Íkala, Revista de Lenguaje y Cultura
ISSN: 0123-3432
ISSN: 2145-566X
Escuela de Idiomas, Universidad de Antioquia

Boginskaya, Olga
Interactional Metadiscourse Markers in English Research Article Abstracts Written by Non-Native Authors: A Corpus-Based Contrastive Study
Íkala, Revista de Lenguaje y Cultura, vol. 28, no. 1, 2023, January-April, pp. 139-154
Escuela de Idiomas, Universidad de Antioquia

DOI: https://doi.org/10.17533/udea.ikala.v28n1a08

Available in: https://www.redalyc.org/articulo.oa?id=255076325008

How to cite
Complete issue
More information about this article
Journal's webpage in redalyc.org

Scientific Information System Redalyc
Network of Scientific Journals from Latin America and the Caribbean, Spain and Portugal
Project academic non-profit, developed under the open access initiative

Interactional Metadiscourse Markers in English Research Article Abstracts Written by Non-Native Authors: A Corpus-Based Contrastive Study

Marcadores metadiscursivos interaccionales en resúmenes de artículos de investigación escritos en inglés por autores no nativos: un estudio contrastivo basado en corpus

Marqueurs métadiscoursifs interactionnels dans des résumés des articles de recherche rédigés en anglais par des auteurs allogènes : une étude contrastive fondée sur corpus

Marcadores metadiscursivos interacionais nos resumos dos artigos de pesquisa escritos em inglês por autores não nativos: um estudo contrastivo baseado em corpus

Olga Boginskaya
Full Professor, Department of Foreign Languages, Irkutsk National Research Technical University, Russian Federation
olgaa_boginskaya@mail.ru
https://orcid.org/0000-0002-9738-8122

Abstract

Abstracts in research articles play a crucial role in settling the impact of academic articles. However, despite the abundance of research on academic discourse, variation in its linguistic features among scholars from different academic cultures seems to have remained untouched. This corpus linguistics study presents a comparative analysis of interactional metadiscourse markers in 96 research article abstracts written in English by both Russian and Spanish scholars in the field of linguistics. The study is based on the assumption that the distribution of interactional metadiscourse devices is different in the abstracts produced by each group of scholars. This is because Spanish academic discourse has been influenced by the growing expansion of Anglophone academic conventions to a larger extent. The theoretical basis of the study is Hyland's (2005) taxonomy of interactional metadiscourse markers, which offers a pragmatically-grounded method for studying different types of such markers in academic discourse. Findings revealed that Spanish scholars leave more traces of themselves in their writing and take far more explicitly involved positions than Russian scholars. These findings carry pedagogical implications for academic writing course designers and instructors and can enhance non-native English writers' knowledge of culture-specific and international academic writing conventions in the discipline.

Keywords: research articles. abstracts, academic discourse, interactional metadiscourse, non-native speakers

Received: 2021-09-28 / Accepted: 2022-04-09 / Published: 2023-02-01
https://doi.org/10.17533/udea.ikala.v28n1a08
Editor: Doris Correa, Universidad de Antioquia, Colombia.
Copyright, Universidad de Antioquia, 2023. This is an open access article, distributed in compliance with the terms of the Creative Commons license BY-NC-SA 4.0 International.

Resumen

Los resúmenes de los artículos de investigación son determinantes en el impacto de los artículos científicos. Sin embargo, pese al rico acervo de investigación sobre el discurso académico, la variación en sus características lingüísticas entre académicos de diferentes culturas parece haberse mantenido intacta. Este estudio de corpus presenta un análisis comparativo de los marcadores metadiscursivos interaccionales en resúmenes de artículos de investigación en lengua inglesa, escritos por académicos rusos y españoles en el campo de la lingüística. El estudio se basa en el supuesto de que la distribución de los dispositivos metadiscursos interaccionales varía en los resúmenes producidos por cada grupo de investigadores. Esto se debe a que el discurso académico español ha recibido en mayor medida la influencia de la expansión creciente de las convenciones académicas anglófonas. La base teórica del estudio es la taxonomía de los marcadores metadiscursivos interaccionales de Hyland (2005), la cual ofrece un método de base pragmática para el estudio de diferentes tipos de marcadores en el discurso académico. Los hallazgos revelaron que los académicos españoles dejan en su escritura más rastros de sí mismos y adoptan posturas mucho más explícitas que los académicos rusos. Estos hallazgos tienen implicaciones pedagógicas para el diseño y la realización de cursos de escritura académica y pueden mejorar el conocimiento de los escritores no nativos del inglés sobre las convenciones de escritura académica internacionales y las específicas de cada cultura en la disciplina.

Palabras clave: resúmenes, artículos de investigación, discurso académico, metadiscurso interaccional, hablantes no nativos

Résumé

Les résumés des articles de recherche sont déterminants pour l'impact des articles scientifiques. Cependant, malgré le riche corpus de recherches sur le discours universitaire, la variation de ses caractéristiques linguistiques entre universitaires de cultures différentes semble être restée intacte. Cette étude de corpus présente une analyse comparative des marqueurs du métadiscours interactionnel dans les résumés d'articles de recherche en langue anglaise écrits par des chercheurs russes et espagnols dans le domaine de la linguistique. L'étude est basée sur l'hypothèse que la distribution des dispositifs de métadiscours interactionnel est différente dans les résumés produits par chaque groupe de chercheurs. Cela est dû au fait que le discours académique espagnol a été influencé dans une plus large mesure par l'expansion croissante des conventions académiques anglophones. La base théorique de l'étude est la taxonomie des marqueurs du métadiscours interactionnel de Hyland (2005), qui offre une méthode basée sur la pragmatique pour l'étude des différents types de marqueurs du métadiscours interactionnel dans le discours universitaire. Les résultats ont révélé que les universitaires espagnols laissent davantage de traces d'eux-mêmes dans leurs écrits et adoptent des positions beaucoup plus explicites que les universitaires russes. Ces résultats ont donc des implications pédagogiques pour la conception et la mise en œuvre de cours de rédaction universitaire et peuvent améliorer la connaissance qu'ont les rédacteurs non natifs des conventions de rédaction universitaire internationales et spécifiques à chaque culture dans la discipline.

