

Genre analysis of literature research article abstracts: A cross-linguistic, cross-cultural study

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Abstract

Following Swales's (1981) works on genre analysis, studies on different sections of Research Articles (RAs) in various languages and fields abound; however, only scant attention has been directed toward abstracts written in Persian, and in the field of literature. Moreover, claims made by Lores (2004) regarding the correspondence of two types of abstracts with different models, and by Martin (2004) concerning the influence of sociocultural factors on the way writers write needed evaluation. To fill this gap, 90 English and Persian abstracts written in the field of literature, by English and Persian native speakers, were analyzed based on the IMRD (Introduction, Method, Results, and Discussion) and CARS (Create A Research Space) models. The results demonstrated that literature RA writers generally focus on Introduction and Results, neglect Method and Discussion, and do not mention the niche in previous related work; secondly, although none of the models were efficient, literature abstracts generally matched CARS more than IMRD; and thirdly, abstracts written by Persian native speakers had minor deviations from both the Persian and the international norms, and exhibited a standard of their own. The present study also discusses steps which the models fail to predict. In addition, it offers a number of pedagogical implications for TEFL, especially for the writing skill.

Keywords: IMRD, CARS, literature, research articles, moves, steps

Introduction

Genre analysis has been in the limelight for more than two decades. The increasing interest in this discipline is motivated by a need to supply models of academic and scientific texts for the students, so that they can produce those texts appropriately. Likewise, scholars and scientists need to communicate their ideas and findings using publications, and it requires them to have a full grasp of the discourse community's conventions (Martin, 2003). English has

long been established as the language of scientific communication (Flowerdew & Dudley-Evans, 2002); it is a norm for journals published in any other language to require the authors to provide English abstracts for their articles (Lores, 2004). Unfortunately, lack of knowledge of text structures and audience expectations has caused non-native writers to be relatively unsuccessful in the international community (Connor, as cited in Martin, 2003).

Since Swales's (1981) work *RA Introduction* section, there have been numerous studies on different sections of the RA, such as Brett (1994) and Williams (1999) on the Results; Hopkins and Dudley-Evans (1988), Holmes (1997) and Fallahi and Erzi (2003) on the Discussion section.

The abstract is one of the most important sections of the RA; it can determine the acceptance or rejection of an article for conferences, and its selection by readers. Nevertheless, as Swales (1990) also maintains, the abstract, as a genre, has received insufficient attention from the researchers.

A number of genre analysis studies have been conducted on RA abstracts in English (Anderson & Maclean, 1997; Cross & Oppenheim, 2006; Duncan, 2008; Lores, 2004; Salager-Meyer, 1991; Stotesbury, 2003) and other languages such as German (Busch-Lauer, 1995) and Spanish (Martin, 2003); yet it seems that abstracts in the Persian language have been left unexplored. Moreover, one of the fields highly disregarded by genre scholars is literature. In fact, only two studies (Afshari, 2005; Stotesbury, 2003) relating to literature were known to the researchers.

Lores (2004) hypothesized that, despite the general belief that all abstracts follow the IMRD structure, there are two types of abstracts which she named "informative" and "indicative", and suggested that while the former conformed to IMRD, the latter corresponded with CARS model. However, these models have never been applied to

literature abstracts to see whether they can thoroughly represent their generic structure. The only report is the study conducted by Stotesbury (2003) which indicated a "different rhetorical structure and style" (p. 330) in literature abstracts, but the degree of difference was not the focus of the study.

In addition, Martin (2003) links the deviations he found in Spanish abstracts from the international standards to "the relationship between the writer and the discourse community s/he addresses, which is different both in terms of numbers and expectations" (p. 42). Similarly, Tahririan and Jalilifar (2004) speculate that "sociocultural factors condition the way academic writers write abstracts" (p. 140). In the case of Persian writers writing in English, there are studies (Afshari, 2005; Tahririan & Jalilifar, 2004) revealing some deviations from the international standards, but since no study has investigated the norms and conventions of Persian writing, these deviations can never be confidently linked to cultural differences.

