SEÇÃO: ARTIGOS

A Contrastive Study of Boosters in a Corpus of Academic Spoken English

Um estudo contrastivo de boosters num corpus de inglês falado no meio acadêmico

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Abstract: The present study intended to investigate the use of boosters in the Michigan Corpus of Academic Spoken English (MICASE). It examined whether native and non-native speakers of English differed from each other in boosters' use based on Hyland (2005) across academic divisions, levels of interactivity, genders, and academic roles in academic spoken English. The results of the UNIANOVA inferential test revealed that not only did native speakers of English utilize boosters more frequently than non-native ones across the four variables, but they also employed boosters in a way that was specific to academic divisions, levels of interactivity, genders, and academic roles. Besides the influence of culture and proficiency on boosters' use, this corpus analysis study found that native English speakers put their statements under focus so that they sound convincing to the audience in soft sciences more than the hard ones. It also indicated native speakers' greater attempt to convince their audience of the truth in their propositions, show new pieces of information as true, and back their own manipulative or persuasive purposes in highly interactive speeches more than the other levels of interactivity. Furthermore, it was shown that female native speakers exceeded to express opinions, state a suggestion with confidence in their knowledge of the topic, and minimize the possibility of accepting other options in academic spoken English of the MICASE. Ultimately, it illustrated that native academic speakers of English of faculty role rated higher to strengthen their existence, position, argument, claims, and commitment to their speech.

Keywords: academic division, academic roles, boosters, gender, levels of interactivity

Resumo: O objetivo do presente estudo foi investigar o uso de *boosters* no Michigan Corpus of Academic Spoken English (MICASE). Examinou se falantes nativos e não nativos de inglês diferiam entre si no uso de reforços com base em Hyland (2005), em todas as divisões acadêmicas, níveis de interatividade, gêneros e funções acadêmicas no inglês acadêmico falado. Os resultados do teste inferencial UNIANOVA revelaram que não apenas os falantes nativos de inglês utilizaram reforços com mais frequência do que os não nativos nas quatro variáveis, mas também empregaram reforços de uma forma específica para divisões acadêmicas, níveis de interatividade, gêneros e funções acadêmicas. Além da influência da cultura e da proficiência no uso de *boosters*, esta análise de *corpus* descobriu que os falantes nativos de inglês direcionam suas declarações de maneira a parecerem mais convincentes para o público nas ciências sociais do que nas ciências exatas. Também indicou uma maior tentativa dos falantes nativos de convencerem o seu público da verdade nas suas proposições, apresentar novas informações como verdadeiras e apoiar os seus próprios propósitos manipulativos ou persuasivos em discursos altamente interativos, mais do que os outros níveis de interatividade. Além disso, foi demonstrado que as mulheres falantes nativas excedem a capacidade de expressar opiniões, de fazer sugestões com confiança no seu conhecimento do tema e de minimizar a possibilidade de aceitar outras opções de inglês acadêmico falado do MICASE. Em última análise, ilustrou que os falantes acadêmicos nativos de inglês com funções docentes tiveram uma classificação mais elevada para fortalecer a

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sua existência, posição, argumento, reivindicações e compromisso com seu discurso.

Palavras-chave: divisão acadêmica, papéis acadêmicos, impulsionadores, gênero, níveis de interatividade

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Boosters have been assumed to be a very important phenomenon in the construction of rhetorical style. That is, they constitute part of the rhetorical elements employed by scholars to reach their communicative purpose. One of the main needs authors have in academic writing is trying to persuade their readership of the truth-value of their propositions. More specifically, this occurs when authors are announcing propositions dealing with new knowledge. In these cases, the writer will usually reveal the information opening with the knowledge both the audience and him/herself share; that is, propositions about known information. Then, the writer will attach the propositions covering new information resulting in the development of these latter propositions (Vázquez Orta & Giner, 2009).

As Hyland (2005) asserted interactional resources of metadiscourse help text organizers control their personality levels, pull the addressee along the argument, focus their attention, acknowledge their uncertainties, and guide them to interpretations. He believed that "Boosters are then rhetorical, persuasive strategies which function to mark, or rhetorically manipulate, consensual understandings based on shared community membership" (p. 368). The linguistic term booster is known as certainty markers or emphatic ones which play a significant role not only in persuasive writing but also in effective or meaningful writing. The active use of boosters is thought of as an intentional act of the writer. Its practical use is perceived as a very useful source in developing effective writing and showing the writer's stance (Khabbazi Oskouei, 2011).

Corpus analysis also known as corpus linguistics, is a linguistic research method that involves the systematic study of large collections of written, spoken, or electronically recorded texts known as corpora (plural of corpus). Corpus analysis is used to investigate and understand various aspects of language, including its structure, usage, patterns, and meaning. It has directed lots of researches ranging from newspaper texts in the Corpus of Contemporary American English (Ulrich & Barreto, 2012) and university level learner corpus (Dutra & Gomide, 2016) to fairy tales (Silva, 2012).