Mots-clef : résumés, articles de recherche, discours académique, métadiscours interactionnel, locuteurs allogènes

Resumo

Os resumos de artigos de pesquisa são decisivos para o impacto dos artigos científicos. Entretanto, apesar do rico corpo de pesquisas sobre o discurso acadêmico, a variação em suas características linguísticas entre acadêmicos de diferentes culturas parece ter permanecido intacta. Este estudo apresenta uma análise comparativa de marcadores de metadiscurso interacional em resumos de artigos de pesquisa em língua inglesa escritos por estudiosos russos e espanhóis na área de linguística. O estudo se baseia na suposição de que a distribuição dos dispositivos de metadiscurso interacional é diferente nos resumos produzidos por cada grupo de pesquisadores. Isto se deve ao fato de que o discurso acadêmico espanhol tem sido influenciado em maior medida pela crescente expansão das convenções acadêmicas anglófonas. A base teórica do estudo é a taxonomia de Hyland (2005) de marcadores de metadiscursos interacionais, que oferece um método pragmático para o estudo de diferentes tipos de marcadores de metadiscursos interacionais no discurso acadêmico. As descobertas revelaram que os acadêmicos espanhóis deixam mais traços de si mesmos em sua escrita e adotam posições muito mais explícitas do que os acadêmicos russos. Estas descobertas têm, portanto, implicações pedagógicas para a concepção e realização de cursos de redação acadêmica e podem melhorar o conhecimento de escritores não nativos sobre convenções de redação acadêmica internacionais e específicas da cultura na mesma disciplina.

Palavras chave: resumos de artigos de pesquisa; discurso acadêmico; metadiscurso interacional; falantes não nativos.

Introduction

To meet the requirements of the academic discourse community, researchers need to gain a high command of academic English for performing various academic tasks. They are asked to publish their research products in English-medium academic journals in the field to secure academic promotion in their institutions. In this vein, knowledge of genre conventions and mastery of the English language contribute to building up their confidence to report research results effectively.

Research articles' (hereinafter RA) abstracts serve as screening devices (Huckin, 2001) that affect the editor and reviewer's decisions. As Bondi (2014) puts it, "abstracts have become essential elements of research communication by guiding readers in the difficult process of identifying the texts they are interested in" (p. 243). Being "significant carriers of a discipline's epistemological and social assumptions, and therefore, a rich source of interactional features", they are organized in a way that allows for "[encouraging] further examination and [drawing] the reader into the more detailed exposition" (Hyland, 2005, pp. 63–64). In the same vein, Kozubíková Šandová (2021) argues that "a correctly written abstract may convince a reviewer of the relevance of the research and the competence of the author and in this way, it may increase the publication likelihood of a paper in an acclaimed journal" (p. 79). Lorés Sanz (2004) also claims that RA abstracts "constitute the gateway that leads readers to take up an article, journals to select contributions, or organizers of conferences to accept or reject papers" (p. 281).

Previous studies on this academic genre have attempted to reveal its rhetorical organization (e.g., Al-Khasawneh, 2017; Gessesse, 2016; Ji, 2015; Saidi & Talebi, 2021), linguistic features (e.g., Kozubíková Šandová, 2021; Kuhi & Mousavi, 2015), cross-disciplinary and cross-cultural variations (e.g., Alonso Almeida, 2014; Belyakova, 2017; Hu & Cao 2011; Martín, 2003; Perales-Escudero & Swales, 2011; Sanz, 2006; Van Bonn & Swales 2007; Yang 2013), interpersonal features (e.g. Lorés Sanz et al., 2010), subjectivity, evaluation and engagement (e.g. Biber, 2006; Lyda & Warchal 2014; Stotesbury, 2003).

Taking prior research altogether, it seems that contrastive metadiscourse features of English-language RA abstracts written by non-native English authors have not received deserved attention. English-language academic texts produced by non-native English writers have been analyzed only in terms of their distinction from academic discourse produced by native English scholars.

The need for metadiscourse studies from different perspectives, including the cross-cultural one, has been caused by changes in the understanding of academic writing as an objective and impersonal form of discourse. Academic writers are considered "as not simply producing texts that plausibly represent an external reality, but also as using language to acknowledge, construct and negotiate social relations." (Hyland, 2005, p. 173). Metadiscourse assists writers in creating an authorial stance, claiming solidarity with readers, evaluating and acknowledging alternative views, thus producing persuasive texts.

To fill the void in the cross-cultural metadiscourse studies, the current work focused on variation in the use of interactional metadiscourse markers in Spanish- and Russian-authored RA abstracts, seeking answers to the following questions:

1. What linguistic devices are employed to express the metadiscourse component in the two subcorpora?

2. What is the frequency of occurrence of interactional metadiscourse markers in Russian- and Spanish-authored RA abstracts?

3. Are there any differences in the overall distribution of interactional metadiscourse devices in RA abstracts written by scholars from two cultural contexts?

4. What are the potential reasons for the uneven distribution of interactional metadiscourse in two subcorpora?

It is possible that such an analysis can reveal metadiscourse features in Spanish- and Russian-authored academic prose which has never been explored to date in terms of differences. I assume that despite a relative uniformity of academic papers imposed by generic requirements, there is significant intercultural variation in the metadiscourse preferences of writers influenced by the national academic writing conventions or having adopted the Anglophone academic writing style.

The present study will focus on interactional metadiscourse markers following Hyland's (2005) taxonomy. The following section will introduce the theoretical framework of the present study and previous research on RA abstracts conducted from different perspectives.

Theoretical Framework

Until recently, academic discourse has been regarded as impersonal. However, more research into academic discourse has changed this approach. Academic texts have started to be considered products of social interaction between the writer and the reader. These texts express the writer's attitudes towards the propositional content and the audience. In this vein, such texts contain various metadiscourse markers which are self-reflective expressions used to negotiate interactional meanings (Hyland, 2005). These linguistic devices "relate a text to its context by assisting readers to connect, organize, and interpret material in a way preferred by the writer and with regard to the understandings and values of a particular discourse community" (Hyland & Tse, 2004, p. 157).

Over the last decades, there have been several taxonomies developed regarding metadiscourse elements (Crismore, 1984; Vande Kopple, 1985; Beauvais, 1989; Crismore et al., 1993; Hyland, 2005). Vande Kopple's (1985) taxonomy is one of these models. Textual markers, according to Vande Kopple (1985), include illocution markers, attitude markers, and commentaries, while interpersonal ones include text connectives, code glosses, validity markers, and narrators. They help us express our personalities and reactions to the propositional content and characterize (Vande Kopple, 1985). Textual metadiscourse markers show how we link individual propositions so that they form a cohesive and coherent text. Crismore et al. (1993) have refined Vande Kopple's (1985) taxonomy and divided textual metadiscourse markers into interpretive (i.e., code glosses illocution markers, and announcements) and textual (i.e., logical connectives, sequencers reminders, and *topicalizers*).

