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Native Experts and Reputable Journals as Points of Reference: A Study on Research-Article Discussions

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Abstract

The current study sought to compare the rhetorical moves and steps that native-English-speaking and Iranian authors of research articles (RAs) employ in writing up the 'discussion' sections of their RAs. It was hypothesized that the latter group is not as proficient in writing RA discussions as the former group. A total of 66 (N=66) RA discussions from three reputable international academic journals and three Iranian journals were sampled from years 2009 to 2019. This corpus was then analyzed by three human coders who used Yang and Allison's (2003) rhetorical move analysis model for scoring the sampled RA discussions. Results showed stark differences between Iranian and native RA writers; the majority of the rhetorical moves and steps that are considered obligatory or conventional by the native group are seen as options by the Iranian group. With the native group and the reputable international journals being the standard points of reference, it was concluded that Iranian authors of RAs lack the professional knowledge and expertise prerequisite to writing standard RA discussions. It is recommended (a) that non-native authors of RAs receive professional training for writing standard discussions, and (b) that journal editors be more sensitive to rhetorical moves and steps before they accept a submission for publication.

Keywords: Academic writing, discussion, genre analysis, move analysis, research article, rhetoric, subgenre.

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1. INTRODUCTION

No matter how seminal, precise and ground-breaking a study and its findings might be, it will not gain the attention it deserves if it is not presented the way it deserves. A study may be presented in the form of a research report, a thesis/dissertation, a conference paper, a journal article, a lecture, etc., and any of these forms of 'presentation' (or genre species) is bound by its own 'de facto' specifications (e.g., move structure, rhetorical organization, rules, nuts and bolts, and nuances and intricacies) that comprise its 'face' validity. Attempts at converting the 'de facto' specifications of 'forms of presentation' into their 'de jure' specifications are not new, and there are records of such attempts that date back even to ancient civilizations—e.g., Enheduanna's Mesopotamian canons of exordium, argument, peroration, repetition, and metonymy (Hallo, 2004); Aristotle's ethos, pathos, and logos (cf., Barnes, 1984); Ancient Egypt's canons of wise silence, timing, restraint, fluency, and truthfulness (Hoskisson & Boswell, 2004); and so forth.

This tradition of converting the de facto specifications of different genre species into their 'de jure' specifications has permeated the whole history of human scholarship. In the 20th century, for instance, people like Reid (1982, 2005; see also Salmani Nodoushan, 2007a, 2007b, 2007c, 2016) wrote course books that have sought to instill the 'de jure' specifications of five-paragraph essays in high school and college students. More recently, people like Swales (1971, 1981, 1990, 2004) have continued the tradition and sought to give form and shape to academic writing beyond college level. Swales' attempts, in specific, have turned up into what we know as modern 'move analysis' (although he was not the first scholar to talk about this concept).

A good number of move-analytic studies have been conducted on different subgenres in academic writing beyond college level (e.g., Hopkins & Dudley-Evans, 1988; Rasmeenin, 2006; Yang & Allison, 2003). To my knowledge, however, no study has compared Iranian academics' writing of research article (RA) discussions to those of their native-English-speaking counterparts with an eye on finding their convergences and divergences. This is an important issue since professional native-English-speaking authors of RAs published in internationally-renowned journals such as Applied Linguistics or Language Testing are points of reference; they are the criteria with whose performance less-proficient non-native authors' performance can be compared. This paper reports the findings of a move-analytic study that has compared Iranian and native-English-speaking authors' RA discussions to see if Iranian authors possess the skill and expertise prerequisite to the writing of modest academic outputs. The study hypothesizes that this is not the case and that Iranian authors of RA discussions lag behind the de facto standards of professional academic writing.

