# 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

# Mahmood Reza Atai Simin Falah Teacher Training University, Tehran, Iran

#### **Abstract:**

The primary aim of this study was to explore the possible variations between English academic writing of English and Persian Native Speakers (ENS & PNS) regarding Applied Linguistic Research Articles (APRAs). To this end 80 APRAs were selected from 15 journals publishing English applied linguistic research articles written by ENS and PNS. The result and discussion sections of these articles were analyzed based on genre analysis models proposed by Brett (1994) and Swales (1990) for result and discussion sections respectively. The second main focus of this study was the analysis of discussion sections of APRAs written by ENS and PNS with respect to Evaluated Entities (EEs) and Ascribed Values (AVs) based on Thetela's model (1997) for evaluative language of discussion sections of applied linguistic, politics and sociology. The findings show that result and discussion section moves as used by ENS and PNS do not completely correspond to the models proposed by Brett (1994) and Swales (1990). Moreover some variations were observed between the moves used by ENS and PNS regarding discussion sections. These findings might be due to the peculiar conventions of APRAs genre or cultural differences between ENS and PNS. Concerning evaluative language, the findings show that EEs and AVs used by ENS and PNS correspond to Thetela's model (1997). Further some differences were observed between the type and frequency of AVs used by both group of writers. The findings may promise some implications for ESP pedagogy, syllabus design, and materials preparation. Keywords: genre analysis, research article, results, discussion, evaluated entities, ascribed values.

# 1. Introduction

As a result of the shortcomings of register and discourse analysis, since the early 1980s there has been an interest in genre centered approaches to analysis of written and spoken discourse in the field of applied linguistics. The motivation behind these studies has been providing comprehensive models for English non-native speaker students, regarding different genes of their disciplines.

One of the research lines in genre studies which has received extensive attention from researchers, is move analysis. According to Nwogu (1997) move analysis in genre studies is the identification of schematic units or moves. Each move is taken to embody a large number of constituent elements which combine in identifiable ways to constitute information in the move. As stated by Dudley-Evans (2000), the underlying assumption behind move-based models is that moves are common to all disciplines but there exists some variations in terms of type and frequency of the moves.. Research articles are among the genres which have received extensive attention from

researchers in move analysis studies. Prominent studies on move analysis of research article introductions includes Swales (1971, 1980), result section Brett (1994), discussion section Holmes (1997), Lindeberg (1994), and Berkenkotter and Huckin (1995).

According to Dudley-Evans (2000), since the early move/step analysis, there have been two main tendencies: one under the influence of sociology of science (e.g., Mulkay, 1991) has been the more detailed analysis of the concept of discourse community (Miller, 1994) and actual discourse communities in practice (Swales, 1998), the other has been the detailed analysis of specific features of language as used in particular genres, such as hedging (Hyland, 1998), reporting verbs (Thompson & Ye, 1991; Thomas and Haws, 1994) and verbs with inanimate subjects (Master, 2000).

Parallel with the ESP approach, in the field of linguistics, within the framework of Systemic Functional Linguistics (SFL) many research programs were carried out, mostly within Australia, on academic genres (Christie & Martin, 1993; Thompson, 1996; Cope & Kalantzis, 1997). From SFL perspective, the relationship between language and context is seen in the varied uses to which language is put, with genres being particular configurations of field (what is going on), mode (what the role of language is), and tenor (who is involved). Genres are patterns of discourse for expressing meanings in context, and the basic components of meaning, or macro/metafunctions. These metafunctions are the ideational, the interpersonal and textual. Ideational resources theorize about some external reality. They construe a reality of participants, processes and the types of relationships these enter into. Interpersonal resources act to characterize the participants in the linguistic exchange, the interlocutors, in terms of social roles, relationships and attitudes. Textual resources act to organize the flow of interpersonal and ideational meanings (Hyland, 2002).

The evaluative language is part of interpersonal semantics of interpersonal metafunction. Interpersonal semantics consists of negotiation, appraisal (evaluation) and involvement systems (Martin, 1997). By evaluation we mean the speaker/writer's attitude and values (Hyland, 2002), which is central to interaction between reader and writer (Thetela, 1997). Earlier it was believed that RA is non-interactive but recent sociological research has shown that professional writers successfully interact with their readers without compromising the factual information, which is traditionally the concern of RA (Thetela, 1997). Evaluation is an essential component of the academic RA. Therefore the study of evaluation can give a considerable amount of information about a text (Hunston, 1998). Some recent studies on evaluation are as follows Dressen (2003), Stotesbury (2003), Shaw (2003), Maurnen (2003), Thetela (1997) and Hunston (1988).

