

# A Metadiscourse Analysis over Interactive vs Interactional Resources within English Academic Articles in Arts and Humanities

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#### **Abstract**

In this article, researchers set out to discover the metadiscourse markers in research articles written by both native and non-native English speakers. To this end, a total number of twenty research articles published by Iranian and native English speakers in highly reputed journals on Arts and Humanities domains were randomly selected from major databases including Science Direct, Noormagz, and Magiran. Through Hylands' (2005) Metadiscoursal model, appraisals were accomplished on two main metadiscoursal aspects including interactive vs. interactional resources. The results revealed that interactive resources had the highest proportion in comparison with interactional resources with transitions being in the top list in both native and nonnative articles considering different parts of the articles from Abstract up to the Conclusion part. From among interactional resources, in articles written by native English speakers, attitude markers and for the non-native ones, engagement markers had the least rates. In addition, Iranian scholars had used some markers e.g. "attitude markers", and "hedges" more than native English speakers. It can be included that students should be informed about a balanced use of the frequency and the percentage of different metadiscourse markers in English as a part of teaching writing or grammar in their research writing modules.

**Keywords:** Academic Discourse, Audience, Essay Writing Skills, Metadiscourse Markers, Research Articles

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#### Introduction

Language as a useful, cultural phenomenon has always been considered by human beings as prominent to achieve their functions or aims in life. One such realization in academic settings is the so-called effective communication for numerous aims such as informing, persuading, advising, etc, (Gastel & Day, 2016). By definition, communication is then a functional process between and among readers and writers for achieving some specified aims or functions, but we may also have communications (in its plural form) as the message itself that we want to send to other people for the sake of mere interaction. Here, communication(s) can then be both a process and the product in English Language Teaching (ELT) world. If we decide then to assign such interpretation to communication, it can also include both form and function (Akmajian, Farmer, Bickmore, Demers, & Harnish, 2017). Everett (2012) suggests that human beings must find a need to communicate without which there would be no social cohesion. In so doing, process-product debate in ELT studies has new meanings and uses for English for Specific Purposes (ESP) courses in academia. This may denote that Non-Native (NN) university students in such courses are required to assess their capabilities in coping with academic writing acts in producing a well-grounded research article in their disciplines.

Drawing on recent social turn movements in which language itself is conceived as a live entity, the researchers in this study would like to take the view that although in writing courses for research writing aims among English major students, we specify the language learning purposes beforehand, this should not make us forget that all language is for a specific purpose (Kumaravadivelu, 2006, cited in Ahmadian & Rad, 2014). This means that there is not a set of common core language forms preexisting for specific aims to be taught at ESP courses for essay writing. Rather, language is learnt in some contexts or another and for a specific purpose by a fully functioning human being. The core at this argument is how we, as language teachers, can let in new goals of teaching at the turn of the century so that our learners and we do not treat language as a dead entity (Ghahremani Ghajar, Doostdar, & Mirhosseini, 2012). In line with this new line of social researches and having realized the need towards deneutralizing language learners and their ways of perceiving language for academic purpose, this research study aimed to explore how native speakers use the language for academic purposes in their major.

Of close relevance to deneutralizing language and language practices within academic settings are the Academic Literacy (AL) trends and practices. Boggs (2015) has precisely contended on collaborative composition writing within a multilingual, academic context before our instructions over writing acts should begin. The entire attempts by this researcher had been made towards recent, socially oriented streaming of thought flourishing among students to practice literacy in the 21st century. His findings must be appreciated from the standpoint that "teaching

involves awakening and arousing faculties already in a state of maturing in the learners and authentic engagement in 21st century literacies is a process of awakening" (p. 30) not directly leading our followers - students - to use language for neutral aims such as informing only. In this milieu, the task of a teacher in the 21st century is thus aligning group interaction and rejoining to student-initiated problems. Within language education, this can be pertinent to make use of students' preferred tools for expanding their literacy skills, which calls for reading and writing practices for a specific target to be reached. According to Gee (2007), one specific duty of the academic community is then to bring this to the students consciousness that they must learn the language (here, English) not just for the sake of controlling the features of grammar and organization in the students produced texts but the ways that different strands of their learning interact with each other and with their previous experience. This attempt by Gee and other scholars in recent era denotes that language scholars within applied linguistics fields have likewise linked AL lines of research to new literacy studies for schools (Mehrad & Gazni, 2010; Mojibur Rahman, 2011).

Entering the academia then means making a cultural shift in order to take on identities as members of those communities (Gee, 2007). So, as is implied by this utterance of Gee (2007), writing teachers might have other responsibilities to take on. Apart from transmitting genre knowledge by just reminding students of their existence, the process of sensitizing students to their new positioning towards identity transforming to a wider world – academic community – might get even more important from AL outlook.

