Steps to a Successful Abstract: A Comparative Genre Analysis

Hossein Talebzadeh[1], Reza Ghafar Samar[2], Gholam Reza Kiany[3], Ramin Akbari[4]

Abstract

The significance of research article (RA) abstract as a key academic genre has recently motivated analysts to focus on this neglected area. Considering a summary function for abstracts, most genre researchers have adopted the conventionally proposed Introduction- Method- Results- Discussion (or Conclusion) (IMRD) model for analysis. However, the problems reported, especially for Results and Discussion sections, question the vitality of such accounts and prompt further scrutiny. Moreover, in spite of claims about disciplinary and cultural variations which can affect communication within and across discourse communities, sufficient contrastive studies which address the Iranian academics' need to communicate with and participate efficiently in the international discourse communities are scarce. Inspired by English for Specific/Academic Purposes tradition of genre analysis, this paper tries to fill these gaps presenting a comparative generic analysis of soft sciences abstracts to see what the characterizing features of the texts of Iranian scholars and

1. PhD Candidate, Department of English, Faculty of Humanities, Tarbiat Modares University, Tehran, hossein_talebzadeh@yahoo.com
2. Associate Professor, Department of English, Faculty of Humanities, Tarbiat Modares University, rgsamar@modares.ac.ir
3. Associate Professor, Department of English, Faculty of Humanities, Tarbiat Modares University, Tehran, rezakiany_gh@modares.ac.ir
4. Assistant Professor, Department of English, Faculty of Humanities, Tarbiat Modares University, Tehran, akbari_r@modares.ac.ir

1

their international peers are. The macro-structure, micro-structure, and some features of 100 experimental RA abstracts taken from a number of reputable Iranian (Persian) and international (English) journals were analyzed and explained drawing upon some existing rigorous models. The results revealed similarities in the presence of Introduction, Method, and concluding units, while there were also differences in the realization of units, Moves, and Steps. It is argued that the differences can point to the varying cultural norms and values of the two groups. Plus, considering the inadequacy of the four-way macro-model, an alternative three-way model was suggested, instead. Some implications of the study are discussed, too.

Keywords: Genre Analysis; Move and Step Models; Macro-structure; Micro-structure; RA Abstracts.

1. Introduction

The fact that, these days, abstracts accompany most research articles (RAs) places these short texts among the most important research- process genres in the competitive market of scientific research. Swales' proposition that "first impression matters" (1990: p.138) as well as his accentuating the role abstracts have in gate-keeping processes (p.181) accentuate their role in selling the article. Drawing upon Salager-Meyer (1990) who believes most abstracts have the macroproposition of accompanying articles, Martin (2003, p.26) regards the main function of abstracts as being "time-saving devices." This function is what Huckin (1987, cited in Swales:

1990, 179) calls "news value" element and is what Swales attributes to the readers' being "extremely fickle: of those who will read the title, only some will read the abstract, and of those who read the abstract only some will read the article itself."

1.1 Abstract Studies across Disciplines and Cultures

Since Swales' regret that such suited texts for genre analysis remained neglected (1990: p.181), many scholars have shown interest in this important academic genre across different disciplines (see also Bondi: 2009). For instance, Salager-Meyer (1990, 1992) deals with Medical English abstracts, their rhetorical structure, and a text-type

2

and move analysis of verb tense and modality distribution in these texts .Information and library research is the field investigated by Gibson (1993). Kaplan et al. (1994) and Santos (1996) are two studies mainly devoted to analyzing the textual organization of abstracts in the field of Applied Linguistics.

More recently, the generic structure of research article introductions and abstracts, as a genre set, from two related fields of Conservation Biology and Wildlife Behavior is compared by Samraj (2005). Van Bonn and Swales (2007) studied certain language choices-like voice, personal pronoun, sentence length, and transition word-and the way research is situated in the language science journal abstracts written by English and French authors. To study variation in abstracts across disciplines, Cavalieri (2011) deals with the use of metadiscourse in the abstracts from the well-established refereed journals from two disciplines representing hard sciences (medicine) and soft sciences (applied linguistics).

Martin's (2003) study, among others, draws the attention to one missing point among all such surveys. He observes that though writing abstracts is of great importance for non-native English students and academics, the studies mostly concern themselves with English-speaking background academics and dismiss, "to a certain extent, the existence of different writing conventions acquired in other cultures" (Martin: 2003:27). Therefore, in line with works on contrastive and intercultural rhetoric (e.g. Connor: 2004; Connor et al: 2008), his study of English and Spanish experimental RA abstracts tries to demonstrate "that scientific discourse is not universal, and there are socio-cultural factors which may condition the preference for certain rhetorical strategies by the members of different scientific communities" (Martin: 2003, p.27). Moreover, having a pedagogical motivation, he wants to help "foreign learners of EAP [English for Academic Purposes], especially Spanish academics, write effective English abstracts in a way that meets the international scientific community's expectations" (ibid.).

In line with his call, many cross-cultural studies have been carried out to investigate abstracts in many languages, disciplines and/ or cultures. For instance, justifying her rhetorical and linguistic analysis of English and Italian linguistics journal RA abstracts,

Diani (2011) emphasizes that comparative and contrastive studies of abstracts have been conducted in English and many European languages including Spanish, French, Portuguese, German and Swedish.

Still, some languages and cultures are not adequately represented in the abstract genre literature. Instances of such under-researched languages are East Asian and Persian language and culture (e.g. Pramoolsook: 2011). Ironically, the academics from these backgrounds are more likely to face problems while writing in English and, consequently, to be in need of pedagogical intervention in light of the findings of such comparative and contrastive studies. Examples of the scare genre studies in the Iranian context are Jalilifar (2006), Saadinam (2005) and Gholampour (2005). Jalilifar (2006) studied thesis and dissertation abstracts from a variety of disciplines by Iranian and non-Iranian writers. Saadinam (2005), also, analyzed M.A. thesis abstracts written by Iranian TEFL and psychology students to identify and compare their schematic move structure while adopting the traditional IMRC sections for overall textual organization.

