

# COMPARATIVE GENRE ANALYSIS OF RESEARCH ARTICLE ABSTRACTS IN MORE AND LESS PRESTIGIOUS JOURNALS: LINGUISTICS JOURNALS IN FOCUS

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## **Abstract**

The current study compares the rhetorical structure and metadiscourse of research article abstracts in more and less prestigious journals in Linguistics. To this end, 200 abstracts from peer-reviewed Linguistics journals that are indexed in the Web of Science and Scopus were compared with 200 abstracts extracted from peer-reviewed Linguistics journals that are not indexed in either of these two highly ranked databases. Using Hyland's (2000) model of move analysis and Hyland's (2005) taxonomy of metadiscourse, the study reveals that abstracts in less prestigious journals typically include longer moves for introduction, purpose and method while abstracts in more prestigious journals include significantly lengthier findings. As for metadiscourse, abstracts in less prestigious journals employ significantly more transitions, frame markers and evidentials whereas the abstracts in more prestigious journals exhibit a higher use of code glosses, hedges, boosters and self-mentions. The results are interpreted with reference to the types of journals, and pedagogical implications and new research directions are proposed.

**Keywords:** genre analysis, moves, metadiscourse, research article abstract, rhetorical structure

## **1. Introduction**

Researchers worldwide are increasingly required to publish at highly ranked journals with reputable indexes (e.g., Web of Science and Scopus) as reflected in diverse university-level practices including the promotion criteria of faculty members, recognition of research excellence, the assignment of research grants/funding (e.g., Ain Shams University in Egypt; King Saud University in Saudi Arabia; Universiti Teknologi Malaysia in Malaysia) and world and regional university rankings (e.g., Times Higher Education World University Ranking, QS World University Ranking and Shanghai World University Ranking). It is generally assumed that research articles in top-tier journals exhibit more scientific value and novelty, but what about the writing style? Are there significant differences between the writing style of research articles at top-tier journals versus other peer-reviewed journals that are not included in reputable databases? The present paper tries to address this question through analyzing the rhetorical structure and metadiscourse of research article (RA) abstracts of more and less

prestigious journals in the field of Linguistics. The more prestigious journals in this article are journals that are indexed in the Web of Science and Scopus while less prestigious journals are not included in either of the two databases.

The focus on RA abstracts in the current paper reflects the significant fact that “the abstract is generally the readers’ first encounter with a text, and is often the point at which they decide whether to continue and give the accompanying article further attention or to ignore it,” (Hyland 2002: 63). In fact, it is generally believed that many articles do not receive the attention they rightly deserve due to poorly written abstracts (e.g., Hartley and Betts 2009; Piqué-Noguera 2012) and that novice writers need to acquire the skills of writing appropriate abstracts to their disciplines to be accepted and recognized by their discourse community (Pho 2008). Besides, RA abstracts, irrespective of their subject discipline, reflect “a well-defined and mutually understood communicative purpose,” (Bhatia 1993: 77) and thus represent an independent genre worthy of analysis. This is clearly evident in the varied existing models for RA abstract analysis (e.g., Bhatia 1993; Hyland 2000; Santos 1996) and numerous relevant studies (see the literature review section).

Genre analysis, defined as “the study of situated linguistic behavior in institutionalized academic or professional settings,” (Bhatia 1997: 181) is a significant approach to text level analysis. The analysis of different genre (= “a type of text or discourse designed to achieve a set of communicative purposes,” Swales and Feak 2009: 1) has been particularly popular in Applied Linguistics due to its rich pedagogic implications for English for Academic Purposes (EAP) and English for Specific Purposes (ESP) classrooms (e.g., Brett 1994). The examination of the distinctive patterns and features of each genre has proved extremely useful to prepare language learners to integrate within their target discourse communities. Learning the particular rhetorical structures and metadiscourse of RA abstracts, for example, enables novice researchers to conform to the conventions of academic writing and thus be more easily accommodated by the scientific community.