Later, the group of interpersonal metadiscourse markers has been expanded by other researchers (e.g., Thomson, 2001; Hyland, 2005) who added hedges, certainty markers, and attributors. Thomson (2001) has classified them into interactional and interactive. The former ones are used to comment on and evaluate material and the latter manage the information flow to guide readers through the text. In line with Thompson (2001), Hyland (2005) developed a model of metadiscourse that involves the interactive and interactional aspects of discourse. Interactional metadiscourse markers are used to interact with the reader, explicitly convey views and attitudes, and involve the audience "by allowing them to respond to the unfolding text", "anticipating objections and responding to an imagined dialogue with others" (Hyland, 2005, pp. 49–50). Table 1 summarizes interactional metadiscourse markers identified by Hyland.

Hedges and boosters are "communicative strategies for recognizing contingency and indicating the room the writer is willing to offer for negotiation" (Hyland, 2005, p. 144). Hedges are used to acknowledge alternative viewpoints, withhold commitment to the presented proposition, and steer the reader to the conclusion or reasoning of the writer's

Table 1 Hyland's Model of Metadiscourse

Types	Key Function	Example
Hedges	acknowledge alternative viewpoints	*apparently*
Boosters	suppress alternative views	*I believe, actually*
Attitude markers	show the writer's evaluation	*crucial, important*
Self-mention markers	signal authorial presence	*I, we, my*
Engagement markers	address readers	*Note, you*

Source: Hyland (2005).

choice. Boosters are used to "suppress alternatives, presenting the proposition with conviction while marking involvement, solidarity and engagement with readers" (Hyland, 2005, p. 145). According to Hyland (2005), "the balance of hedges and boosters in a text thus indicates to what extent the writer is willing to entertain alternatives and so plays an important role in conveying commitment to text content and respect for readers" (p. 53).

Attitude markers show the writer's evaluation of given parameters and express the influence on the information and demonstrate importance, surprise, agreement, frustration, obligation, etc. In turn, *self-mention markers* send "a clear indication to the reader of the perspective from which their statements should be interpreted, distinguishing their own work from that of others" (Hyland, 2005, p. 148). The degree of authorial presence in the text is signaled explicitly by the first-person singular or plural pronouns and corresponding possessive adjectives. Lastly, *engagement markers* "explicitly address readers, either to focus their attention or include them as discourse participants" (Hyland, 2005, p. 53). They can also involve the rhetorical positioning of readers guiding them to interpretations. This group includes reader pronouns (*you* and *your*), questions, and directives. It should be noted that these metadiscourse markers are not employed in RA abstracts due to the specificity of the genre.

For responding to the research questions, Hyland's (2005) taxonomy of metadiscourse devices was selected as a point of departure as being based on the pragmatically-oriented assumption that metadiscourse is always interpersonal. Therefore, metadiscourse markers serve the purpose of providing a way for writers to express themselves and involving readers in a dialogue.

Previous Studies on RA Abstracts

RA abstracts are explored from a cross-disciplinary or cross-cultural perspective or in a single discipline and cultural context. One group of studies focuses on the use of metadiscourse in English-language research articles investigating it from a synchronic or diachronic perspective (Abarghooeinezhad & Simin, 2015; Farjami, 2013; Hu & Cao, 2011; Gillaerts, 2014; Kozubíková Šandová, 2021; Kuhi & Mousavi, 2015; Nurhayati, 2017). For example, Farjami (2013) explored metadiscourse markers in applied linguistics articles. Abarghooeinezhad and Simin (2015) studied the metadiscourse features typical of engineering-related RA abstracts; Nurhayati (2017) examined those associated with EFL RA. Hu and Cao (2011), Gillaerts (2014), and Kuhi and Mousavi (2015) compared the use of hedges and boosters in applied linguistics RA abstracts. Kozubíková Šandová (2021) explored metadiscourse in linguistics RA abstracts from a diachronic perspective.

Unlike undisciplinary research, some studies have investigated linguistic features of RA abstracts across disciplines (e.g., Babaii & Ansary, 2005; Graetz, 1985; Muñoz, 2013; Stotesbury, 2003). Thus, Graetz (1985) found that RA abstracts "give the reader an exact and concise knowledge of the total content of the very much lengthy original, a factual summary which is both an elaboration of the title and a condensation of the report" (p. 23). In contrast, Stotesbury (2003) revealed that humanities RA abstracts contain more citations as compared with those in the social and natural sciences. He also found that the writer's voice is most often heard in natural science abstracts while in

humanities abstracts the passive voice is typically employed. Bondi (2014) explored self-mention and authorial voice in history, economics, and linguistics abstracts in order to identify changes occurring over some time.

Another body of research includes those dealing with the cultural features of this genre (e.g., Alonso-Almeida, 2014; Belyakova, 2017; Cmejrkova, 1996; Duszak, 1994; Hryniuk, 2018; Peterlin, 2005; Pyankova, 1994; Vassileva, 2001; Walková, 2018). Belyakova (2017) carried out a cross-linguistic comparison between abstracts written in English by Russian novice researchers and native English-speaking experts in geoscience. The author sought to explore their rhetorical structure and linguistic features such as the use of personal pronouns, tense, articles, and sentence length. The cross-linguistic approach was adopted in Alonso-Almeida's (2014) study to compare linguistic features of English and Spanish RA abstracts related to medicine, computing, and legal science. He has revealed that the use of evidential and epistemic devices is more prominent in the English RA abstracts.

The review of previous studies has shown that the abstracts in question have been investigated from the intra-disciplinary, cross-disciplinary, cross-linguistic, and diachronic perspectives. These studies have adopted a cross-linguistic approach, focusing on the comparison of RA abstracts written by native and non-native English writers. To illustrate this, Pyankova (1994) has studied differences between English and Russian abstracts and found that Russian writers tend to avoid self-mentions markers and employ passive and impersonal structures instead.

In her research on similarities and differences in the degree of commitment and detachment in English, Bulgarian, and Bulgarian English research articles, Vassileva (2001) revealed differences regarding the use of hedges and boosters in the three subcorpora, which are, according to her, due to the different rhetorical and educational traditions. Likewise, Duszak's (1994) article reported the results of the contrastive study on linguistic and rhetorical differences found in the academic discourses produced by Anglophone and Polish writers. The author has revealed that in contrast to Polish academic prose, the English texts feature direct, assertive and positive rather than indirect, affective, and tentative expressions.

