

Original Article**A Study of the Research Article Discussion Section Written by Native****Authors: Hyland's (2005) Metadiscourse Model in Focus***Jafar Asadi¹, Seyed Hesamuddin Aliasin^{2,*}, Rasool Moradi-Joz²*¹English Language Department, Maragheh Branch, Islamic Azad University, Maragheh, Iran²English Language Department, University of Zanjan, Zanjan, Iran

Submission date: 31-12-2022

Acceptance date: 08-02 – 2023

Abstract

Academic writing in general and writing research articles in particular have long been considered a crucial mode of discourse, which is due to its challenging requirements for writers. Metadiscourse resources aid the reader in reading comprehension through coherence and cohesion. This study attempts to analyze research article discussion sections written by native authors regarding metadiscourse markers. To this end, 40 research article discussions by native writers from humanities were selected and analyzed. The purpose of the study is to discover the number and types of metadiscourse markers and rhetorical techniques used in composing these texts. The study continues on a qualitative research design, through text analysis, on the basis of Hyland's (2005) Metadiscourse Model. The findings indicated that the writers used the interactive metadiscourse markers twice as often as the interactional ones. This research could have a direct bearing on teaching writing and material design to enable EFL learners to use an optimal extent of these resources effectively.

Keywords: Academic writing, Discussion, Hyland's (2005) model, Metadiscourse, Metadiscourse markers, Research articles

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1. Introduction

1.1. Writing Skill

Writing is, as Hashemi et al. (2021) put, the creative advanced language skill employed to express proofs, facts, information, expertise, and goals to readers, and a network joining the more conversant to those pursuing that knowledge. It is a tool by which human knowledge and experience are accumulated and transferred to later generations.

1.2. Academic Writing

Academic writing is the primary tool for distributing academic knowledge for future use. It is compulsory for all academicians to have a good knowledge of academic writing, and grasp written English and its right application in academic writing. Academic writing, as a self-expression instrument, is a requisite for specialists to spread their credit and publicize their beliefs, attitudes, inferences, and interpretations.

Academic writing, according to Ezeifeke (2014), involves any form of writing which is the result of research, study, and analysis and is meant to disseminate academic knowledge in a specialized setting. It is an advanced language skill which constitutes a major program in an advanced curriculum. Thus, an awareness and familiarity with the rules and principles of writing is an immediate need for those who aspire to pursue their higher education and prove their partials to the disciplinary communities.

1.3. Research Article Discussion

Research articles are a significant demonstration of academic writing, and, every day, many research articles get published in peer-reviewed scientific journals displaying research results to relevant research community. Publication of research articles in quality journals is also a necessity for university professors as an indication of their academic success and qualification in the field to get a raise in status or tuition. Writing research articles is also a key skill for advanced EFL or ESL learners, too.

2. Literature Review

2.1. Metadiscourse

Metadiscourse is a necessary element of academic writing. With the expansion of corpus-based studies, research on the importance of academic discourse has been intensified. Academic writing comprises different text types from course books to research articles, and

each has its way of communicating with the readers using metadiscourse markers. Some scholars (e.g., Ädel, 2010; Kuhl & Behnam, 2011) have indicated how metadiscourse markers might be different for different text types. Concerning metadiscourse, scholars do not have an agreement-upon comprehensive definition. In Hyland's (2019) view, metadiscourse is the expressions used to communicate interactional meanings in a text, helping the writer (or speaker) to express an idea and engage with readers as members of a specific community.

Metadiscourse comprises all the devices which are handy for the readers to understand and realize the meaning of a text. Metadiscourse, therefore, refers to (a) the features of a text that reasonably unify the discourse and relate the ideas and (2) the qualities which specify the authors' opinion toward the readers and the content. In the first stage, it is intended to assist the writer to attain an effective text in order for the readers to better understand a text. In the second phase, it aims at helping the author to explain and state his opinions efficiently with reference to the content and the readers to help readers grasp the point better. Metadiscourse is a broad term for words employed by the writer to indicate the path and goal of a given text. In academic writing, as Williams (2012) notes, metadiscourse, however, comes most often in introductions where the writer makes claims and announces intentions.