Inspired by the recent ends in teaching both text and beyond text features in writing for publication aims (Street, 2015), the authors in this research aimed to undertake a consciousness raising task by comparing the mechanisms of language use among university scholars to see through their ways for interacting with the readers in academic settings so that instructions on the social functions of language through metadiscoursal markers for publication aims be reminded to ELT practitioners inside the country. Metadiscourse as a recent research scheme in discourse studies refers to those interaction spaces in which writers explicitly acknowledge that they are constructing a text to communicate a meaning or intent (Abdi, Tavangar Rizi, & Tavakoli, 2009; Hyland, 2017). More specifically, metadiscourse can be defined as "the range of devices writers use to explicitly organize their texts, engage readers, and signal their attitudes to their audience" (Hyland & Tse, 2004, p. 156).

#### **Review of Literature**

Metadiscourse, as a widely used term in recent decades within discourse analysis studies, was by and large defined as the ways writers or speakers project themselves

in their texts to interact with their receivers (Hyland, 2005). Aboulalaei (2019) mentions the positive effect of metadiscourse teaching in improving academic writing. Some other scholars alleged that metadiscourse is a concept which is based on a view of writing or speaking as a social engagement (Fuertes-Olivera, Velasco-Sacristan, Arribas-Bano, & Samaniego-Fernandez, 2001). Metadiscourse was also defined as the spoken or written linguistic item, which does not add anything from the propositional or content viewpoint, but helps the reader to organize, interpret and evaluate the given information (Crismore, Markkanen, & Steffenson, 1993).

In the existing literature, although there were many models for analyzing metadiscourse markers such as analyzing move structure and schematic representation (Dudley-Evans, 1994), genre analysis (Jalilifar, Hayati, & Namdari, 2012; Liu, & Buckingham, 2018; Zhang, Sun, Peng, Gan, & Yu, 2017) co-text analysis (Mohammadi, 2019), corpus-based sequence analysis (Haselow, 2019) etc., in the interim, many researchers had made use of Hyland's (2005) interactional model of metadiscourse as in the present study. Kahkesh and Alipour (2017) analyzed metadiscourse markers including interactive and interactional discourse markers in the Results and Discussion sections of Literature Reviews among engineering and literature students and found out that the density and percentage of the use of such markers was higher in the literature research papers than in the engineering and concluded that the research papers published in the literature studies were rich and more comprehensive. In the same vein, Rezaei, Estaji, and Hasanpour (2015) examined the differences in the use, type, and frequency of interactional metadiscourse markers within thesis genre among some M.A. male vs. female students majoring as applied linguistics graduates in a local state university. They showed that across different genders, there were some subtle differences in the frequency and types of these metadiscourse markers, but between the chapters of theses, metadiscourse markers had significantly been represented differently. Namely, chapter five - Discussion - having the most frequency in hedge devices and boosters, chapter three - Method - with highest degree of attitude markers and chapter one - Introduction - had the least number of boosters. In both studies above and other similar studies (Cuenca & Crible, 2019; Faghih & Mohseni, 2014; Faghih & Mousaee, 2015; Haselow, 2019), the necessity of pedagogical aspects for explicit teaching of such markers to university students were highlighted for having more coherent writing. Adel (2006) mentions the metadiscourse differences between native and non-native English speakers. Adel and Mauranen (2010) studied the differences in use of metadiscourse markers in different disciplines and genres.

Within most recent studies, results of instructions for metadiscoursal issues were also abound in the related literature. Kalajahi and Abdullah (2012) found out a moderate perception on the part of Iranian learners as to explicitly teaching metadiscourse markers. On the other hand, Khazaee (2012) recognized that apart

from teaching, other factors such as years of living in an ESL setting had an influential impact in this process. Regarding other non-pedagogical factors, quite recently, Gabarró-López (2020) recounted that factors such as age could not influence the usage of the two discourse markers by language learners. Also, the level of education did not seem to be effective. Conversely, Martin-Laguana and Alcon-soler (2018) emphasizing the positive effect of multilingualism, focused on learners' pragmatic awareness, along with teachers' practices as well as the sociolinguistic context as influential factors in the explicit teaching of discoursal markers. Jalilfar and Alipour (2007) found the positive effect of explicit teaching of metadiscourse markers on improving pre-intermediate Iranian EFL learner's reading skill. In addition, Cheng and Steffen (1996) mentioned the positive role of instructing metadiscourse strategies on improving students' essay writing. This shows that gradually, teachers are becoming aware of its significance. Up to now, teachers have mostly tried to focus on the content and how ideas are conveyed by speakers or writers and writing has mainly been taught by focusing on grammatical points or application of rules. However, lately researchers have proved that rhetorical features are essential for learning reading and writing skills (Hyland, 2017). In fact, metadiscourse creates a connection between the text, the reader, and the writer. In general, metadiscourse is used to signal the following things to the readers: How our text is organized, How our ideas relate to one another, How we are using evidence to support what we are saying, How we want readers to orient themselves to a particular aspect of our text, How much strength we attribute to a particular claim. How we feel about a particular aspect of our text, How we are further explaining an idea, and How the text reflects our authorial role (Hyland, 2005).