Another study on Anglo-American and Polish metadiscourse in research articles was conducted by Hryniuk (2018). It explored how writers from two cultural backgrounds construct a credible representation of themselves in writing and investigated differences and similarities in the frequency of use and the role of first-person pronouns and determiners in applied linguistics research articles. Results showed that English-language texts written by Polish writers contain fewer first-person pronouns than the texts written by native English whose writers tend to assume responsibility for their claims.

By the same token, Cmejrkova (1996, p. 148) investigated academic writing in Czech and English, revealing that Czech linguists writing in English are reluctant to commit themselves early to announcing the research purpose and prefer indirect declarations or rhetorical questions. Pisanski Peterlin (2005) conducted a contrastive analysis stressing the differences in the use of two metatext categories in English and Slovene research articles and found that the use of these categories is more restricted in Slovene academic writing. Finally, Walková (2018) explored how Anglophone writers and Slovak authors writing in Slovak and English position themselves in research papers. The author suggested that Anglophone academic culture features the reader-inclusive perspective, the predominant use of the first person singular by single authors, and the third person by multiple authors (p. 101).

Method

In order to investigate interactional metadiscourse markers in the RA abstracts selected for the analysis, this study adopted corpus-based and computational techniques together with multidimensional quantitative and qualitative analysis.

Since the interactional metadiscourse markers are diverse and the context of their occurrence is crucial for their classification, the corpus was labelled manually.

Similarly, Hyland's (2005) taxonomy of metadiscourse markers was utilized to analyze the abstracts. According to this classification, the markers were divided into five groups: boosters, hedges, attitude markers, self-mentions, and engagement markers. The frequency of occurrence of each group of these markers in each journal was identified and calculated. The frequency was calculated per 1,000 words because these sub-corpora had different lengths.

The analysis of results followed two stages: first, the abstracts were read and scanned in search of potential metadiscourse markers. Once a given feature qualified as a metadiscourse device, it was assigned to one of the categories (hedges, boosters, self-mention markers, or attitude markers). Then, this feature was traced in the whole corpus using Wordsmith Tools (5.0). The quantitative analysis was combined with a manual qualitative analysis of the examples, which was conducted to interpret the findings of the quantitative analysis and go beyond a mere list of interactional metadiscourse markers typically employed in RA abstracts. Reasons for preference of one or another metadiscourse device were suggested at this stage of the study.

In short, the combination of the qualitative and quantitative methods contributed to more explanatory findings. The quantitative analysis identified the frequency of occurrence of interactional metadiscourse markers in two sub-corpora. The frequency of occurrence of these markers in the corpus was summarized in a table format. Descriptive statistics were used and frequency and percentage values were presented for each marker in two sub-corpora.

Corpus Design

A corpus was designed following the principles of corpus linguistics. Since the RA abstracts collected were used as a repository of data, the approach employed in the present research was corpus-based. This study was carried out based on a corpus of abstracts taken from six high-impact journals in the field of linguistics (see Table 2). Impact factor data was obtained from the Scopus database. Only Q1-Q2 journals were selected.

Table 2 Corpus of the Study

Category	Sub-Corpus 1	Sub-Corpus 2
N.° of RA abstracts	48	48
N.° of journals from which RA abstracts were taken	3	3
N.° of RA abstracts taken from each journal	16	16
Total number of tokens analyzed	18,213	21,245

Sub-corpus 1 (SC1) included RA abstracts derived from three Russian language journals: *Russian Journal of Linguistics*[1], *Quaestio Rossica*[2], and *Journal of Language and Education*[3]. Sub-corpus 2 (SC2) included abstracts taken from three Spanish language journals: *Porta Linguarum*[4], *International Journal of English Studies*[5], and *Catalan Journal of Linguistics*[6]. 96 abstracts were selected from the issues of these journals. To prevent the corpus to be based by the influence of the time of publication, only the abstracts published between 2016 and 2021 were selected for analysis. The origin of authors was determined by their family names and affiliation. The journals selected to build the corpus impose strict requirements on the quality of English used in research articles. As for the articles, they were written by Russian and Spanish experts in English who, presumably, have a high level of command of English. For comparability criteria, the writers had a university affiliation, which guaranteed that they were acquainted with

1 https://journals.rudn.ru/linguistics
2 https://qr.urfu.ru/ojs/index.php/qr/
3 https://jle.hse.ru/index
4 https://www.ugr.es/~portalin/
5 https://revistas.um.es/ijes
6 https://revistes.uab.cat/catJL

research article writing conventions. All in all, the key criteria followed allowed for a unified account of the findings. Such criteria were: (1) a high impact factor of journals; (2) time of publication; (3) sociological characteristics of authors (nationality and affiliation); and (4). high command of English.

Results and Discussion

The quantitative analysis of the corpus showed that metadiscourse markers appeared more frequently in RA abstracts written by Spanish scholars. Table 3 summarizes the results of the contrastive analysis of interactional metadiscourse markers occurring in the two sub-corpora.

Table 3 Interactional Metadiscourse in the Corpus per 1,000 Words (% of Total)

Interactional Metadiscourse Markers	SC 1	SC 2
Hedges	25 (48.5 %)	32.1 (38 %)
Boosters	7.2 (14 %)	21.9 (25.9 %)
Attitude markers	11.3 (21.9 %)	27 (31.9 %)
Self-mentions	8 (1.6 %)	3.6 (4.3 %)
Total	51.5 (100 %)	84.6 (100)

As can be seen in Table 3, the overall frequency of metadiscourse is different in the two sub-corpora. The Russian sub-corpus and the Spanish one form two distinct groups concerning the use of metadiscourse. The degree of detachment is higher in the Spanish sub-corpus. It appears that the Spanish authors are much more tentative in putting forward claims, anticipating, acknowledging, challenging, and suppressing alternatives. Additionally, in the Spanish sub-corpus, the most frequent interactional devices are hedges and attitudes markers, comprising 38 % and 31.9 %, respectively. Russian authors use hedges (48.5 %) and attitude markers (21.9 %) more frequently than other devices, but their number per 1,000 words (per sub-corpus) is smaller. Plus, no engagement markers are found in both sub-corpora. Moreover, the share of self-mentions is higher in the Russian sub-corpus. Lastly, interestingly, the number of boosters in the Russian sub-corpus is small (7.2. per 1,000 words). Thus, in English-language RA abstracts, writers from the two academic communities represent themselves, their work, and their readers in different ways. Below the four categories of interactional metadiscourse markers used in the corpus are examined more closely, accounting for the potential reasons for their uneven distribution.