Former studies have categorized metadiscourse with respect to the three communicative language functions proposed by Systemic Functional Linguistics (Halliday, 1994), and a large number of metadiscourse scholars (e.g., Hyland, 2000; Vande Kopple, 1985) have assumed that metadiscourse is the textual and interpersonal functions. Halliday's language functions are as follows (Halliday, 1994):

- The **Ideational** function: the content of language, language use, and its function as a tool for the expression and representation of our experiences and ideas.
- The **Interpersonal** function: the use of language to encode interaction, and for the writer to state attitude toward the content and the reader, allowing us to engage with others, to take on roles and to express and understand evaluations and feelings.
- The **Textual** function: the use of language to create and organize logically the text itself, coherently relating what is said to the world and to readers to make sense of the text in the context and fulfill its function as a message.

The idea of discourse as ideational has played down the other two functions. The interpersonal metadiscourse, however, is by no means less significant than textual function

as it explains how the writer analyzes the content and what to expect from the reader. The interpersonal metadiscourse is a neglected area in teaching writing, in general, and academic writing, in particular, where the writer is to consolidate his credit and motivate the readers. In this concern, writers, in an academic context, have to be taught this aspect of metadiscourse and be motivated to use these kinds of metadiscourse markers in their writings. The analysis of language in action, or with reference to a certain social context, for recognizing language particularities in different genres (Hyland, 2009), has gained prominent attention, and thus, discourse analysis, in general, and metadiscourse, in particular, have lately attracted a great deal of attention from researchers. Metadiscourse is how the writers and speakers connect with their audience using language. Metadiscourse, therefore, is a kind of interpretation of a text or an utterance by the creator, and an extensively employed jargon in language teaching, discourse analysis and pragmatics.

Metadiscourse is indeed motivated by the impetus of connecting language to the context and the association between the two. That is, scholars are interested to find out how speakers and writers employ language to explain the communicative context and make the desired meanings clear to the participants using their awareness of communicative context. Metadiscourse, thus, may serve language teaching as well as literacy education. This, although a conceptually substantial and analytically strong idea, as Hyland (2017) believes, is not without difficulties due to clear-cut definitions, well-defined categorization, and detailed analysis.

Scholars have been doing research on various genres of written discourse such as research articles, masters' dissertations, business letters, textbooks, and medical articles as well as jokes, job applications, lab reports, interviews, speech act theory, and academic writing. In their corpus-based study on 120 research articles in humanities (education, psychology and applied linguistics) to explore their interactive metadiscourse features. They argued that the differences come back to the characteristic epistemological bases which make differences between qualitative and quantitative patterns and the different knowledge-knower pattern dominant in the discipline under inquiry. In another similar study, Hu and Cao (2015) reported the same result. Examining interactive metadiscourse markers in applied linguistics and economics in sixty research article abstracts, Khedri et al. (2013) found that the interactive metadiscourse markers were common in applied linguistics, and transition markers were more common categories. They also showed different textual

practices across the two disciplines. They finally suggested that the writers need to be aware of discursive strategies, qualities and principles of best practices. They concluded that writers are advised to know about the effective use of these tools to direct readers to the proper desired message.

Analyzing the introduction and conclusion sections of 240 research articles, using Hyland's (2019) interpersonal model, to find out about engagement markers and their functions, Khatib and Esfandiari (2021) observed a difference in frequency of engagement markers in the three different sub-corpora, that is, American Corpus, Persian International Corpus, and Persian National Corpus. In addition, both American scholars and internationally published Persian researchers used similar types of metadiscourse markers. Meanwhile, they found that Persian scholars' cultural preferences affected their engagement choices. The conclusion is that linguistic background and cultural inclinations impact the way writers communicate their positions to others in composing research articles. Duruk (2017) analyzed 20 MA dissertations written by nonnative Turkish writers in English language teaching (ELT). These dissertations were analyzed in terms of three sections namely methodology, results, and discussion. The analysis based on the use of interpersonal metadiscourse markers revealed that while Turkish writers used 'hedges', 'emphatics (boosters)' and 'attitude markers', to a certain extent, 'attitude markers' were the most frequent ones. Alternatively, concerning the use of personal markers, differences were found among the writers.