As Samar, Talebzadeh, Kiany, & Akbari (under review) argue, however, not only should different research-process genres be considered as distinct (though related) genres, but their different sub-genres (including different sub-genres of the genre of abstract like RA, thesis and dissertation, and conference abstract) should be studied in light of their distinctive structures and functions. Therefore, studies that specifically and separately deal with each of these sub-genres are of significance. Findings from Gholampour's (2005) analysis of TEFL (English and Farsi) and psychology (just Farsi) RA abstracts drawing upon Nwogu's (1997) model with the stated objective of checking the existence of the Moves and Steps of his model in the abstracts written by Non-native writers of these two fields could be very conducive in raising the awareness of psychology academics while writing abstracts in English. Nevertheless, this study does not compare English and Persian psychology RA abstracts; therefore, only drawing more tentative pedagogical implications might be possible. Moreover, more attested and /or robust models like Swales' (1990) CARS model as well as Yang and Allison's (2003) models are overlooked.

Another issue which invites further attention and scrutiny is the "substantial agreement" on a four-way model, following Bhatia (1993, pp78-79), for the macro-structure of abstracts "mostly mirroring the typical IMRD structure (Introduction-Methods- Results- Discussion [or Conclusion]" (Bondi: 2009:32). While many studies (e.g. Bondi: 2009; Diani: 2011; Martin: 2003; Saadinam: 2005 among others) seem to adopt this four- way model, some researchers (e.g. Martin: 2003) report difficulties in identifying textual boundaries especially in the case of concluding sections (Results, Discussion, Conclusion, and Implications). On the other hand, there are a number of studies which suggest models with three (Hatzitheodorou: 2011, for law and economics), to five (Anderson & Maclean: 1997, for medical abstracts) and even six (Busch-Lauer: 1995a, 1995b, for medical abstracts) main Moves. Still, capturing the structure of psychology RA abstracts remains a task to be undertaken.

1.2 The Present Study

The present comparative study reports the preliminary stages of a larger genre analysis project (which also deals with other soft sciences and research genres) and is intended, among other purposes, to check some pertinent models and claims. Specifically, it is an attempt to generically examine the structure of RA abstracts written in English for international scientific journals of psychology and those written in Persian for Iranian journals of psychology. In so doing, it tries to address some of the problems and shortcoming of the previous genre studies hoping to assist non-native and/or novice, including Iranian, scholars who aspire to become a functioning member of their own and international discourse communities.

2. Methodology

2.1 Corpus Selection

To minimize the effect of disciplinary variation on the results of the study (Bazerman: 1993, p.ix; Martin: 2003:27), the sample was selected from a representative discipline of (experimental) soft sciences, namely, psychology. It was consisted of 50 Persian RA abstracts and 50 English RA abstracts.

For selecting the sample, two criteria of reputation and representativeness were considered. Apart from consulting some members of the psychology department at

Tarbiat Modares University (TMU), we used the reliable ISC and ISI indexing websites to select the reputable, top-tier journals for our corpus. The resulting list of the prestigious journals in the field comprised around 20 Iranian journals as well as about 20 English journals all of which having high impact factors. From these journals a corpus of around 4500 abstracts, which can well represent most of the major issues of interest in the field, were selected (see the appendix for the list of journals whose abstracts are part of the final sample).

From each of these two groups of journals, 50 RA abstracts were randomly selected to form a sample of 100 texts. To control for the possible dynamicity of genre over time (see e.g., Connor, 2004; Ramanathan & Kaplan, 2000) the corpus only included the articles published during the years 2001 to 2005.

2.2 Procedure

Data analysis was conducted through two main steps, each of which was characterized by many revisions. First, as had been the common practice in other similar studies, the RA abstract was assumed to reflect the same common

underlying structure of RAs, so it was analyzed in terms of four basic sections of Introduction, Method, Result, and Discussion. Then each section, with the exception of Method, was analyzed in terms of the comprising Moves and Steps.

There are some reasons to use Move and Step as units for the analysis of discourse sections. One of the advantages attributed to the unit of move is that "it enables the categorization of chunks of text in terms of their particular communicative intentions" (Yang & Allison: 2003, p.370). To be more specific, "[t]he concept of Move captures the function and purpose of a segment of text at a more general level," yet "step spells out more specifically the rhetorical means of realizing the function of Move" (ibid.)

Therefore, in the next step of analysis, namely, identification of textual boundaries in each section, some of the models based on the units of Move and Step were drawn upon. Swales' robust CARS model (1990) which is one of the mostly-used models was utilized for the analysis of Introduction. For the analysis of concluding sections, however, the proposed accounts by Yang and Allison (2003) had been the basis of analysis.
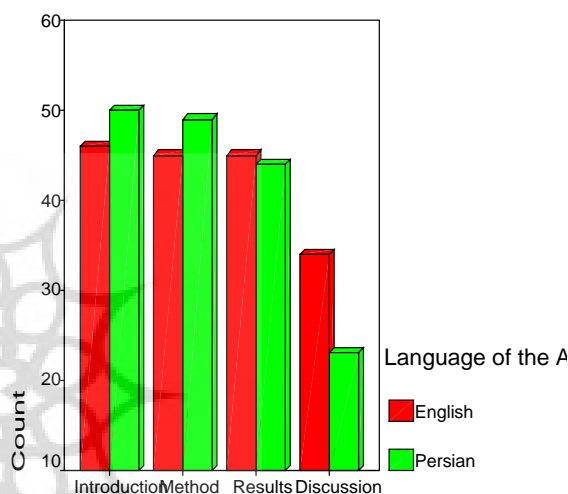
6

Obviously, identification of each section, Move, and Step was done through various revisions based on different readings of the models used; moreover, attempts had been made to avoid imposing any preconceived categorization on the texts. Reliability of the analysis was taken into account through discussion sessions in which a frame of analysis was agreed upon. Additionally, as mentioned above, a similar study with comparable texts was being conducted simultaneously by the researchers, in which the consistency of two sets of analyses (both studies) by the researchers was monitored.