Although boosters (actually, always, demonstrate, determine, doubtless, essential) of academic corpora have been widely investigated in recent years, few studies have focused on those of academic spoken English. The corpus focused on its contents in this study was the MICASE (Simpson, Lee, & Leicher, 2002) to which far too little attention has been paid from the perspective of this interactional feature of metadiscourse, to the best of the researcher's knowledge. Therefore, this study intended to contrastively scrutinize boosters in two groups of native and non-native English speakers across various academic divisions, genders, discourse modes or levels of interactivity, and academic roles.

Literature Review

To provide the readers with the theoretical background, this study elaborates on the origins and definition of metadiscourse, then focuses on boosters. According to Hyland (2005), the term metadiscourse was coined by Zellig Harris in 1959 and it was introduced into the applied linguistics vocabulary in the 1980s. He defined metadiscourse as "an umbrella term, used to include an apparently heterogeneous array of cohesive and interpersonal features which help relate a text to its context" (Hyland, 2005, p.16). He also stated that it can be defined simply as "discourse about discourse" or considered as a fuzzy (without clear-cut boundaries) term which includes a wide collection of language items used to label both the discourse organization and the means by which we relate to our listeners or readers (Hyland, 2005, p.16).

del (2006) believed that sometimes it is hard to make a precise distinction between what is and what is not metadiscourse. However,

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applied linguists, composition theoreticians, and rhetoricians accepted that metadiscourse refers to "the various linguistic tokens employed to guide or direct a reader through a text so both the text and the writer's stance is understood" (Hyland, 2005, p. 18). He also stated that "metadiscourse is the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community" (p.37).

Hyland (1998a, 2004a, 2004b) made the most wide-ranging classification of metadiscourse markers into interactive, also called textual (i.e., guiding the reader through the text), and interactional (i.e., involving the reader in the text). Each of these two categories includes five types of metadiscourse markers with boosters (in other words, emphatics) having their place in the category of the interactional ones of which definition has been largely discussed by Crompton (1997) and Hyland (1998b). Boosters/ emphatics were defined through their function as the markers that help their users express opinions, state a suggestion with confidence in their knowledge of the topic, and minimize the possibility of accepting other options. These features represent a strong claim about a set of circumstances and characterize involvement and solidarity with listeners or readers, stress shared information, group membership, and direct engagement with readers (Hyland 1998b). They include expressions such as of course, clearly, obviously, etc.

Fortunately, there is rich literature investigating the use of boosters across different types of texts and genres. For example, Abdullah (2022) explored how advanced second language writers use metadiscoursal markers (particularly hedges and boosters) in two different disciplines, biology and linguistics. He collected a corpus of (30) master theses written by Iraqi MA students with an emphasis on three challenging parts, including introduction, results and discussion, and conclusion. To show how variations in disciplines or fields of knowledge influenced the pattern of usage of metadiscourse in academic writing created by novice MA students, the study utilized a discourse analysis of the written texts with contrastive analysis. Such analysis showed the discourse features that distinguished their genre from others and also pointed to the disciplinary differences within this genre. The statistical results indicated that metadiscourse was an effective academic phenomenon the writers used to present themselves, their positions, and their readers. It has also been shown that there were significant variations in using hedges and boosters between the two disciplines. This study recommended that special attention should be paid to such markers, essentially at the advanced levels of academic writing to develop the students ' pragmatic competence.

Donadio and Passariello (2022) assumed that writers of academic papers generally use a wide range of strategies when they expose scientific argumentations or take a position that can potentially threaten readers' faces. They stated that hedging and boosting devices are rhetorical devices that aid authors lessen or increase the impact of their positions and claims on readers and sought to explore their role and the frequency in scientific articles from a cross-cultural perspective. Their goal was to compare English and Italian research papers to describe hedging and boosting strategies and checked whether they differ between the two languages in terms of frequencies and functions. To do that, they collected a bilingual corpus made up of 58 medical research papers in Italian and English and investigated them through quantitative and qualitative methods. Their findings demonstrated that targeting an international audience intensely increases the frequency of the hedges, particularly the category of reader-oriented hedges. This research offered a good insight into the enormous array of modalities that authors of research articles written in English or Italian make use of. The results confirmed the assumption that authors become growingly aware of the obstacles that they face when writing a paper on a given issue. Although studies on

hedging and boosting in Italian have not been very widespread so far, it has been demonstrated that authors writing research articles in Italian use hedging and boosting devices, but their occurrence is much lower than in English.