The present study aimed at filling the abovementioned gaps in the literature by comparing the generic standards of Persian and international communities, and by discovering to which community the Persian-speaking writers writing in English belong. Besides, the predictive value of CARS and IMRD models was examined to evaluate their appropriateness for literature abstracts.

Background

Genre was first introduced in the area of ESP in the 1980s. Various influences on Genre Analysis have been listed by scholars, namely the examination of children's writings in Australia, composition studies and *new rhetoric* in North America, and also Miller's (as cited in Paltridge, 2007, p. 931) notion of "genre as social action".

Definition of genre

Defining genre is a "fuzzy" task (Swales, 1990). Traditionally, the word indicated various kinds of literary and artistic works; however, its use was extended by linguists to cover "classes of language use and communication in all areas of life" (Allison, 1999, p. 144).

For Swales (1990, p. 58), a genre "comprises a class of communicative events, the members of which share some set of communicative purposes." For him, particular genres share similarities in their structure, style, content, intended audience, and rhetorical movement.

Elements in genre

Genres, as perceived in linguistic approaches, are characterized in terms of communicative functions they serve, and can be analyzed into "generic structures" (Flowerdew & Dudley-Evans, 2002) or obligatory and optional elements which comprise these functions. Swales (1990) classified these elements as follows:

1. Moves

Moves represent the writer's social purpose and include *steps*. Move is defined by

Nwogu (1997) as "a text segment made up of a bundle of linguistic features . . . which give the segment a uniform orientation and signal the content of discourse in it" (p. 122).

2. Steps

Steps are optional textual elements, which may or may not exist in any specific text.

Pedagogic potentials of genre analysis

Genre Analysis is known for its various pedagogic implications. Kay and Dudley-Evans (1998) asserted that genre is a "very powerful pedagogic tool" because it defines the kinds of discourse the students need to be able to produce, and also—considering its social context and purpose—it can explain "why a discourse is the way it is" (p. 310).

Poole (2002), too, considered genre analysis to be the "best-realized link between discourse analysis and contemporary L2 pedagogy" (p. 76) because it aids writing instructors via yielding analyses of different academic texts, and also helps them provide appropriate discourse awareness for their students.

Cross-cultural and cross-linguistic studies involving Persian

The number of cross-cultural genre studies of different sections of RA written by Persian native speakers is relatively small (Atai & Falah, 2005; Atai & Sadr, 2006; Bandary, 1999; Keshavarz, Ataei, & Barzegar, 2007), and the researchers have encountered only one instance of such studies focusing on abstracts: Tahririan and

Jalilifar (2004) conducted a study on Applied Linguistics abstracts written by native speakers of Persian, English and other languages, and speculated that the differences might be linked to first language interference and sociocultural factors.

Thus far, the researchers have come across only one cross-linguistic genre study involving Persian RAs: Falahi Moghimi and Mobasher (2007) studied the Introduction section of 60 English and 60 Persian Mechanical Engineering RAs, and found a significant difference between the frequencies of steps of these two categories. No study on Persian abstracts has been conducted.

This study

To fill the abovementioned gaps in the literature, assess the predictive power of the existing models, and investigate the cross-linguistic, cross-cultural similarities and differences of RA abstracts in the field of literature, two questions were addressed in the present study:

- 1) Is there any association between the frequency of moves used in the corpus, i.e. abstract sections of Persian research articles written by Persian native speakers (PPs), English articles written by Persian native speakers (EPs), and English articles written by English native speakers (EEs) in the field of literature, and the models for abstract (IMRD and CARS)?
- 2) Is the frequency of the moves incorporated into the abstracts of EPs

the same as those of the PPs or those of the EEs?