Different forms of metadiscourse have been identified in the existing literature. Vande Kopple (1985) introduced two categories of metadiscourse, "textual" and "interpersonal". Four strategies - text connectives, code glosses, illocution markers, and narrators - constituted textual metadiscourse, and three strategies - validity markers, attitude markers, and commentaries - made up the interpersonal metadiscourse.

Crismore, Markkanen and Steffensen (1993) identified two other categories of textual and interpersonal, and reorganized the subcategories. The textual metadiscourse was further divided into two categories of "textual" and "interpretive" markers in an attempt to separate organizational and evaluative functions. Textual markers consist of those features that help organize the discourse, and interpretive markers are those features used to help readers to better interpret and understand the writer's meaning and writing strategies.

The interactive part of metadiscourse focuses on the writer's awareness of his receiver, and his attempts to accommodate his interests and needs, and to make the argument satisfactory for him. On the other hand, the interactional part concerned

the writer's attempts to make his views explicit, and to engage the reader by predicting his objections and responses to the text (Hyland, 2005).

Eghtesadi and Navidnia (2009) conducted a research on metadiscourse usage between native and non-native English speakers based on audience differences. The results indicate that the articles written by native speakers which are mainly addressed to TESOL professionals and researchers include more metadiscourse signals than the articles in the two Iranian journals. Comparing Roshd and TELL, it appears that Roshd authors use more metadicourse in the Abstract sections of their articles, but in the Introduction, Results, and Discussion sections, the TELL authors used more metadiscourse. The findings of the study imply that Iranian authors in general and Roshd authors in particular should pay more attention to their expected readers through more metadiscourse use. This study is different from our study since we do not consider audiences. In this study, we want to show Iranian students how our writing is different from native English speakers and try to teach correct use of metadiscourse for our learners by comparing Iranian and native English speakers' written performance. Kobayashi (2009) has done a research on metadiscourse usage between native and non-native English speakers. The procedure is exactly the same as our study. However, this study considers essays of high school English learners. In our study we compare academic articles related to TESOL. We compare the different amount of metadiscourse resources in different part of an article from Abstract up to Conclusion part. Al-Zubeiry (2019) has conducted a research on different metadiscourse usage of native English speakers and Arab EFL learners as non-native English speakers. This study compared scientific articles in TESOL. The procedure is similar to our study; however, in our study we have considered the qualitative results of discourse markers in different parts of the article separately, but in his study there is not any clarification related to the different parts of the articles. The results are related to the whole article without separating Abstract, Review of Literature, Methodology, Result, and Conclusion (AIRMD). Data was collected from forty research scientific articles written and published in international journals and Arab journals; analysis was done in accordance with Hyland's (2005) model. The analysis revealed that frequently used metadiscourse devices in scientific articles written by native English writers and Arab English writers include evidential, code glosses, frame markers, and endophoric markers; hedges; boosters; and attitude markers, respectively. The results also showed that native English writers of scientific articles embrace more metadiscourse resources than Arab English researchers of scientific academic articles. This confirms that native English writers of scientific articles are more proficient at English than Arab English researchers given the differences in the frequency of metadiscourse resources used. This finding has implication to Arab researchers of scientific research articles. In our study the context focuses on the differences between Iranian and native English speakers. Jalilifar, Hayati, and Mashhadi (2012) had contended that international writers compared with Iranian scholars were more expert in using argumentative means through explicit Attitude and Graduation resources within research articles genres. Babapour and Kuhi (2018) who had also used Hyland's (2005) model but in another genre - newspaper opinion columns - contended that both native and NN speakers had difficulty in macro levels of writing including Attitude markers.

Regarding more uses of metdiscoursal categories/markers by native speakers, Clyne (1991) also found that English speakers had used more advance organizers than German speakers. This could show that Iranian English language users might possibly not be able to adjust their cultural and linguistic background in their first language as the resource language and English as the target language.