Bhatia (1999) offers a model that focuses on the development of knowledge of genre in professional settings. According to Bhatia's model writers must acquire the following skills; a) general writing skills, b) general generic skills, and c) develop skills to mix, embed and create generic forms. This means that not only students should be familiar with general writing skills; generic knowledge is a must for these novice academic writers. There is evidence that although applied linguistic students have a good command of general English, lack of general generic skills is

troublesome for these students in writing academic essays, reports, research articles (RAs), and thesis. These students should be provided with frameworks of the genres of their disciplines in order to enhance their reading and writing academic genres. In the field of applied linguistics RAs are the main media to communicate with the discourse community, therefore the literature on genre analysis of applied linguistic RAs is rich with different move analysis models proposed for different sections of RAs. Since the effect of L1 culture on students' academic writing cannot be denied, many researches have been carried out concerning move analysis in articles written by English native speakers and non-native speakers across different disciplines (Brown, 1982; Mohan & Lo, 1985; Takahashi & Beebe, 1987; Yang & Allison, 2003). But not much study is done considering Persian native speakers writing RAs in applied linguistics. Two studies regarding the move analysis of APRAs are yang & Allison (2003) and Fallahi & Erzi (2003). Yang and Allison (2003), analyzed result and discussion sections of 20 applied linguistic RAs. Following moves were reported to had been observed in the results sectuions: move 1- (preparatory information 10%), move 2- (reporting results 52%), move 3- commenting on results (interpreting results, comparing with the literature, evaluating results, accounting for results, 33%), move 4- (summarizing results 2%), move 5evaluating results (indicating limitation, indicating significance, .06%), move 6- deductions from the research (recommending further research, 0.3%). Any move regarding restatement of hypothesis was not reported by Yang and Allison (2003). Yang and Allison (2003) considered reporting the results as the obligatory move and the rest as optional moves for the result sections of applied linguistic research RAs. Yang and Allison (2003) observed the following moves for discussion sections: (background information, less than one percent), (reporting results, 18%), (summarizing results, less than one percent), (commenting on results (interpreting, comparing with the literature, accounting for results, evaluating, 35%), (summarizing the result, less than one percent), (evaluating the study, less than one percent) and deduction (suggestions for further research and pedagogical implications, 21%). Yang & Allison (2003) reported that in discussion sections of applied linguistic RAs there is a more communicative focus on commenting on results. Moves commenting on results and reporting on results are obligatory and the rest are optional moves.

Another relevant research to mention here is Fallahi & Erzi (2003). They too analyzed discussion sections of 61 applied linguistic RAs written by ENS. They proposed the following moves for the discussion sections of applied linguistic RAs: (information, 17%), (results, less than one percent), (findings, 32%), (unexpected outcome, about one percent), (reference to previous research, 3%), (explanation, 7%), (claim, 21%), (limitation, 0%), (recommendation, 8%), (restatement of hypothesis, 3%), (procedure, 2%). In this study findings were the dominant move used by ENS writers.

As stated by Bhatia (1999) considering the generic knowledge as the mere knowledge of moves and assuming the text as mono functional blocks has the danger of oversimplifying and ignoring writer's complex purpose and 'private intentions'. Authors write RAs to communicate and

interact with the discourse community. According to Hunston (1998) one way of interaction is evaluation, i.e. statement of 'personal judgment', which is 'interpersonal'.

The primary aim of this study is to explore possible differences in type, sequence and frequency of moves of results and discussion sections of English applied linguistic research articles written by ENS and PNS. The second section of this study deals with the variations observed in the type and frequency of evaluative language employed by ENS and PNS in discussion sections of applied linguistic research articles.