2. LITERATURE REVIEW

Studies on the rhetorical move structure of 'discussions' are quite rare. This is not surprising because move analysis is a relatively recent development in academic writing in general, and English for Specific Purposes (ESP) in specific. Swales and Feak (1994) are perhaps the first scholars who noted that writing discussions is not an easy task because they "vary considerably depending on a number of factors" (p. 195)—including variability in research questions, type of research design (i.e.,

qualitative quantitative, etc.), the species of genre (e.g., theses, research articles, etc.) in which they appear, and so forth—that determine whether the 'discussion' should be focused on a description of findings, solutions to problems, or other orientations (cf., Swales & Feak, 2003; Wilkinson, 1991). This implies, for instance, that "different types of questions require research writers to focus on different parts of the research such as the results section or the research methods section or the related literature in order to support their answers" (Rasmeenin, 2006, p. 1).

2.1 Organization of the Discussion Subgenre

Variability in the organization of the 'discussion' subgenre is also, at least in part, due to its relative placement in the structure of the whole genre. In a RA, for instance, the discussion section may appear after (a) the 'method' section or (b) the 'results' section. The results and discussion subgenres or the discussion and conclusion subgenres may even conflate into a single section. All these factors affect the move structure of a discussion (cf., Rasmeenin, 2006; Swales & Feak, 1994). As such, it is not an easy task to propose a unique move-structure scheme for the discussion subgenre. Nevertheless, it would still be possible to propose such a scheme for RAs if we controlled the variables that affect RA discussions. For instance, if two different journals publishing quantitative RAs required that RA 'results', 'discussion', and 'conclusion' subgenres appear as separate sections (each with its own heading), it would not be wrong to argue that their RAs should engage a similar move structure. Where the discussion subgenre has been placed after the 'results' and before the 'conclusion' in a RA, readers have already read the title, the abstract, the keywords, the introduction, the background/literature, the method, and the results before they opt for reading the discussion. This implies (a) that a major bulk of the information presented in those sections would be redundant in the discussion, and (b) that writers should make certain moves (e.g., intertextual referencing, summarization, etc.) to make sure their discussions would be simultaneously parsimonious, succinct, precise, adequate, and effective.

Rasmeenin (2006) argued that authors may start their discussions (a) with a summary of the results presented in the previous subgenre or (b) with answers to their research questions. They may then highlight their main findings, interpret them, and discuss why and how their findings have come about. Authors may also want to compare their findings with similar other studies. Nevertheless, there is essentially no clear criterion to tell authors how to structure their discussions, and the discussion subgenre is not as mechanically structured as are certain other subgenres (Sereebenjapol, 2003). This, of course, does not mean that hypothetical frameworks for the move structure of discussions have not been developed. Yang and Allison (2003), for instance, have attempted to develop a theoretical framework to delineate the move structure of the discussion subgenre in applied linguistics. Others have also made similar attempts pertaining to other scientific disciplines (e.g., Hopkins & Dudley-Evans, 1988; Kanoksilapatham, 2005; Peng, 1987), but Yang and Allison's framework is by far the most comprehensive and all-inclusive model for applied linguistics.

2.2 Model for the Rhetorical Move Structure of the Discussion Subgenre in Applied Linguistics

Since the 'type of ESP', the 'communicative purpose', the 'preferred approach', and the 'language use' in other academic communities of practice do not easily conflate with those of applied linguistics, Yang and Allison's framework is to be preferred in our discipline (Kanoksilapatham, 2005; Nwogu, 1997). Compared to the models developed by others (e.g., Hopkins & Dudley-Evans, 1988; Peng, 1987), Yang and Allison's framework is more adequate, precise, and comprehensive. The model comprises seven rhetorical moves some of which, in turn, comprise a few rhetorical steps (Salmani Nodoushan, 2012). To develop their model, Yang and Allison (2003) analyzed a rich corpus of discussions from a rich variety of applied linguistics genres. Table 1 summarizes their model.

Table 1. Yang and Allison's (2003) model for the rhetorical move structure of discussion subgenre in applied linguistics.