Corpus

A total of 90 abstracts were employed in this study. The corpus in Persian consisted of 30 literature abstracts written by Persian native speakers and published in Iranian academic journals. Ten journals were randomly selected, and three articles were chosen from each.

The English corpus was composed of two groups. The first group included 30 literature abstracts, written by Persian native speakers, and published in Iranian journals. Four journals were chosen; nine articles were picked out from the first journal; another nine from the second; eight from the third, and four from the fourth.

The second group consisted of 30 abstracts in the discipline of literature written by English native speakers and published in international ISI journals. Ten journals were decided upon, and three articles were extracted from each.

All the journals were available online, and the articles were chosen from the most recent issues of the journals. The articles were all checked in terms of the nationality of their authors and those written by Persian and English native speakers were selected. Table 1 below presents a summary of the corpus characteristics.

Table 1: Summary of corpus characteristics

Language of abstracts	Writers' first language	Number of abstracts	Number of journals
Persian	Persian	30	10
English	Persian	30	4
English	English	30	10

Procedure

The analysis of the data was carried out in two main stages. The IMRD model for informative abstracts and Swales's (2004) CARS model for Introduction section which applies to indicative abstracts as mentioned by Lores (2004) were used as the basis of analysis.

In the first stage, the abstracts were scanned for the presence of Introduction, Method, Results, and Discussion moves, following Lores's definition of each (Table 2).

Table 2: Lores's (2004) elaboration on IMRD

Section 1 (Introduction)	This may outline the author's purpose or objective, the goals of the research or the problem the authors wishes to tackle.
Section 2 (Method)	Here the author indicates the way the problem has been studied or the goal set out: this might include the data used and the methodology followed.
Section 3 (Results)	In this section a summary of the general findings appears. This move might include an interpretation of the results,
Section 4 (Discussion)	some implication for further research or applications of the findings.

In the second stage, the abstracts were checked against Swales's (2004) CARS model (Table 3) to test its predictive value for literature abstracts.

Table 3: Swales's (2004) CARS model for introduction section

I1	Establishing Research Territory
I1s1	<i>Claiming centrality and/or Making topic generalisations</i>
I1s2	<i>Reviewing items of previous research</i>
I1s3	
I2	Establishing a niche
I2s1A	<i>Indicating a gap</i>
I2s1B	<i>Adding to what is known</i>
I2s2	<i>Presenting positive justification</i>
I3	Presenting Present Research
I3s1	<i>Announcing present research purposively/descriptively</i>
I3s2	<i>Presenting research questions/hypotheses</i>
I3s3	<i>Definitional clarification</i>
I3s4	<i>Summarising methods</i>
I3s5	<i>Announcing principle outcomes</i>
I3s6	<i>Stating the value of present paper</i>
I3s7	<i>Outlining structure of paper</i>

It is to be noted that each of the I, M, R and D sections corresponds to the following models, respectively: Swales's (2004) CARS model for Introduction, Lim's (2006) for Method, Brett's (1994) for Results, and Hopkins and Dudley-Evans's (1988) model for Discussion. These models were later utilized in a step analysis to find out if any steps existed in the literature abstracts not predicted by the models.

Sample analysis

An instance of the move analysis of an English abstract written by an English native speaker will be presented below.

In the first stage, the abstract was inspected to find out whether it manifested the four moves of I, M, R, and D and was, thus, an “informative” abstract. It was found that all four moves existed in it:

1 (Introduction)

This essay reassesses James Fenimore Cooper's literary relationship to Walter Scott...

2 (Method)

... by examining the depiction of Scots in The Last of the Mohicans (1826) and The Prairie (1827).