3. Results and Discussions

3.1. Contrastive Analysis of Structural Units

The results obtained from stage one of the analyses is summarized in Table 1 and Graph 1. As shown, all four basic structural units of a RA are present with varying degrees in the two groups of abstracts. It can be observed that the frequency of occurrence of each structural unit is not significantly different between English and Persian abstracts. It can be claimed that the two sets of texts are not significantly different as long as the presence of

Introduction, Method, and Results units is concerned. The only noticeable difference is the higher number of discussion units in international texts compared to their Iranian counterparts.
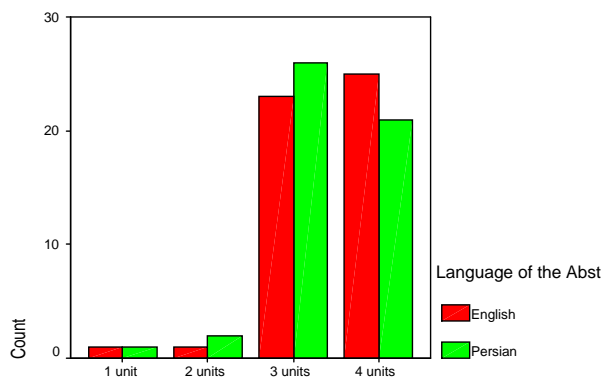

Graph 1. Frequency of Occurrence and Distribution of Structural Units in International and Iranian RA Abstracts

Table 1. Frequency of Occurrence and Distribution of Structural Units in International and Iranian RA Abstracts

	English	**Persian**
Four Units	25 (50%)	21 (42%)
Three Units	23 (46%)	26 (52%)
Two Units	1 (2%)	2 (4%)
One Unit	1 (2%)	1 (2%)

Table two and graph two, also, reveal some interesting findings with regard to the number of structural units used at the same time in the abstracts. Martin (2003, p.30) reports the figure of 67.5% for the presence of four structural units at the same time in his abstracts; nevertheless, our data just reveals a figure of 50% and 42% for International and Iranian abstracts, respectively. As could be expected based on table 1, the number of abstracts with three sections present at the same time is the highest for Iranian texts and fairly considerable for International abstracts, while texts with two or one units are very meager in the two groups of abstracts.

Table 2 Number of Abstracts with Four, Three, Two, and One Structural Units in each Group

	English	**Persian**
Four Units	25 (50%)	21 (42%)
Three Units	23 (46%)	26 (52%)
Two Units	1 (2%)	2 (4%)
One Unit	1 (2%)	1 (2%)

Graph 2. Number of Abstracts with Four, Three Two, and One Structural Units in each Group

Such a finding is comparable with the findings of Samar and Talebzadeh (2006). They found out, in spite of Martin's (2003) findings, that their International and Iranian authors of ESP abstracts do not differ significantly in their preference for the use of three structural units at the same time rather than four units (International: 56.5% vs. Iranian: 62.5%).

It was also observed that the linear order of the structural units follows what is considered to be the logical order of presentation:
Introduction+Method+Results+Discussion.
There was no case in the Persian sample which deviated from this order. On the other hand, there were several cases in the English abstracts where the order of

presentation differed from the normal sequence: No. 21: (M+I(E)+M+D), No. 25:(I+M(E)+I+R+D), and No. 19 (I+M(E)+I+R), No. 51. (R+M(E)+D) among others. As shown with the letter (E), most of these cases were spotted as a result of one unit, realized in terms of a Move or Step of a Move, being embedded (E) into another structural unit.

The important issue of rhetorical structure and its two important aspects, namely, the number of structural units and the number of abstract paragraphs, are argued to be closely related to text comprehension (Martin: 2003, p.30). With regard to the latter, number of paragraphs, 3 English abstracts exceeded one paragraph, while four in the Persian sample had two paragraphs. The number of paragraphs is considered to be an impediment to understanding just when there is a conceptual overlapping (ibid.). In the case of the abstracts with more than one paragraph just one of them had such an overlap (No. 40). On the other hand, as will be discussed later in this paper (see 3.2.3), the number of structural units in the sample analyzed is a function of the number of concluding sections (Results, Discussion, Conclusion, and/or Implications) of the abstract.

3.2.1 Description of Introduction Unit
As evinced in Table 1, the Introduction unit is the most frequent section among the four structural units in both groups of abstracts. All Persian abstracts as well as 45 of English abstracts begin with this section. As mentioned before, there were 2 cases in which the Method section preceded Introduction and four other abstracts which did not have such a unit.

For the description of the Introduction section, Create a Research Space (CARS) model, proposed and modified by Swales (1982, 1990), was drawn upon. This model which is consisted of three main Moves and their comprising Steps is one of the highly rigorous models applied for the analysis of Introduction section of research genres across a variety of disciplines and languages (Ahmad, 1997; Jalilifar: 2006; Martin, 2003; Nwogu, 1997; Ozturk, 2007; Samraj, 2005; Soler-Monreal, Carbonell-Olivares, & Gil-Salo, 2011).

Application of this model to analyze the Introduction unit of our abstracts revealed a number of interesting outcomes.

9

Table 3 Frequency and Distribution of Moves in Introduction Section of Abstracts (out of 50 in each group) (after Swales: 1990)

	English	Average Frequency Per Abstract	Persian	Average Frequency Per Abstract
Move1 Establishing a Territory	25	0.5	12	0.24
Step 1 Claiming centrality	3	0.06	6	0.12
Step 2 Making topic generalizations	13	0.26	6	0.12
Step 3 Reviewing items of previous research	9	0.18	0	0
Move 2 Establishing a Niche	9	0.18	0	0
Step 1A Counter-claiming or	1	0.02	0	0
Step 1B Indicating a gap or	7	0.14	0	0
Step 1C Question-raising or	1	0.02	0	0
Step 1D Continuing a tradition	1	0.02	0	0
Move 3 Occupying the Niche	41	0.82	51	1.02
Step 1A Outlining purposes or	10	0.2	30	0.6
Step 1B Announcing present research	31	0.62	21	0.42
Step 2 Announcing principal findings	0	0	0	0
Step 3 Indicating RA structure	0	0	0	0

A prominent feature of Table 3 is the international abstract writers' tendency to use a wider range of Moves and Steps of Introduction unit. While Iranian authors have limited themselves to extensive use of M3:S1A/B (around 100%) and in some cases utilizing the strategy of Establishing a territory (24%), the abstracts written in English draw upon other potentials of the genre as strategies to situate their work more smoothly and convincingly.