The rhetorical structure of a genre is often analyzed using its constituent “moves”. A popular definition for a “move” is “a discursal or rhetorical unit that performs a communicative function in a written or spoken discourse,” (Swales 2004: 228-229). While having its own communicative function, each move contributes to the overall purpose of the genre and can be realized by a number of smaller constituents, known as steps. Moves vary in their frequency and combinatory patterns, and may be optional or obligatory. Table (1) presents three popular models for move analysis of RA abstracts. The first model (Bhatia 1993) consists of 4 basic moves highlighting the action the author takes, the way the action is achieved, the findings and conclusions. The model is referred to as IMRD (=Introduction, Method, Results and Discussion). Another model is Santos’s (1996) who presented a five-move framework for the analysis of abstracts. The five moves include (1) situating the research, (2) presenting the research, (3) describing the methodology, (4) summarizing the findings and (5) discussing the

findings. A similar model is Hyland's (2000) who established a unique place for the "purpose" of the study, and, thus, specified five moves for the RA abstract; namely, introduction, purpose, method, product and conclusion. Please, note that the "product" move is referred to as "findings" in the remainder of the article to clarify its function.

**Table 1.** Move models of RA abstracts

| <b>Bhatia (1993)</b>                 | <b>Santos (1996)</b>                | <b>Hyland (2000)</b>    |
|--------------------------------------|-------------------------------------|-------------------------|
| Move 1:<br>Introducing the purpose   | Move 1:<br>Situating the research   | Move 1:<br>Introduction |
| Move 2:<br>Describing methodology    | Move 2:<br>Presenting the research  | Move 2:<br>Purpose      |
| Move 3:<br>Summarizing the results   | Move 3:<br>Describing methodology   | Move 3:<br>Method       |
| Move 4:<br>Presenting the conclusion | Move 4:<br>Summarizing the findings | Move 4:<br>Product      |
|                                      | Move 5:<br>Discussing the findings  | Move 5:<br>Conclusion   |

In addition to the rhetorical structure, genre analysis also examines the linguistic features specific to a genre. A popular model for the analysis of linguistic features is Hyland's (2005) taxonomy of metadiscourse. The model classifies linguistic features in a text into textual and interpersonal features. The textual features, which help to guide readers through the text, include logical connectives, frame markers, endophoric markers, evidentials and code glosses. As for the interpersonal features, they mainly aim to involve the reader in the text. This type includes the categories of hedges, boosters, attitude markers, self-mentions and engagement markers. Table (2) shows the varied categories of the model along with their functions and relevant examples.

**Table 2.** Hyland's (2005) taxonomy of metadiscourse

| <b>Category</b>                   | <b>Function</b>   | <b>Examples</b>  |
|-----------------------------------|---|--|
| <b>Textual</b>                    | <b>Help to guide reader through the text</b>                                | <b>Resources</b>   |
| Logical connectives (Transitions) | Express relations between main clauses                                      | and, but, in addition, however, thus                                       |
| Frame markers                     | Refer to discourse acts, sequences or stages                                | My purpose is..., first, second, the findings are..., In conclusion        |
| Endophoric markers                | Refer to information in other parts of the text                             | mentioned above, as follows  |
| Evidentials                       | Refer to information from other texts                                       | according to..., X states that...  |
| Code glosses                      | Elaborate propositional meanings  | in other words, it means that..., such as..., e.g., for example            |
| <b>Interpersonal</b>              | <b>Involve the reader in the text</b>                                       | <b>Resources</b>   |
| Hedges                            | Withhold writer's full commitment to statements                             | may, might, could, would, perhaps, some, possible                          |
| Boosters                          | Emphasize force or writer's certainty                                       | in fact, definitely  |
| Attitude markers                  | Express writer's attitude including significance, obligation to proposition | should, have to, agree, surprisingly                                       |
| Self-mentions                     | Refer to author(s) explicitly   | I, my, exclusive we, our   |
| Engagement markers                | Build relationship with reader explicitly                                   | imperatives (e.g., Please note that...), You can see that..., inclusive We |

A number of genre analysis studies have analyzed RA abstracts (see the literature review section), but analysis of abstracts with reference to the prestige of their journals is extremely rare. The current study thus aims to fill a gap in the genre analysis literature through comparing RA abstracts in more and less prestigious journals from a genre perspective. The popular idea is that the difference between these types of journals has to do with content and scientific value. The current paper, however, addresses the assumption that differences may surpass content to the writing style in terms of rhetorical patterns and metadiscourse. This study may thus prove enlightening for academic writing research and instruction. The results may also support a large pool of researchers who either aim to or are required to publish in highly ranked journals in their disciplines.