Skorczynska and Carrió-Pastor (2021) looked into the differences in the frequencies and pragmatic functions of boosters, and in particular, with regard to their verb forms. Three corpora covering the fields of Engineering, Medicine, and Linguistics were collected and manually annotated for metadiscourse markers, boosters included, by a group of annotators. A predetermined list was used for annotation, but all over the annotation process, the list was improved to better reflect the use of metadiscourse in the corpora. The raw count of the occurrences of verb boosters showed clear differences between the corpora, which in turn confirmed previous studies of this type. Nevertheless, the range of verbs recognized was very similar, pointing to a large correspondence among the three. The three top frequency verb boosters also displayed a clear overlap for Engineering and Medicine but showed considerable differences with Linguistics.

Farnia and Gerami (2021) did a descriptive-analytical study to examine research articles discussion sections from four disciplines to measure the functions and frequencies of hedges and boosters. These researchers elected scholarly research articles randomly from leading and reputable journals in Mechanical and Industrial Engineering as representatives of hard science disciplines and Management and Psychology as representatives of soft science disciplines with a total size of around 17,000 words. The data were examined through Hyland's (2005) model of interactional metadiscourse for hedges and boosters' devices. Results of descriptive and inferential statistics indicated that the use of hedges was significantly more in soft science disciples while boosters were overused in hard science disciplines, consistent with the fact that by being less personal and more objective, hard sciences are characterized by more frequent use of boosters than hedges to express facts. Instead,

soft sciences are affected by their subjectivity which results in higher frequencies of hedges.

Mokhtar, Hashim, Khalid, Albakri, and Jobar (2021) stated that although there were several studies conducted by linguistics researchers on the differences between the linguistic styles of female and male writers, there were not many studies conducted on the use of boosters in academic writing as tools to convince and emphasize statements. They analyzed the consistency of boosters used in the Introduction section of 10 research articles and the influence of gender differences in the use of specific boosters through a document analysis method. The findings showed that male writers applied more boosters than female writers. Although the number of words for the female writers was more than the number of male writers, it did not influence the number of boosters used in the Introduction section of those articles. It also revealed that both the female and male writers used boosters to highlight their claims or their beliefs irrespective of their gender, while the use of boosters was more obvious among the research articles of the male author because they seemed to be more direct in proving and mentioning their claims.

Söğüt and Keçik (2020) focused on stance adverbials as hedges and boosters employed by Turkish non-native EFL (English as a Foreign Language) and American university students in their argumentative essays. The data of this study consisted of the argumentative essays of American university students (LOCNESS corpus) and Turkish non-native students from the corpus of argumentative essays written by freshmen Turkish students at the English Language Teaching Department. Simple random sampling was used to choose 200 argumentative essays (100 from each student group). The native corpus consisted of 84,851 words although the non-native corpus consisted of 86,554 words. This study used both qualitative and quantitative methods to analyze the data. They included percentages, mean frequencies per 10,000 words, and Log-likelihood results for each item. All occurrences of

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stance adverbials as hedges and boosters were recognized in both corpora by using a concordance program, Ant. Conc. 3.3.4. and each incidence was analyzed in its local and wider context to separate stance expressions. The results of the quantitative analyses showed that the frequencies and percentages of individual items in hedging and boosting devices differed in native and non-native students' essays. Argumentative essays of students were characterized by extensive use of boosters and less by the use of hedges.

Cazares-Cervantes, LaGue, & Dykeman (2019) studied the use of the devices of self-mentions, boosters, attitude markers, and hedges within a stratified random selection of research articles from 24 peer-reviewed counseling journals. They found that counseling journals contained a greater use of self-mentions, attitude markers, and hedges than social science articles.

Hryniuk (2018) compared the use of main interpersonal metadiscourse markers – hedges and boosters – in a corpus of 40 research articles from the field of applied linguistics, written in English by native speakers and Polish writers. He believed that these words and expressions are used as communicative strategies and increase (boosters) or reduce (hedges) the force of arguments. He utilized a concordance tool called WordSmith 6.0 (Scott, 2012) to do the analysis and found important discrepancies in the usage of these text features by authors representing different native languages and cultures.

Siddique et al. (2018) analyzed boosters (categorized into the tools of certainty expression, repetition, and attribution) in a corpus of Pakistani English Newspaper Editorials including 1,000 ones from four famous newspapers such as Dawn News, The Frontier, The Express Tribune, and The News. They found that the corpus of The Frontier included more boosting devices than the other corpora. In conclusion, this study has claimed that the corpus of The Frontier has greater effectiveness and persuasiveness as compared to other corpora because of the excessive use of boosters as metadiscourse markers. Khabbazi Oskouei (2011) also worked on

clarifying the 'certainty' and 'uncertainty' markers in Magazine editorials. She concluded that the use of interactional metadiscourse features by British and Persian editorialists reasonably varied because of different cultural backgrounds. British editorialists favored the use of uncertainty markers. On the other hand, Iranian editorialists seemed in favor of the use of certainty markers.