Move	Step	What happens in the move/step
Move 1		Presenting background information
Move 2		Reporting result
Move 3		Summarizing result
Move 4		Commenting on result
	Step 1	Interpreting result
	Step 2	Comparing result with literature
	Step 3	Accounting for result
	Step 4	Evaluating result
Move 5		Summarizing the study
Move 6		Evaluating the study
	Step 1	Indicating limitations
	Step 2	Indicating significance
	Step 3	Evaluating methodology
Move 7		Deductions from Research
	Step 1	Making suggestions
	Step 2	Recommending further research
	Step 3	Drawing pedagogic implications

As the model indicates, authors in applied linguistics may start their 'discussion' subgenres with the presentation of some background information. This is different from literature review in that, here, authors usually restate their goals/aims, hypotheses, and questions very briefly. They may or may not use meta text (e.g., 'the current study sought to …', 'this research aimed at …', etc.) to signal this move (Weissberg & Buker, 1990). They may then proceed to the second move in which they present their results – often very briefly since the results may already have been presented in the 'Results' section that precedes the 'Discussion' section. This move engages several textual clues (including past tense, reporting verbs, figures, tables, intertextual deixis, and so forth) that are part and parcel of data commentary. Authors may then decide to make the third move that summarizes their results. To be able to make this move, authors do need certain summary writing skills; précis writing, engaging intertextual referencing, wielding noun premodifiers, and other summarizing techniques are very useful–for more on these topics please see Allen and Mason (1964), Hernandez (2023), Reid (1982; 2005). The fourth move is perhaps the most

important move in a discussion. Here, authors comment on their results by making subjective judgments, providing interpretation, making comparisons with the existing literature on similar studies, and so forth – often in the form of a succession of rhetorical steps (i.e., interpreting the results, comparing the results with existing literature, accounting for the results, and evaluating the results). The fifth move involves a general summary of the whole study. Like the fourth move, the sixth move (i.e., evaluating the study) may also include a few rhetorical steps; authors may point out the limitations of their studies, talk about the pros and cons of their studies, or evaluate their methodologies. Likewise, the seventh move may also involve a few steps in which authors make certain suggestions for future research, talk about the implications of their studies for language teaching, and so forth.

Nevertheless, enumerating the moves – as we did – may mislead the reader to think that they must be sorted in a linear fashion, but this is not true. Authors are not always expected to start their discussions with move 1, then proceed to moves 2, 3, 4, 5, and 6 before they arrive at move 7. In other words, a linear and consecutive sorting of these moves gives a mechanical look to the discussion subgenre. Authors versed in applied linguistics often avoid this form of move organization and opt for other organization schemes that may involve the nesting of certain moves within certain other moves. As such, writing a discussion does not need to be a mechanical skill that can be taught through drilling; rather, it all depends on the author's expertise and skill. Nevertheless, it is not a bad idea if less experienced/proficient authors opt for a linear organization which they, then, brush up with certain cohesive ties that allow them to transit across different moves and steps smoothly (Salmani Nodoushan, 2012).

3. METHOD

The current study took Yang and Allison's (2003) conceptual framework (see 2.2) as its move analysis framework to extract the rhetorical moves and steps that were present in its corpus of research article (RA) discussions written by native-English-speaking authors and non-native Iranian authors.

3.1 The Corpus

For purposes of the current study, six journals were randomly selected: three journals published in Iran and edited by Iranian non-native speakers of English, and three journals published by reputable academic publishers and edited by native-English-speaking editors. The former group included Iranian Journal of Applied Language Studies (IJALS), Journal of English Language Pedagogy and Practice (JELPP), and Journal of English Language Teaching and Learning Studies (JELTLS), and the latter group consisted of Applied Linguistics (AL), Language Testing (LT), and System (SYS). Table 2 summarizes the composition of the corpus.

Table 2. The composition of the corpus.

Sets	Journals	Code	Tokens
Native authors	Applied Linguistics	AL	14131
	Language Testing	LT	11495
	System	SYS	14018

Table 2 continued…

Iranian authors	Iranian Journal of Applied Language Studies	IJALS	8565
	Journal of English Language Pedagogy and Practice	JELPP	10516
	Journal of English Language Teaching and Learning Studies	JELTLS	8028

The 'publication range' of the selected journals consisted of 2009 to 2019, and from each journal, one paper was randomly selected from each year. As such, two journal sets were included in the corpus: (1) the native set, and (2) the Iranian set. Care was taken to include only those papers in the corpus that had been written by native speakers of English or by Iranian non-native speakers of English. With this in mind, 11 papers were randomly selected from each journal (one paper per year). This gave 33 discussions written by Iranian non-native-English-speaking authors and 33 discussions written by native-English-speaking authors. Care was also taken to include in the corpus only those discussions that appeared as a separate section from the 'results' and the 'conclusion' sections. In other words, each of the selected papers included 'results', 'discussion', and 'conclusion' as three distinct sections, each with its own heading. This was important for controlling the factors that might otherwise affect the precision and validity of the data.