## 2. Literature Review

The literature on abstract analysis mainly addresses two types of abstracts; (1) thesis abstracts and (2) RA abstracts. Despite the high number of studies on thesis abstracts (e.g., Al-Ali and Sahawneh 2011; Geçiklî 2013; Ghasemi and Alavi

2014; Jin and Shang 2016; Kondowe 2014; Nasserri and Nematoliahi 2014; Ren and Li 2011), the present literature review will focus on RA abstracts to maintain relevance to the scope of the current study.

A major trend in the study of RA abstracts is cross-disciplinary. A number of authors have compared the rhetorical structure, metadiscourse and various linguistic features across different disciplines to explore potential disciplinary variation. Sample studies include comparisons between Applied Linguistics and English as a Second Language (Al-Shujairi, Ya'u and Buba 2016), Applied Linguistics, Applied Mathematics and Applied Chemistry (Darabad 2016), five sub-disciplines of Engineering (Maswana, Kanamaru and Tajino 2015), Linguistics and Literature (Doró 2013), Applied Linguistics, Applied Economics and Mechanical Engineering (Saboori and Hashemi 2013) and Linguistics and Applied Linguistics (Suntara and Usaha 2013). The comparisons highlighted major similarities and differences across the target disciplines, which have led to important implications to the teaching of writing in English for Specific Purposes (ESP).

Another trend is cross-linguistic in nature as other comparisons of RA abstracts were conducted across languages. Examples abound in the literature, including comparisons between English and Arabic (Alotaibi 2015), English and Turkish (Çandarh 2012), English and Russian (Zanina 2017) and English and Persian (Farzannia and Farnia 2017; Marefat and Mohammadzadeh 2013; Talebzadeh, Samar, Kiary and Akbari 2013). With the growing need to communicate efficiently with the international discourse community, such cross-linguistic comparisons including the English language are increasing and leading to interesting results. The studies have thus far revealed intriguing similarities and differences with respect to rhetorical structure, the use of metadiscourse and the production of certain linguistic features. These results, which may be partially interpreted in terms of varying cultural norms, reveal important pedagogical implications for the learning of the English language.

Equally important to English language teaching and learning are comparisons between the RA abstracts of native and non-native speakers of English. Such comparisons provide useful implications for language instructors and the learners themselves about how the abstracts of English language learners are similar and/or different than native speakers of English, thus allowing learners to improve their writing based on the findings of these comparisons. Sample studies have targeted learners of English with varied first languages, such as Chinese (e.g., Liu and Huang 2017), Persian (e.g., Abarghooeinze and Simin 2015; Ebrahimi and Motlagh 2015) and Taiwanese and Turkish (e.g., Kafes 2012).

Another approach to examine RA abstracts with reference to authors compares the abstracts of expert and novice writers with the latter often represented by graduate students (e.g., Byun 2015; Menezes 2013; San and Tan 2012). For example, Byun (2015) aimed to identify the features of RA abstracts produced by EFL (=English as a Foreign Language) graduate students. The study investigated the variation in rhetorical structure and metadiscourse of English abstracts

between Korean novice academic writers compared with native-speaking experienced writers. The study analyzed 91 abstracts by Korean graduate students of English language major drawn from a university annual periodical versus 91 abstracts by native-speaking experienced writers drawn from 7 international and well-recognized journals. The analysis relied on Hyland's (2000) five-move model and Swales's (2004) three-move model for the analysis of rhetorical structure and Hyland's (2005) metadiscourse taxonomy for the metadiscourse examination. The results revealed that the novice writers' abstracts tend to follow Swales's (2004) model and show preference for the use of evidentials, boosters and engagement markers. Novice writers' abstracts also revealed more cross-disciplinary variation and a significantly different use of metadiscourse.

While the earlier cross-disciplinary, cross-linguistic and author-dependent approaches to the study of RA abstracts dominate the scene, it is relatively rare to find studies focusing on how the abstracts of highly ranked and indexed journals in specific are written despite the increasing need for this direction. A sample study focusing on highly-ranked journals is Oneplee (2008) who examined the organization of journal article abstracts in two prestigious journals; *Science* and *Nature*. To this end, 100 abstracts published between 2006 and 2008 were analyzed using Santos's (1996) abstract move patterns theory with the help of 5 experts in Linguistics and Science. The results showed that the abstracts generally comprised the 5 moves of background, purpose, methodology, results and conclusion. The analysis also revealed that the results move constituted the largest part of the abstracts (i.e., 25.8%) followed by the background information (21.8%) and conclusion (15.8%). The two journals, however, assigned less space to the methodology move (11%), a finding that was interpreted as reflecting a general pattern in the scientific field.