#### 2. Corpus

To select the corpus for the study first the researchers collected a comprehensive list of journals published in the field of applied linguistics through searching the Internet and checking library references of universities. From this list 15 journals (7 international and 8 Iranian) were selected by consulting the experts in the field guided by such standards as, journal's relevance to the readership in English Language Teaching (ELT), and reputation in the field of ELT. Following Nwogu (1997:121) reputation is defined as 'the esteem which members of an assumed readership held for a particular publication or a group of publications.' The selected journals are: Applied Linguistics, TESOL Quarterly, Language Learning, English for Specific Purposes, Studies in Second Language Acquisition, Second Language Research, Language Testing, Iranian Journal of Applied linguistics, Iranian Journal of Teaching Languages, Foreign Language Teaching Journal, Journal of Social Sciences and Humanities of Shiraz University, Research Bulletin of Isfahan University, The journal of humanities, Journal of Humanities of Al-Zahra University, and Journal of Humanities and social sciences of Tarbiat Modarres University.

In order to select the articles from the selected journals, first 300 articles published from 1991 to 2004 were selected randomly from the table of contents of journals. Then they were checked in terms of nationalities of their authors. Those articles written by ENS and PNS were selected. Richards et al. (1992: 241) defines native speaker as' a person considered as a speaker of his or her native language'. The information regarding the authors' nationalities is obtained from the experts in the field, information given at the end of article and search through Internet to find out their nationalities and places of birth.

### 3. Procedure

First articles written by non-native English and Persian native speakers, and articles presenting other genres such as article and book reviews or essays were excluded and 80 articles presenting empirical research were selected (40 from international and 40 from Iranian journals) by the researchers. Then, result and discussion sections of the selected articles were analyzed based the models proposed by Swales (1990) for discussion and Brett (1994) for the result section. Finally, since Thetela's (1997) model exclusively analyses evaluative language of discussion sections, only discussion section of the selected articles were analyzed with respect to evaluated entities and

ascribed values.

According to Brett's model (1994:52-54), the main moves used in the results section of RAs are as follows: 1. metatextual categories (1.1- pointer,1.2- structure of section), 2. presentation categories (2.1- Procedural, 2.2- Hypothesis restated, 2.3- statement of data), 3. comment categories (3.1- comparison of finding with the literature, 3.2- evaluation, 3.3- further research suggested, 3.4-implications, 3.5- summarizing.)

According to Swales (1990) the moves of discussion section are: background information, statement of results, (un)expected outcome, reference to previous research, explanation, exemplification, deduction of the hypothesis, recommendation.

The unit of move analysis in this study was sentence. In line with some previous studies if there were two moves in a sentence it was assigned to the move that was more salient. Holmes (1997), and Yang & Allison (2003), employed this procedure. Also, the sequence of moves and number of sentences devoted to each move were recorded for the purpose of further analysis.

The analysis of the evaluative language of discussion sections is based on Thetela's (997) model. Many different evaluation signals were identifiable in the text, the majority of which were not relevant to the purpose of this research. Based on the category proposed by Thetela (1997), first, evaluated entities were categorized under the two headings of topic –oriented categories (TOE) and Research-Oriented Entities (ROE). The EEs are printed in bold face and AVs in Italics.

Example: Evidence in this research is sufficient to confirm that... (ROE) (Nelson, 2002)

Example: <u>On-line planners spent much longer on task than the pre-task planners</u>, but produced less overall speech (a difference that was statistically significant). (TOE) (Ellis, 2001)

This study focuses on ROE. Based on Thetela's (1997) model ROE itself is divided into two categories.

1. Process-oriented category:

A) Usefulness:

Thetela (1997) defines usefulness as the judgment of value of a method on the basis of its goal achieving function, ability to evaluate theory, relevance in the achievement of goals, applicability, explicability, power, and appropriateness

Example: It is important ... that the <u>research</u>...(Nelson, 2002)

B) Control: Through this category the writer expresses an opinion about whether or not a process entity is reliable. (Thetela, 1997)

Example: It is not possible to claim ... (McNamara, 2002)

2. Product -oriented category:

(A) Significance: According to Thetela (1997) it is the most common quality ascribed to the results of findings, concerning their validity, or relevance to research.

Example: An important finding... (Brindley, 2002)

(B) Certainty: It is related to the personal function of language, modality, modalization, and more specifically the epistemic type (Thetela, 1997).