3 (Results)

Read as companion texts, these novels represent the imperial migrations of Scots as a cause of Native Americans' unfortunate, but for Cooper seemingly inevitable, eradication. They also trace the development of an American identity that incorporates feudal chivalry and savage fortitude and that is formed through cultural appropriation rather than racial mixing. The Last of the Mohicans' Scottish protagonist, Duncan Heyward, learns to survive in the northeastern wilderness by adopting the Mohicans' savage self-control as a complement to his own feudal chivalry; in turn, The Prairie's Paul Hover equips himself for the challenges of westward expansion by adopting both the remnants of this chivalry and the exilic adaptability and colonial striving that Cooper accords to Scots

4 (Discussion)

I suggest that the cultural appropriation through which Heyward and Hover achieve an American identity that incorporates Scottish chivalry and savage self-command offers a model for the literary relationship between Cooper's and Scott's historical romances. The Leather stocking Tales borrow selectively from the Waverely Novels, rejecting their valorization of feudal chivalry while incorporating their representation of cultural appropriation as a mechanism of teleological social development.

The same abstract was then matched with CARS to see if it was similar to an “indicative” abstract. It showed one move: I3 (Presenting Present Research).

Results

The first step to answer the questions was to analyze the abstracts and note all occurrences of moves based on IMRD and CARS models.

After the first stage of analysis and in order to achieve a better understanding of the nature of literature abstracts, and also to assess the appropriateness of the two models, the researchers matched the corpus with the models once more to identify the *steps* as well. During this stage, a number of new steps were discovered which will be discussed in detail.

Question No. 1 The first question was an attempt to analyze the abstracts using two models: IMRD and CARS.

Analysis based on IMRD moves
To answer the first part of question number 1, i.e. the existence of any association between the frequency of moves used by the three groups based on IMRD, the abstracts were subjected to a move analysis to check

the existence of the moves I, M, R and D. The results are summarized in Table 4 below. (The percentages have been rounded up and Critical χ^2 for df of 2 is 5.99.)

Table 4: Frequency (percentage) and Chi-Square results for the association between the groups and IMRD moves

	I	M	R	D
PP	30 (100%)	11 (37%)	12 (40%)	5 (17%)
EP	30 (100%)	15 (50%)	23 (77%)	5 (17%)
EE	29 (97%)	15 (50%)	23 (77%)	9 (30%)
χ^2	.033	27.03*	5.06	56.36*

As the table suggests, the three groups' use of the I and R sections is close to the prediction made by the model, i.e. the three groups follow the IMRD model in their incorporation of Introduction and Results. Nevertheless, all groups make use of the M and D sections significantly less than the model predicts.

Concerning the *sequence* of moves, only 13% of the abstracts manifested the I-M-R-D sequence; the most frequent sequences were I (12 PPs) and I-R (7 EPs and 5 EEs).

Analysis based on CARS moves

To answer the second part of question number 1, i.e. the existence of any association between the frequency of moves used in the three groups based on CARS, the abstracts were scanned for the existence of the CARS moves. The results have been summarized in Table 5 below.

Table 5: Frequency (Percentage) and Chi-Square results for the association between the groups and the moves based on CARS

	I1	I2	I3
PP	29 (97%)	4 (13%)	29 (97%)
EP	23 (77%)	11 (37%)	29 (97%)
EE	27 (90%)	3 (10%)	30 (100%)
χ^2	1.97	58.86*	.07

As the table shows, the three groups incorporate I1 and I3 into their abstracts as frequently as the model predicts, but the use of I2 has been far less than the prediction of the model.

In respect to *sequences*, 33% of the abstracts showed I1-I2-I3 sequence (2 PPs, 2 EPs, and 6 EEs); the most frequent move sequence was I1-I3 (25 PPs, 18 EPs, and 11 EEs).

Step analysis

In order to further elucidate the nature of literature abstracts and also the predictive power of the models, the corpus was subjected to a deeper analysis which identified the constituent *steps* as well. Several points were revealed after this stage of analysis.

1. Four new steps, not predicted by the models, were discovered in the corpus. The researchers named them "Solution", "Counter-claiming", "Significance" and "Implications", and they existed in two (EP and EE), three (EP and EE), two (PP and EP) and five (PP and EP) abstracts respectively. (It is worth noting that the step "Counter-claiming" had previously been considered in Swales's 1990 version of CARS, yet removed from the 2004 version concerned in this study.) Examples of these new steps are included in Appendix A.

