article will proceed" (Yasin & Qamariah, 2014, p. 39). S1A often follows step 3 of the first move. It presents an opposite viewpoint or weakness of previous research. As Table 2 shows, the occurrence of S1A is 13 with 14% has a small occurrence. This can be for various reasons. For instance, the writers may present their counter-claiming in the other parts of the thesis like the discussion section. Samraj (2008) claims that "discourse analysis shows that the specialists' notions of the structure of thesis introductions do not completely overlap with the Swalesian model and what is actually found in the texts" (p. 60). In addition, to take a closer look at M2 and related steps and with an assumption about writers' awareness to create M2, Swales (1990) has proposed only one step which can be presented in the form of counter-claiming or the other offered three steps. Hence, considering M2 and its four steps can make this hypothesis stronger.

The next step (S1B), has the highest occurrence among the other steps with 58% frequency. Although, it was supposed to find the result near to 100% regarding the concept of the PS and what has been stated about the feature of writing the PS section of the thesis in methodology books. On contrary, this matter can be compensated if the total percentage of M2 becomes greater than M1 and M3. S1B with a 58% percentage of occurrences is the obligatory step in M2.

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in society either identified by the student or those identified by other philosophers (Swales, 1990).

The last step of M2, S1D, contrary to imagination shows a relatively better result. S1D has an occurrence of 17 and includes 19% frequency in M2. As the findings show, the effort of this study was to identify all steps of the CARS model although, some researchers have omitted or added one or two steps or mixed both versions (Swales, 1990, 2004) in their analysis. According to the findings, the low percentage of M2 to M1 is opposite of Swales and Feak's (1994) emphasizing on M2 that it bridges the divide between M1 and M3 (what has been done and what the present study is about).

4.1.3 Move 3 (Occupying the niche)

The lowest occurrence was related to M3. S1B is the sole obligatory step of M3 with 56% occurrences that is in agreement with those obtained by Jalilifar et al. (2011) with 82%. The high occurrence of this step shows that writers employ it as an essential step to documenting research (Jalilifar et al., 2011). Samraj (2008) labeled this step as a crucial step of M3.

S1B with 56% shows relatively a positive result although its number of occurrences is small (14). According to Swales (1990), in S1B of M3, authors try to represent an alternative strategy used in S1A and explain the aim(s) of the current study which is going to set out to do. In fact, this step is typically the response(s) to 'what, how, who, where, or when'. Although, it might be supposed that this is compulsory to be mentioned in the introduction section and no necessary in the PS. This ambiguity assumption became clear regarding Swales' explanation that if the problem statement ends with an indication of how the problem might be solved, then this would probably constitute an M3. Jalilifar et al. (2011) state that "in some cases, these authors used a mixed title (Statement of the Problem and Statement of the Purposes)" for the PS section (p. 92). In their point of view, indicating the purposes may be considered as a strategy in M3 as an optional step.

The two last steps of M3 (S2 and S3) never occurred in any of the samples. For the occurrence of the M3S2 and M3S3, it can be suggested that they are not necessary to be present in the structure of the whole thesis in the PS. A similar conclusion may also be made for the second step of M3 (S2) is not necessary to present in the PS.