With the aim of filling a real gap in the literature and supporting researchers' efforts to publish in prestigious journals, the current study aims to compare the similarities/ differences between the abstracts in more and less prestigious journals in the field of Linguistics. The point of reference for the current comparison, as has been mentioned earlier, is indexing or lack of indexing in the two well-known databases of Web of Science and Scopus. In this regard, the question arises: Are prestigious journals distinguished only in terms of scientific value and novelty? Or is it that they display a different writing style than less prestigious journals? The question is extremely intriguing from a genre perspective, but is also highly valuable in practical terms for researchers who always aim to publish in prestigious journals and would appreciate learning how to enhance their acceptance rates.

## Research Questions

The current study addresses the two following questions:

1. Are there significant differences between the abstracts of more and less prestigious journals with respect to move analysis?
2. Are there significant differences between the abstracts of more and less prestigious journals with respect to metadiscourse?

## 3. Methodology

### 3.1. Data Collection

A total of 400 abstracts were drawn from Linguistics journals for the purpose of the current study. Half the abstracts were extracted from 4 journals indexed at the Web of Science and Scopus; namely, *Applied Linguistics*, *International Journal of Applied Linguistics*, *Journal of English Linguistics* and *Language Sciences*. The abstracts were published between 2008 and 2016. The other 200 abstracts were extracted from 4 journals that are not listed in the Web of Science or Scopus. The abstracts of the less prestigious journals (i.e., *International Journal of Linguistics*, *Journal of Language and Linguistic Studies*, *Open Journal of Modern Linguistics* and *The Modern Journal of Applied Linguistics*) ranged in the year of publication between 2009 and 2016. All the abstracts were written in English and were part of empirical research articles. The exclusion of other types of articles, such as literature surveys and position papers, helped establish a valid criterion of comparison through ensuring similarity across the target abstracts.

### 3.2. Data Coding and Analysis

The current study adopted Hyland's (2000) 5-move model for the analysis of the rhetorical structure. The 5-move model, explained in detail in Table (3), seemed easy to implement and allowed comparison with a number of earlier studies that adopted the same framework for analysis. As for the analysis of metadiscourse, Hyland's (2005) model was selected as it seemed comprehensive and well-tested in previous research. Further subcategories were, however, added to the model to allow more accurate comparisons. For example, logical connectors were subcategorized into contrast, reason and cause, purpose, consequence, addition and sequence. Similarly, hedges were classified into adjectives, adverbs, modals, verbs and phrases, and boosters into emphatic *do*, adjectives, adverbs and phrases. A detailed description of the subcategories and illustrative examples are shown in Table (4). Another measure was also taken to allow accurate comparisons. The moves in which the linguistic features under examination were noted. The analysis did not only show that a specific abstract included 3 contrast and 4 addition

connectives, for example, but also marked the move (i.e., introduction, purpose, method, findings or conclusion) where these connectives were found.

**Table 3.** Hyland's (2000) model for the rhetorical structure of RA abstracts

|                     |   |
|---------------------|---|
| <b>Introduction</b> | Establishes context of the paper and motivates the research     |
| <b>Purpose</b>      | Indicates purpose, outlines the aim behind the paper            |
| <b>Method</b>       | Provides information on design, procedures, data analysis, etc. |
| <b>Finding</b>      | Indicates results   |
| <b>Conclusion</b>   | Points to application, or wider implications and interpretation |

Adapted from Behnam and Golpour (2014: 175).