In another interesting study, Taymaz (2021) investigated 10 MA theses and 10 Ph.D. dissertations written by the same students to compare the probable developments between the two academic levels. It was found that the frequency of boosters was higher in Ph.D. than in MA level, whereas the students used more hedges in their MA theses than in Ph.D. dissertations. He, therefore, noticed an increase in students' self-confidence in conveying ideas and discussing their findings from MA to Ph.D. level, based on their wider academic knowledge and expertise, in addition to a certain degree of unawareness in both levels as to the use of meta-discourse markers and academic writing styles.

2.2. Hyland's (2005) Framework

Metadiscourse is open to many conceptualizations and interpretations, and various scholars have tried to develop their own version to account for the variations observed and

explain a specific linguistic dimension. Vande Kopple (1985) proposed the first model suggesting two classifications of metadiscourse: textual and interpersonal. There are four textual metadiscourse devices including text connectives (TCs), code glosses (CGs), validity markers (VMs) and narrators, and three interpersonal metadiscourse devices including illocution markers (IMs), attitude markers (AMs) and commentaries. Hyland's (2005) model as a reputable model for the analysis of meta-textual and interpersonal items of metadiscourse in academic writing is used. As a unique property of Hyland's framework, the citation is a good part of metadiscourse which is rational for the investigation of metadiscourse in research writings since claims are essential in scientific writing and a lot of intertextualities is necessary to show who first made the claim and how it relates to the current argument. In addition, citations are also essential to gaining support of new claims by providing substantial support for arguments and indicating the novelty of assertions.

In Hyland's framework, meta-textual items are called *interactive metadiscourse*, and interpersonal items are referred to as *interactional metadiscourse*. Interactive items are used to, according to Hyland (2005), organize propositional information in ways that a probable target audience is likely to find coherent and convincing. Interactional elements are used to show the writer's viewpoint towards both propositional information and readers themselves. A glance at Tables 1 and 2 best displays the point:

Table 1.

Interactive Metadiscourse (Hyland, 2005)

Metadiscourse	Functions	Examples
Transitions	Express semantic relation between main clauses or sentences	In addition, but, and
Frame markers		Finally, my purpose is
Endophoric markers	Refer to discourse acts, sequences or text stages	to
Evidential	Refer to information in other part of the text	Noted above, in Section 2
Code glosses	Refer to sources of information from other texts	According to X, (Y, 1990)
	Help readers grasp meanings of ideational material	Namely, e.g., such as, In other words

Table 2.

Interactional Metadiscourse (Hyland, 2005)

Metadiscourse	Functions	Examples
Hedges	Withhold commitment to a proposition	Might, perhaps, possible,
Boosters	and open dialogue	Emphasize certainty about
Attitude markers	or close dialogue	In fact, definitely, it is clear that
Engagement marker	Express writer's attitude to proposition	Unfortunately, surprisingly
Self-mention	Build a relationship with the reader by addressing the reader's reference to author	Explicit Consider, note that, you can see that I, We, my, our

3. Methodology

3.1. Corpus Selection

In this study, 40 research article discussions were selected from humanities and social sciences. The texts included in the study were taken from various journals written by native authors published during the years 2020 through 2022.

3.2. Data Collection and Analysis Procedure

The identification of the textual elements is based on the keywords used as cues and signs of the presence and types of the metadiscourse (interactive and interactional) resources. The next step is the categorization of these cases based on the same cues as used to identify them. In order to meticulously discover the similarities and variations, the metadiscourse elements were numbered from 1 to 10. Meanwhile, the relative frequency of metadiscourse markers was 8.5 percent in research article discussions; that is, in an average of 1000 words, metadiscourse markers made up 9.5 percent of the word count.