A strikingly significant finding from Table 3, however, is that Iranians have never used Move two, Establishing a niche. This tendency to overlook this Move and its Steps may conveniently be interpreted as an indicator of Iranian psychology researchers' unfamiliarity with all the strategies they have at their disposal; Saadinam (2005) as well as Gholampour (2005) ascribe the tendency to omit some Moves of Introduction (and other units) to Iranian researchers' unfamiliarity with the territory under study, use of inadequate writing guidelines, and/ or unfamiliarity with

abstract writing.

Alternatively, however, it can be argued that Iranian scholars may consciously avoid adopting any controversial strategies in their writing. Specifically, in the case of Move 2 and its constituent Steps, they might prefer to duck any risk of being attached to a (possibly notorious or disputable) tradition or being accused of duplication (Step 1D) or performing a face-threatening act by counter-claiming, indicating a gap, or even question-raising (Steps 1A, 1B, or 1C, respectively). This hypothesis seems more likely since even in the preceding Move 1, the items of previous research are not reviewed in any of the Farsi abstracts (Move 1:Step 3), while 9 instances of this Step were observed for English abstracts (Table 3). Samar, Talebzadeh, Kiany, & Akbari (under review) found a similar reluctance among both Iranian and East Asian conference abstract writers in using strategies like Move2:Step1A, while their American peers were more likely to use them.

It appears that Iranian psychology abstract writers would rather not establish a niche even if it means writing a too general statement of the topic and a not very smooth abstract. Still, such a practice can

be argued to reflect the general nature of the problems dealt with in the country; it might point to the fact that most areas in the study of psychology in the Iranian discourse community are still so untouched and underrepresented that as soon as the territory is established (Move 1) the purpose of the study is clear and of sound bases (Move 3). In any case such differences can be interpreted in the light of different requirements of the discourse communities in which the academics are functioning.

A figure in the above table that attracts the most attention is the high frequency of the presence of Move 3, "Occupying the niche," and more specifically its steps 1A and 1B, "Outlining purposes" and/ or "Announcing present research" in both languages. Even in Persian abstracts where territory and gap establishment are not adequately attended to, the researchers have felt an obligation to announce the present paper and, more importantly, unravel and directly state its purpose (s) (in fact, many Iranian authors tried to emphasize the purposes of study by using the Farsi equivalent for "aim or purpose"). Consequently, it might be claimed that this Move is perceived by both discourse

community members as the obligatory Move of Introduction unit of RA abstracts, while Move 1 can be quasi-obligatory (or even optional).

Many abstract studies pass a similar verdict. Drawing on recent studies, Jalilifar (2009, pp. 88-89) claims that "statement of aims, introducing procedures, principal findings, restatement of aims, topic generalization, and implications are more frequently selected by the researchers in applied linguistics." Move 2, "Presenting the research," is reported as obligatory Move of Santos' (1996) five-move pattern; also, Purpose is an integral move of the various abstract models proposed by Bhatia (1993), Anderson and Maclean (1997), and Busch-Lauer (1995 a, 1995b). Saadinam (2005) reported "Presenting present research" as one of the mandatory Moves in thesis abstracts by Iranian TEFL and psychology MA students; Gholampour (2005) also found that it was compulsory in her sample of TEFL and psychology RA abstracts.

Move repetition, Move variation, and Step variation were among features present in some of the abstracts. There were a few instances of Move repetition in Persian abstracts, including No.5 (M1:S2+M1:S1)

which was at the same time an example of Step variation as well as No.11 (M3:S1A+M3:S1B); there were also some instances of this move repetition in English abstracts. Examples of Move variation in both Persian and English sample were few, too. The scarcity of such Move repetition practices strengthens Swales' (1990) position that some of the Steps (like Steps of Move 2 and Steps 1A and 1B of Move 3) are mutually exclusive, and questioning the position taken by Martin (2003, p.33) who introduces successive use of mutually exclusive Steps of a Move as a common practice.

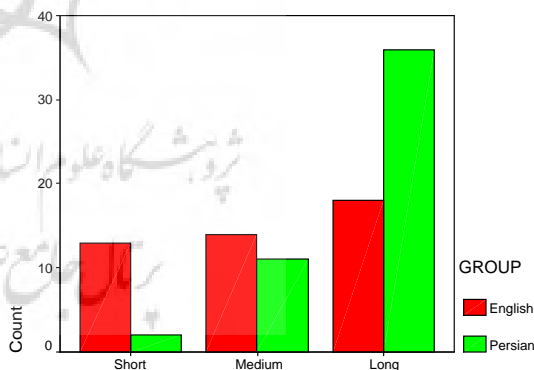### 3.2.2 Description of Method Unit

The figures shown in Table 1 report the occurrence of Method section where the writer describes participants, data source, materials, procedures in measuring variables, methodology and design, and data analysis techniques as 90% and 98% for the English and Persian abstracts, respectively; it accentuates the importance of this structural unit for the writers of both discourse communities. Method unit was found to be an omnipresent section in the abstracts of Iranian conference presenters of Samar, Talebzadeh, Kiany, & Akbari's (under review) study, too; while the other three groups of applied linguists from East

Asia, Europe, and the U.S. had used Method unit with a high frequency (more than 36 instances out of 40), all Iranian abstracts had devoted at least a sentence or phrase to this linking section. Contrary to these findings as well as those of Martin (2003, p.36), however, in Samraj's (2005) abstracts from the journals in Wildlife Behavior and Conservative Biology, Method section had a low frequency. One explanation can be that Samraj's abstracts are from two disciplines very different from psychology, phonetics and applied linguistics (all examples of soft sciences). There are also revealing differences in terms of length and dependency of the Method section between the two languages. 47 out of 49 Method sections in the Persian sample were characterized as being of medium length (between 10 to 20 percent of abstract text) or long (more than 20 percent of abstract length) and just 2 of them were short (less than 10 percent). On the other hand, 13 out of 45 Method sections were short in the English sample, while only 32 out of 45 Method sections were evaluated as medium or long. Although Martin (2003, p. 36) reported that "in both groups, the majority of Methods elements were very short, sometimes constituted by only one simple sentence where the author describes very briefly the most relevant details of materials, subjects, data sources, procedures or the

methodology used in the study," non-native abstract writers of his study showed "a greater tendency to write longer Methods sections. This can be clearly observed in eight of the Spanish abstracts … where this unit occupies considerable textual space in comparison with the abstracts in English" (p. 36).