Hedges

As can be seen in Table 3, this is the most heavily used category of metadiscourse markers in both sub-corpora. However, their share in the total number of occurrences in each of the sub-corpora is different: 48.5 % in SC1 and 38 % in SC2. The difference in the number of occurrences per 1,000 words is insignificant: 25 per 1,000 words in the Russian sub-corpus and 32 per 1,000 words in the Spanish one. Here are some examples of hedges used in the corpus.

> Example 1: Thus, their lives *may* be called "lives by inertia" (SC1, own emphasis).

> Example 2: This change *seems* to highlight the overly instrumental nature of the instruction students received during their schooling in EFL (SC2, own emphasis).

The hedges in Examples 1 and 2 cast the propositions as contingent by highlighting their subjectivity and expressing the authors' willingness to negotiate a claim thereby, conveying respect for alternative views, because "it is generally accepted that members of academia cannot make categorical statements about their own hypotheses or findings" (Lafuente Millán, 2008, p. 68). Hedging devices are used to express some reservations or doubts about the truth of the assertion (Aijmer, 2009) and play a significant role in persuading readers of the validity of research, modulating the degree of certainty attached to the information conveyed.

In Example 3, the hedge can have several pragmatic effects, including authorial modesty and a way of anticipating criticism (Krapivkina, 2014):

> Example 3: In my research on the Trobriand Islanders' language, culture, and cognition, *I have been trying* to fill this ethnolinguistic niche (SC1).

> Example 4: Additionally, results from discriminant analyses *seem* to provide evidence that factors such as motivation, verbal intelligence, extramural exposure to English and socioeconomic status cannot account for differences between CLIL and non- CLIL groups (SC2, own emphasis).

The hedges expressed by the verbs *try* and *seem* strongly reinforce the idea of lack of certainty. In addition, using hedging markers, the writer distinguishes between information as a fact and information as an opinion:

> Example 5: However, it *can* be complex for the teacher to decide which fact statement to work at each level of teaching / learning, having traditionally used frequency as a criterion for levelling (SC2, own emphasis).

Avoiding absolute statements, the hedge in Example 5 shows that the statements are open to alternative interpretations, which helps to protect the academic reputation of the author. In Example 6, the authors indicate that the views which will be used in the article may be inaccurate and speculative:

> Example 6: The starting point for such an analysis is the *assumption* that one may regard translation equivalents and paraphrases of a linguistic unit extracted from real translated texts as a source of information about its semantics (S1, own emphasis)

The lower use of hedges by Russian scholars indicates that they do not seem to acknowledge the provisional nature of their results to the same degree as their Spanish peers. Within the Anglo-Saxon academic writing tradition, which has been adopted by Spanish authors, much attention is given to communication with a reader, making this an explicit feature of the academic writing style. Frequent signaling of the author's presence "conveys the impression that the reader is invited to take a tour of the text together with the author, who acts as a guide" (Mauranen, 1993, p. 16). Within the Russian academic writing tradition, the use of hedges is not advisable since these metadiscourse devices may weaken the propositional content of knowledge claims and reduce the degree of reliability for authorial statements. One more reason for the lower number of hedges is presumably poor knowledge of the interactional metadiscourse markers in English. Russian writers are often unaware of the need to use hedges, thus failing to meet the expectations of the English-language academic community. In contrast, Spanish scholars, who seem to be acquainted with Anglophone academic writing conventions, hedge their discourse more heavily. Different cultures show different degrees of hedging depending on the impact of academic writing traditions.

Hedging markers in the corpus of RA abstracts are expressed by the modal verbs *can, could, may*, and *might*, the adjectives *possible* and *apparent*, the verbs *seem, appear*, and *try*, the adverbs and adverbial expressions *possibly, probably, largely, rather, supposedly, somewhat, apparently,* and *in many respects*. In both sub-corpora, the most frequent forms of hedging are the modal verbs often followed by the link verbs other than *be (seem, appear)*. As regards the types of modal verbs used in the two sub-corpora, certain differences have to be mentioned here (see Table 4).

The smaller number of modal verbs as hedging devices in the Russian sub-corpus is likely due to the linguistic characteristics of the Russian language in which modality meanings are more frequently expressed with lexical modals. One may therefore say that while Spanish writers employ

Table 4 Distribution of Modal Verbs in the Corpus per 1,000 Words

Modal Verbs	SC1	SC2
Can	5	6
May	3	4
Might	2	5
Could	0	5
Total	10	20

modal verbs, Russian authors are inclined to stick to lexical modals (*possible, probably, probably*, etc.). What is also interesting here is the predominance of the primary modal auxiliaries (*can, may*) in the Russian sub-corpus whereas in the Spanish one, the primary and secondary modals (*might, could*) are equally used. Another interesting finding is the overuse of *can* by both Russian and Spanish scholars, which is perhaps because this modal is the first one learned in EFL classrooms.

Boosters

As for boosters, results indicate that Spanish scholars use a wider range of boosters and include some more boosters per 1,000 words than their Russian peers (see Table 3). This reveals that Spanish authors make their claims in a slightly more assertive tone. A similar conclusion has been reached by Mur-Dueñas (2011) in her intercultural analysis of metadiscourse features in research articles written in English and Spanish. Here are some examples from both sub-corpora.

> Example 7: First, the approach *has revealed* that the image schema CONTAINER guides semantics of an array of various adjectives independent of their morphemic structure or date of origin (SC1, own emphasis).

> Example 8: The quantitative data *shows* that stakeholders believe that language, methodological and classroom management competences are equally necessary for a CLIL teacher (SC2, own emphasis).

Unlike hedges, boosters are employed in Examples 7 and 8 to suppress alternatives, allowing authors to express their certainty in what they say. In the above instances, the authors anticipate possible responses from the reader but choose to prevent them.

> Example 9: This *finding* and the practical application of examples to video games *show* that it is a medium that *can* be interpreted with the resources of literary studies (SC1, own emphasis).

The boosting devices *show* and *finding* in Example 9 are used to express conviction with which the author communicates his/her research results and constructs "rapport by marking involvement with the topic and solidarity with an audience, taking a joint position against their voices" (Hyland, 2005, p. 53). Along with the boosters, the writer uses the hedge *can*, which implies that the statement is based on the writer's plausible reasoning rather than certain knowledge.