Some of the papers in corpus had more than one author—i.e., were co-authored. I am aware that this might be an intervening factor if I wanted to compare native and Iranian authors' language proficiency levels, but the aim of this study is to compare the static-and-objective rhetorical structures of two sets of written products, not their producers' language proficiency.

3.2 Procedure

Engaging Yang and Allison's (2003) model (see Table 1), each of the three human coders/raters—all experts in teaching academic writing with a minimum of 10 years of experience—coded each of the discussions separately. A move/step observed in a discussion received a score of 1, and a move/step not observed a score of 0. A rater's 0s and 1s for all of the moved and steps were added up to obtain the overall score assigned to each of the discussions by the rater. As such, three sets of overall scores were obtained, one from each human coder. The sets were then correlated (using Spearman's *rho*) to see if the raters' coding were reliable. Reliability indices were estimated at 0.981, 0.980, and 0.967 for raters 1 and 2, raters 1 and 3, and raters 2 and 3, respectively.

Since move 4 in Yang and Allison's (2003) model comprises four steps, and because three raters had assigned 0s and 1s to each move and step separately, move 4 had a total score of 12—i.e., a score range of 0 to 12. Likewise, moves 6 and 7 had a score range of 0 to 9 since each of them includes 3 steps (scored by 3 raters). Other moves and each of the steps in moves 4, 7 and 6 had a score range of 0 to 3 (i.e., three 0s or 1s assigned by 3 raters). As such, it was necessary to scale up all of the raw scores (for moves 1, 2, 3, 5, 6, and 7) up to 12 (i.e., the upper score limit for move 4) so that they could be statistically comparable to move 4. This procedure was also followed for each of the steps in moves 4, 6, and 7; the steps were also scaled up to 12. This procedure gave me a clean standard data set that was ready for submission to statistical analysis.

To compare Iranian and native writers' RA discussions in my corpus, I then used a set of Mann-Whitney *U* tests (i.e., the non-parametric counterpart of the *t*-test for independent samples that works with medians). It would, of course, be possible to use parametric tests for data analysis since my Iranian and native corpora included 33 discussions each; since the number of discussions in each set was larger than 30, a violation of the normality assumption would not cause any issues for parametric analyses (cf., Pallant, 2016). However, I preferred the non-parametric Mann-Whitney *U* test because the raters had used binary scoring (i.e., 0s and 1s) in their coding of the RA discussions under study.

Descriptive statistics (and percentage data) were also used to pinpoint the obligatory, conventional, and optional moves/steps in my corpus. To this end, Rasmeenin's (2006) criteria were used; a move/step appearing in 100% of the discussions in the corpus was labeled 'obligatory', a move/step appearing in 66% to 99% of the discussions was called 'conventional' (i.e., de facto), and a move/step appearing in less than 66% of the discussions was considered 'optional'.

4. RESULTS

A Mann-Whitney U test was performed to see if Iranian and native writers of RA discussions differed in any statistically significant way. The result showed that the native group (MR=47.77, n=33) outperformed the Iranian group (MR=19.23, n=33), U=73.5, z=–6.043, p=.000, r=.74 (see Table 3—last row).

Table 3. Mann-Whitney U Test results for the moves/steps in this study.