In Hyland's model, meta-textual markers indicate interactive metadiscourse, whereas the interpersonal markers refer to interactional metadiscourse. Interactive markers (Table 1) are used to form propositional information so as to prove coherent and convincing for a projected target audience (Hyland, 2005), and interactional markers (Table 2) are employed to indicate the writer's viewpoint towards both propositional information and readers themselves (Hyland, 2005).

After the identification of metadiscourse elements based on the classification mentioned above, the quantitative and qualitative analyses of the items are performed. In the

quantitative stage, the total number of metadiscourse items used in each text and the frequency of interactive and interpersonal items were tallied. The qualitative phase involved the analysis of the ways these metadiscourse markers served various purposes as well as the probable explanations for the differences.

3.3. Data Analysis Procedure

Working within the framework of the Hyland's (2005) metadiscourse model, data were collected by identifying and recording metadiscourse markers in the texts. Data analysis in this study involves the identification of metadiscourse markers in each text, and then coding and assigning the resources to relevant categories. The frequency and percentage of the resources was calculated, compared, and contrasted both within and across the main classes of metadiscourse elements.

The researchers first selected the texts. The next step was to identify metadiscourse elements in the texts by carefully examining each text. This step, checking for metadiscourse markers, was done twice after some two-month interval to make sure of the consistency in selection and coding. Next, after identification, the metadiscourse resources were coded and were subsumed under relevant categories (Interactive, Interpersonal). They were further incorporated into the subcategories. Then, the researchers counted each of these items and calculated the frequency and percentages of each. Then, the frequencies were compared and contrasted both within and across the main fields.

3.4. Research Questions

This study attempts to answer the following research questions:

1. What is the frequency of different types of metadiscourse markers used in native English research article discussion sections?
2. Are all metadiscourse markers equally distributed in native writings?

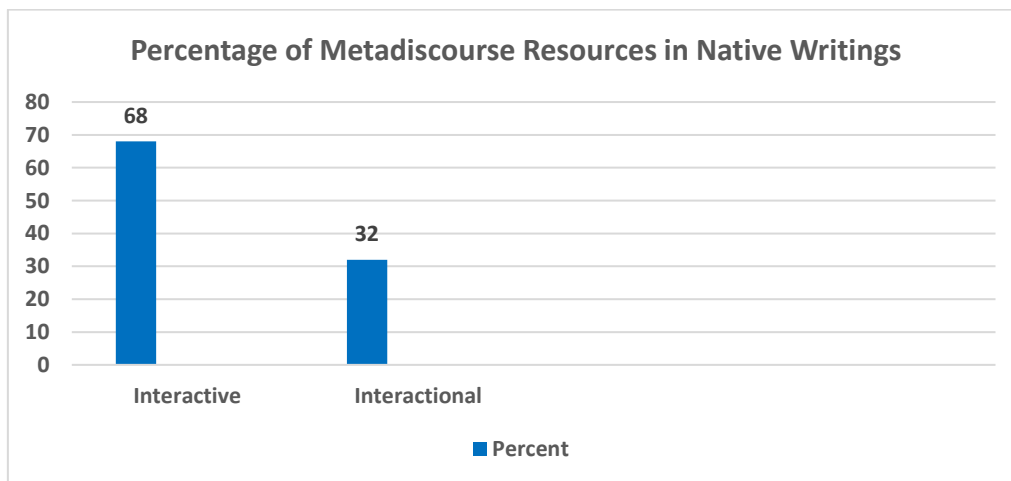
4. Results

The analysis of the data in terms of the use of metadiscourse resources revealed interesting and important findings for the preferences and priorities in using such resources. Native writers employed the greatest number of interactive metadiscourse in the discussion section of research articles, and there is a high frequency (68 percent) of these resources

(Figure 1). Interactive metadiscourse, therefore, is the most dominant in these article discussions. The domination of interactive metadiscourse resources can be said to indicate the writers' cognizance and attention to their own writing to be able to organize the text and put various ideas in the texts into coherent, comprehensible, and rational pieces in a convincing way. In terms of interactional metadiscourse, the low distribution of such interactional resources (32 percent) is suggestive of an important issue evident in the discussion section of the research articles. It might be concluded that the low frequency in the use of interactional metadiscourse markers relates to the writers' unwillingness to plainly interrupt in the texts to make obvious references either by using self-mentions or engaging the potential readers as participants in the current argument. Figure 1 below visualizes the point best.