4.2 Rhetorical Structure of the Samples

As mentioned before, Swales (2004) explains 'Move' as a "discoursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse which aligned with a grammatical unit like a sentence" (p. 228). Also, he states that a move can be defined by a 'clause' in some sentences. He also points out "issues regarding 'cross-cultural and cross-linguistic similarities and differences in research rhetoric and contrastive rhetoric and rhetorical structures in genre analysis" (Swales, 2004, p. 229). The contrastive rhetoric represents the comparison of discourse structures across cultures and genres among five types of text organization (Connor, 1996, p. 15). The rhetoric structure of the English language is linear. Swales (1990) introduces linear, cyclic, anomalous, and embedded for the sequences of moves structures in his genre analysis book. The findings of the present study revealed four types of the rhetorical structure of move sequences.
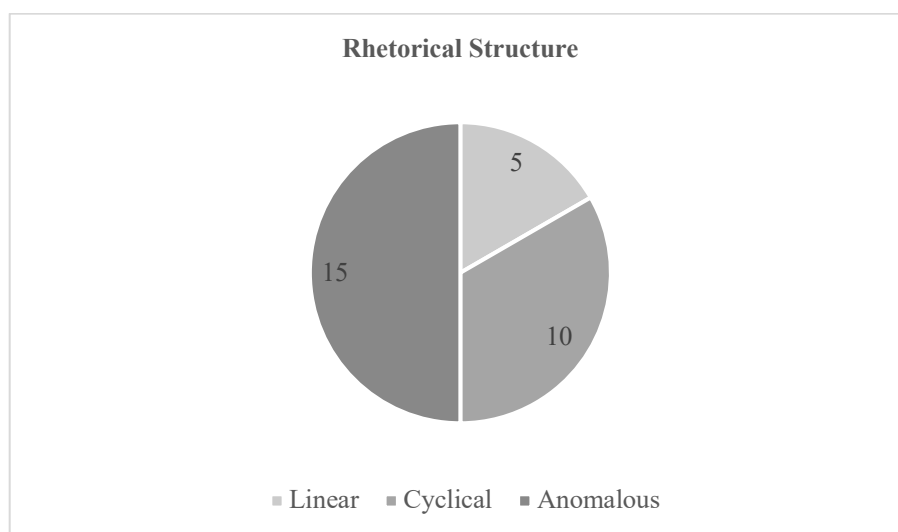
Figure 1. Writing rhetorical structure of the samples.

The findings in Figure 1 show only 5 out of the 30 samples had a linear rhetorical structure that ended with M3. Their rhetorical structure included M1, M2, and M3. Table 3 shows the outline structure of the PS section in one of the samples.

Table 3. Example for outline structure (Sample 20).

	Move-Step	Signals (Swales' Emphasises)
Para. 1	1-1	With the progression in economical globalization and in society, acquiring productive Skills (speaking and writing) in English as an international language is **essential** for most people for living in twenty-first century **(Wang, 2010).**
	1-2	Due to this fact, English as a compulsory required foreign language is taught from school to university levels in **most parts of world.**
Para. 2	2-1B	**Although,** the concept of competence in productive skills is promoted as one of the educational standards for most of the learners, most students **suffer** from some **difficulties** in using English to communicate especially in writing.
Para. 3	2-1B	For most learners, one of the **barriers** to writing performance in English is that they **lack** the ability to use appropriate grammar in their writing.
	1-3	**Andrews (2005), pointed out** that "one particular aspect of knowledge about language is knowledge about the grammar of sentence construction" (**Andrews, 2005, p.69).**
Para. 4	3-1A	Thus, **this study aims to examine** the role of written CF on journal writing in improving learners' grammatical accuracy.

According to Swales (1990), "the extent of this rhetorical work can often be seen among expert products" who have had an exercise in writing" (p. 157). But in this case, it cannot be true regarding the Iranian EFL postgraduate students' background without prior English medium academic experience.

In view of the results reported above, it can be stated that there are differences in the structural organization of the PSs as the samples of the present study. This appears to be an important finding in that the differences are not related to different disciplines or sub-disciplines. These differences are related to the writers such as their first language, background, and field of the study. This indicates that Iranian EFL postgraduate students do not follow a definite structure to write this part of their

research projects. Hence, it seems that "variation in the structural organization of texts cannot be explained in terms of an interdisciplinary or a sub-disciplinary analysis" (Ozturk, 2007, p. 32).

The findings collected from analyzing the rhetorical structure of the PSs written by MA students revealed a great diversity including a) their lengths were different, and b) they lacked any perceptible obligatory moves and fixed sequence of moves. On the other hand, this study produced results which corroborate the findings of many previous studies in this field (e.g., Ozturk, 2007). The findings of the current study are also consistent with those of Ozturk' (2007) who found there is "a greater deviation from the move structure proposed by the CARS model" (p. 30). But on the contrary, regarding the small number of the samples (n=5) with linear move structure cannot support the previous research (e.g. Crookes, 1986; Ozturk, 2007).