**Table 4.** Adaptation of Hyland's (2005) taxonomy of metadiscourse

| <b>Category</b>                   | <b>Subcategory</b>                           | <b>Examples</b>                           |
|-----------------------------------|--|---|
| <b>Textual</b>                    | <b>Help to guide reader through the text</b> | <b>Resources</b>                          |
| Logical connectives (Transitions) | Contrast                                     | However; in contrast                      |
|                                   | Reason & cause                               | Because, due to                           |
|                                   | Purpose                                      | So that, in order to                      |
|                                   | Consequence                                  | Thus, therefore                           |
|                                   | Addition                                     | Besides, Moreover                         |
| Frame markers                     | Sequence                                     | Then, next                                |
|                                   | Listing                                      | First, second                             |
|                                   | Phrases                                      | In conclusion, To sum up                  |
| Endophoric markers                | Sentences                                    | The findings show, The article concludes  |
|                                   | No subcategories                             | No subcategories                          |
| Evidentials                       | No subcategories                             | No subcategories                          |
|                                   | Perspective                                  | Theory, model                             |
|                                   | Work   | Earlier study                             |
| Code glosses                      | Instrument                                   | Survey, test, task                        |
|                                   | Punctuation                                  | Colon, semi-colon                         |
|                                   | Phrases                                      | A case in point, A good example is        |
| <b>Interpersonal</b>              | Exemplification Markers                      | Such as, for example                      |
|                                   | <b>Involve the reader in the text</b>        | <b>Resources</b>                          |
| Hedges                            | Adjective                                    | Relative, modest                          |
|                                   | Phrase                                       | Mostly but not exclusively,               |
|                                   | Adverb                                       | Perhaps, generally                        |
|                                   | Modal  | Could, may                                |
|                                   | Verb   | Seem, assume                              |
| Boosters                          | Emphatic do                                  | Do believe, does exist                    |
|                                   | Adjective                                    | Striking, considerable                    |
|                                   | Adverb                                       | Strongly, clearly                         |
|                                   | Phrase                                       | In fact                                   |
| Attitude markers                  | Impersonal                                   | Against expectation, It is suggested that |
|                                   | Verb   | Argue, need                               |
|                                   | Adverb                                       | Surprisingly, interestingly               |
| Self-mentions                     | No subcategories                             | No subcategories                          |
| Engagement markers                | No subcategories                             | No subcategories                          |



#### 4. Results

The first part of the results is related to the rhetorical structure of RA abstracts. Using Hyland's (2000) model, Table (5) shows that the moves of method and findings occupy the largest parts of abstracts in both more and less prestigious journals as measured through word count. However, while the method and findings occupy almost equal parts in the abstracts of less prestigious journals, the findings occupy a larger part than the method in the abstracts of more prestigious journals. Regarding the remaining moves, purpose came in the third position with almost equal length in both more and less prestigious journals. This was followed by introduction, which was slightly longer in the abstracts of less than more prestigious journals. The final position went for the conclusion which constituted almost a tenth of the abstracts in the two types of journals.

**Table 5.** Percentages of moves across RA abstracts

| Journal          | Introduction | Purpose | Method | Findings | Conclusion | Total |
|------------------|--------------|---------|--------|----------|------------|-------|
| Less prestigious | 14.62%       | 19.90%  | 28.41% | 28.10%   | 8.97%      | 100%  |
| More prestigious | 10.43%       | 18.73%  | 23.45% | 37.24%   | 10.14%     | 100%  |

Using a 2-tailed T-test, significant differences were observed between the length of the moves in terms of word count in the abstracts of more and less prestigious journals. Table (6) shows that the abstracts in less prestigious journals include significantly longer introduction, purpose and method. However, the findings move is much longer in the abstracts of more prestigious than less prestigious journals. No significant difference is noted for the move of conclusion.

**Table 6.** T-test comparisons of the rhetorical structure of RA abstracts

| Move         | Journal          | Mean    | St. Dev. | t      | Sig (2-tailed) |
|--------------|------------------|---------|----------|--------|----------------|
| Introduction | Less prestigious | 25.8650 | 37.32832 | 2.799  | .005           |
|              | More prestigious | 17.0850 | 23.97377 |        |                |
| Purpose      | Less prestigious | 35.2000 | 21.98469 | 2.187  | .029           |
|              | More prestigious | 30.6700 | 19.36092 |        |                |
| Method       | Less prestigious | 50.2500 | 42.63126 | 3.330  | .001           |
|              | More prestigious | 38.3900 | 26.82004 |        |                |
| Findings     | Less prestigious | 50.2121 | 31.93546 | -3.224 | .001           |
|              | More prestigious | 60.9800 | 34.63521 |        |                |
| Conclusion   | Less prestigious | 15.8700 | 19.65182 | -.376  | .707           |
|              | More prestigious | 16.6050 | 19.40805 |        |                |

Further comparison was conducted regarding the combination patterns of moves. A similar number of patterns was found in the abstracts of more and less prestigious journals with 38 patterns for the less prestigious and 35 patterns for

the more prestigious. Table (7) shows the most frequent combinations that represented 10% or higher of the total number of combinations. Great similarity is noted across the two types of abstracts with the top combination of Purpose-Method-Findings-Conclusion, followed by Purpose-Method-Findings in second place, Introduction-Purpose-Method-Findings in third place and Introduction-Purpose-Method-Findings-Conclusion at the fourth place.