Figure 1.

Percentage of Metadiscourse Recourses in Native Writings



Hyland (2005) holds that all metadiscourse is interpersonal as it accounts for the reader's knowledge, textual experiences and processing needs, and offers writers the resources of rhetorical appeals. It is, therefore, intended to study how variations in cultural settings in using the same medium (written English) of conveying attitudes affect diverse rhetorical techniques in writings, in both social sciences and linguistics, and the realization of interpersonal connections in the discussion sections of research articles, to create a good, convincing, and logical text. Due to the importance of cross-cultural differences in a failure in getting recognition in the academic community (Connor, 1996), this research also attends

to the noticeable likenesses or variations in the groups involved in the current study. Table 3 represents the main speech act categories as well as the subcategories.

Table 3.

The Frequency of Interactive & Interactional Metadiscourse Markers

Metadiscourse Markers		Frequency	
Percentage			
Interactive	Transitions	250	24.5
	Frame Markers	230	22
	Code Glosses	40	4
	Evidential	102	10
	Endophorics	75	7.5
Interactional	Self-mentions	40	4
	Engagement Markers	10	1
	Attitudes	50	5
	Hedges	170	17
	Boosters	50	5
Total		1017	100

5. Discussion

As Figure 1 indicates, native writers, as Abdulaal (2020) also found, use more interactive metadiscourse elements in the composition of research article discussions signifying their concern more to create a good logical text than to engage the reader; that is, they are involved more in the structure and organization of the text as a reader-friendly and comprehensible construction. They, thus, give prominence to interactive items and care more for the textual power and structural strength of the text over any other thing. This is natural, to the researcher, as text structure and meaningfulness is more significant than the message which is to be conveyed.

Another important finding to be mentioned here concerns interactive metadiscourse markers; transitions, frame markers, and evidential comprise the most recurrent classes of interactive metadiscourse elements employed by native writers and, therefore, suggests that

these writers care more for precision, simplicity, clarity, and support for the points made in the texts as also reported by Marandi (2003). Precision and clarity are made possible by using transitions and code glosses to move smoothly through the text. Transition helps make semantic relationships obvious in order to avoid any ambiguities and misunderstanding in the reader. Using code glosses, these writers make the intended points through the reformulation of the argument and exemplifications, if considered necessary. The application of the evidential items is indicative of these writers' awareness of readers' inclination in believing their arguments if their claims are supported by outcomes from similar related studies. Bearing this in mind, the native writers, therefore, employed evidential markers in order to compare and contrast their conclusions and results with the findings in similar studies.

The findings indicate native writers' overall use of metadiscourse elements in their research article discussion. This fact might suggest native writers' power to reach the reader and convey their message more convincingly. This seems to be natural as native writers in the academic context have a better command of the English language and, thus, a stronger communication power in general. The frequency of the metadiscourse markers, in native writers' discussions, thus, signifies the conclusion that native writers might be superior in interpersonal and interactional skills in their writings, and, therefore, more expressive and forceful in their appeals, claims, and arguments.

Regarding interactional metadiscourse markers, it is notable that hedges are the most frequent interactional metadiscourse markers. This high frequency might suggest that the native writers in this research are attentive to avoid overstatements. This equal frequency of hedges and evidential markers is probably indicative of the native writers' consciousness and awareness that they need both *evidences* to support their arguments and a *proper quality*, in terms of structure and organization, in composing their writings and discussions.

The frequency of metadiscourse markers found in the current research is in line with and supported by other results from some other identical researches done on other genres of academic writing (Salahshoor & Afsari, 2017). Hyland (1998), for example, analyzing research articles in four different fields, found that transitions, hedges, code glosses, and evidential, respectively, comprise the most frequent types of metadiscourse categories. In another study on metadiscourse elements in Ph.D. and MA theses, he (2004) discovered that

hedges and transitions were the most recurrent classes of metadiscourse items. Next, come evidential and engagement categories followed by code glosses.