2. There was a shortcoming in Swales's (2004) CARS model regarding the first two steps, i.e. I1s1 "Claiming Centrality" and I1s2 "Making Topic Generalizations". Swales (1990) defines the function of the former as follows: "centrality claims are 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). Regarding the latter, he writes: "Step 2. . . represents a more neutral kind of general statement than Step 1" (p. 146).

The difference between these two steps was sometimes clear, as in the following example chosen from the corpus:

(I1s1) *Scholars have long been fascinated with the performance of Richard II on the eve of the Essex "rising"—an episode where the interface between drama and politics is particularly broad and responsive. . . .*

(I1s2) *The incident is intriguing because we only know about it from the chance survival of three newsletters reporting that, in early August 1628, a performance of Shakespeare's play Henry VIII was "bespoken of purpose" at the Globe by the duke of Buckingham.*

Nonetheless, in eight cases this dichotomy did not seem to be efficient in describing the steps. For instance, in the next case taken from the corpus, the two opening steps cannot be named I1s1 and I1s2.

Step1: *In the text-based disciplines, psychoanalysis and Marxism have had a major influence on how we read,*

Step2: *and this has been expressed most consistently in the practice of symptomatic reading, a mode of interpretation that*

assumes that a text's truest meaning lies in what it does not say, describes textual surfaces as superfluous, and seeks to unmask hidden meanings. For symptomatic readers, texts possess meanings that are veiled, latent, all but absent if it were not for their irrepressible and recurring symptoms.

Here, the difference is not related to the persuasive or neutral tone of the writer, but is more of a "general" versus "specific" *background information*, which is not captured by Swales's (2004) I1s1-I1s2 dichotomy. It is worth mentioning that this difference had been noted in Dudley-Evans's 1989 Introduction model (as cited in Bandary, 1999, p. 55) via these three moves: "Introducing the field", "Introducing the general topic (within the field)" and "Introducing the particular topic (within the general topic)".

3. There were six cases (all within the PP group) where one step was confined within the boundaries of another step. In other words, one step subsumed another step. This phenomenon was exclusive to the Introduction section where the I3s1 step contained either an I2s2 or an I3s4 step when matched with CARS model, or their corresponding Method steps when matched with IMRD. Nevertheless, these cases were all counted as I3s1 steps while doing the statistical analyses.

Question No. 2

The second question explores the similarities between the groups. The purpose was to see whether the patterns utilized in abstracts written in English by Persian writers were similar to those in abstracts written in Persian by Persian writers, or to the patterns employed in abstracts written in English by English writers. Question number 1 had delved into the comparison of the abstracts with the model; this time,

however, the groups were compared with one another. Thus, the frequencies were calculated from the data, not based on the models.

Analysis based on IMRD

The frequency of occurrence of IMRD moves in the three groups were counted and compared, and the next table summarizes the results.

Table 6: Frequency (Percentage) and Chi-Square results for the association between the groups based on IMRD

	I	M	R	D
PP	30 (100%)	11 (37%)	12 (40%)	5 (17%)
EP	30 (100%)	15 (50%)	23 (77%)	5 (17%)
EE	29 (97%)	15 (50%)	23 (77%)	9 (30%)
χ^2	.022	.78	4.172	1.68

With regard to Table 6 above, it can be concluded that there is no difference among the groups in the incorporation of the IMRD moves into their abstracts. All groups employed I almost all the time but D to a low degree, but there are differences in the extent to which each group employs R and D and M.

Analysis based on CARS

Table 7 below presents the results for the frequency of occurrence of CARS moves. As can be seen, the frequency of occurrence of the I1 and I3 moves is equally high across the three groups. Respecting move I2, the EP group is different from PPs and EEs in that it uses I2 significantly more than the other groups. Therefore, one can conclude that the three groups are similar to one another except for I2 move, where EPs are significantly different from the other two groups.