Example: It is consistent with ... (Collins, 2002)

After the determination of EEs and AVs a comparison was employed between two groups of writers (ENS and PNS), to find the existing differences if any and then they were categorized based on the model presented by Thetela (1997). (See table 1)

Table 1- Product vs. process scales of value

Research investigation	Results or findings	
(doing)	(knowing)	
Usefulness	Significance	
Control	Certainty	
	Truthfulness	Consistency

(Thetela, 1997:113)

The study then employed a descriptive text linguistic design to analyze type, sequence and frequency of moves in result and discussion sections of APRAs written by ENS and PNS. Then, to compare the data for ENS and PNS the non-parametric statistical test of Chi Square was used.

Regarding EEs and AVs, discussion sections of APRAs were analyzed based on Thetela's (1997) model and type and frequency of EEs and AVs were recorded. Then for the purpose of comparison between the type and frequency of the EEs and AVs employed by ENS and PNS statistical test of Chi Square was used. Finally EEs and AVs were categorized based on predefined headings of Thetela's (1997) model.

## 4. Results

This study examined the differences between the generic structure of result and discussion sections of applied linguistic RAs written by ENS and PNS. The models used as the bases of analysis were Swales (1990) for discussion and Brett (1994) for result sections.

In order to explore the difference between the kinds of "moves" used in results (R) and discussion (D) sections of applied linguistic RAs written in English by English and Persian native speakers, using Brett's (1994) model for the results and Swales' (1990) model for the discussion sections. To probe the first null hypothesis the move structure of the result sections of applied linguistic RAs written by ENS and PNS were analyzed in terms of their kind based on Brett (1994) model. From the ten moves proposed by Brett (1994), six moves are employed by ENS and PNS. These moves are 1.1- (pointer), 2.1- (procedural), 2.2- (hypothesis restated), 2.3- (statement of data), 3.1- (comparison with literature), and 3.2- (evaluation). Moves 1.2- (structure of the section), 3.3-

(further research suggested), 3.4- (implications), and 3.5- (summarizing) were not used by both

group of writers. From these moves, moves 1.1, 2.1, 2.2, 2.3 3.1 were obligatory in both context.

To investigate the second part of the first question, discussion sections of applied linguistic RAs were analyzed based on Swales' (1990) model. From the eight moves proposed by Swales

(1990) all were used by ENS but PNS used only six moves in discussion sections of applied

linguistic RAS. In the PNS corpus moves 3- (unexpected outcome) and move 7- (generalizability)

were absent.

The second research question addressed differences between the sequence of "moves" used in

the R and D sections of the applied linguistic RAs written by ENS and PNS in terms of their

sequence. To this end the sequence of the moves in result and discussion sections of applied

linguistic RAs written by ENS and PNS were recorded. The main patterns for moves were found and

frequency of each pattern was counted in result and discussion of APRAs written by ENS and PNS.

No linear move structure was found, that is moves did not follow the order proposed by Brett (1994)

and Swales (1990). Regarding move sequence significant variations were observed.

There were some cyclic patterns concerning moves in results and discussion sections. The

typical patterns in ENS and PNS corpus were as follows:

For result section: 1-5-1-5-1-5 or 5-3-1-5-3-1

For discussion section: 2-4-2-4-2-4-2

A chi square analysis was run to find the differences between the frequency of patterns of

sequence of the moves of result and discussion sections of applied linguistic RAs written by ENS

and PNS. The results of chi square analysis for result section was 3.47 which is below critical chi-

square 3.84 at 1 level of freedom. Therefore there is no significant difference between the sequence

of moves in result sections of APRAs written by ENS and PNS. The results of chi square analysis for

discussion sections was 4.32 which is above the critical chi square value at 1 degree of freedom.

This means that there is a significant difference between move sequences of discussion sections of

APRAs written by ENS and PNS.

In order to explore the differences in the frequency of the moves of result and discussion

sections of applied linguistic RAs written by ENS and PNS the frequency of the moves were

recorded. The data for the frequency of result section moves of RAs written by ENS and PNS are

presented in table 2. As table 2 depicts move 2.3- (statement of the data) was the most frequent move

used by both group of writers, and move 3.2- (evaluation), was the less frequent among the observed

moves.