Table 4 Observed Length of Method Unit of English and Persian Psychology RA Abstracts

length	English	Persian
Long	18	36
Medium	14	11
Short	13	2
Total No.	45	49

Graph 3 Observed Length of Method Unit of English Persian Psychology RA Abstracts

Another observation concerning Method unit was its being coalesced with or

embedded in other adjacent structural units, especially Introduction. Such a tendency to merge or embed Methods section is observed by other researchers including Anderson and Maclean (1997), Martin (2003) and Santos (1996), and it is interpreted by Martin (2003, p. 35) to suggest "that this strategy is favoured [sic.] by the authors of both languages due, perhaps, to constraints of space."

Nevertheless, the degree of this inclination varies to a great extent between the two groups of our study. It is apparent from the information in table 5 that most Persian writers tended to present the Method unit as an independent unit with a great deal of attention to details of the procedures and even statistical tests and analyses involved. On the contrary, a higher number of abstracts in the international journals of psychology tended to embed or to coalesce the Method section with other sections (mostly introduction and results) with less attention to details.

In their attempt to investigate the Method section of applied linguistics conference abstracts, Samar, Talebzadeh, Kiany, & Akbari (under review) conclude that Method section and its constituent parts, especially recounting steps in data collection, are integral to a conference abstract. Saadinam (2005), also, contended

that describing participants as well as data source and instrumentation were obligatory in the Method section of her sample of thesis abstracts, as one of the most complete sections of her abstracts. Contrary to these, however, is Gholampour (2005) who did not find any obligatory Move in the Method unit of her journal article abstracts. As Samar, Talebzadeh, Kiany, & Akbari (under review) assert, "the emphasis on the use of" an independent, long Method section and its constituents can be another attempt, on the part of researchers, to 'sell' the article by convincing the referees and audience that the paper to be presented is based on firm grounds and follows the requirements of the discipline and discourse community" while reflecting "adherence to standards of honesty, precision, and rigor …."

Table 5 Frequency of Independent and Dependent Method Units

	English	**Persian**
Independent Method Unit	23 (51%)	39 (80%)
Coalesced or Embedded Method Unit	22 (49%)	10 (20%)

On the other hand, the attempt, especially by international authors, to

14

shorten the length of the method unit as well as to embed it into or coalesce it with other units can be an indication of a change in the realm of social sciences. Swales (1990: 179) believed it was ironical that social scientists were engaged "in a cognitive and rhetorical upgrade of Method at a time when their mentors in the hard sciences" were "beginning, rhetorically at least, to downgrade its importance." However, this newly-detected inclination among the members of international discourse community to deviate from upgrading Method unit, as opposed to the Iranian authors who adhere to the method-upgrading practice, can be an indication of a new pursuit for scientific identity. It might appear that the international community of social scientists, as far as their writing is concerned, has felt an urge to live up to the 'scientist' part of their title by writing abstracts resembling those by their mentors in hard sciences. Needless to mention this is a tentative claim which needs to be checked against even more ample data comparing hard and soft sciences.

3.2.2 Description of Results and Discussion Unit

In their comprehensive study of concluding sections of applied linguistic RAs, Yang and Allison (2003:380) contended that "Swales' (1990) comment that our knowledge of the last three sections in the IMRD pattern i.e. Results, Discussion and Conclusion sections, is limited still remains in force." Such a comment regarding the RA which has, at least, the clue of section headings as a privilege for the analysis, is indicative of the problems one may face in investigating a genre like abstract.

The analysis of the concluding sections of the abstracts, as mentioned before, is done adopting the models proposed by Yang and Allison (2003), who describe the Moves and Steps in Results, Discussion, Conclusion, and Implication sections of applied linguistics research articles. Table 6, in which just the observed Moves and Steps are included, shows the preliminary results obtained from the analysis of the units perceived of as Results and Discussion.

15

Table 6 Moves and Steps of Structural Units of Results and Discussion (after Yang & Allison: 2003)

	English	English
(R) Move 2 Reporting results	56	52
(R) Move 3 Commenting on results	24	10
Step 1 Interpreting results	10	8
Step 2 Comparing results with literature	7	2
Step 3 Evaluating results	3	0
Step 4 Accounting for results	4	0
(D) Move 3 Summarizing results	2	2
(D) Move 4 Commenting on results	23	12
Step 1 Interpreting results	15	8
Step 2 Comparing results with literature	4	2
Step 3 Accounting for results	3	2
Step 4 Evaluating results	1	0
(D) Move 6 Evaluating the study	3	3
Step1 Indicating limitations	2	0
Step2 Indicating significance/advantage	1	3
(D) Move 7 Deductions from the research	19	12
Step 1 making suggestions	3	3
Step 2 Recommending further research	3	2
Step 3 Drawing implications	13	7

Efforts to apply the Moves and Steps model to the sections conceived of as Results and Discussion/Conclusion in the first step of the analysis clearly showed the degree of inconsistencies which are likely to be encountered in a linguistic analysis of the sections. Moreover, the overlap observed in this study as well as in other studies (e.g. Martin, 2003: 39) gives rise to the idea that thinking of the concluding part of the RA abstract as two different sections may require to be revisited.

It might be argued that though there are many overlapping Moves in the Results section and other concluding sections of RAs, their communicative emphasis is different (Yang & Allison: 2003:380). Accordingly, it would be expected to find the same pattern in RA abstracts (Salagar-

Meyer: 1990; Swales: 1990, 181; Martin: 2003:28). However, in this study, there is almost no abstract in which, for instance, it is commented on the results by realizing both (R) M3 and (D) M4 at the same time. It is true that there were instances of Move or Step repetition, but two overlapping Moves across two different sections never co-occurred.

There were also many instances in both languages where "reporting results," (R) M2, was the final move. For instance, in the five Persian abstracts from a specific journal in which each section is provided with a heading, just one of them ended with a Conclusion (an alternative to Discussion) section and even that section could be included under (R) M3:S1 (No. 29). Actually, Results unit was the final section in around 15 Persian and 6 English abstracts. A similar finding was reported by Samar and Talebzadeh (2006).