Table 7: Frequency (Percentage) and Chi-Square results for the association between the groups based on CARS

	I1	I2	I3
PP	29 (97%)	4 (13%)	29 (97%)
EP	23 (77%)	11 (37%)	29 (97%)
EE	27 (90%)	3 (10%)	30 (100%)
	.70	6.51*	.021

Discussion

This study had three major aims:

- 1) evaluating Lores's (2004) claim that different types of abstracts correspond with different models;
- 2) probing into the generic structures of literature RA abstracts; and
- 3) checking if Persian scholars are under the influence of Persian culture and/or community expectations regarding RA genres when they write in English.

In so doing, a number of questions were raised. To answer these questions a corpus of 90 literature RA abstracts written in English and Persian by English and Persian native speakers were subjected to move analysis.

The first question to deal with in the present study was whether there is any association between the frequency of moves in the abstracts and the IMRD and CARS models. The results for the match with the IMRD model illustrated that the abstracts follow the model only in their Introduction and

Results sections. Only 13% of the abstracts had the I-M-R-D pattern.

The results for the match against the CARS model revealed that the corpus follows the model in the use of I1 (Establishing Research Territory) and I3 (Presenting Present Research) moves, but does not include I2 (Establishing a Niche). Also, 33% of the abstracts had the I1-I2-I3 move sequence.

Thus, it can be concluded from the results that none of the models is able to describe the corpus reliably. However, CARS seems to be a better model for this field than IMRD since (a) two out of its three moves are incorporated into the abstracts, and (b) it predicts the move sequence of abstracts more accurately than IMRD does.

In regard to the first aim, one may thus be able to claim that in line with Lores's (2004) idea, some abstracts (here, literature abstracts) tend to follow CARS model and not the IMRD model and are, in her words, of the "indicative" type, not "informative." Still, even CARS is not a strong predictor for these abstracts.

As for the second aim, i.e., comprehending the nature of literature RA abstracts, one can argue that the writers tend to focus on Introduction and Results, yet neglect Method and, to a greater extent, Discussion. Also, they do not generally mention the niche in the previous works which led them to carry out the study.

The second question of this study dealt with the similarities between the groups. The focus here is on the English abstracts written by Persian native speakers (EPs), and to find out which group they are more similar to, the EE or the PP group.

Concerning the IMRD model, the three groups were similar to one another. Respecting CARS model, on the other hand, a discrepancy was observed: the EP group used I2 move significantly more than both EEs and PPs, and was – surprisingly – different from the other two. In other words, literature abstracts written by Persian native speakers are not entirely under the influence of either Persian or English communities, but define a standard of their own.

The third aim of the study is thus gained: the argument advanced by Martin (2003) and Tahririan and Jalilifar (2004) about the influence of sociocultural factors on the way academicians write abstracts is corroborated; however, this influence is not necessarily exhibited in terms of similarity to any other community rather than their own. In other words, one should be cautious in interpreting the abovementioned hypothesis as predictor of similarities between communities sharing the same native language.

Theoretical implications

The present study aimed at, among others, evaluating Lores's (2004) claim that different types of abstracts conformed to different models. She made a distinction between "informative" and "indicative" abstracts, and held that the former

corresponded with IMRD while the latter with CARS model. The findings of this study corroborate this claim: literature abstracts are mostly of the indicative type and generally follow CARS model. Still, the abstracts exhibited marked deviations from CARS and it cannot, therefore, be considered as a reliable predictor of these abstracts.

Another aim of this study was to clarify the nature of literature RA abstracts. Based on the results, it is evident that literature scholars fail to mention the reason why they are conducting the study, and often avoid presenting and discussing the results. Furthermore, a number of deficiencies in the models were described by this study, and four new steps were identified.