Crookes (1986) in the analysis of the introduction section based on Swales' (1981) prior model, suggested that the "pattern proposed by Swales occurs in shorter RA introductions" (p. 65). Furthermore, the results of our study did not demonstrate that the researchers in second language acquisition research tend to employ the move structure M1-M2-M3" as reported by Ozturk (2007, p. 30). The lack of a common rhetorical structure in all samples corroborated the ideas of Samraj (2008), who recommended that there is little attention to this in MA programs, in comparison to Ph.D. programs. While the rhetorical structure of each part of the thesis writing is important for its discourse community, in which every sentence or segment used is a representation of a specific message or communicative purpose in the form of communicative events, a particular rhetorical framework must be followed. This can facilitate writing for scholars, encouraging them to carry out an accurate rhetorical structure of writing. If so, all scholars as the producers of texts and genres throughout the world will then belong to a discourse community that a "genre may require at least one move from a set of core moves" (Samraj & Gawron, 2015, p. 12). Intrinsically, something should hold together the members of this discourse community: not "a shared list of defining features" but rather an "inter-relationship of a somewhat looser kind" (Swales, 1990, p. 49).

There were some similarities between the findings of the present study and Jalilifar et al.'s (2011) findings (e.g., presenting M1 and related steps in most of the samples). This similarity shows the importance of this move for the writers of these samples. According to Swales (1990), the occurrence of one move or step more than 50% is named obligatory that the findings showed the M1S1 as an obligatory one. The frequency of S1 was more than half of the total data is contrary to previous studies (Jalilifar et al., 2011; Samraj, 2008). Both S1 and S3 of M1 had high occurrence. The highest occurrence of S3 often supports topic generalization (Samraj, 2008). On the other hand, S3 with a frequency of 26 occurrences, acknowledges Swales' (1990) claim on the significance of this step.

It is interesting to note that in most samples, presenting M1 rather than M2 shows the lack of the writers' knowledge. The stating problem as a niche existence in previous studies or even in the real-world (M2) is the most important characteristic of the PS mentioned in research method books (e.g. Creswell, 2012; Kumar, 2010). Swales (1990) states that writers try to persuade readers that the research was carried out to add something to the exciting pool of knowledge in M2.

What is surprising is that the results of M2 in this study were quite the reverse of Jalilifar et al.'s (2011) findings. Their results showed that the most common step

was stating the problem, with 93 occurrences followed by indicating a gap with 88 occurrences, both as constitutive rhetorical structures of the second Move. While the results of the present study showed the high occurrences were related to M1 (n=102).

The findings showed that there was not a common rhetorical structure in the PSs sections of the samples of the current study which shows a lack and deficiency in creating this section rhetorically by the Iranian EFL MA postgraduate students. The finding also supports Khodabandeh's (2014) statement that there is no explicit rhetorical structure to learn how to write an appropriate PS in the Iranian Educational curriculum. This lack of explicit rhetorical structure increases the differences among produced genres. According to Swales (1990), the significant differences among genres lead to the need for genre analysis as a "theoretical activity distinguishable from discourse analysis" (p. 61). Incidentally, Hyland (2007b) suggests genre-based writing courses in an academic setting empower both teachers and students. It can enhance students' ability to convey various genres and suggests to teachers a more effective way of finding the students' difficulties in this regard.

There were important differences in the rhetorical organization of the PSs analyzed although the moves and steps were identified using the CARS model. The most striking difference is that one or two moves were missing in six samples. Table 4 illustrates the outline structure of one of these samples.

Table 4. Example for outline structure (Sample 29).

	Move-Step	Signals (Swales' Emphasises)
Para. 1	3-1A	The present study **<u>aims</u>** at determining the impact of audio materials vs. audio-visual materials on …
Para. 2	2-1B	Furthermore, there is **a <u>general</u> consensus** among teaching practitioners **(Colon, 1988; Parry, Meredith, and R. Alan, 1988) that** audio-visual aids facilitate understanding of the learners **<u>rather than</u>** the audio aids.
Para. 3	3-1A	…, the researcher set forth two main **<u>objectives</u>** in designing this study, namely: i) **to investigate** and compare the impact of audio materials vs. audio-…

The embedded moves were also defined with a small number (n=4). According to Swales (1990), sometimes, the function and structure of one unit or segment may show more than one move in the move analysis process as the 'embedded move'. It means, one move may be embedded in the other one. In this case, the move with more dominant linguistic features will be coded. 4 embedded moves represented in the findings of this study that one of them is as follows:

Sample 2:

Many learners keep complaining that not long after they have memorized a word, it evades and based on what Allen (1983) says, even where teachers devote much time to vocabulary teaching, the results are often disappointing. M1S2/M2S1B

It can be claimed that the above example is M1S2 through the words 'Many learners' which makes it more highlighted. On the other hand, the negative words like 'not' and 'often disappointing' can be coded M2S1B and can be stated that M2S1B is embedded in M1S2.