Mu et al. (2015) compared the use of metadiscourse markers in 20 research articles from applied linguistics journals in Chinese and 20 in English. They found that the English sub-corpus included significantly more interactional metadiscourse markers than the Chinese one. While hedges appeared most frequently in both sub-corpora, they were used more often in English research articles. Chinese writers, on the other hand, used more boosters or emphatics. These two groups of writers were also indicated to use hedges and boosters for slightly different purposes and it was accounted for by the differences in cultural writing conventions followed by the writers.

Hu and Cao (2011) analyzed 195 research article abstracts in three corpora of Chinese abstracts published in Chinese-medium journals, abstracts in English published in Chinese-medium journals, and English abstracts in English-medium journals. They found that more hedges appeared in the article abstracts in English medium journals, however, the other two sub-corpora did not differ significantly. They also found more occurrences of boosters in the Chinese abstracts, published in Chinese-medium journals than in the other two sub-corpora. Consequently, although the English writers' arguments seemed more cautious, the Chinese ones appeared to be more self-confident. They also compared the use of these tools in the empirical and non-empirical academic articles abstracts (i.e., review, theoretical, methodological articles, etc.) and found that there were more occurrences of boosters in the former. The researchers finally claimed that the results can be attributed to the cultural differences in the use of rhetorical strategies by the two groups of writers.

A careful study of the literature revealed that

previous studies of boosters have not dealt with the analysis of this metadiscourse feature, therefore, their clear understanding seems essential to explain the degree of argument strength, the transmission of commitment to text content, and respect for the audience by the speakers. In this paper, an attempt was made to answer the following questions.

Do the native and non-native speakers of English differ from each other in boosters' use across four academic divisions in academic spoken English? If yes, how?

Do the native and non-native speakers of English differ from each other in boosters' use across levels of interactivity in academic spoken English? If yes, how?

Do the native and non-native speakers of English differ from each other in boosters' use across genders in academic spoken English? If yes, how?

Do the native and non-native speakers of English differ from each other in boosters' use across four academic roles in academic spoken English? If yes, how?

Methodology

It was necessary to follow a fourfold descriptive and quantitative corpus-based analysis to explain the distinctive features of boosters that characterize the native and non-native English speakers' academic speech across four academic divisions, levels of interactivity, different genders, and academic roles, through collecting numerical data that were analyzed using mathematically based methods and quantified by counting and scaling in the MICASE.

Corpus Justification

The Michigan Corpus of Academic Spoken English (MICASE), made ready by Simpson, Lee and Leicher (2002), is without restrictions available and obtainable at Quod (https://quod.lib.umich.edu/cgi/c/corpus/corpus?c=micase;page=mbrowse), including transcriptions of 200 hours or nearly 1.7 million words of academic spoken English, and was analyzed based on the list of boosters provided by Hyland (2005) shown in Table 1.

TABLE 1 - LIST OF BOOSTERS INVESTIGATED IN THE MICASE

Actually, always, apparent, I believe, certain that, certainly, certainty, clearly, it is clear, conclusively, decidedly, definitely, demonstrate, determine, doubtless, essential, establish, in fact, the fact that, indeed, know, it is known that, must, never, no doubt, beyond doubt, obvious, obviously, of course, prove, show, sure, true, undoubtedly, well known, won't, even if, should, by far

Boosters analysis was performed on all native American English and non-native speakers from a diverse range of L1 backgrounds available in the MICASE across four academic divisions, biomedical and health science, arts and humanities, physical sciences and engineering, and social sciences and education. This study also considered the corpora of those English users across five discourse modes or levels of interactivity, including *highly interactive, mostly interactive, highly monologic, mostly monologic,* and *mixed* in the intended corpus. Besides, the differences between female and male native and non-native speakers numbering 842 and 729 respectively in the MICASE were investigated.

Lastly, this study examined the academic speech of native and non-native speakers of various academic roles, faculty (160 participants), graduate students (257), undergraduate students (782), and people of other roles.

Data Collection Method

To answer the research questions, the researchers respectively searched the MICASE for all of the boosters in the speech of native speakers and non-native speakers in academic divisions of biomedical and health science, arts and humanities, physical sciences and engineering, and social sciences and education. Then, all boosters were separately searched

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for in all discourse modes, including *highly interactive, mostly interactive, highly monologic, mostly monologic,* and *mixed* in the native and nonnative corpora. Next, they were separately searched across genders in the native and nonnative corpora. Finally, each of the boosters was separately searched across academic roles faculties, graduates, undergraduates, and others in the native and nonnative corpora of the MICASE.

Data Analysis

This study needed the extraction of the frequency counts provided by MICASE into SPSS software for the use of boosters. Because the word counts were not equal in each of the corpora, these frequency counts were reported by every 1,000 words. Then, frequency, mean, and standard deviation were computed (descriptive statistics). To indicate the degree of significance or non-significance of these differences, this study used the inferential test called UNIANOVA which provided us with any probable differences between the two groups of speakers across the academic divisions, and levels of interactivity, genders, and academic roles in boosters' utilization.