			Mean	Rank				
		Total N	Native	Iranian	U	z	Sig.	r*
Move1		66	33.83	33.17	533.500	-.158	.874	.02
Move2		66	43.36	23.64	219.000	-4.828	.000	.59
Move3		66	42.79	24.21	238.000	-4.377	.000	.54
Move4		66	45.32	21.68	154.500	-5.167	.000	.64
	Step 1	66	37.50	29.50	412.500	-2.994	.003	.37
	Step 2	66	37.50	29.50	412.500	-2.534	.011	.31
	Step 3	66	41.02	25.98	296.500	-3.626	.000	.45
	Step 4	66	42.47	24.53	248.500	-4.740	.000	.58
Move5		66	39	28	363.000	-3.206	.001	.39
Move6		66	38.50	28.50	379.500	-2.530	.011	.31
	Step 1	66	37.42	29.58	415.000	-2.329	.020	.29
	Step 2	66	33.48	33.52	545.000	.013	.990	.00
	Step 3	66	37	30	429.000	-2.773	.006	.34
Move7		66	41.12	25.88	293.000	-3.374	.001	.42
	Step 1	66	37.68	29.32	406.500	-2.008	.045	.25
	Step 2	66	38.38	28.62	383.500	-2.663	.008	.33
	Step 3	66	37.77	29.23	403.500	-2.288	.022	.28
Overall		66	47.77	19.23	73.5	-6.043	.000	.74

*($r = Z$ /sqrt N)

This would be considered a very large effect size using the criterion proposed by Cohen (1988)—i.e., 0.1=small effect, 0.3=medium effect, 0.5=large effect. As for the first rhetorical move in RA discussions (i.e., Presenting background information), the native group (MR=33.83, n=33) and the Iranian group (MR=33.17, n=33) did not show

any significant difference: U=533.500, z= –1.58, p=.874, r=.02. This was also true for the second step in the sixth rhetorical move (i.e., indicating the significance of the study). The native group (MR=33.48, n=33) did not differ from the Iranian group (MR=33.52, n=33): U=545.000, z= –.013, p=.990, r=.00. For all the other rhetorical moves and steps described by Yang and Allison's (2003) model, however, the results revealed significant differences between the out-performing native and the low-performing Iranian authors of RA discussion. Table 3 summarizes the results of the study.

As indicated in Table 3, the size of the difference between the native and the Iranian groups was large in connection to moves 2, 3, and 4 (and also step 4 of move 4). The size of the difference between the native and the Iranian groups, à la Cohen (1988), was medium in connection to moves 5, 6, and 7, and also steps 1 to 3 in move 4, step 3 in move 6, and step 2 in move 7. By the same token, a small difference was observed between the native and the Iranian groups in relation to step 1 in move 6 and also steps 1 and 3 in move 7 (see Table 3).

As for the types of moves and steps (i.e., obligatory, conventional, or optional), the frequencies of the moves and steps observed in the corpus by the three human coders were totaled and averaged, and then their percentages were computed. The outcome percentages were then interpreted using Rasmeenin's (2006) criteria (i.e., 100%='obligatory'; 66% to 99%='conventional' or 'de facto'; less than 66%='optional'). It would of course be much better if we took 50.05% to 99.94% as the range for 'conventional' moves and steps since the term 'norm' is more often than not defined as 50-plus% agreement among members of a community; once these numbers are rounded, they will render a range of 50.05% to 99.90%. Anyway, for this study, I went by the criteria set by Rasmeenin (2006).

Table 4 displays the obtained percentages and uses labels to indicate how each of the native and Iranian author groups have approached the task of RA discussion writing.

Table 4. Obligatory, conventional, and optional moves and steps in native and Iranian RA discussions.

		Native		**Iranian**	
		Percentage	**Type**	**Percentage**	**Type**
Move 1		57.58%	Optional	56.57%	Optional
Move 2		85.86%	Conventional	27.27%	Optional
Move 3		79.80%	Conventional	31.31%	Optional
Move 4		78.03%	Conventional	42.68%	Optional
	Step 1	100%	Obligatory	75.76%	Conventional
	Step 2	93.94%	Conventional	69.70%	Conventional
	Step 3	64.65%	Conventional	22.22%	Optional
	Step 4	53.54%	Optional	3.03%	Optional
Move 5		39.39%	Optional	6.06%	Optional
Move 6		16.50%	Optional	5.39%	Optional
	Step 1	25.25%	Optional	8.08%	Optional
	Step 2	7.07%	Optional	8.08%	Optional
	Step 3	17.17%	Optional	0%	Optional
Move 7		42.76%	Optional	19.53%	Optional
	Step 1	53.54%	Optional	31.31%	Optional
	Step 2	38.38%	Optional	12.12%	Optional
	Step 3	36.36%	Optional	15.15%	Optional