Table 5 Distribution of the Most Frequent Boosting Devices in the Corpus per 1,000 Words

Boosters	SC1	SC2
Show/demonstrate/reveal/determine	4.2	8.1
Evident/evidently, obvious/obviously, apparent/apparently, clear/clearly	2.9	7.7
Must	0.1	2.4

Analysis showed that, unlike hedging, boosting is mainly expressed by semantic verbs such as *show, demonstrate, reveal, and determine* (see Table 5). Adjectives and adverbs of evidentiality such as *evident/evidently*, *clear/clearly, obvious/obviously,* and *apparent/apparently* rank second among the hedging markers employed in the corpus. This preference seems to be a universal feature of RA abstracts included in both sub-corpora. The modal verb *must*, which fulfills the function of boosting, is rarely used in both sub-corpora.

The less frequent use of boosters by Russian authors may also be explained regarding Russian academic traditions according to which it is not advisable to strengthen own arguments which are not common knowledge or evidence-based facts. These differences may be accounted for in connection with the view that Russian authors tend to produce more neutral utterances. Another inference can be drawn: while in Spanish academic discourse, the writer is responsible for effective communication, in the Russian one the reader has to make efforts to understand the texts (Clyne, 1987; Hyland, 2005). Russian authors seem to be less dialogic and often ignore readers who accept new knowledge. As regards the use of individual boosting devices, more similarities than differences in both sub-corpora were found. The difference was

in the frequency of occurrence of boosters compared to other interactional metadiscourse markers.

Attitude Markers

The attitude markers rank second in both sub-corpora. These metadiscourse devices convey explicit opinions of writers and "create a research space and bring into being a linkage with the disciplinary community" (Khedri et al., 2015, p. 311). They indicate authorial judgments and convey either positive or negative evaluations. Here are some samples from the corpus.

> Example 10: Though, the peer review process serves as a filtering and assessment system, it is believed to *greatly* contribute to *better* quality of scholarly journals (SC1, own emphasis).

> Example 11: These skills are *essential* for EFL students who express themselves in oral presentations or written assignments (SC2, own emphasis).

These statements foreground the author, contribute to an author's persona, and establish a link with the academic community. Analysis evidenced that Russian writers use these markers less frequently than their Spanish peers, who explicitly establish their claims through the use of attitude markers. This finding suggests that Russian authors consider academic style more impersonal, and communicating factual information rather than taking overt personal responsibility for their claims is favored. On the contrary, Spanish writers try not to hide their identities and authority behind the *shield of objectivity*. Assessing the importance or disputability of research problems are key features of RA abstracts written by Spanish authors, who take a more active position on these issues. In Example 12, the significance attitude marker is used to show the role of the research object.

> Example 12: This article deals with a *crucial* variable in CLIL settings: socioeconomic status, which was measured via parents' educational level (high, medium or low) (SC2, own emphasis).

In the corpus, attitude markers are expressed by verbs, adjectives, adverbs, and nouns showing the author's attitudes and encode positive or negative values: *agree, prefer*, *important, interesting, useful, fruitful, effective, correctly, persuasively, problematically, hopefully, importance,* and *significance*. The most frequent attitude markers in the two sub-corpora are presented in Table 6.

Table 6 Distribution of the Most Frequent Attitude Markers in the Corpus per 1,000 Words

SC1	SC2
Important (4.1)	Important (8.8)
Efficient (2.3)	Useful (3.4)
Useful (1.4)	Considerably (3.3)
Significance (1.2)	Essential (2.9)
Problematically (1.1)	Underdeveloped (1.4)

As can be seen in Table 6, the most frequent attitude marker in the Russian and Spanish sub-corpora is the adjective *important*. In general, there are no striking differences in the types of attitude markers. However, the total frequency of these devices differs significantly: The Spanish writers use attitudinal metadiscourse almost three times more frequently than the Russian ones. The reason for this might be that the academic discourse of Spanish authors is not so impersonal and detached due to the influence of the Anglophone style, which is stronger in the Spanish academic community. In Russia, this tendency is less pronounced since the Russian academic community is more reserved and follows own academic writing traditions.

Self-Mention Markers

The frequency of self-mention markers found in the corpus is presented in Table 7.

Table 7 shows that the distribution of this group of interactional markers across the academic cultures under study is also uneven. The largest number of all cases of self-mention are in the Russian sub-corpus with an average of 8 per 1,000 words, compared with only 3.6 per 1,000 words in the Spanish sub-corpus. Here are two examples from the corpus.

Table 7 Distribution of Self-Mentions in the Corpus per 1,000 Words

Self -mention	SC1	SC2
First-person plural pronouns in single-authored RA abstracts	2.6	0
First-person plural pronouns in RA abstracts written by multiple authors	1.9	1.1
First-person singular pronouns in single-authored RA abstracts	1.1	1.2
First-person plural possessive in single-authored RA abstracts	1.9	0
First-person plural possessive in RA abstracts written by multiple authors	0.5	1
First-person singular possessive in single-authored RA abstracts	0	0.3
Total	8	3.6

> Example 13: *Our* findings showed that quantitatively the most common semantic pattern used by Higher School of Economics students is actor + (augmentor) evaluator + physical/mental action performed by the actor + (augmentor) evaluator (SC1, own emphasis).

> Example 14: In order to address this issue, *I* will analyse two 21st-century Latinx texts that delve into the intricate ways in which transnational forces collide with economic, cultural and political processes that persistently revolve around the framework of the nation-state (SC2, own emphasis).

It is interesting that in the Spanish sub-corpus, first-person plural pronouns are used only in RA abstracts written by two or more authors (Example 15). In single-authored articles, no occurrence of these pronouns is found. In the Russian sub-corpus, the first-person plural pronouns are more frequent (i. e. 72 %) and often used in RA abstracts written by one author (see Example 16).

> Example 15: On this basis, *we* propose guidelines for the levelling of these expressions in order to guide the Spanish teacher in their selection, thus contributing to the improvement of their teaching in the SFL / 2L [Spanish as a Foreign/Second Language] classroom (SC2, own emphasis).

> Example 16: It reaffirms *our* belief that *we* have identified, in full, the shared "alphabet of human thoughts" (SC1, own emphasis).

In Example 14, the first-person plural pronoun refers exclusively to the multiple authors, as they are followed by actions that they took in their research process. In Example 15, the Russian author employs *our* and *we* to refer to himself.

The overuse of first-person plural pronouns in RA abstracts written by Russian authors might reflect cultural preferences or inexperience with Saxonic academic conventions (Hyland, 2005). Spanish authors adhere to the Anglophone academic writing tradition where the employment of first-person plural pronouns in single-authored articles is less common. Russian writers, in turn, adopt well-established writing standards of their national academic community which are difficult to overcome. The heavy use of these pronouns is seen as inappropriately informal for English academic argumentation, while in the Russian academic community *we* signals the author's desire to enhance the significance of the work presenting his/her claims as the opinion of a scientific school (Krapivkina, 2014).