Results

To investigate the differences between native and non-native speakers' use of boosters across four academic divisions, levels of interactivity, genders, and academic roles in corpora of academic spoken English, this study first computed descriptive statistics, including mean and standard deviation, and represented in Table 2.

TABLE 2 - THE DESCRIPTIVE STATISTICS OF NATIVE SPEAKERS AND NON-NATIVE SPEAKERS' USE OF BOOSTERS IN THE MICASE

Variables		Language Status	Mean	Std. Deviation	N
Academic divisions	Biological and Health Sciences	Native speakers	94.5405	250.04128	37
		Non-native speakers	3.5946	11.20382	37
		Total	49.0676	181.63182	74
	Humanities and arts	Native speakers	147.3784	447.60432	37
		Non-native speakers	2.3514	6.85653	37
		Total	74.8649	322.73206	74
	Physical Sciences and Engineering	Native speakers	102.3243	289.73283	37
		Non-native speakers	9.2162	19.16469	37
		Total	55.7703	209.22640	74
	Social Sciences and Education	Native speakers	154.3514	496.94993	37
		Non-native speakers	4.0811	12.74401	37
		Total	79.2162	357.19859	74
	Total	Native speakers	124.6486	382.25633	148
		Non-native speakers	4.8108	13.37494	148
		Total	64.7297	276.59335	296

Variables		Language Status	Mean	Std. Deviation	N
Levels of interactivity	Highly interactive	Native speakers	218.8649	747.20554	37
		Non-native speakers	5.5000	12.90515	36
		Total	113.6438	539.23656	73
	Highly monologic	Native speakers	35.1081	65.62892	37
		Non-native speakers	.0000	.00000	36
		Total	17.7945	49.65827	73
	Mostly monologic	Native speakers	119.5676	368.52322	37
		Non-native speakers	4.8056	14.92040	36
		Total	62.9726	267.11530	73
	Mostly interactive	Native speakers	108.4324	277.56336	37
		Non-native speakers	6.5000	15.18928	36
		Total	58.1644	203.14035	73
	Mixed	Native speakers	78.0811	228.52916	37
		Non-native speakers	4.5833	12.71754	36
		Total	41.8356	166.01322	73
	Total	Native speakers	112.0108	407.02824	185
		Non-native speakers	4.2778	12.56494	180
		Total	58.8822	294.50458	365
Gender	Female	Native speakers	325.3333	969.79789	36
		Non-native speakers	8.6757	25.99899	37
		Total	164.8356	694.93939	73
	Male	Native speakers	243.1622	722.21952	37
		Non-native speakers	12.3784	28.30621	37
		Total	127.7703	520.69255	74
	Total	Native speakers	283.6849	848.35312	73
		Non-native speakers	10.5270	27.05460	74
		Total	146.1769	611.61158	147
Academic roles	Faculty	Native speakers	250.4595	651.71366	37
		Non-native speakers	10.6216	25.13668	37
		Total	130.5405	473.65111	74
	Graduate	Native speakers	119.0000	371.49092	37
		Non-native speakers	8.2973	23.71341	37
		Total	63.6486	267.28367	74
	Other	Native speakers	48.6486	156.81858	37
		Non-native speakers	1.1351	2.87868	37
		Total	24.8919	112.71112	74
	Undergraduate	Native speakers	141.9459	505.79700	37
		Non-native speakers	1.0000	3.10018	37
		Total	71.4730	362.21852	74
	Total	Native speakers	140.0135	460.18624	148
		Non-native speakers	5.2635	17.75508	148
		Total	72.6385	332.02201	296

According to Table 2, the mean usage of boosters by native speakers exceeded that of non-native speakers in four academic divisions, five levels of interactivity, both genders, and four academic roles. However, to ascertain the significance of these differences, this study employed the UNIANOVA inferential test (as shown in Table 3, 4, 5, and 6).

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TABLE 3 - THE UNIANOVA OF NATIVE SPEAKERS AND NON-NATIVE SPEAKERS' USE OF BOOSTERS ACROSS ACADEMIC DIVISIONS IN THE MICASE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerb
Corrected Model	1167477.568	7	166782.510	2.244	.031	.052	15.711	.830
Intercept	1240221.622	1	1240221.622	16.690	.000	.055	16.690	.983
Language status	1062721.946	1	1062721.946	14.301	.000**	.047	14.301	.965
Academic Divisions	47223.432	3	15741.144	.212	.888	.002	.635	.090
Language status * Academic Divisions	57532.189	3	19177.396	.258	.856	.003	.774	.099
Error	21401166.811	288	74309.607					
Total	23808866.000	296						
Corrected Total	22568644.378	295						

a. R Squared = .055 (Adjusted R Squared = .031)

b. Computed using alpha = .05

**p≤ 0.01

Table 3 revealed a significant disparity in the frequency of boosters among academic divisions when comparing native speakers and non-native speakers (p=0.000 and F=14.301). The eta squared value was 0.047, showing that the independent variables (native and non-nativeness) were the source of approximately 4.7% of the score variations. Consequently, there was a notable contrast in booster usage between the two groups, with native speakers employing more boosters than non-native speakers across all academic divisions, including Biological and Health Sciences, Humanities and Arts, Physical Sciences and Engineering, as well as Social Sciences and Education in MICASE.