5. DISCUSSION

This study belongs in the tradition of rhetorical move analysis (cf., Swales, 1971, 1981, 1990, 2004). Building on the move structure framework proposed by Yang and Allison (2003) and the criteria for move and step classification proposed by Rasmeenin (2006), the current study sought to see if native and non-native authors of RA discussions differed in their performance. The results of the data analysis were presented in section 4. In this section, a discussion of the reported results is presented. Overall, it can be argued that the two independent groups under study (i.e., native-English-speaking authors of RA discussions versus Iranian EFL-/ESL-speaking RA discussion authors) differ in statistically significant ways; although they do not differ in terms of 'presenting background information' and 'commenting on the significance of their studies' in their RA discussions, the RA authors from the native group have clearly outperforms their Iranian counterparts in terms of (a) reporting the results of their studies, (b) summarizing their results, (c) commenting on their results, (d) summarizing their studies, (e) evaluating their studies by indicating their limitations and evaluating their methodologies, (f) deducing from their researches through making suggestions and recommending for further research as well as drawing pedagogic implications from their studies, and (g) interpreting their results – i.e., comparing their result with literature, accounting for their result, and evaluating their results,

Iranian and native RA discussion authors in this study have assumed (a) that the first move (i.e., presenting background information in a RA discussion) is an option and (b) that they may opt out of it. This stands in stark contrast to Rasmeenin's (2006) finding that considers this move as 'obligatory'. Likewise, it also stands in contrast to Salmani Nodoushan's (2012) finding which showed that 'presenting background information' is a conventional and de facto move in discussions in master's theses. This behavior on the part of the RA discussion authors in the current study, however, is perhaps justifiable since background information is always presented in earlier sections in a research article (e.g., introduction and literature review); nevertheless, it is commendable if RA authors are advised to present a brief overview of background information in a couple of sentences in their RA discussions since it can introduce some form of modularity to the discussion subgenre and can also serve their readership.

The second (i.e., reporting the results) and the third (i.e., summarizing result) moves were considered conventional by native RA writers, but optional by Iranians. This contradicts Rasmeenin's (2006) findings which showed that these moves are obligatory—Salmani Nodoushan's (2012) findings showed that the third move is conventional, though. One reason for this discrepancy might be the fact that the corpus under study here included only those research articles that had separate sections for 'results', 'discussion', and 'conclusion'. However, a reiteration of the results in a RA discussion, if the word limits of the target journal allow, would be reasonable since it would introduce modularity to the discussion subgenre and make it less demanding for the readership.

Both Rasmeenin (2006) and Salmani Nodoushan (2012) have argued that the fourth move (i.e., commenting on result) is the heart of a discussion, so it should be considered an obligatory move. As shocking as it may seem, the Iranian RA discussion authors in the corpus of the current study have seen it as an optional move – notice that the percentages of steps 1 through 4 were totaled and averaged to yield the overall

percentage for the move. Although native RA discussion writers have considered this move conventional, 100% of them have taken the first step (i.e., interpreting result) to be obligatory, but the Iranian authors have seen this step as conventional (75.76%). This finding can perhaps be accounted for if we notice that (a) the journals from which the Iranian RA discussions were sampled for this study are edited by naive editors, (b) the authors are mainly university students who lack professional knowledge and expertise, and (c) professors' names as co-authors are present in these articles by way of courtesy.