All such issues considered, the best alternative was to interpret the last parts of the RA abstract as a single structural unit, namely, the Findings section which can encompass the functions of reporting results, commenting on them, evaluating the study, and drawing deduction from it in terms of five Moves and the comprising

Steps. In so doing, we came up with Table 7 below which appeared to be a more appropriate representative of the constituent strategies in briefly expressing the findings of a research.

Table 7 indicates that both Iranian psychologists and their international peers deemed Reporting results, Move 1, as a compulsory part of an adequate abstract. This finding is corroborated by many scholars who announce reporting results as an integral Move or macro-move of their studies; among them are Bhatia (1993), Lorés (2004), Martin (2003), and Santos (1996). A significantly higher number of abstracts in the English corpus (47 versus 22), however, commented on results; the popular strategy among the two groups of scholars to actualize Move 2 was Step 1, interpreting results. It appears that Iranian authors are less willing than their international colleagues to compare their findings with previous literature (M2:S2). This observation becomes more meaningful when it is compared with the absence of M2 of Introduction— which establishes a niche — as well as Move 4: Step 2 of Findings— indicating significance/ advantage; coupled with the significance of Method unit in the Iranian abstracts, it might be claimed that

17

Iranian academics try to make a very positive first impression by refraining from negative comments and / or criticisms (like gap indication or indicating limitations) as well as distancing themselves from others

(by not continuing a tradition or comparing results with literature while emphasizing the advantage/significance of their work) (see also Samar, Talebzadeh, Kiany, & Akbari: under review).

	English	Average Frequency Per Abstract	Persian	Average Frequency Per Abstract
Move 1 Reporting results	54 (1*)	1.08	50	1
Move 2 Commenting on results	47	0.94	22	0.44
Step 1 Interpreting results	25 (1*)	0.5	16 (1*)	0.32
Step 2 Comparing results with literature	11	0.22	4	0.08
Step 3 Evaluating results	4 (1*)	0.08	0	0
Step 4 Accounting for results	7	0.14	2	0.04
Move 3 Summarizing results	2 (1*)	0.04	2	0.04
Move 4 Evaluating the study	3	0.06	3	0.06
Step1 Indicating limitations	2 (1*)	0.04	0	0
Step2 Indicating significance/advantage	1	0.02	3	0.06
Move 5 Deductions from the research	19	0.38	12	0.24
Step 1 making suggestions	3(3*)	0.06	3 (2*)	0.06
Step 2 Recommending further research	3 (2*)	0.06	2 (1*)	0.04
Step 3 Drawing implications	13 (10*)	0.26	7 (2*)	0.14

While "Evaluating the study" can be an optional Move of the psychology RA abstracts, "Deductions from the research," Move 4, can well be nominated as a quasi-obligatory Move of abstracts especially in International texts. Iranian psychology discourse community members, however, reflect somehow less preoccupation with the application of their research findings. Actually, this observation coupled with

much fewer commenting on results in the abstracts of Iranian scholars can offset an issue of concern raised by many Iranian academics and authorities, namely, the research in Iran is not appropriately translated into practice and application. Nevertheless, there are studies of abstracts of other disciplines in Iran which modulate this conclusion within disciplinary and cultural boundaries. For example, Samar

18

and Talebzadeh (2006) and Samar, Talebzadeh, Kiany, & Akbari (under review) found that Iranian applied linguistics are much more inclined to draw implications from their research than their international, European, and American peers. Therefore, still more data from different disciplines and cultures are required before passing a verdict about the importance of research deductions and applications in the writing of Iranian academics.

As it should have been noticed, many numbers in the table are marked with "*" after a number in parenthesis; it indicates the frequency of the occurrence of a strategy with the function of "drawing the reader into the article" rather than the Move they are attributed to. For example, instead of making any suggestion or drawing any implication, it was stated in one abstract that "Proposals for future research in recidivism are formulated" (No. 1). A similar strategy was used by the conference abstract writers of both Samar, Talebzadeh, Kiany, & Akbari (under review) and Yakhontova (2002). Samar, Talebzadeh, Kiany, & Akbari (under review) conclude that such a "promotional strategy which anticipates or promises interesting,

elaborate method, results, discussion, etc. in the paper or presentation … seems to be one idiosyncrasy of the genre of (conference) abstract and serves to fulfill the main function of abstracts to "sell" the article, and not, always, just to "tell" and give information."

4. Conclusion

Motivated by the English for Specific/ Academic Purposes tradition of applied genre analysis, this study reported a comparative generic investigation of experimental RA abstracts from the field of psychology, as a representative of soft sciences, written by Iranian and international authors. In so doing, some of the main propositions regarding the macro- and micro-structure of the RA abstracts as well as their variation across cultures were checked.

Concerning the macro-structure of abstracts, it was found that Introduction, Method, and concluding sections were compulsory units of an abstract. Investigation of their rhetorical structure, however, cast several doubts on the widely-held belief that abstracts as research-process genres and time-saving devices should replicate the IMRD structure of

19

RAs. In fact, it was argued that a better reformulation for the organization of RA abstracts might be a three-way model in terms of Introduction, Method, and Findings and their comprising Moves and Steps.

While the two groups of abstracts were not significantly different with regard to their macro-structure, distinctive differences were observed between the members of international and Iranian discourse community in the strategies they preferred to actualize the main units. International authors opted for a wider range of Moves and Steps to realize the Introduction section of their abstracts, whereas Iranian academics made sure to use Move 3 and to avoid Move 2. Plus, Persian abstracts were more likely to have a complete and independent Method unit compared with English abstracts. One the other hand, more international abstract writers, compared to Iranians, ensured that they commented on their results and there was a reference to their research deductions in the short text of abstract.

Moreover, considering the way Method section of English abstracts differed from Persian abstracts as well as what is conceived to be the common practice of

social sciences with regard to length and importance of this section, it is not improbable that social scientists once again are trying to move away from positivistic trends by downgrading Method section, at least rhetorically, and pursuit their mentors in hard sciences. If this is the case, the Iranian writers of RAs are suggested to be more aware of the recent changes in their field in order to effectively interact with the members of international community and be a key player in the scientific circles.

Having a pedagogical orientation in mind, we introduced the obligatory, quasi-obligatory, and optional sections, Moves, Steps and some features of the psychology RA abstracts. This can guide both novice and non-native psychologists, and their supervisors and language teachers to help them, in order to prepare an abstract fulfilling the basic requirements of the community of practice in which they aspire to effectively function. Obviously, the defining differences between the two discourse communities should be taken into account when writing any genre including abstracts.