In addition, Mauranen (1993) found that Finnish students used less connectors in their language. Metadiscourse markers can convey the idea of politeness for Fins. The Finnish show respect for their readers by leaving more of the textual processig up to them. In a research study by Keshavarz and Kheirieh (2011), it was noted that within English research articles written by Iranian speakers vs. native English writers from among two different disciplines of Applied Linguistics and Civil Engineering, metadiscourse markers had been used differently. Teachers can teach metadiscourse to their students to raise their awareness of the presence and the functions of different metadiscourse markers representing the relations and functions of different parts of texts, author's attitudes, implicatures and presuppositions, shifts of topics, etc. According to (Abdi, Tavangar Rizi, & Tavakoli, 2009) macro levels of writing for publication aims, whole-text, rhetorical aspects of various text types have been discussed in the existing literature on genre studies. In line with research aims of the present study, in a writing genre such as research articles, macro aspects or features might then include 1) identifying, analyzing, and defining a problem to solve, 2) determining information in a discipline to solve that problem, 3) collecting data, 4) offering viable solutions, and finally 5) evaluating them via four successive sections including "Introduction", "Review of Literature", "Method", and "Discussion" (IRMD).

This study aimed at investigating the metadiscourse markers within English academic papers written by native and NN English speakers within Arts and Humanities. Two research questions were posed in this study:

- 1. Is the proposition of metadiscoursal markers different in diverse sections of a research paper including AIRMD within Arts and Humanities according to interactive vs. interactional resources between native and non-native English speakers?
- 2. To what extent the percentage rate of metadiscourse markers based on interactive vs. interactional resources between English academic papers written by Iranian and English users (native and non-native English speakers) in international journals is different?

### Methodology

In line with the two research questions in this study, the authors decided to work on the academic articles written by some sampled native versus NN authors, in order to find out about the variation in their writing. This is a completely qualitative study.

### **Data Collection Procedures**

The data was initially collected from some local and international peer-reviewed journals that were abstracted and indexed in Arts and Humanities including TEFL/TESL, psychology and sociology departments which were mainly concerned with language studies within major databases including Science Direct<sup>1</sup>, Noormags<sup>2</sup>, and Magiran<sup>3</sup>. This focus on language studies was because of the authors' expertise, which could obviously give more credible results during analyzing meta-discoursal elements due to content-sensitive nature of discourse uses. In all, researchers used 20 English articles in TEFL/TESL and psychological domain for the analyses from the local peer-reviewed journals. In so doing, ten research papers on psychological issues written by international scholars mainly in English speaking countries were selected mainly from United Kingdom (UK), Australia, and United States of America (USA) and compared with 10 academic papers written by Iranian English major scholars. The typical publication date range of the sampled articles was 2010-2018. Journals from which sampled articles were taken have been listed in tables 1 and 2.

**Table 1.** Journal Info. for Native English Language Researchers

| Journal name                             | <b>Publication Year</b> |
|--|-------------------------|
| Research in Developmental Disabilities   | 2018                    |
| Neuroscience and Biobehavioral Reviews   | 2010                    |
| Journal of Experimental Child Psychology | 2018                    |
| Journal of Neurolinguistics              | 2017                    |
| Journal of Experimental Child Psychology | 2018, 2018              |
| Emotion, Space and Society               | 2015                    |
| Chaos, Solitons and fractals             | 2018                    |
| Neuropsychologia                         | 2017, 2018              |

<sup>1-</sup> https://www.sciencedirect.com

<sup>2-</sup> http://www. Noormags.ir

<sup>3-</sup> http://www.magiran.com

Table 2. Journal Info. for Iranian Researchers

| Journal name   | Publication Year |
|--|------------------|
| Journal of Teaching Language Skills (JTLS)                             | 2017, 2018       |
| Applied research on English language                                   | 2015, 2017       |
| Journal of English Language Teaching and<br>Learning Tabriz University | 2013, 2014, 2016 |
| Applied linguistics  | 2014             |
| Iranian Journal of Applied Language Studies                            | 2013, 2015       |

According to Hyland (2015), interactive resources allow the writer to manage the information flow to explicitly establish his or her preferred interpretations. They help to guide the reader through the text while interactional resources involve the reader in the argument. His metadiscourse classification along with some examples is shown in Table 3.