The analysis of the research articles' discussions displays that the mainstream of authors made more use of evidential, code glosses, and hedges in their research articles discussions. The analysis indicates that the high frequency of metadiscourse elements is in favor of hedges, transitions, code glosses, and evidential, and, on the contrary, the writers made less use of such metadiscourse categories as transitions, endophoric items, attitude markers, and self-mentions in research articles. The inference here is that the variation in the size and number of meta-textual or interpersonal metadiscourse elements lead to the conclusion that, in general, more usage of meta-textual items might indicate the writers' superior attempt to obviously guide readers in text comprehension.

5.1. Interactive Metadiscourse

Interactive metadiscourse involves the organization and structure of the text for an easy readership of it. Through the use of interactive metadiscourse markers, the writer directs the reader through the text, controls the flow of the ideas and information, and makes sure the reader is able to get the points clearly and interpret them unambiguously as originally intended.

As for the components of the interactive metadiscourse markers, transition items constitute the most frequent ones, roughly about 45 percent of the entire interactive metadiscourse resources and 36 percent of all metadiscourse subclasses. The conclusion drawn here might be that the writers are concerned about, above all, the structure, organization, and surface validity of the text through the creation of a good semantic connection between the earlier and later phrases, clauses, and sentences. The writers also try to indicate the relationship between the sentences and the text as a whole, make their intentions obvious, help the reader follow the arguments correctly, and, thus, avoid confusion and misunderstanding.

As another ingredient of the interactive metadiscourse, evidential markers are very abundantly employed in the discussion section of research articles and make up about 20 percent of the whole interactive metadiscourse resources (16 percent of subclasses). As Harwood (2009) holds, evidential items are crucial in specialized academic writing context, since, through appropriate citation, the writers demonstrate their field knowledge, provide a

background for their research, and create a niche for their own positions to fit the context by endorsing or opposing former studies and provide support and credibility for their own study.

Code glosses, as another constituent of the interactive metadiscourse markers, form the next frequently used elements in the research article discussions analyzed in the current study. By the use of these resources, the writers make their propositional meanings clear through the explanation of complex notions or exemplifications to create a comprehensible and user-friendly text. The writers also show their sensibility and empathy by predicting readers' problems and providing a solution to the problems.

Endophoric items are another member of the interactive metadiscourse devices used to refer the reader to other sections of the text. Concerning endophoric devices, they were found more to refer to tables and figures used in the other sections above or below the part in question as there are numerous such figures and tables employed in academic articles to graphically present the information which is easy to grasp, eye-catching, and quick to use. There was, sometimes, the problem that there was a long space between the figure and the reference that the reader might have lost the connection in an attempt to go back to the section and find the information to relate it to the part involved.

In the lowest place in interactive metadiscourse devices, in terms of frequency, come frame markers holding 4 percent of the whole interactive metadiscourse items in the analyzed research article discussion sections. Frame markers refer to discourse acts, sequences, and text stages. These devices display what the author is doing in a specific part, and what is done earlier or expected later. The proper use of frame markers can work out well to move the point smoothly as well as topic alteration where there are different topics or the discussion of one point takes long to be covered in one place.

5.2. Interactional Metadiscourse

Interactional metadiscourse resources are those devices that indicate writers' position with reference to the points raised and involving the reader in the discussion as well. The low rate of interactional metadiscourse markers suggests the prominent idea of the supremacy of the structure and organization in academic writing than other issues of attitude, support, direct appeal, engagement, and interaction, and, therefore, are more concerned about the content and claims. Hedges, in line with Abdulaal (2020) research, form the most frequently used interactional metadiscourse markers in the discussions studied in the present

research. Through the use of hedges, writers try to create reader-friendly discussions by putting forth the arguments with due care and support, and avoiding overconfidence and hasty and inaccurate statements. They, therefore, attempt to pass on precise information and not mere assumptions and conjectures and base their arguments on reason and logic for the reader to make sure of the credibility of the propositions and claims.