Findings on the differences in metadiscourse are in line with previous intercultural studies (e.g., Al-Khasawneh, 2017; Belyakova, 2017; Crismore et al., 1993; Mur-Dueñas, 2011; Mauranen, 1993; Hyland, 2005), which indicate that the extent of employment of metadiscourse markers is determined by the cultural context in which the academic texts are produced. In Russia, the native academic writing culture is more influential and has stronger power in establishing the authorial identity. Russian authors produce their academic texts relying on previously written texts, thus following some well-established standards, which are difficult to overcome irrespective of the degree of command of English. In addition, due to the reserved nature of the Russian academic community, scholars seem to be unaware of the need to use metadiscourse devices. Hence, they fall short when meeting the expectations of the international academic community. In contrast, the academic discourse of Spanish writers has been influenced by the growing expansion of Anglophone

academic conventions. It is not so impersonal and detached but more interpretative due to the influence of the Anglophone style. Having mastered the English standards of academic writing, Spanish scholars have incorporated themselves into the international academic discourse community while Russian ones show deficient handling of metadiscourse resources and need more instructions in writing academic English. This is especially important because of the pressure on Russian scholars to publish in English. Like many other countries, Russia has imposed policies to promote publications in international academic journals to increase the country's share of global research output. As far as the Anglophone writing culture dominates in the academic world, awareness of its rhetorical strategies is useful for L2 writers if they want to meet the expectations of the international academic community and find a space in the Anglophone international publication context. This means that Russian writers should adjust their discursive practices when addressing an international audience to meet readers' expectations in the global cultural context.

Conclusion

This paper explored interactional metadiscourse markers in English-language RA abstracts written by Russian and Spanish authors from a contrastive perspective. At the beginning of this research, the distribution of interactional metadiscourse devices was thought to be different in the two sub-corpora. This is because Spanish academic discourse has been influenced by the growing expansion of Anglophone academic conventions to a larger extent. This hypothesis was confirmed by the research results obtained. A comparison of the RA abstracts extracted from Russian and Spanish journals showed that both academic communities manifest different metadiscourse preferences. Academic writers from the Spanish academia leave more traces of themselves in their writing, claim personal responsibility for the information, avoid generalization, and take far more explicitly involved positions.

In terms of a greater understanding of metadiscourse, findings may contribute to language teaching for students of English for Academic Purposes in non-Anglophone countries. Measures should be taken to develop academic writing skills in L2 writers. Although there are some textbooks, which offer guidelines on the use of metadiscourse devices, they are rather general and do not focus on RA abstracts. It seems that explicit teaching of metadiscourse in RA abstracts can help raise awareness of the interactional aspect of this genre among L2 writers and increase their ability to interact with readers and make their claims more persuasive. Results can assist curriculum designers to create materials for L2 writers.

The research results presented here are limited due to the small extent of the corpus and should be understood as trends in the two academic cultures which can be confirmed or disproved by large-scale comparative research. Further research might deal with interactional devices investigated from other perspectives. It would be interesting to compare the distribution of metadiscourse markers in other disciplines. Diachronic variation in the use of the interactional metadiscourse markers in RA abstracts could be also of interest. Despite the above-mentioned limitations, this study could be taken as a starting point for future studies of the academic metadiscourse from cross-disciplinary, cross-cultural, or diachronic perspectives. The results can be considered in teaching English for academic purposes.

References

Abarghooeinezhad, M., & Simin, S. (2015). Analyses of verb tense and voice of research article abstracts in engineering journals. *International Letters of Social and Humanistic Sciences*, *47,* 139–152. https://doi.org/10.18052/www.scipress.com/ILSHS.47.139

Aijmer, K. (2009). Seem and Evidentiality. *Functions of Language, 16*, 63-88. https://doi.org/10.1075/fol.16.1.05aij

Al-Khasawneh, F. M. (2017). A genre analysis of research article abstracts written by native and non-native

speakers of English. *Journal of Applied Linguistics and Language Research*, *4*(1), 1–13.

Alonso-Almeida, F. (2014). Evidential and epistemic devices in English and Spanish medical, computing and legal scientific abstracts: A contrastive study. In M. Bondi, & R. Lorés Sanz (Eds.), *Abstracts in Academic Discourse: Variation and Change* (pp. 21–42). Peter Lang.

Babaii, E., & Ansary, H. (2005). On the effect of disciplinary variation on transitivity: The case of academic book reviews. *Asian EFL Journal*, *7*(3), 113–126.

Beauvais, P. (1989). A speech-act theory of metadiscourse. *Written Communication*, *6*(1), 11–30. https://doi.org/10.1177/0741088389006001002

Belyakova, M. (2017). English-Russian cross-linguistic comparison of research article abstracts in geoscience. *Estudios de Lingüística Universidad de Alicante*, *31,* 27–45. https://doi.org/10.14198/ELUA2017.31.02

Biber, D. (2006). Stance in spoken and written university registers. *Journal of English for Academic Purposes, 5*(2), 97–116. https://doi.org/10.1016/j.jeap.2006.05.001

Bondi, M. (2014). Changing voices: Authorial voice in abstracts. In M. Bondi, & R. Lorés Sanz (Eds.), *Abstracts in Academic Discourse: Variation and Change* (pp. 243–270). Peter Lang. https://doi.org/10.3726/978-3-0351-0701-2

Cmejrkova, S. (1996). Academic writing in Czech and English. In E. Ventola, & A. Mauranen, *Academic writing. Intercultural and textual issues* (pp. 137–152). John Benjamins. https://doi.org/10.1075/pbns.41.11cme

Crismore, A. (1984). The rhetoric of textbooks: Metadiscourse. *Journal of Curriculum Studies, 16,* 279–296. https://doi.org/10.1080/0022027840160306

Crismore, A., Markkanen, R., & Steffensen, M. S. (1993). Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. *Written Communication, 10*(1), 39–71. https://doi.org/10.1177/0741088393010001002

Farjami, H. (2013). A corpus-based study of the lexical make-up of applied linguistics article abstracts. *Journal of Teaching Language Skills*, *32*(2), 27–50.

Gessesse, C. M. (2016). An investigation into the macro rhetorical structures of the EFL research abstracts of graduates of 2013: the case of Bahir Dar University in Ethiopia. *Online Journal of Communication and Media Technologies*, *6*(1), 1–22. https://doi.org/10.29333/ojcmt/2534

Gillaerts, P. (2014). Move analysis of abstracts from a diachronic perspective: A case study. In N. -L. Johannesson, G. Melchers, & B. Björkman (Eds.), *Of butterflies and birds, of dialects and genres* (pp. 49–60). Acta Universitatis Stockholmiensis.