**Table 7.** Percentages of move combinations in RA abstracts

| Combination Pattern                                 | Less Prestigious | More Prestigious |
|---|------------------|------------------|
| Purpose, Method, Findings, Conclusion               | 28%              | 24%              |
| Purpose, Method, Findings                           | 19%              | 18%              |
| Introduction, Purpose, Method, Findings             | 15%              | 15%              |
| Introduction, Purpose, Method, Findings, Conclusion | 10%              | 12.5%            |

The second part of the results is concerned with the metadiscourse of the RA abstracts. Regarding the textual markers, Table (8) shows that transitions were the highest in use in both types of abstracts. For the abstracts in less prestigious journals, frame markers came second followed by code glosses. The opposite pattern was noted for the abstracts in more prestigious journals with code glosses coming second followed by frame markers. The fourth position was occupied by evidentials in both types of abstracts with a higher representation in the abstracts of less prestigious journals. Endophoric markers were rarely used in both types of abstracts.

**Table 8.** Number of textual metadiscourse in RA abstracts

| Subcategory   | Less Prestigious | More Prestigious |
|---------------|------------------|------------------|
| Transitions   | 558              | 484              |
| Frame markers | 300              | 170              |
| Endophorics   | 2                | 1                |
| Evidentials   | 124              | 76               |
| Code glosses  | 200              | 341              |

Comparing the textual markers across the two types of abstracts statistically reveals significant differences for the use of transitions, frame markers, endophorics and code glosses as shown in Table (9). Overall, transitions were more frequent in the abstracts of less prestigious journals. This was due to a higher use of purpose transitions in the method move and of addition transitions in the method and findings moves. Contrast transitions were, however, more recurrent in the abstracts of more prestigious journals, particularly in the moves of findings and conclusion. Frame markers were also more frequent in the abstracts of less prestigious journals. This was particularly due to the high occurrence of sentence markers in the purpose and findings moves. Likewise, evidentials were more common in the abstracts of less prestigious journals due to the recurrent use of

instrument evidentials in the method move. Code glosses, however, behaved differently as they were used more frequently in the abstracts of more prestigious journals, particularly at the method and findings moves.

**Table 9.** T-test results for textual metadiscourse in RA abstracts

| Subcategory   | Journal          | Mean   | SD      | t      | Sig (2-tailed) |
|---------------|------------------|--------|---------|--------|----------------|
| Transitions   | Less prestigious | 1.000  | 1.24004 | -4.814 | .000           |
|               | More prestigious | 1.7050 | 1.65884 |        |                |
| Frame markers | Less prestigious | 1.5000 | 1.05144 | 6.728  | .000           |
|               | More prestigious | .8500  | .87253  |        |                |
| Endophorics   | Less prestigious | 2.7900 | 1.77529 | 2.147  | .032           |
|               | More prestigious | 2.4200 | 1.66959 |        |                |
| Evidentials   | Less prestigious | .0100  | .09975  | .578   | .563           |
|               | More prestigious | .0050  | .07071  |        |                |
| Code glosses  | Less prestigious | .6200  | 1.10075 | 2.282  | .023           |
|               | More prestigious | .3800  | 1.00030 |        |                |

As for the interpersonal markers, higher numbers were generally noted in the abstracts of more prestigious journals. Table (10) shows 163 hedges, 99 self-mentions, 55 boosters, 47 attitude markers and 3 engagement markers in the more prestigious abstracts. The numbers of interpersonal markers in the abstracts of less prestigious journals, however, reflected a general trend for less frequent use.

**Table 10.** Number of interpersonal metadiscourse in RA abstracts

| Subcategory        | Less Prestigious | More Prestigious |
|--------------------|------------------|------------------|
| Hedges             | 86               | 163              |
| Boosters           | 26               | 55               |
| Attitude Markers   | 35               | 47               |
| Self-Mention       | 13               | 99               |
| Engagement Markers | 1                | 3                |

The T-test results for interpersonal markers in Table (11) show three cases of statistical significance, all in favor of the abstracts in more prestigious journals. Hedges were more frequently used, particularly in the findings and conclusion. Boosters were also more recurrent, especially in the findings move. Lastly, more self-mentions were found in the method, findings and conclusion. The same interpersonal markers were used significantly less frequently in the abstracts of less prestigious journals.