Booster metadiscourse markers, unlike the hedges, form a very low frequency among the interactional metadiscourse markers. The high occurrence of hedges, in contrast to the low occurrence of boosters, might lead to the conclusion that the writers favor truthful treatment of the claims and arguments. This is, then, logical that they opted for hedges, and avoid boosters, in their effort to make the impression of commitment to the validity of the arguments. This is actually the essence of academic writing where it is highly expedient and recommended that careless and unsupported assumptions be avoided and ignored.

Self-mentions, as another category of interactional metadiscourse markers, involve explicit reference to the writers, in the use of first-person pronouns, in the text. Through self-mentions, which is a common technique in academic writing, authors endorse themselves and introduce their new publications in the field which is, of course, more suited to the already-established authors whose figures give credibility and confirmation to the field. Self-mentions are of a very low frequency in the research article discussions analyzed in this study, and many writers tend to avoid this strategy in their writings. This is quite natural as the writers are instructed to be objective and impersonal. The point interesting and worth mentioning here is that, despite being much less frequent in case, native writers tended to use more of such resources than nonnative writers which indicates that native writers are more secure and feel more authoritative in their writings.

Attitude markers constitute very uncommon and infrequent interactional metadiscourse markers in the research article discussions. This is anticipated and has a direct bearing on the points stated earlier for the self-mention markers; as the writers suppose academic writing to be objective, they were inclined to state less and less attitude markers which express writers' attitudes to propositions and claims being introduced in the text. It is, however, interesting that, in the same vein as observed in self-mentions, native writers expressed two times more their attitudes than nonnative writers which might be that they are more assertive and confident than nonnative ones.

Engagement interactional metadiscourse markers make up the least frequent resources found in the texts studied. These items enjoy the same level of performance in both native and nonnative writers. Engagement markers help build a relationship with the reader by addressing him as a participant in the text. They, thus, made the least attempt to directly address the reader and failed to create a direct relationship which is effective in convincing the reader and might be a base for establishing solidarity.

6. Conclusion

Writing research articles has long been regarded as a fundamental mode of written discourse which is a difficult text type for students, especially for EFL learners. This study attempts to analyze research article discussion sections written by native researchers with reference to metadiscourse markers. To this end, 40 research article discussions by native writers from humanities and social sciences were selected and analyzed on the basis of Hyland's (2005) Metadiscourse Model. The purpose of the study is to discover native writers' preferences in the number and types of metadiscourse markers and rhetorical techniques in composing these texts.

The findings indicate that the writers involved in the research profoundly employed interactive metadiscourse markers in their research article discussions. We can draw the conclusion that these writers are more careful about the organization of their compositions and care more about providing help for the readers in the reading process and reading comprehension. They employed the greatest number of such metadiscourse markers as code glosses, transitions and evidential, and, therefore, are more attentive to accuracy, clarity, and support for their arguments.

The low frequency of interactional metadiscourse resources shows that the writers have a clear preference for such metadiscourse resources suggesting that metadiscourse does not involve merely in personal rhetorical options, rather it is subject to attention to audience and generic and disciplinary needs which define the requirement of the discourse community. These factors, thus, determine the type and frequency of the metadiscourse markers the writers use in their writings. These different preferences for the adoption of some specific metadiscourse resources over the others (more interactive and less interactional) might be, to some extent, due to the text types, research article discussion sections, which by nature require more clarity and precision in presentation of the findings and results. As research

articles are quite different in nature and requirements, so the application of metadiscourse resources also differs from other types of academic writings such as reports, essays, term projects, and theses or dissertations.

The writers, involved in the study, indicated their awareness of creating a reader-friendly and comprehensible text through the right application of metadiscourse items in an attempt to create a good discussion and persuasion by means of supporting arguments made, engaging the readers (engagement markers), representing own positions (attitude markers) and views (hedges and boosters), specifying main points or concepts, mentioning other relevant studies (evidential markers), and the like which is made possible in the appropriate use of metadiscourse resources.

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