TABLE 4 - THE UNIANOVA OF NATIVE SPEAKERS AND NON-NATIVE SPEAKERS' USE OF BOOSTERS ACROSS LEVELS OF INTERACTIVITY IN THE MICASE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerb
Corrected Model	1746248.735a	9	194027.637	2.310	.016	.055	20.786	.908
Intercept	1233745.461	1	1233745.461	14.685	.000	.040	14.685	.969
Level of interactivity	355234.106	4	88808.527	1.057	.378	.012	4.228	.333
Language status	1058885.845	1	1058885.845	12.604	.000**	.034	12.604	.943
Level of interactivity * Languagestatus2	322737.613	4	80684.403	.960	.429	.011	3.842	.304
Error	29824543.200	355	84012.798					

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerb
Total	32836288.000	365						
Corrected Total	31570791.934	364						

a. R Squared = .055 (Adjusted R Squared = .031)

b. Computed using alpha = .05

**p≤ 0.01

Table 4 indicated significant differences in booster usage between native speakers and non-native speakers across various levels of interactivity (p=0.000 and F=12.604). The eta squared value was 0.034. It suggested that roughly 3.4% of the differences in frequencies could be attributed to first language variations. In essence, native speakers used more boosters than non-native speakers in highly interactive, highly monologic, mostly monologic, mostly interactive, and mixed academic spoken English within the MICASE dataset.

TABLE 5 - THE UNIANOVA OF NATIVE SPEAKERS AND NON-NATIVE SPEAKERS' USE OF BOOSTERS ACROSS GENDERS IN THE MICASE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerb
Corrected Model	2865439.564a	3	955146.521	2.639	.052	.052	7.918	.636
Intercept	3192837.726	1	3192837.726	8.823	.003	.058	8.823	.839
Gender	56562.237	1	56562.237	.156	.693	.001	.156	.068
Language status	2753033.928	1	2753033.928	7.608	.007**	.051	7.608	.782
Gender * Language status	67742.050	1	67742.050	.187	.666	.001	.187	.071
Error	51748593.838	143	361878.279					
Total	57755082.000	147						
Corrected Total	54614033.401	146						

a. R Squared = .052 (Adjusted R Squared = .033)

b. Computed using alpha = .05

**p≤. 0.01

Table 5 illustrated a significant discrepancy in booster usage across genders when comparing native speakers and non-native speakers (p=0.007 and F=7.608). The eta squared value was 0.051, indicating that first language differences can account for around 1.5% of the score dissimilarities. In other words, there was a noteworthy difference between the two groups in their use of boosters across genders. Specifically, female native speakers employed more boosters than female non-native speakers, while male native speakers utilized more boosters than male non-native speakers.

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TABLE 6 - THE UNIANOVA OF NATIVE SPEAKERS AND NON-NATIVE SPEAKERS' USE OF BOOSTERS ACROSS ACADEMIC ROLES IN THE MICASE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerb
Corrected Model	2123038.051a	7	303291.150	2.874	.006	.065	20.115	.923
Intercept	1561800.679	1	1561800.679	14.797	.000	.049	14.797	.970
Academic Role	422877.497	3	140959.166	1.336	.263	.014	4.007	.355
Language status	1343659.625	1	1343659.625	12.731	.000**	.042	12.731	.945
Academic Role* Language status	356500.929	3	118833.643	1.126	.339	.012	3.378	.303
Error	30397354.270	288	105546.369					
Total	34082193.000	296						
Corrected Total	32520392.321	295						

a. R Squared = .065 (Adjusted R Squared = .043)

b. Computed using alpha = .05

** p≤ 0.01

Table 6 showed a significant difference in booster usage across four academic roles when comparing native speakers and non-native speakers (p=0.000 and F=12.731). The eta squared value was 0.042, signifying that approximately 4.2% of the score variations in booster' use was attributable to first language differences. Consequently, there was a substantial contrast between the two groups in their utilization of boosters across the four academic roles. Faculty native speakers used more boosters than faculty non-native speakers, graduate native speakers employed more boosters than graduate non-native speakers, and undergraduate native speakers utilized more boosters than undergraduate non-native speakers. Additionally, native speakers in other academic roles employed more boosters compared to non-native speakers in similar academic roles within the MICASE dataset.