Table 3. Hylands' (2005) Model for Metadiscourse Markers in Academic Texts

| Category          | Function                                       | Examples                     |  |  |  |  |
|-------------------|--|------------------------------|--|--|--|--|
| Interactive resou | irces:   |                              |  |  |  |  |
| Transitions       | Express semantic relation between main clauses | in addition/but/thus/and     |  |  |  |  |
| Frame             | Refer to discourse acts,                       | finally, /to conclude/my     |  |  |  |  |
| markers           | sequences, or text stages                      | purpose is                   |  |  |  |  |
| Endophoric        | Refer to information in other                  | noted above/see Fig/in       |  |  |  |  |
| markers           | parts of the text                              | section 2                    |  |  |  |  |
| Evidentials       | Refer to source of information                 | according to X/(Y, 1990)/Z   |  |  |  |  |
|                   | from other texts                               | states                       |  |  |  |  |
| C. I. d           | Help readers grasp meanings                    | namely/e.g./such as/in other |  |  |  |  |
| Code glosses      | of ideational material                         | words                        |  |  |  |  |
| Interactional res | ources:  |                              |  |  |  |  |
| Hadaaa            | Withhold writer's full                         | might/porhans/possible/about |  |  |  |  |
| Hedges            | commitment to proposition                      | might/perhaps/possible/about |  |  |  |  |
| Boosters          | Emphasize force or writer's                    | in fact/definitely/it is     |  |  |  |  |
| Doosters          | certainty in proposition                       | clear that                   |  |  |  |  |
| Attitude          | Express writer's attitude to                   | unfortunately/I              |  |  |  |  |
| markers           | proposition                                    | agree/surprisingly           |  |  |  |  |
| Engagement        | explicitly refer to or build                   | consider/note that/you       |  |  |  |  |
| marker            | relationship with reader                       | can see that                 |  |  |  |  |
| Self-mentions     | Explicit reference to author                   | I/we/my/our                  |  |  |  |  |

### **Data Analysis**

According to Halliday (1989), lexical density is assessed by the number of lexical words in a clause. In this study, results of the lexical density for every metadiscourse item were initially assessed by the percentage of every item per T-unit. The sampled research articles were of similar length with a page range of 15-23 and having 8000-10000 word counts in each set by both native and NN authors. The model for Metadiscourse analysis as used in this study was according to Hyland (2005). The research articles were precisely coded according to the pre-defined framework by Hyland (2005) through MaxQda ver. 12.4 pro as a practical software for qualitative research data. It should be mentioned that what the researchers actually did in this study was counting the number of metadiscourse markers in different research papers per T-unit. This is a qualitative study.

In this study, metadiscourse markers in native speakers' written performance were first assessed discretely for different parts of the articles to give an elaborate view about metadiscourse markers. This could be a good model for EFL learners to know about different usage of metadiscourse markers in diverse sections of an article i.e. Abstract, Introduction, Review of Literature, Methodology, etc. However, the NN English speakers' written performance was only analyzed holistically without mentioning the results of different parts of articles separately. Table 4 below displays the frequency counts and percentage rates of Metadiscourse markers in native English speakers on diverse sections of the analysed articles. In order to be sure of the reliability of the answers, the results were done by the same researchers twice, to be sure of the correct result and check the intra-rater reliability.

**Table 4.** Frequency and Percentage Rate of Metadiscourse Markers in Native English Speakers' Written Performance

|                       | Abstract |        | Intro / Review of literature |        | Method |        | Result |        | Discussion |        | Conclusion |        | Total |        |
|-----------------------|----------|--------|------------------------------|--------|--------|--------|--------|--------|------------|--------|------------|--------|-------|--------|
|                       | f        | p      | f                            | р      | f      | р      | f      | p      | f          | р      | f          | р      | f     | p      |
| Transitions           | 93       | 58.86% | 569                          | 49.43% | 407    | 45.83% | 428    | 38.01% | 483        | 42.22% | 53         | 38.4%  | 2033  | 44.14% |
| Frame<br>markers      | 5        | 3.16%  | 63                           | 5.47%  | 69     | 7.77%  | 125    | 11.10% | 67         | 5.85%  | 10         | 7.24%  | 339   | 7.36%  |
| Endophoric<br>markers | 2        | 1.26%  | 30                           | 2.60%  | 61     | 6.86%  | 114    | 10.12% | 35         | 3.05%  | 4          | 2.89%  | 246   | 5.34%  |
| Evidentials           | 4        | 2.53%  | 223                          | 19.37% | 123    | 13.85% | 66     | 5.86%  | 124        | 10.83% | 0          | 0%     | 540   | 11.72% |
| Code glosses          | 17       | 10.75% | 105                          | 9.12%  | 84     | 9.45%  | 54     | 4.79%  | 96         | 8.39%  | 5          | 3.62%  | 361   | 7.83%  |
| Hedges                | 17       | 10.75% | 56                           | 4.86%  | 40     | 6.16%  | 25     | 2.22%  | 97         | 8.47%  | 5          | 3.62%  | 240   | 5.21%  |
| Boosters              | 8        | 5.06%  | 46                           | 3.99%  | 34     | 4.50%  | 155    | 13.76% | 90         | 7.86%  | 20         | 14.49% | 353   | 7.66%  |
| Attitude<br>markers   | 3        | 1.89%  | 14                           | 1.21%  | 8      | 0.9%   | 10     | 0.88%  | 12         | 1.04%  | 9          | 6.52%  | 56    | 1.21%  |
| Engagement<br>marker  | 2        | 1.26%  | 30                           | 2.60%  | 21     | 2.36%  | 41     | 3.64%  | 54         | 4.72%  | 13         | 9.42%  | 161   | 3.49%  |
| Self-<br>mentions     | 7        | 4.43%  | 15                           | 1.30%  | 41     | 4.61%  | 108    | 9.59%  | 86         | 7.51%  | 19         | 13.76% | 276   | 5.99%  |
| Total                 | 158      |        | 1151                         |        | 888    |        | 1126   |        | 1144       |        | 138        |        | 4605  |        |