ENS have made more frequent use of moves 1.1-(pointer), 3.1- (comparison with literature)

and 2.2- (hypothesis restatement) compared to PNS data. On the other hand PNS writers have made

more frequent use of 2.1 (procedural) and 3.2- (evaluation) moves. A chi-square analysis was run to

47

investigate the probable differences between the moves used in the result sections of the corpus. The chi-square observed value=2.4 at 5 degrees of freedom is lower than the critical chi-square, i.e. 11.07. Based on this finding it can be concluded that there is no significant difference between the frequencies of the moves in result sections of the corpus. Therefore the third null hypothesis is not rejected

In order to investigate the second part of the third question the frequency of the moves of discussion sections of the corpus were recorded. Findings are presented in table 3. As table 3 depicts move 2 (Statement of the results) is the most frequent move used by both group of writers. Moves 6 (exemplification) and move 8 (suggestions for further research) are the less frequent used by PNS and move 7 (generalizability) is the less frequent move used by ENS. It should be mentioned that moves 3 (unexpected outcome) and move 7 (generalizability) were not used by PNS. Except move 2 'statement of results' is equally used by both groups of writers, the rest of the moves are used more frequently by ENS.

Table 2- Frequency of moves of result sections of applied linguistic RAs written by ENS and PNS

Moves of results section	ENS f	PNS f
1.1- Pointer	35	34
1.2- Structure of section	0	0
2.1- Procedural	22	26
2.2- Hypothesis restated	10	9
2.3- Statement of data	40	40
3.1- Comparison with literature	18	13
3.2- Evaluation	2	5
3.3- Further research suggested	0	0
3.4- Implications	0	0
3.5- Summarizing	0	0

In order to investigate the possible differences between the moves used in discussion sections of the corpus, a chi-square analysis was run. The observed value of chi-square are 14.49 at 5 degrees of freedom exceeds the critical chi-square, 11.01. This finding indicates that ENS and PNS have used different patterns of moves in discussion sections of the corpus. These findings indicate that there is difference between the frequency of the moves used by ENS and PNS in discussion sections of applied linguistic RAs.

Table 3- Frequency of moves of discussion sections of applied linguistic RAs written by ENS and PNS.

Discussion section moves	ENS f	PNS f
1- Background knowledge	19	11
2- Statement of results	40	40
3- (Un) expected outcome	10	0
4- Reference to previous research	33	20
5- Explanation	26	14
6- Exemplification	16	2
7- Generalizability	7	0
8. Recommendation	13	2

As mentioned above the second main focus of this study was the analysis of EEs and AVs of discussion sections of applied linguistic RAs written by ENS and PNS. The analysis in this section is based on the model proposed by Thetela (1997) for discussion sections of applied linguistics, politics and sociology.

The fourth question addresses the differences between the "evaluated entities" (EE) and "ascribed values" (AV) used in D sections of applied linguistic RAs written in English by English and Persian native speakers, in terms of kind and frequency. To this end the discussion sections of the corpus were analyzed with respect to EEs and AVs based on the model proposed by Thetela (1997).

In the analysis of discussion sections of corpus 38 cases of process-oriented category of evaluation were observed. From these 38 cases, 28 cases of evaluation were employed by ENS and 10 cases by PNS. These cover 60% and 35% of the total number of the observed process oriented category of evaluation respectively.

'Usefulness' quality was expressed by terms such as *significant, significantly, important, evidence, reliable* and *substantial.* The 'control' quality was realized through the use of the clause 'it is (not) possible to...'. ENS and PNS writers used different terms to express the qualities of usefulness and control. PNS writers have used terms such as *significant, reliable, substantial*, to express usefulness On the other hand ENS writers have used *significant, significantly, important* and *evidence* to express the quality of usefulness. Moreover PNS writers have not expressed the quality of control in their writings. These findings show that there is a difference between the type of EEs and AVs employed by ENS and PNS. Examples of EEs and AVs of process-oriented category of evaluation are as follows.

Examples: (1) It is not possible to distinguish...

(2) It is important to note that due to the restrictions imposed on the design...

Thetela (1997) defines product-oriented category of evaluation as evaluating the results and findings of RAs. In the analysis of discussion sections of the corpus 98 cases of evaluation of product oriented categories were observed. From this number 56 cases were employed by ENS and 42 by PNS writers. These cover 57% and 42% of the observed product oriented category of evaluation.

'Significance' was expressed by terms such as, *important*, *modest*, *tentative*, *evidence*, *and significance*, *insignificant*, *significant*, *remarkable*. The 'certainty' quality was expressed through terms such as, *It is possible that*, *confirm*, *evidence*, *support*, *complement*, *valid*, *consistent counter to*, *replicate*, *accords to*, *compatible*, *support*, *contribute*, *contrary to*, *confidence*, *conformity*, *correspond and consistent*.