Discussion

The results of the present study designed firstly to determine the differences between native and non-native speakers of English in boosters' use across academic divisions in the corpus of academic spoken English namely MICASE were in line with Abdullah (2022) and Sepehri, Hajijalili, and Namaziandost (2019), i.e., native speakers of English were indicated to use boosters significantly more than non-native speakers across all academic divisions (Table 3). It was indicated that native speakers used more boosters than non-native ones (in agreement with Donadio and Passariello, 2022) in Social Sciences and Education, Humanities and Arts, Physical Sciences and Engineering, and Biological and Health Sciences respectively. Namely, native speakers of soft sciences (Social Sciences and Education and Humanities and Arts**)** rated higher in boosters which means they put their statements under focus so that they sound convincing to the audience, tried to achieve the speakers' need of convincing their audience of the truth in their propositions, showed new pieces of information as true, and backed their own manipulative or

persuasive purposes.

However, native speakers of hard sciences (Physical Sciences and Engineering and Biological and Health Sciences) significantly were less inspired by epistemological causes to use boosters based on the results and findings themselves and less integrated with social goals in scientific communities, such as achieving agreement and consensus by appealing to common knowledge and shared understandings, not in line with Farnia and Gerami (2021). Accordingly, consistent with Söğüt and Keçik (2020), these speakers were not committed to making use of boosters to show their self-reliance on the truth of a particular proposition and were not inclined to affect the response of the readership to which the text is addressed and persuade them of the conclusions drawn by the scholar(s).

On the other hand, in agreement with Skorczynska and Carrió-Pastor (2021), the non-native speakers did not use boosters significantly different across the academic divisions or disciplines. That is, they did not expose scientific argumentations or take a position that can potentially threaten listeners' faces. It can be attributed to their unfamiliarity with the pragmatic and rhetorical elements of English that contribute to a more assertive and emphatic expression and thus potentially also to the speaker sounding more urgent, certain, and convincing. Probably, they do not know the strategies of making use of the impressions assisting in constructing a speaker persona and stance and highlighting their claims or their beliefs. Therefore, boosters' use was controlled both by general rules of communication and the standards and practices of particular academic divisions. The unequal distribution also suggested discipline or academic divisions-specific boosting strategies, the discourse means, and the rhetorical styles of each discipline and echoed the nature of different disciplinary features.

The corpus analysis results also indicated that native speakers of English used boosters significantly more than non-native speakers across all levels of interactivity including highly interactive, mostly monologic, mostly interactive, mixed, and highly monologic respectively (Table 4). It is important to mention that no highly monologic speech was available for the non-native speakers' corpora; therefore, we could make no comparisons between the two groups of language users concerning this discourse mode. Nonetheless, it was indicated that non-native speakers did not differentiate in boosters use, as a very important fact in the creation of rhetorical style, across levels of interactivity. It may somehow be the result of intentional avoidance to decrease the risk of listeners' resistance, not to have personal responsibility for their arguments, and not to seem confident and assertive.

The above-mentioned results proved that boosters constitute part of the rhetorical elements employed by native speakers of interactive speeches in the academic genre to reach their communicative purpose. It can be attributed to their attempt to persuade their audience of the true value of their suggestions. More precisely, the higher the level of interaction, the more native speakers engaged in negotiations try to announce propositions dealing with new knowledge and growth of competitiveness and self-advocacy. In these cases, the speaker made use of the boosters to reveal the information beginning with the knowledge shared by both the audience and him/herself; that is, propositions about common information. Then, s/he attached the propositions including new information resulting in the development of these latter propositions, in line with Vázquez Orta and Giner (2009). The higher rate of boosters in highly interactive discourse modes aided each side of the interaction to increase the influence of their positions and claims on the other side and to influence them with their opinions and suggestions.

This study also indicated that not only did female native speakers significantly use more boosters than female non-native speakers (Table 5), but also female native speakers generally used more boosters (in line with Bacang, Rillo, Alieto, 2019) than male ones (Table 6). However, male and female non-native speakers significantly did

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not use them differently from each other.

Interestingly, our findings were consistent with Meyerhoff (1992) and Dixon and Foster (1997) who reacted against "wanton frequency counts and generalizations about women's subordination in conversation" (p.96). Female native speakers' greater use of boosters can be due to their desire to show a strong persuasion for a statement, strengthen the utterance's illocutionary force, be more direct in demonstrating and stating their claims, and signal their confidence concerning the credibility of their utterance. Despite Mokhtar, et al. (2021) and Besançon, et al. (2021), it seems that generally female speakers were more inclined to strengthen propositions and demonstrate their commitment to statements. They applied a higher rate of these rhetorical tropes which help to increase commitment, sharpen the boundaries between good and evil, and strengthen solidarity. Although such an assertion of the speakers' conviction can be seen as leaving little room for the listeners' interpretations, boosters also offer them a medium to engage with their audience and produce interpersonal solidarity. Such intensifying resources can also be considered examples of positive politeness strategies and their main functions are associated with listeners' persuasion and the audience's convincing with arguments generally reinforced by data presented in the speech.