The results initially revealed that "Transitions" among interactive resources were used more than any other markers within all different sections. However, the difference in the least used metadiscourse markers was also noted for which in the Abstract section, "Endophoric" (1.26%) and "Engagement" markers (1.26%) were the same. The Introduction and Review of Literature in the native speakers' articles were analyzed together since based on APA rules, some researchers had merged the two sections in some cases. In this section, "attitude markers" (1.21%) had the least rated spot. In the next three sections, the least used metadiscoursal was also "attitude marker" with 0.9%, 0.88% and 1.04% spots respectively. "Evidentials" with a non-existent status was also the least rated scale in the Conclusion section.

The highest percentage of "frame markers" was related to the Results section (125, 11.10%). The least percentage (5, 3.16%) was related to the Abstract part. Furthermore, "Endophoric markers" were high in the Results section (114, 10.12%), and the lowest percentage (1.26%) was related to the Abstract section. The highest percentage of "evidentials" (223, 19.37%) belonged to the Review of Literature part and the least was for the Conclusion part (0%). "Code glosses" (10.75%) were highest in the Abstract section and the least in the Conclusion section (3.62%). "Hedges" percentage was high in the Abstract section (10.75%) and the least portion (2.22) was in the Result part. The highest percentage for "Boosters" was in the Conclusion part (14.49%) and the least spot or this marker (3.99%) was related to the Review of Literature section. "Attitude markers" (6.52%) were high in the Conclusion and the least (0.88%) belonged to the Results section. "Engagement" was the highest in the Conclusion (9.42%) and the least (1.26%) was in the Abstract. The highest percentage for "Self-mention" (13.76%) was related to the Conclusion and the least percentage (1.30%) belonged to the Review of Literature part. For an overall view, Figure 1 also displays the overall enactment of all due markers in terms of percentage rate.

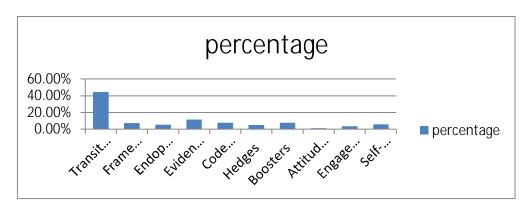


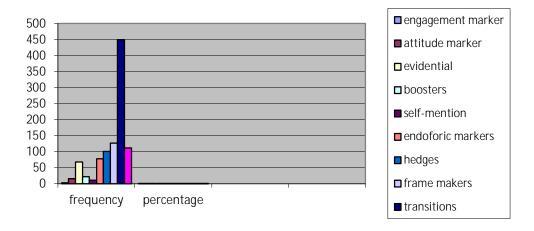
Figure 1. Percentage of Metadiscourse Markers in Native English Speakers' Writing

In all, "Attitude markers" (56, 1.21%), "Engagement markers" (161, 3.49%), "Hedges" (240, 5.21%) and "Endophoric markers" (246, 5.34%) were respectively used less than other items by native speakers within all sections.

In line with the second research question in this study as to the distribution of metadiscoursal markers within Iranian and English speaking scholars, initially frequency counts over metadiscourse markers in the sampled articles were coded and computed via Maxqda software. Figures 2 and 3 below depict the distribution of the spotted markers within ten articles written by Iranian scholars as NN speakers.



**Figure 2.** Frequency of Metadiscourse Markers in Non-Native English Speakers' Written Performance



**Figure 3.** Percentage of Metadiscourse Markers in Non-Native English Speakers' Written Performance

The results of the analysis on academic EFL articles written by Iranian authors revealed, in the first place, that in both native and NN articles, "Transitions"

(45.67%, 44.14%) again were the highest used metadiscourse marker and the least used were "Engagement markers" (0.2%). In articles written by native speakers "Attitude markers" (1.21%) had the least spot.