This paper was among the genre studies which deal with the needs of academics from under-researched cultures, like Iranian

culture. The corpus and sample were selected in a way to be representative of the abstracts of the field; furthermore, many of the findings could find ample support from the scarce literature. However, more comprehensive comparative studies from a variety of disciplines and cultures with a focus on different sub-genres of the genre of abstract, drawing upon recent and rigorous models of analysis can shed new light on the concept of genre and yield several pedagogical implications and applications.

References

[1] Ahmad, U. K., (1997), "Scientific research articles in Malay: A Situated Discourse Analysis". Unpublished doctoral thesis. Michigan: The University of Michigan.

[2] Anderson, K. & Maclean, J., (1997), "A Genre an Analysis Study of 80 Medical Abstracts." Edinburgh *Working Papers in Applied Linguistics*, 8, Pp. 1-23.

[3] Bazerman, C., (1993), Foreword to N. Blyler & C. Thralls (Eds.) *Professional Communication: the Social Perspective.* Newbury Park: Sage.

[4] Bhatia, V. K., (1993), *Analyzing Genre: Language Use in Professional Settings.* New York: Longman.

[5] Bondi, M., (2010), "Abstract Writing: The Phraseology of Self-Representation." In Marta Conejero López, Micaela Muñoz Calvo and Beatriz Penas Ibáñez. Valencia (Eds.), *Linguistic Interaction in/and Specific Discourses.* Editorial Universitat Politècnica de València. pp. 31-48.*

[6] Busch-Lauer, I.-A., (1995°), "Abstracts in German Medical Journals: A Linguistic Analysis." *Information Processing & Management,* 31(5), 769-776.

[7] Busch-Lauer, I.-A. (1995b), "Textual organization in English and German medical abstracts." In B. Warvik, S.-K. Tanskanen & R. Hiltunen (Eds.), Organization in Discourse: Proceedings from the Turku Conference, Pp. 175-186, Turku, Finland: University of Turku.

[8] Cavalieri, S., (2011), "Variation in Abstracts Across Disciplines." Paper presented at the international CERLIS conference, Bergamo, Italy, June 23-25.

[9] Connor, U., (2004), "Introduction." *Journal of English for Academic Purposes,* 3 (4), 271–276.

[10] Connor, U., Nagelhout, E., & Rozycki, W. V. (Eds.), (2008), *Contrastive rhetoric: Reaching to Intercultural Rhetoric.* Amsterdam: John Benjamins.

[11] Diani, G., (2011), "On English and Italian RA Abstract: Genre Variation Across Cultures." Paper presented at the international CERLIS conference, Bergamo, Italy, June 23-25.

[12] Gholampour, M., (2005), "A cross-Disciplinary Analysis of Research Article Abstracts". Unpublished MA dissertation. Tehran: Khatam University.

[13] Gibson, T.R., (1993), "Towards a Discourse Theory of Abstracts and Abstracting." *Monograph in Systemic Linguistics,* No. 5. , The Department of English Studies, University of Nottingham, Nottingham.

[14] Hatzitheodorou, A., (2011), "A Genre-oriented Analysis of Research Article Abstracts in Law and Economics Journals." Paper presented at the international CERLIS conference, Bergamo, Italy, June 23-25.

[15] Huckin, T. N., (1987), "Surprise Value in Scientific Discourse." Paper presented at the CCC Convention, Atlanta, Ga, March.

[16] Jalilifar, A. R., (2006), A comparative generic analysis of English theses and dissertation abstracts: Variations across disciplines and cultures. Unpublished doctoral thesis. Isfahan: University of Isfahan.

[17] Jalilifar, A. R., (2009), *Research Articles in Applied Linguistics: A Genre-based Writing Guide.* Ahvaz: University of Shahid Chamran.

[18] Kaplan, R.B, S. Cantor, C. Hagstrom, L. Kamhi-Stein, Y. Shiotani and C. Zimmerman, (1994), "On abstract writing." *Text* 14:3, pp. 401–426.

[19] Lorés, R., (2004), "On RA Abstracts: from Rhetorical Structure to Thematic organization." *English for Specific Purposes,* 23, Pp. 280–302.

[20] Martin, P. M., (2003), "A Genre analysis of English and Spanish Research Paper Abstracts in Experimental Social Sciences." *English for Specific Purposes,* 22:1, pp.25-43.

[21] Nwogu, N. N., (1997), "The Medical Research Paper: Structure and Functions." *English for Specific Purposes,* 16:2, Pp.119-138.

[22] Ozturk, I., (2007), "The textual Organization of Research Article Introductions in Applied Linguistics: Variability within a Single Discipline." *English for Specific Purposes,* 26(1), 25-38.

[23] Pramoolsook, I., (2011), "Disciplinary variations across 12 sub-disciplines of engineering: genre analysis of abstracts written by Thai engineers." Paper presented at the international CERLIS conference, Bergamo, Italy, June 23-25.

[24] Ramanathan, V. & Kaplan, R. B., (2000), "Genres, Authors, Discourse Communities: Theory and Application for (L1 and) L2 Writing Instructors." *Journal of Second Language Writing,* 9 (2), 171-191.

[25] Saadinam, F., (2005), A Contrastive Study of Schematic Move Structure in Thesis Abstracts Written by Iranian Students in the Field of TEFL and Psychology".

Unpublished MA dissertation. Tehran: Khatam University.

[26] Salager-Meyer, F., (1990), "Discoursal Flaws in Medical English Abstracts: A Genre Analysis Per Research- and Text-Type." *Text,* 10:4, pp. 365–384.

[27] Salager-Meyer, F., (1992), "A text-type and Move Analysis Study of Verb Tense and Modality Distribution in Medical English Abstracts." *English for Specific Purposes,* 11:2, pp.93-113.

[28] Samar, R. G. & Talebzade, H., (2006), "Professionals Write Like This: The Case of ESP/EAP Experimental Research Article Abstracts." Paper presented at the first Post-Graduate Conference, University of Tehran, Iran.

[29] Samar, R. G., Talebzadeh, H., Kiany, G. R. & Akbari, R (under review). "Moves and Steps to Sell a Paper: A Cross-cultural Genre Analysis of Applied Linguistics Conference Abstracts."