It should be noted that in both cases of ENS and PNS the 'certainty' quality was expressed by 'consistency'. No realization of 'truthfulness' was observed in RAs written by ENS and PNS. Compared to the PNS data ENS writers have used more variety of terms to express the abovementioned.

Examples of AVs expressing the qualities of significance and certainty are as follows.

These <u>results</u> are **consistent** with Bailey's (1990)...

This is consistent with Sander's (1987)

This <u>finding</u> is **important** since Snellings

It is important to point out that

This study replicates the findings of almost all...

- (6) It is possible that the Chinese...
- (7) This observation is perhaps important...

In all the qualities under study, i.e. 'usefulness', 'significance', 'certainty' and 'control', ENS have made more use of evaluative lexis. 'Control' quality is totally ignored by PNS and the frequency of the use of 'significance' quality is nearly equal in ENS and PNS corpus.

In order to compare the EEs and AVs used by PNS and ENS a chi square analysis was run. The findings reject the fourth null hypothesis at 0.05 level of significance. That is the result of chi square analysis 6.41 which is above the critical chi-square 5.59 with df=3 rejects the null hypothesis. Therefore there is a difference between the 'evaluated entities' (EE) and 'ascribed values' (AV) used in D sections of applied linguistic RAs written in English by English and Persian native speakers, in terms of kind and frequency.

The fifth question considers the possibility of categorizing the 'evaluated entities' (EE) and

'ascribed values' (AV) used in D sections of applied linguistic RAs written in English by English and Persian native speakers based on Thetela's (1997) model.

EEs and AVs observed in this study can be categorized based on the model proposed by Thetela (1997). Since the quality of truthfulness was absent in the corpus, it should be excluded from the model

#### 5. Discussion

This study examined the differences between moves of result and discussion sections of applied linguistic research articles with respect to evaluated entities and ascribed values based on models proposed by Swales (1990) for discussion and Brett (1994) for result and Thetela (1997) for EEs and AVs.

As pointed out earlier the chi-square analysis of result section moves of the RAs written by ENS and PNS revealed that there is no significant difference between the type, sequence and the frequency of moves in result sections of the corpus. That is although not all the moves proposed by Brett (1994) appeared in the corpus, the writers tended to use similar moves throughout the result section of their articles. Following moves were observed in the corpus of this study: pointer, procedural, hypothesis restated, statement of data, comparison with literature and evaluation. It should be mentioned that moves (structure of the section), (further research suggested), (implications), (summarizing) were absent in the corpus.

The most frequent move of the result sections of the corpus was statement of the data that was the core element of the result sections. As a result moves (statement of the data), and (pointer) can be considered as obligatory moves for the result sections of applied linguistic RAs written by ENS and PNS, the rest of the moves are optional. Moreover it was observed that moves (pointer) and (statement of the data) are overlapping moves since they report similar data.

By comparing the findings of this study with that of Yang and Allison (2003) it can be claimed that, the findings of this study corresponds to the findings of Yang and Allison (2003) in terms of kind and frequency of the moves of result sections of applied linguistic RAs.

As previously mentioned data analysis of discussion sections of applied linguistic RAs revealed that there is a difference between the move structure of discussion sections of RAs written by ENS and PNS in terms of their type and frequency. In the corpus under study moves (statement of results) and (reference to previous research) were obligatory and the rest were optional. Since move (statement of results) was the most frequent move, it can be considered as the core element of discussion sections of applied linguistic RAs. It should be mentioned that moves unexpected outcome and (generalizability) were absent in PNS corpus. ENS writers have used moves (explanation), (generalizability) and (recommendation) more frequent than their PNS counter part. This makes discussion sections of ENS writers more interactive.

Lewin et al (2001) and Yang & Allison (2003) state that using moves in different sections of

applied linguistic RAs is restricted by time and space, similar previous research, subsequent sections in the RAs, the writer's being a novice or a esteemed veteran member of the discourse community, and writer's personal judgment to express the amount of information in order to convince the audience. As a result it can be concluded that omitting some of the moves in result and discussion sections of RAs as observed in this study were the result of any of the above-mentioned factors.

To compare the findings of this study with the relevant literature concerning frequency and type of moves of discussion sections of the corpus there will be a reference to Yang & Allison (2003) and Fallahi & Erzi (2003).