In order to have an overall view over the variability of metadiscoursal markers in all, table 5 below summarizes the order of priority for the spotted metadiscourse markers among English vs. Persian speakers.

**Table 5.** Hierarchy of Metadiscoursal Occurrence in the Papers Written in Local vs. International Scholars

| Interna               | tional Use | ers    | Local Users           |     |        |  |  |  |
|-----------------------|------------|--------|-----------------------|-----|--------|--|--|--|
| Transitions           | 2033       | 44.14% | Transitions           | 449 | 45.67% |  |  |  |
| Evidentials           | 540        | 11.72% | Frame markers         | 127 | 12.91% |  |  |  |
| Code glosses          | 361        | 7.83%  | Code glosses          | 111 | 11.25% |  |  |  |
| Boosters              | 353        | 7.66%  | Hedges                | 100 | 10.17% |  |  |  |
| Frame<br>markers      | 339        | 7.36%  | Endophoric<br>markers | 78  | 7.93%  |  |  |  |
| Self-mentions         | 276        | 5.99%  | Evidentials           | 68  | 6.91%  |  |  |  |
| Endophoric<br>markers | 246        | 5.34%  | Boosters              | 21  | 2.13%  |  |  |  |
| Hedges                | 240        | 5.21%  | Attitude markers      | 16  | 1.62%  |  |  |  |
| Engagement<br>marker  | 161        | 3.49%  | Self-mentions         | 11  | 1.11%  |  |  |  |
| Attitude<br>markers   | 56         | 1.21%  | Engagement<br>markers | 2   | 0.2%   |  |  |  |
| Total                 | 4          | 1605   | 983                   |     |        |  |  |  |

As is evident in table 5, the least spotted code category for the international sets of articles was "attitude markers" (1.21%), while for the Iranian scholars, the "engagement markers" (0.2%) were the least used category. Possible interpretations have been brought in the next section.

Some samples for discourse makers in the studied articles:

**Self-mention**.....<u>we</u> assumed the role of complete observers and did not participate in the class.

**Engagement marker**......therefore, we can make initiation feasible in teacher-fronted class rooms interaction.

Attitude marker......it seems reasonable to recommend that

**Booster**.....generosity <u>can</u> be expressed using the

Evidentials.....according to <u>Cohen (1988)</u>,.

Code glossing......for example, in her study of an ESL classroom

### **Discussion**

The aim of this study was to find out how scholars could argue in writing their research paper using discourse markers. For this aim, we decided to find the discourse markers in articles written by native speakers according to the different parts of the article.

As a whole, we could conclude that the frequency and percentage rate of metadiscourse markers among scholars active in English speaking countries were higher in total compared with those of NN English speakers' academic writing in this study. Initially, this could show a seen gap in our writing as NN speakers. This could also be the reason why piles of academic articles written by Iranian are initially rejected by highly refuted journals outside the local contexts. Teachers should use the results of this study by focusing on teaching metadiscourse markers as such.

Based on the results for the second research question, we found out that the highest metadiscourse marker in the academic articles written by both native and NN English speakers were within interactive with "Transitions" in the top list as compared with interactional resources. The least one in the articles written by native English speakers was "attitude markers" and in the articles written by Iranian scholars were "engagement markers". Urgent need over the use of argumentative genres in both corpora can thus be revealed, which needs further analysis over the reasons why this set of resources were less in general among the two language users. Nevertheless, this result was, by some means, not fully in line with Jalilifar, Hayati, and Mashhadi (2012). On the other hand, the results were in line with (Babapour & Kuhi, 2018; Clyne, 1991; Mauranen, 1993) in using metadiscourse markers among the Iranian English language users. This could show that Iranian English language users might possibly not be able to adjust their cultural and linguistic background in their first language as the resource language and English as the target language. Researchers like Hyland (2005) believed that explicit analysis of

metadiscourse features to students has three main advantages; first, they can identify the cognitive demands that texts make for readers, and the ways they can help them to proceed; second, it provides them with enough resources to take a stance toward their ideas; and third, it helps them to negotiate that stance with their readers.

Based on the results of this study, on average, Iranian scholars had used some markers e.g. "attitude markers", and "hedges" more than native English speakers. This should be resolved by informing students about a balanced use of the frequency and the percentage of different metadiscourse markers in English as a part of teaching writing or grammar in their research writing modules. It could be concluded that with the help of analysis on texts written by a native speaker of L2, we might discover then whether although intelligibility is the norms and should be the focus, in some cases, the over/underuses of some metadiscourse might not seem natural in the texts produced by the NN English speakers. To help university students, more trainings and exercises on analyzing metadiscourse markers as conducted in this study should be given to the students/scholars in order to improve their essay writing skills.