**Table 11.** T-test results for interpersonal metadiscourse in RA abstracts

| Subcategory        | Journal          | Mean  | SD      | t      | Sig (2-tailed) |
|--------------------|------------------|-------|---------|--------|----------------|
| Hedges             | Less prestigious | .4300 | .79262  | -3.903 | .000           |
|                    | More prestigious | .8150 | 1.14776 |        |                |
| Boosters           | Less prestigious | .1300 | .36574  | -3.352 | .001           |
|                    | More prestigious | .2750 | .49049  |        |                |
| Attitude Markers   | Less prestigious | .1750 | .41863  | -1.366 | .173           |
|                    | More prestigious | .2350 | .45916  |        |                |
| Self-Mentions      | Less prestigious | .0650 | .33366  | -5.162 | .000           |
|                    | More prestigious | .4950 | 1.12976 |        |                |
| Engagement Markers | Less prestigious | .0050 | .07071  | -1.004 | .316           |
|                    | More prestigious | .0150 | .12186  |        |                |

## 5. Discussion

The results of the current study with respect to combination patterns of moves seem to match the finding of earlier studies (e.g., Darabad 2016; Li 2011; Suntara and Usaha 2013; Tseng 2011) that Linguistics abstracts generally conform to the conventional structure of RA abstracts including “Purpose-Method-Findings-Conclusion.” The current study demonstrates general conformity to Hyland’s (2000) 5-move model, and the most frequent move pattern was the “Purpose-Method-Findings-Conclusion” which represented almost a quarter of the move patterns in the abstracts of both more and less prestigious journals. Also similar to earlier studies, the move patterns displayed great variety with 38 patterns in the abstracts of less prestigious journals and 35 in the abstracts of more prestigious journals.

A closer analysis of moves revealed that the moves of method and findings constitute the largest chunks of the Linguistics abstracts. It seems that Linguists pay great attention to explain the method and findings of their study, perhaps to explain and support their contributions. Another important finding with moves is that while the abstracts of less prestigious journals showed significantly longer moves of introduction, purpose and method, the abstracts of more prestigious journals included significantly longer findings. This is an extremely interesting result since it shows that the abstracts of more prestigious journals tend to highlight the findings of the study more than other moves. The findings of the study represent the novel contributions to scientific knowledge. Authors of more prestigious journals seem clearly aware of the importance of findings as the main selling point for their studies. They are also confidently capable of highlighting the scientific value of their research.

The current study also showed significant differences between the abstracts of more and less prestigious journals with respect to textual metadiscourse markers. Transitions were more significantly recurrent in the abstracts of less prestigious journals. Further analysis revealed that purpose and addition connectives were more common in the abstracts of less prestigious journals in the method and

findings moves. Authors of less prestigious journals showed stronger tendency to explain motives and add new findings. The case was different with the abstracts of more prestigious journals which showed a significantly higher use of contrast connectives in the moves of findings and conclusion. In the abstracts of more prestigious journals, authors did not only introduce additional findings but they seemed to also compare their findings with earlier studies, popular models or influential theories. Such a comparative perspective seems more sophisticated than simple additions. Comparisons of textual metadiscourse also revealed a significantly higher use of evidentials in the abstracts of less prestigious journals. The main cause was the frequent use of other authors' instruments in the method section. This again shows a main distinction between the abstracts of more and less prestigious journals. It seems that authors of less prestigious journals rely more on instruments that were devised and used in earlier studies while this practice is much less observed in more prestigious journals which seem to demonstrate more novel instruments.

The comparison of textual markers also revealed three important observations. First, frame markers are significantly more recurrent in the abstracts of less prestigious journals particularly in the purpose and findings moves. This is mainly represented with the use of sentence frames such as "The purpose of the study is" and "The findings of the study show". The use of these conventional sentence frames may reflect an adherence to recurrent chunks of the language. The authors in less prestigious journals may find it easier to structure their abstracts along fixed phrases while the authors in more prestigious journals prefer to express their flow of thoughts in a more varied and lucid manner. Second, code glosses were found much more in use in more prestigious abstracts, particularly punctuation markers in the findings move. This may again reflect more sophisticated writing. The use of colons, semi-colons, etc. is not easily mastered in English. The authors in less prestigious journals may feel more comfortable using exemplification markers. Third, endophorics were rarely used in both types of abstracts. They do not seem recurrent in Linguistics abstracts.