By comparing the findings with that of Yang & Allison (2003) it can be claimed that the findings of this study concerning move structure of discussion sections of applied linguistic RAs do not completely correspond to the findings of Yang and Allison (2003). A comparison of the findings of this study with that of Fallahi and Erzi (2003) shows that the findings of this study are not in total agreement with that of Fallahi & Erzi (2003).

To elaborate on the findings of the second question it should be mentioned that moves did not follow each other in a linear pattern. The cyclical pattern of moves was prevalent in both result and discussion sections of applied linguistic RAs. This supports the findings of Peng (1987), Dudley-Evans (1988), Swales (1990), Holmes (1997), Yang and Allison (2003). These researchers have reported the cyclic patterns of move in terms of their sequence in different disciplines.

Another finding of this study was that the frequency, sequence and types of moves used in result and discussion sections of applied linguistic RAs are not related to the length of the section under study. This supports Lewin et al's (2001) claim that genre structure for research text does not include an obligatory amount of text that should be devoted to each move. Moreover in the corpus under study it was observed that moves having similar functions appeared in composite forms. For example moves (pointer) and (statement of data) of result sections and moves (statement of results); (unexpected outcome) and (explanation) of discussion sections were consolidated in some cases. This is in conformity with the findings of Holmes (1997) and Lewin et al's (2001) findings in RAs of social sciences. They also reported cases were similar or more relevant moves were integrated within a sentence.

As previously mentioned the evaluative lexis used by ENS and PNS differs in terms of kind and frequency. ENS has made more frequent use of evaluative lexis in discussion sections of their RAs. Also they have used a variety of terms to express evaluation.

Interactive function of evaluation is expressed by Hunston (1998) and Thetela (1997). The larger number of EEs and the variety in AVs in ENS corpus is an evidence for the interactiveness of applied linguistic RAs. This is in line with findings of Suau (1999), Nicolas (1988) and Cmerjkova (1996). They too evaluated English RAs and academic discourse more interactive than Spanish, Ukrainian, Russian and Czech academic discourse. The interactiveness of English writing as stated in Suau (1999) is due the development of Anglo-Saxon tradition of writing.

Bloor and Bloor (1991), Brown and Skelton (1988) state that the unqualified and direct writing distinguishes nonnative speakers of English from English native speakers. Moreover it is argued that linguistic competence is a prerequisite for mastery of pragmatic competence. He further adds that linguistic competence does not ensure an equal level of pragmatic competence. Also Takahashi and Beebe (1987) and Kasper et al (1996) claim that linguistic proficiency may aid certain types of pragmatic transfer from L1 to L2. Crystal (1992:75) defines pragmatic competence as "the ability to produce and understand statements appropriate to the social context in which they occur." The findings of this study support abovementioned claims in that even if PNS writers of English RAs are proficient in general English skills, this proficiency does not guarantee their mastery in pragmatic competence. This means it is possible that PNS writers have concentrated on grammar and syntax of their writing and communicative aspects, which are as important as syntax, have been ignored.

Mohan and Lo (1985) have also proposed a set of factors as influential on L2 writing. They state that inadequate knowledge of English skills for expressing and articulating complex and abstract ideas, unfamiliarity with the cultural components of a topic, heavier focus on grammar and syntax rather than communicating the meaning and unfamiliarity with the cultural conventions of expository writing in the target language, might hinder better performance of non native speakers writing in English. The differences observed in the use of evaluation in ENS and PNS corpus might be the result of any of the above-mentioned factors. That is PNS writers might be unfamiliar with the conventions of applied linguistic RAs as a result pay more attention to textual rather than interactional aspects of academic writing. This makes their RAs less interactive compared to ENS corpus.

# **6.** Conclusion and implications

The findings indicated some similarities in the generic structure of result sections of RAs written by ENS and PNS. Moreover some differences were observed among the moves of discussion sections of RAs written by ENS and PNS. Since in applied linguistic discipline RAs are the main media to communicate with the discourse community, it is obvious that PNS writers have studied many applied linguistic RAs for updating their academic knowledge, as a result they are familiar with the genre of academic writings. On the other hand PNS writers have not adopted the generic structure of result and discussion sections. Therefore RAs written by PNS writers do not completely conform to the conventions of discourse community; as a result explicit teaching of this genre seems essential.