M2 as the most important move in the PS was missing in two of the samples. This destructively influences the instruction of the texts and shows the writer's lack of assumption of knowledge. The outline structure of the samples is shown in Table 5.

Table 5. Example of outline structure (Sample 7).

	Move-Step	Signals (Swales' Emphasises)
Para. 1	1-2	It is a **widely** **held** belief that language is culture and culture is language which is a …
	1-2	It is also **believed** that one could not possibly appreciate the nuances of languages in the absence …
	1-2	Some even **believe** that speaking the language is an indispensable part of getting familiar with a foreign culture.
	1-1	Thus, to language learners, appreciation and understanding the culture of the target language is of paramount **importance**.
Para.2	-	-
Para.3	-	-
Para. 4	3-1A	What has been sought to achieve in this research is a program **aimed** at promotion of cultural understanding through teaching proverbs.

A lacking or missing Move 2 can negatively affect the rhetorical structure of the PS as is often attributed to the writer's lack of content knowledge or information about the adequate structure of the texts.

4.3 Linguistic Features Employed in the PSs

The samples of the present study were analyzed to extract the linguistic features (Pho, 2013) as the signals to identify moves and steps (Swales, 1990). According to Swales (1990), in the S1, the authors present "appeals to the discourse community whereby members are asked to accept that the research about to be reported is part of a lively, significant or well-established research area" (p. 144).

The words and phrases such as 'necessary', 'important', and so on were the linguistic features to signal M1S1. They emphasize the need for doing or starting something. The word like 'necessary' as an adjective refers to Type 12 of Feature 5 or the phrase like 'attracted increasing interest' refers to Type 9 (agentless passive) of Feature 4 (voice).

The linguistic features like 'widely held', 'quite obvious', and 'emphasize' were signals to identify M1S2. As the examples for M1S3 indicate, the authors typically refer to former studies to bring evidence to prove the claimed problem by reporting verbs. Therefore, the names of the authors of previous studies and reporting verbs function as the signals for this step.

Based on the findings, the first Step (S1A) of M2 was signaled by linguistic features such as 'reminds a challenge', 'rarely, and 'difficulty'. Counter-claiming shows the reader that the writers are able to anticipate critical thinking skills. This motivates the readers to continue reading (Swales, 2004). The words like 'however', 'fail', and 'attention' were the signals to identify S1B. The next step (S1C) was signaled by expressions like, 'question is to what extent' 'how', and 'remain unclear'. Lastly, the final step (S1D) was signaled by expressions such as 'have to understand, 'needs to do', and 'needed to evaluate'.

The first step of M3 (S1A) is signed by the words like 'goal' and 'purpose'. These words show the main objective of a study. The Second Step (S1B) is indicated by lexical items such as 'attempted' and 'sets out'. The writers show their own aims of conducting the study.

The linguistic features had a crucial role to distinguish the moves and steps. The ones related to Swales' (1990) move analysis were highlighted and bolded. After defining Pho's (2013) linguistic features and their roles to distinguish the M and S, some examples are summarized in Table 6.

Table 6. Linguistic features associated with moves and steps.

M&S	Example	Feature	Type
M1S1	Nowadays textbooks play a <u>vital</u> role ….	5. stance adjectives, adverbs, & nouns	13: epistemic stance words
M1S2	It is a <u>widely</u> held belief that …	5. stance adjectives, adverbs, & nouns	12: attitudinal stance words
M1S3	Author (YEAR) <u>claimed</u> that ….	6. that-complement clauses or: 7: controlling word types	15: that-complement clauses controlled by verbs or: 20: negative strong
M2 S1A	it remains a <u>challenge</u> in evaluating	5. stance adjectives, adverbs & nouns	13: epistemic stance words
M2 S1B	<u>… but few</u> studies have been conducted	5. stance adjectives, adverbs& nouns	12: attitudinal stance words
M2 S1C	The <u>question</u> arises, …	5. stance adjectives, adverbs, & nouns	13: epistemic stance words
M2 S1D	So, culture learning is <u>necessary</u> for….	5. stance adjectives, adverbs, & nouns	13: epistemic stance words
M3 S1A	So, it will be the <u>goal</u> of the present study	5. stance adjectives, adverbs, & nouns	13: epistemic stance words
M3 S1B	<u>This study</u> is an <u>attempt</u> …	1. self-reference words	1: first person pronouns and other self-reference worth