The comparisons regarding interpersonal markers also revealed significant differences. The abstracts of more prestigious journals exhibited a higher use of hedges, particularly in the findings and conclusions, and boosters, especially in the findings. It seems that authors of more prestigious journals demonstrate better command of using hedges and boosters as appropriate. This is again particularly important for them when it comes to the findings of their studies, the main selling point of their research as explained earlier. At this particular move, authors in more prestigious journals are careful when to hedge and when to boost their scientific contributions. Authors in more prestigious journals also seem quite conscious of their novel contributions as reflected in their more frequent use of self-mentions in the moves of method, findings and conclusion. Finally, it is worth noting that engagement markers are rarely used in both types of abstracts, which may reflect a general tendency for Linguistics as a discipline.

## 6. Pedagogical Implications

The results of the current study highlight the importance of providing special training on the writing of abstracts to those researchers aspiring to publish in prestigious journals. The following implications can be proposed for RA abstract writing instruction in the field of Linguistics as they reflect the main characteristics of abstracts in more prestigious journals:

- a) Researchers need to learn how to highlight the findings of their studies, which represent their main contributions to the field of knowledge.
- b) Researchers must be trained on comparing and contrasting findings with relevant studies, models or theories.
- c) Researchers need to highlight the novelty of their research, such as the use of novel instruments.
- d) Researchers need to practice effective ways of using punctuation markers, hedges, boosters and self-mentions.
- e) Researchers should be encouraged to write with variety and lucidity.

## 7. Conclusion

The current study addresses a significant question; “Is the writing style of abstracts in more and less prestigious journals different?” The question gains its significance from the strong international trend to publish in highly ranked journals. To answer the question, a genre analysis was conducted among 400 abstracts from 8 more and less prestigious Linguistic journals. The analysis involved both the rhetorical structure of the abstracts based on Hyland’s (2000) 5-move model and the linguistic features of the abstracts using Hyland’s (2005) taxonomy of metadiscourse. The results showed that moves combine in a variety of patterns in Linguistics abstracts with the pattern “Purpose-Method-Findings-Conclusion” occupying the most frequent position. Other less common combination patterns are “Purpose-Method-Findings”, “Introduction-Purpose-Method-Findings” and “Introduction-Purpose-Method-Findings-Conclusion.” The move analysis also showed that abstracts in less prestigious journals exhibit longer moves for introduction, purpose and method while abstracts in more prestigious journals assign longer parts for findings. This reflects the awareness of authors in more prestigious journals of the significance of their findings, which represent the major contributions for their studies and hence the main selling point to attract attention to published articles.

The metadiscourse analysis also revealed significant differences between the abstracts of more and less prestigious journals. While purpose and addition connectives were more common in the method and findings of the abstracts of less prestigious journals, contrast connectives were more recurrent in the findings of the abstracts of more prestigious journals. This may reveal a comparative approach to findings in more prestigious journals instead of mere addition of

findings. The abstracts in less prestigious journals also included more frame markers and instrument evidentials, which indicate the higher level of novelty and writing variety and lucidity in the abstracts of more prestigious journals. The abstracts in more prestigious journals exhibited a more frequent use of punctuation markers, such as code glosses, as well as hedges, boosters and self-mentions in the findings and conclusions. These results further support the conclusion that authors of more prestigious journals exhibit stronger command of the writing style as they seem better able to handle the assertion and ownership of their findings and use relatively implicit code glosses to this end rather than direct ones.

The findings of the current study present interesting implications for academic writing instruction and research. Pedagogically, abstract writers need to learn how to highlight the novelty and contributions of their studies, effectively employ the linguistic features of punctuation markers, hedges, boosters and self mentions and practice writing variety and lucidity. At the research front, the current study calls for further genre analysis of research articles in more and less prestigious journals. The future direction should be to examine other sections of research articles, including introduction, methodology, results, discussion and conclusion. It is also important to extend this research direction to other disciplines in addition to Linguistics.

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