Moves 5 and 6 were considered optional by both of the author groups under study; this corroborates Rasmeenin's (2006) findings although Salmani Nodoushan (2012) found that move 5 is a conventional move in master's theses. Nevertheless, discussions from master's theses might not be easily compared to RA discussions since their genres, although overlapping, might not be considered as exact twins. As for move 7, both Rasmeenin (2006) and Salmani Nodoushan (2012) labeled it 'obligatory', but this move was considered 'optional' by both of the author groups under study here. This might be granted owing to the fact that RAs may normally postpone this move for their 'conclusion' subgenre.

If we take the native author group as our point of reference, we can argue – based on the findings of this study – that (a) moves 2, 3, and 4 should be part and parcel of any RA discussion and that (b) no manuscript should be accepted for publication if its author has failed to include these rhetorical moves in his/her RA discussion. Since the native author group in my sample has considered step 1 (i.e., interpreting the results) from move 4 as an obligatory move, all prospective authors of RAs should be advised to include this step in their RA discussions. They should also be told that 'reporting the results' is one thing, but 'interpreting the results' is a totally different story; the former is to be presented in the 'Results' section of a RA, but the latter should be reserved for the 'Discussion' section. Nevertheless, a longer discussion that comprises all of the moves and steps delineated by Yang and Allison's (2003) theoretical framework would never hurt anyone provided that the word limits of target journals allow prospective authors to write longer discussions. Even where journals have strict word-limit policies, prospective authors might still be advised to be parsimonious – for instance, through précis writing techniques (cf., Allen & Mason, 1964) – in other sections (e.g., literature review, method, etc.) but extravagant in the discussion section. After all, the discussion section is where green and veteran RA authors are told from each other.

It should be noted that the present study worked with a limited sample (33 RA discussions in the native group and 33 in the Iranian group). This delimitation was necessary due to the fact that the current study was a project with limited resources, funds, and time. As such, I could not practically engage a larger sample in my corpus. Further research engaging a much larger sample and a richer range of journals might corroborate or contradict the findings of this study. Nevertheless, the percentages reported for the native group in Table 4 are a good point of reference for both prospective RA author and journal editors. Since these percentages are based on a corpus obtained from three of the most reputable journals in our field (i.e., Applied Linguistics, Language Testing, and System), the findings reported in Table 4 might be seen as a torch that can illuminate the path for new-coming RA authors who aspire after a long academic career and a modest publication record.

6. CONCLUSION

This study sought to see if non-native/Iranian authors of RA discussions know the conventions that govern the rhetorical structure of this subgenre. Based on the findings of the study, it can be concluded that the Iranian group does not possess the knowledge and skills prerequisite to writing succinct comprehensive RA discussions. The obligatory and conventional rhetorical moves and steps that are an inevitable part and parcel of any robust RA discussions had been expended by the Iranian authors of the RA discussions randomly sampled for the corpus of the current study. An author not engaging de facto rhetorical moves and steps in his academic writing performance is a naive author whose manuscripts lag behind and should not be accepted for publication.

The findings of the current study also indicate that the Iranian editors of the Iranian journals from which part of the corpus was sampled lack professional knowledge and skills prerequisite to journal editing. After all, journal editors are the de facto people expected to be the de facto gate keepers of academic honesty, integrity, and standards, but the ones in my corpus are not living up to their professional and/or ethical responsibilities – partly because of certain ideological and/or economic aspirations, and partly because of lack of professional skill and expertise.

All in all, we need a reform not only in our teaching programs but also in our publication standards. University professors and graduate students need training in writing different academic genres; they need to be (a) sensitized to the move-analytic standards of academic writing, (b) motivated to learn the obligatory and conventional rhetorical moves that govern different forms of academic genres as well as their composing subgenres, and (c) expected to engage these moves and steps in their academic written products. Journal editors and peer reviewers, in addition to being sensitive to plagiarism (cf. Muthalib et al., 2023), also need to learn these skills and practice them in their editing or review assignments. If we failed to live up to our responsibilities, no one from outside of our discipline might save us.

REFERENCES

Allen, E., & Mason, A. (1964). *The principles of précis*. Hodder & Stoughton Educational Division.

Barnes, J. (Ed.). (1984). *The complete works of Aristotle: The revised Oxford translation*. Princeton University Press.

Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Hallo, W. W. (2004). The birth of rhetoric. In C. S. Lipson & R. A. Binkley (Eds.), *Rhetoric before and beyond the Greeks* (pp. 25-46). State University of New York Press.

Hernandez, H. P. (2023). Nouns as nominal premodifiers in disciplinary research articles written by Filipino research writers: A cross-investigation. *International Journal of Language Studies, 17*(1), 31-52.

Hopkins, A., & Dudley-Evans, T. (1988). A genre-based investigation of the discussion sections in articles and dissertations. *English for Specific Purposes, 7*(2), 113-121. https://doi.org/10.1016/0889-4906(88)90029-4

Hoskisson, P. Y., & Boswell, G. M. (2004). Neo-Assyrian rhetoric: The example of the third campaign of Sennacherib (704-681 BC). In C. S. Lipson & R. A. Binkley (Eds.), *Rhetoric before and beyond the Greeks* (pp. 65-78). State University of New York Press.

Kanoksilapatham, B. (2005). Rhetorical structure of biochemistry research articles. *English for Specific Purposes, 24*(3), 269-292. https://doi.org/10.1016/j.esp.2004.08.003

Muthalib, K. A., Mustafa, F., & Yusuf, S. B. (2023). Types of plagiarism in EFL undergraduate theses: Discrepancy between knowledge and practice. *International Journal of Language Studies, 17*(2), 75-98.

Nwogu, K. N. (1997). The medical research paper: Structure and functions. *English for Specific Purposes, 16*(2), 119-138. https://doi.org/10.1016/S0889-4906(97)85388-4

Pallant, J. F. (2016). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Everbest Printing Co., Ltd.

Peng, J. (1987). Organisational features in chemical engineering research articles. *ELR Journal, 1*, 79-116.

Rasmeenin, C. (2006). *A structural move analysis of MA thesis discussion sections in applied linguistics* [Unpublished master's thesis]. Mahidol University.

Reid, J. M. (1982). *The process of composition*. Pearson Education Limited.

Reid, J. M. (2005). *Essentials of teaching academic writing*. Cengage Learning.

Salmani Nodoushan, M. A. (2007a). Error treatment in the EFL writing class: Red pen method versus remedial instruction. *Journal of Educational Technology, 4*(3), 53-58.

Salmani Nodoushan, M. A. (2007b). On adopting a cognitive orientation in EFL writing classroom. *Journal on Educational Psychology, 1*(1), 15-18.

Salmani Nodoushan, M. A. (2007c). Thinking on the write path. *Training Journal, May*, 37-40.

Salmani Nodoushan, M. A. (2012). A structural move analysis of discussion sub-genre in applied linguistics. *DacoRomania, 17*(2), 199-212. https://doi.org/10.5281/zenodo.7514774

Salmani Nodoushan, M. A. (2016). Working on the 'write' path: Improving EFL students' argumentative-writing performance through L1-mediated structural cognitive modification. *International Journal of Language Studies, 10*(4), 131-152. https://doi.org/10.5281/zenodo.7514806

Sereebenjapol, P. (2003). *An analysis of the errors in English which graduate science students make in the discussion section of their thesis* [Unpublished master's thesis]. Mahidol University.

Swales, J. (1971). *Writing scientific English*. Nelson.

Swales, J. M. (1981). *Aspects of article introductions. ESP monograph No. 1*. Language Studies Unit Aston University.

Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.

Swales, J. M. (2004). *Research genres: Exploration and applications*. Cambridge University Press.

Swales, J. M., & Feak, C. B. (1994). *Academic writing for graduate students: Essential tasks and skills*. The University of Michigan Press.

Swales, J. M., & Feak, C. B. (2003). *English in today's research world: A writing guide*. The University of Michigan Press.

Weissberg, R., & Buker, S. (1990). *Writing up research: Experimental research report writing for students of English*. Prentice-Hall.

Wilkinson, A. M. (1991). *The scientist's handbook for writing papers and dissertations*. Prentice-Hall.

Yang, R., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes, 22*(4), 365-385. https://doi.org/10.1016/S0889-4906(02)00026-1