[30] Samraj, B., (2005), "An Exploration of a Genre set: Research Article Abstracts and Introductions two Disciplines." *English for Specific Purposes,* 24, Pp.141-156.

[31] Santos, M.B., (1996), "The Textual Organization of Research Paper Abstracts in Applied Linguistics." *Text* 16:4, pp. 481–499.

[32] Soler-Monreal, C., Carbonell-Olivares, M., & Gil-Salo, L., (2011), "A Contrastive Study of the Rhetorical Organization of English and Spanish PhD Thesis Introductions". *English for Specific Purposes,* 30, 4–17. doi:10.1016/j.esp.2010.04.00

[33] Swales, J. M., (1990), *Genre Analysis: English in academic and research settings*. Cambridge: CUP.

[34] Van Bonn, S., & Swales, J. M., (2007), "English and French Journal Abstracts in the Language Sciences: Three Exploratory Studies", *Journal of English for Academic Purposes*, 6, 93–108.

[35] Yakhontova, T., (2002), 'Selling' or 'Telling'? The Issue of Ccultural Variation in Research Genres. In J. Flowerdew (Ed.), *Academic Discourse*, Pp. 216–232). Harlow: Longman.

[36] Yang, R.& D. Allison, (2003), "Research Articles in Applied Linguistics: Moving from Results to Conclusions." *English for Specific Purposes,* 22:4, Pp.365-385.

Appendix

A. List of English (International) Psychology Journals:

1. Archives of General Psychiatry
2. Journal of Applied Psychology
3. Journal of Counseling & Clinical Psychology
4. Journal of Instructional Psychology
5. Journal of Personality and Social Psychology
6. Journal of Social Psychology

7. Personality and Individual Differences

8. Personality and Social Psychology Bulletin (Sage) (Monthly)

9. Personnel Psychology

10. Psychological Science

B. List of Persian (Iranian) psychology journals:

٦. اصول بهداشت روانی

٧. فصلنامه روانشناسی دانشگاه تبریز

٨. تازه‌ها و پژوهشهای مشاوره

٩. مجله روانشناسی و علوم تربیتی (دانشگاه تهران)

١٠. دانشور رفتار

١١. فصلنامه علمی‌-پژوهشی علوم انسانی دانشگاه الزهراء (س)

١. روانشناسی معاصر

٢. روانشناسی تحولی

٣. مجله روانشناسی

٤. پژوهشهای روانشناسی بالینی و مشاوره

٥. مطالعات روانشناختی

گام‌هایی به سوی چکیده‌ای موفق: تجزیه و تحلیل ژانرمحوری مقایسه‌ای

حسین طالب‌زاده[۱]، رضا غفارثمر[۲]، ، غلامرضا کیانی[۳]، رامین اکبری[٤]

اهمیت چکیده مقالات پژوهشی به عنوان ژانری دانشگاهی انگیزه لازم را جهت تمرکز تحلیل‌گران بر این حیطۀ مغفول فراهم آورده است. اکثر پژوهشگران حیطۀ ژانر، با فرض کارکرد تلخیصی چکیده‌ها، برای تجزیه و تحلیل از مدل مرسوم **IMRD** (مقدمه – روش – نتایج– بحث یا نتیجه) بهره برده‌اند. حال اینکه مشکلات گزارش شده درمورد بخش‌های پایانی چنین مدلی، مداقه و تحقیق بیشتر را طلب می‌کند. از این گذشته علیرغم تاثیر فراوان گونه‌گونی رشته‌ای و فرهنگی بر ارتباطات موثر درون رشته‌ای و بین رشته‌ای اعضای جوامع گفتمانی، مطالعات مقایسه‌ای با تاکید بر نیازهای دانشگاهیان ایرانی جهت ارتباط با و حضور موثر در جوامع گفتمانی بین‌المللی بسیار اندک هستند. تحقیق حاضر با الگوگیری از سنت تجزیه و تحلیل ژانرمحور آموزش زبان انگلیسی برای اهداف ویژه/ دانشگاهی به دنبال پر کردن برخی خلاهای موجود با انجام تجزیه و تحلیل مقایسه‌ای چکیده‌هایی از علوم نرم بود تا ویژگی‌هایی را که وجه مشخصه متون محققان ایرانی و همکاران بین‌المللی آنهاست، تعیین کند. کلان‌ساختار، ریزساختار و برخی ویژگی‌های ۱۰۰ چکیدۀ مقالات پژوهشی تجربی برگرفته از مجلات معتبر ایرانی (فارسی) و بین‌المللی (انگلیس) روانشناسی با بهره‌گیری از برخی مدل‌های متقن و دقیق تجزیه و تحلیل و تبیین گردید. نتایج نشان داد که علیرغم وجود شباهت‌هایی در استفاده از بخش‌های مقدمه، روش و انتهایی، در نحوۀ شکل‌گیری بخش‌ها، حرکت‌ها و گام‌های تشکیل‌دهندۀ آنها تفاوت وجود داشت. تفاوت‌های موجود در سایۀ اولویت‌های فرهنگی دو جامعۀ گفتمانی توضیح داده شده‌اند. با توجه به ناکارآمدی مدل چهاربخشی کلان‌ساختار، مدلی سه‌بخشی نیز پیشنهاد گردید. همچنین کاربردهای این پژوهش مورد بررسی قرار گرفته است.

واژگان‌کلیدی: تجزیه و تحلیل ژانرمحور، مدل‌های حرکت و گام، کلان‌ساختار، ریزساختار، چکیده مقاله، پژوهشی.

۱. دانشجوی دکتری، گروه آموزش زبان انگلیسی، دانشکده علوم انسانی، دانشگاه تربیت مدرس، تهران، ایران

۲.دانشیار گروه آموزش زبان انگلیسی، دانشکده علوم انسانی، دانشگاه تربیت مدرس، تهران، ایران

۳. دانشیار گروه آموزش زبان انگلیسی، دانشکده علوم انسانی، دانشگاه تربیت مدرس، تهران، ایران

٤. استادیار گروه آموزش زبان انگلیسی، دانشکده علوم انسانی، دانشگاه تربیت مدرس، تهران، ایران