This study also evaluated the hypothesis put forward by, among others, Martin (2003) and Tahririan and Jalilifar (2004) that the way academicians write is under the influence of sociocultural factors, by demonstrating how the abstracts by Persian-speaking literature scholars writing in English differ from those by English-speaking writers. Nonetheless, one cannot confidently link this deviation to native language differences, since the same discrepancy was shown between the two groups of Persian-speaking scholars too. The influencing factor is not the native language but rather the norms of the community for which the scholars write.

Pedagogical implications

Besides theoretical implications, this study has a number of implications for teaching English as a foreign language.

It is generally believed (Martin, 2003) that, in order to be accepted within the scientific communities, scholars must be familiar with international generic conventions of their field. Thus, it may be necessary for syllabus designers to develop ESP courses on generic structures in university programs to make sure Persian native speakers are familiar with generic norms of writing.

The results of this study may also serve as a guide for literature scholars with other native languages who wish to write in English, by delineating the generic structure of literature RA abstracts published in international journals.

This research study, besides answering some questions, raises some others which can be dealt with in other studies:

- 1) The researcher focused on RA abstracts written on the subject of *literature*. A similar procedure may be replicated with abstracts written by English and Persian native speakers on other similarly disregarded subjects, in order to discover the generic conventions of those disciplines.
- 2) The present study focused on *RA* abstracts. It is possible that *thesis* abstracts behave in different ways;

therefore, it is necessary to inspect them as well.

- 3) A similar research study can be carried out using models other than those utilized in this study, in order to find a better model for describing literature RA abstracts.
- 4) This study was confined to 90 RA abstracts. A similar study with a larger corpus may lead to more reliable results.
- 5) It is also rewarding to examine the lexico-grammatical features of Persian and English RA abstracts to more clearly perceive the difference between Persian and international community norms.

References

- Afshari, M. (2005). *On genre analysis of thesis abstracts: An examination of Iranian TEFL, English literature, and sociology thesis abstracts*. Unpublished Master's thesis, University of Tehran, Tehran, Iran.
- Allison, D. (1999). Genre. *ELT Journal*, 53(2), 144.
- Anderson, K., & Mclean, J. (1997). A genre analysis study of 80 medical abstracts. *Edinburgh Working Papers in Applied Linguistics*, 8, 1-23.
- Atai, M. R., & Falah, S. (2005). *A contrastive genre analysis of result and discussion sections of applied linguistic research articles written by native and non-native English speakers with respect to evaluated entities and ascribed values*. Paper presented at the 10th Conference of Pan-Pacific Association of Applied Linguistics, Edinburgh.
- Atai, M. R., & Sadr, L. (2006). *A cross-cultural genre study on hedging devices in discussion section of applied linguistics research articles*. Paper presented at the 11th Conference of Pan-Pacific Association of Applied Linguistics, Korea.
- Bandary, L. (1999). *A cross-cultural study of the rhetorical move pattern of Iranian TEFL students' thesis introductions*. Unpublished Master's thesis, University of Tehran, Tehran, Iran.
- Brett, P. (1994). A genre analysis of the results section of sociology articles. *English for Specific Purposes*, 13(1), 47-59.
- Busch-Lauer, I.-A. (1995). Abstracts in German medical journals: A linguistic analysis. *Information Processing & Management*, 31(5), 769-776.
- Cross, C., & Oppenheim, C. (2006). A genre analysis of scientific abstracts. *Journal of Documentation*, 62(4), 428-446.
- Duncan, B. R. (2008). *A computational linguistic analysis of biomedical abstracts: Differences between native and Korean speakers of English*. (Doctoral dissertation, University of Memphis, 2008) ProQuest Digital Dissertations, AAT 3328191.
- Falahi Moghimi, M., & Mobasher, A. (2007). Genre analysis of introduction section of English and Persian articles in mechanics. *Teaching English Language and Literature Society of Iran (TELLSI)*, 1(2), 59-73.
- Fallahi, M. M., & Erzi, M. (2003). Genre analysis in language teaching: An investigation of the structure of the discussion section of language-teaching-journal articles. *IJAL*, 6(1), 69-81.
- Flowerdew, J., & Dudley-Evans, T. (2002). Genre analysis of editorial letters to international journal contributors.