Another crucial point hitherto is that EFL writing teachers should relate grammar learning to students' daily life so that they use English language in a more vivid way and use it in a more argumentative manner. When the students realize about the significance of learning metadiscourse, they will have more motivation to learn how to write their articles for publication aims. Teachers, as well, should focus on how the students apply metadiscourse in their writing instead of only explaining the function of each category of metadiscourse.

#### Conclusion

There were other researches about metadiscourse markers between native and non-native English speakers (Adel, 2006; Adel & Mauranen, 2010; Eghtesadi & Navidnia, 2009; Kobayashi, 2009). However, they chose different genres. This article was innovative since compared all metadiscourse markers in different parts of an academic article in arts and humanities focusing on Abstract, Review of Literature, Methodology, Results, Discussion, and Conclusion. The researchers found out about the least and the most used discourse markers in every part of an article and compared them between native and non-native English speakers' articles to find out the difference between discourse markers usage in their written performance. This can be helpful for both teachers and the students. Teachers can use these results to teach about it in their curriculum and help Iranian EFL learners to solve their written performance related to the discourse markers usage in academic articles.

In the present research, the possible effect of discipline/content was controlled by choosing only articles within Arts and Humanities mainly on language studies within TEFL/TESL, Sociology and Psychology subdomains, since texts, as part of social events or the linguistic form in which people act and interact socially, might have influenced the writing processes (Boggs, 2015). Accordingly, both authors of texts and their audiences are seen as agents whose actions are not free, but socially delimited. Possible other factors can also be considered in further analyses by future researchers such as the effects of the researchers' first language, culture, gender, publication experience, the genre of the texts, etc. This is because metadiscourse is especially important in certain genres with a performative purpose, where the reader does not only decode a message but also acts in a certain genre. Moreover, as Halliday (1994) described, metadiscourse has two functions: through interpersonal meaning-making practices - the function which explains how the author addresses in the context by means of different linguistic elements like personal pronouns, imperatives, certain adjectives, or epistemic verbs which contain part of the author's beliefs, opinions, or hints that try to influence the reader's interpretation of the text; and through comparing the amount of language that metadiscourse needs to be displayed with the propositional content of a text, it can be concluded that it needs a very small percentage of words or structures. On the other hand, its importance is considerable in certain genres and different parts of a text.

Teaching metadiscourse in the classroom can have other benefits like: creating a context to convey information; increasing the persuasiveness of a text; improving comprehension and recall; assisting coherence and relating issues clearly to each other; focusing on the attitudes of the writer in a text, making readers aware of the interpretation of the text; indicating writer's attitudes to the reader and the text, and linking sections and ideas, together. Apparently, ESP (English for Specific Purposes) teachers in the Iranian academic contexts have seemingly failed to achieve considerable attention (Mashhady, 2016) and interest to teaching such goals among students in Humanities esp. among psychology students (Sadeghi & Tahririan, 2014) is increasing. Up to now, they have been busy just analyzing and concentrating on instructing linguistic elements and grammatical forms as separate and discrete items and they failed to spend enough time on teaching rhetorical parts of speech. However, as recent above-cited studies have revealed the importance of metadiscourse and its teaching in language classrooms, such explicit analysis are recommended to be included within the curriculum so that the written performance of Iranian scholars develops as expected. This is most needed since although advocates of multi-literacy scholars have also claimed that this might put NN English speakers in an unequal situation compared with other scholars in the world who exercise English as their native or second language (Canagarajah, 2007), some other scholars like Hyland (2015) asserted that for research writing, scholars need another competence, which he termed as "research writing competence". Hyland, initially, termed this problem as "Non-Native Orthodoxy". By this, he believed that even within those researchers from native users, one could find problems in writing for publication purposes. He thought regarding scholarly publications at international levels, Native/Nonnative competencies might, at times, be obscured by the dichotomous Native vs. Non-Native users of the language. He talked of a special competence, which, to him, is needed if any scholar wants to participate in knowledge dissemination practices: "Writing for publication is a specialized competence which both Native and non-Native English speakers must acquire, a fact which is obscured by two key assumptions of the linguistic disadvantage orthodoxy" (p. 61).

In the present study, comparative-descriptive nature of the analysis just offered some gaps in the research writing performance of a group of scholars in native and non-native contexts. However, it could be considered a consciousness raising study for writing teachers as such to lead English for Academic Purposes (EAP) course at college in a different way.

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