Graetz, N. (1985). Teaching EFL students to extract structural information from abstracts. In J. M. Ulijn and A. K. Pugh (Eds.), *Reading for professional purposes. Methods and materials in teaching language* (pp. 123–135). Amersfoot.

Hu, G., & Cao, F. (2011). Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English-and Chinese-medium journals. *Journal of Pragmatics*, *43*(11), 2795–2809. https://doi.org/10.1016/j.pragma.2011.04.007

Huckin, T. (2001). Abstracting from abstracts. In M. Hewings (Ed.), *Academic writing in context* (pp. 93–103). University of Birmingham Press.

Hyland, K. (2005) *Metadiscourse: Exploring interaction in writing*. Continuum.

Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics, 25,* 156–177. https://doi.org/10.1093/applin/25.2.156

Ji, X. (2015). Comparison of abstracts written by native speakers and second language learners. *Open Journal of Modern Linguistics, 5*, 470– 474. https://doi.org/10.4236/ojml.2015.55041

Jordan, M. P. (1991). The linguistic genre of abstracts. In A. Della Volpe (Ed.), *The seventeenth LACUS forum 1990* (pp. 507–527). LACUS.

Khedri, M., Chan, S. H., & Tan, H. (2015). Interpersonal-driven features in research article abstracts: Cross-disciplinary metadiscoursal perspective. *Pertanika Journal of Social Sciences and Humanities, 23*(2), 303–314.

Kozubíková Šandová, J. (2021). Interpersonality in research article abstracts: A diachronic case study. *Discourse and Interaction*, *14*(1), 77–99. https://doi.org/10.5817/DI2021-1-77

Krapivkina, O. A. (2014). Pronominal choice in academic discourse. *Middle-East Journal of Scientific Research*, *20*(7), 833–843. https://doi.org/10.5829/idosi.mejsr.2014.20.07.13676

Kuhi, D., & Mousavi, Z. (2015). A diachronic study of interpersonality in research articles' discussion section: The field of applied linguistics.

International Journal of Research in Humanities and Social Studies, 2(4), 6–13. https://doi.org/10.1007/s11192-019-03329-z

Lafuente-Millán, E. (2008). Epistemic and approximative meaning revisited: The use of hedges, boosters and approximators when writing research in different disciplines. In S. Burgess, & P. Martín-Martín (Eds.), *English as an additional language in research publication and communication* (pp. 65–82). Peter Lang

Lorés Sanz, R. (2004). On RA abstracts: From rhetorical structure to thematic organisation. *English for Specific Purposes, 23*(3), 280–302. https://doi.org/10.1016/j.esp.2003.06.001

Lorés Sanz, R., Mur-Dueñas, P., & Lafuente-Millán, E. (Eds.) (2010). *Constructing Interpersonality. Multiple perspectives on written academic genres.* Newcastle upon Tyne. Cambridge Scholars Publishing.

Lyda, A., & Warchal, K. (2014). Gender and academicity: Insights from research article abstracts. In M. Bondi, & R. Lorés Sanz (Eds.), *Abstracts in academic discourse: Variation and change* (pp. 111–130). Peter Lang.

Mauranen, A. (1993). Contrastive ESP rhetoric: metatext in Finnish-English economics texts. *English for Specific Purposes, 12,* 3–22. https://doi.org/10.1016/0889-4906(93)90024-I

Muñoz, C. M. (2013). The "I" in interaction: Authorial presence in academic writing. *Revista de Lingüística y Lenguas Aplicadas*, *8*(1), 49–58. https://doi.org/10.4995/rlyla.2013.1162

Mur-Dueñas, P. (2011). An intercultural analysis of metadiscourse features in research articles written in English and in Spanish. *Journal of Pragmatics, 43,* 3068–3079. https://doi.org/10.1016/j.pragma.2011.05.002

Nurhayati, N. (2017). Analysis of linguistic realizations of abstracts on Asian EFL journal. *Proceedings, 1*(1), 184–193.

Perales-Escudero, M., & Swales, J. M. (2011). Tracing convergence and divergence in pairs of Spanish and English research article abstracts: The case of Ibérica. *Ibérica*, *21*, 49–70

Peterlin, P. A. (2005). Text-organising metatext in research articles: An English-Slovene contrastive analysis. *English for Specific Purposes, 24(*3), 307–319. https://doi.org/10.1016/j.esp.2004.11.001

Pyankova, T. (1994). *A practical guide for the translation of Russian scientific and technical literature into English*. Letopis.

Saidi, M., & Talebi, S. (2021). Genre analysis of research article abstracts in English for academic purposes journals: Exploring the possible variations across the venues of research. *Education Research International*, *2*, 1–5. https://doi.org/10.1155/2021/3578179

Stotesbury, H. (2003). Evaluation in research article abstracts in the narrative and hard sciences. *Journal of English for Academic Purposes, 2,* 327–341. https://doi.org/10.1016/S1475-1585(03)00049-3

Thomson, G. (2001). Interaction in academic writing: Learning to argue with the reader. *Applied Linguistics, 22*(1), 58–78. https://doi.org/10.1093/applin/22.1.58

Van Bonn, S., & Swales, J. M. (2007). English and French journal abstracts in the language sciences: Three exploratory studies. *Journal of English for Academic Purposes*, *6*(2), 93–108. https://doi.org/10.1016/j.jeap.2007.04.001

Vande Kopple, W. (1985). Some exploratory discourse on metadiscourse. *College Composition and Communication*, *36*(1), 82–93. https://doi.org/10.2307/357609

Vassileva, I. (2001). Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes, 20*(1), 83–102. https://doi.org/10.1016/S0889-4906(99)00029-0

Yang, Y. (2013). Exploring linguistic and cultural variations in the use of hedges in English and Chinese scientific discourse. *Journal of Pragmatics*, *50*(1), 23–36. https://doi.org/10.1016/j.pragma.2013.01.008

Walková, M. (2018). Author's self-representation in research articles by Anglophone and Slovak linguists. *Discourse and Interaction*, *11*(1), 86–105. https://doi.org/10.5817/DI2018-1-86

How to cite this article: Boginskaya, O. (2023). Interactional metadiscourse markers in English research article abstracts written by non-native authors: A corpus-based contrastive study. *Íkala, Revista de Lenguaje y Cultura, 28*(1), 139–154. https://doi.org/10.17533/udea.ikala.v28n1a08