The second main focus of this study was on the evaluative language used in applied linguistic RAs written by ENS and PNS. The differences observed in the findings might be due to the differences between the pragmatic aspects of the two languages under consideration, i.e. English and Persian. The role of general language proficiency and English pragmatic competence of PNS

writers are the other factors to be considered as influential.

The findings of the present study have some pedagogical implications regarding teaching and material design. According to Holmes (1997) lack of awareness of the role of genre in academic discourse results in the inadequate materials and syllabi. The present study provides a framework for material design for writing classes of applied linguistic in BA, MA and PHD level. Moreover familiarizing students with the genres of their discipline enhances their understanding of written and spoken discourse of their discipline. Further more enhances students' effectiveness, creativity and flexibility in producing written and spoken academic discourse. And finally familiarizing students with genres of RAs makes them consider RAs not as a linguistic text, but as social interaction with other members of the discourse community.

Genre analysis studies should not be limited to a specific genre or discipline. More studies should be carried out regarding genres of different disciplines. This study was descriptive. Some experimental researches can be done by comparing the RAs written by those who are taught the RA genre and those who are not. Cross-field comparison of different disciplines helps in providing ESP students with a comprehensive model concerning the move structure. The last but not the least suggestion concerns evaluative language. Since this study was based on Thetela's (1997) model which covers a proportion of evaluative language of RAs other studies based on other models of evaluation should be carried out to provide students with an integrated and comprehensive model of evaluative language in RAs.

#### References

- Berkenkotter, C. & Huckin, T.N. (1995). *Genre knowledge in disciplinary communication*. Lawrence Erlbaum.
- Bhatia, V.K. (1999). Integrating products, processes, purposes and participants in professional writing. In C.N. Candlin and K. Hyland (Eds). *Writing, texts, processes and practices*. London: Longman
- Brett, P. (1994). A genre Analysis of the result sections of sociology articles. *English for Specific Purposes*, 13(1), pp.47-56.
- Brown, D. Some linguistic differences in the written English of the Chinese and Australian students. Language learning and Communication, 191),pp.39-49.
- Christie, F and Martin, J. (1993). Curriculum genres: planning for effective teaching. In Cope, B. & Kalantzis, M. *The powers of literacy: A genre approach to teaching writing*. Bristol, PA: Falmer Press.
- Dudley-Evans, T. (2000). *Genre analysis: A key to a theory of ESP.* URL: <a href="https://www.uv.es.aelfe/webRAs/RA-2-Dudley.pdf">www.uv.es.aelfe/webRAs/RA-2-Dudley.pdf</a>

- Holmes, R. (1997). Genre analysis and the social sciences: An investigation of the structure of RAs discussion sections in three disciplines. *English for Specific Purposes 16(4), pp. 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(1), pp. 113-122.
- Hunston, S. (1988). Evaluation and ideology in scientific writing. In M. Ghadessy (Ed.) *Register* analysis: Theory and practice. London: Printer.
- Hunston, S. (1998). Evaluation and organization in a sample of written academic discourse. In M. Coulthard (Ed.). *Advances in written text analysis*. London: Routledge.
- Lewin, B. et al. (2001). Expository discourse: a genre-based approach to social science research texts. Continuum.
- Martin, J.R. (1997). Genre and institutions. Continuum. London.
- Nwogu, K.N. (1997). The medical research paper: structures and functions. *English for Specific Purposes*, 16 (2), pp. 119-137.
- Swales, J.M. (1990). Genre analysis. Cambridge University Press.
- Swales, J.M. (1998). Consider thesis: the role of imperatives in scholarly writing. *Applied Lingistics*, 19(1), pp.97-121.
- Takahashi, T. & Beebe, L.(1987). The development of pragmatic competence by Japanese learners of English. *JALT Journal*, 8(1), pp. 131-151.
- Thetela, P. (1997). Evaluated entities and parameters of value. *English for Specific Purposes*, 16(2), pp. 101-117.
- Yang, R. & Allison, D. (2003). RAs in applied linguistics: Moving from results to conclusions. English for Specific Purposes, 22(4), pp.365-384.

Email: mreatai@yahoo.com

<sup>\*</sup>Address for Corresponding: Mahmood Reza Atai, No. 49 Mofatteh St., English Department, Teacher Training University, Tehran, Iran.