- Applied Linguistics*, 23(4), 463-489.
- Holmes, R. (1997). Genre analysis and the social sciences: An investigation of the structure of research article discussion sections in three disciplines. *English for Specific Purposes*, 16(4), 321-337.
- Hopkins, A. & Dudley-Evans, T. (1988). A genre-based investigation of the discussion sections in articles and dissertations. *English for Specific Purposes*, 7, 113-121.
- Kay, H., & Dudley-Evans, T. (1998). Genre: What teachers think. *ELT Journal*, 52(4), 308-314.
- Keshavarz, M. H., Ataei, M. R., & Barzegar, V. (2007). A contrastive study of generic organization of research article introductions written by Iranian and non-Iranian writers in applied linguistics. *Teaching English Language and Literature Society of Iran (TELLSI)*, 1(2), 13-33.
- Lim, J. M. H. (2006). Method sections of management research articles: A pedagogically motivated qualitative study. *English for Specific Purposes*, 25, 282-309.
- Lores, R. (2004). On RA abstracts: From rhetorical structure to thematic Organization. *English for Specific Purposes*, 23, 280-302.
- Martin, P. M. (2003). A genre analysis of English and Spanish research paper abstracts in experimental social sciences. *English for Specific Purposes*, 22, 25-43.
- Nwogu, K. N. (1997). The medical research paper: Structure and functions. *English for Specific Purposes*, 16(2), 119-138.
- Paltridge, B. (1994). Genre analysis and the identification of textual boundaries. *Applied Linguistics*, 15(3), 288-299.
- Paltridge, B. (2007). Approaches to genre in ELT. *International handbook of English language teaching* (Vol. 15, pp. 931-943). Springer.
- Poole, D. (2002). Discourse analysis and applied linguistics. In R. B. Kaplan (Ed.), *The Oxford handbook of applied linguistics* (pp. 73-84). Oxford: OUP.
- Salager-Meyer, F. (1991). Reading expository prose at the post-secondary level: The influence of textual variables on L2 reading comprehension (a genre-based approach). *Reading in a Foreign Language*, 8(1), 645-662.
- Stotesbury, H. (2003). Evaluation in research article abstracts in the narrative and hard sciences. *English for Specific Purposes*, 2, 327-341.
- Swales, J. M. (1981). *Aspects of article introductions*. Birmingham: The University of Aston.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: CUP.
- Swales, J. M. (2004). *Research genres: Explorations and applications*. Cambridge: CUP.
- Tahririan, M. H., & Jalilifar, A. R. (2004). Genre analysis of thesis and dissertation abstracts: Variation across cultures. *IJAL*, 7(2), 121-143.
- Williams, I. A. (1999). Results sections of medical research articles: Analysis of rhetorical categories for pedagogical purposes. *English for Specific Purposes*, 18(4), 347-366.

Appendix A

Examples of Four New Steps Found in the Abstracts

Solution: . . . *To perceive how it registers them requires a careful investigation of the relationship of the text to a variety of its contexts, contexts whose existence can be fragile, whose persistence can be uneven . . .*
(EE 30)

Counter-Claiming: . . . *This paper seeks to complicate that assumption. . .* (EE 8)

Significance: . . . *The strength of this paradigm lies in the fact that it relies mostly on process-conscious and active engagement of the reader in the reading experience.* (EP 25)

Implications: از اطلاعات و یافته‌های این تحقیق می‌توان در بررسی‌های ادبی، مردم‌شناسی، جامعه‌شناسی، روان‌شناسی و شناخت اعتقادات قوم ایرانی استفاده نمود.

(PP 20)