As it is presented in Table 6, each linguistic feature belonged to one feature and related types that in general, confirms the relationship between linguistic features and the CARS model. Particularly, in terms of the "linguistic exponents used to express moves and their associated steps" (Swales, 1990, p. 166). For instance, the word 'vital' as an adjective stance is categorized as the Feature 5 'stance adjectives, adverbs, and nouns' and Type 13 'epistemic stance words' which the concept of this word emphasizes the importance of the topic of the study and it is a signal to identify M1S1. Although, there is a weakness in Pho's (2013) classification of the linguistic features. It is related to some linguistic features which may belong to more than one Feature. For example, as Table 3 shows, the word 'claim' can be Type 15: that-complement clauses controlled by verbs or Type 20: 'negative strong words of Features 6 that-complement clauses or 7 controlling word types.

As mentioned before, the linguistic features had a crucial role to distinguish the moves and steps. The linguistic features were the words such as verbs, nouns, and adjectives as the signals. These words facilitated realizing and justifying the moves and steps according to Pho's (2013) classification of the linguistic features. The ones related to Swales' (1990) move analysis were highlighted and bolded. In summary, some words like 'Nowadays' can be a signal to identify M1. That-complement clauses along with reporting verbs played an important role to identify M1S3. The words such as 'lack, inefficiency, few' with a negative concept whether in the form of verbs,

nouns, adjectives, or adverbs were signal to identify the gap or niche. Finally, the words like 'aim, purpose, or objective' were signals to identify M3.

5.   CONCLUSION

The study contributes to the theory in this research area. The results of the current study provided evidence for the usefulness of the CARS model in identifying the moves and steps of the PS section. The results clearly showed that most samples were not structured well according to the rhetorical structure of the CARS model.

It should, however, be noted that M3S2 and M3S3 were not found in any of the PS samples. According to the PS characteristic, only S1A and S1B were explored in analyzing the rhetorical structure of the PSs and the two last steps (S2 and S3) were not explored for being irrelevant. However, further studies are required to prove this claim. Therefore, this study has important implications for future practice. A well-structured PS investigation as a genre in the thesis is easier to explain than an ill-structured one. In consequence, teaching an explicit framework of discourse raises the novices' skills to achieve an expert-level fluency in the genre as part of the disciplinary and discourse community, and to use their generic knowledge. The CARS model appears to be the most far-reaching model for analyzing the rhetorical structure of texts. Its prior adaptation has been effectively used by specialists on presentations in various orders.

Increasing postgraduate students' awareness about the rhetorical structure of each part of the thesis like PS, would make writing this part simpler. The studies reveal the deficiencies of the rhetorical structure in various genre performances. The deficiencies and shortcomings demand improvement of students' knowledge in this regard. The students and researchers should know how to construct different genres. Thus, there is a need to represent an accurate framework for writing any part of the thesis particularly PS.

In this regard, a particular framework (Yasin & Qamariah, 2014) should be provided for writing each part of the thesis or research projects that "every writing situation requires writers to perform in unique ways, to dance without knowing all the steps, to improvise their own" (Devitt, 2015, p. 8), That is, the research findings reveal both competence and performance in genre analysis that includes both rhetoric and linguistics, for the various disciplines using CARS model, that genres are grounded in the shared communicative purposes and realized in particular linguistic utterances.

It would also be interesting to train postgraduate students on the CARS model to investigate its effect on raising the scholars' knowledge of the significant characteristics of a PS and their final write-up of PS. Overall, the difference in move pattern variations of these students may reveal their difficulties with the rhetorical structure of the PS as expected in the move structures (Tamela, 2020) were realized linguistically in the Iranian EFL students' written text.

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