In addition, this study indicated that faculty, graduate, undergraduate, and other academic members in the native speakers' corpus used more boosters than their counterparts in the non-native corpus (Table 6). It is also apparent that faculties of both corpora rated higher in boosters' use in line with Abdullah (2022) to express opinions, state a suggestion with confidence in their knowledge of the topic, and minimize the possibility of accepting other options. These features represent a strong assertion about a set of positions and describe involvement and unity with listeners, stress mutual information, group membership, and close engagement with listeners. However, non-natives again rated so low in boosters and used it similarly across all academic people.

It can be the result of their unfamiliarity with the English rhetorical and persuasive strategies which work to mark, or rhetorically manipulate, consensual understandings based on shared community membership. Furthermore, it can be attributed to the different rhetorical strategies used by L2 users to promote their work, including positive assessments of their study on one hand and negative assessments of conflicting and/or varying views.

Faculties' higher use of this category of interpersonal metadiscourse markers strengthens their existence, position, argument, claims, and commitment to their speech and shows their broader academic experience and expertise in their discourse community. They also used boosters higher to demonstrate their research uniqueness and when they were quite sure that their claims communicate some widespread understanding. It can also be due to the importance of boosters as essentially argumentation devices that aid the speakers to standardize their attention more to the proposition or the listener, stressing or diminishing the truth value or speakers' responsibility. It indicated that graduates, undergraduates, and people of other academic roles apply different degrees of assurance in their claims when they attempt to convince their target audience to agree to take their views and claims. These groups' lower use of boosters can be due to decreasing the risk of conflict, as a means of being polite, and as a way to make vague their authorial identity while continuing their opinion. The dissimilarities between the groups can also be accounted for by the speakers' different rhetorical understanding and awareness of the audience.

Conclusion

The present research offered good insight into the comparison of boosters or emphatic markers that native users of English and non-native ones make use of while they are speaking in an academic setting. This corpus study analyzed the MICASE to reveal whether those users of English differed from each other in boosters'

frequency across academic divisions, levels of interactivity, genders, and academic roles. The results confirmed that native speakers of English used boosters significantly more than non-native speakers in all academic divisions and more in soft sciences than hard ones. Therefore, it can be concluded that the academic discourse covers many discipline or academic division-specific regularities, preferences, or norms, influencing how identities and arguments are presented regularly and effectively and various ways in which the different academic divisions or disciplines outline their point of view and create their knowledge through discourse, contribute to these delicate variations. It can also be inferred that language is essentially a variable that can illuminate some particular cross-cultural differences observed through academic spoken English and the use of boosters is not only culture and language-specific but also topic and genre-dependent.

It has been underlined that the use of boosters is also conditioned by the levels of interactivity. That is the higher the level of interactivity, the more frequently the boosters were used by the native speakers to persuade their audience of the truth-value of their propositions.

The quantitative analysis of the boosters across the native and non-native female and male speakers of English suggested that female native ones more than the male ones and generally native speakers more than the non-native ones preferred to use boosters strategies as a tool to form a border along the country-based community of academic speakers interacting by using a specific language, which endangers them with more risks and allows them to direct the local academic audience for purposes that go beyond knowledge dissemination.

The present analysis confirmed that people of different academic roles use boosters differently. That is, the native faculties utilized these argumentational devices more to regulate her/his attention to the proposition or the listeners and emphasize the truth value or speaker accountability.

All in all, the above-mentioned results can be attributed to the cultural variances in rhetorical strategies use by the two groups of speakers in academic spoken English. Therefore, boosting merits particular attention if academic members want to fully develop competence in academic speech and make an interpretation of the phenomenon of academic persuasion.

This study recommended that some strategies are proving to be of crucial importance for academic insiders. One of them is the interpersonal metadiscourse markers of emphatics or boosters. It was shown that special attention should be paid to such markers, fundamentally at the higher levels of the academic genre to advance the students ' pragmatic competence.

By making students aware of these rhetorical features, teachers can both improve their understanding of disciplinary cultures and prepare them for producing persuasive arguments in their field (Hyland, 2000). Academic speech is mainly different from writing because it is directly interactive. Usually, there is little time or opportunity to correct or contemplate. Speakers are under pressure of planning their arguments, discussing with the audience, and stopping on time, which makes a speech a challenge, in particular for novice and non-native speakers. Accordingly, English for specific courses can be designed to contain learners' needs in developing communicative skills and strategies in spoken English for academic purposes.

Second, English for specific purposes teachers can enhance postgraduate students' awareness of communicating their arguments clearly and increase their understanding of rhetorical consciousness by having them do small-scale corpus analysis of the texts they need to learn. Teachers can attract students' attention to the characteristics of academic speech they have to engage in and lead them to discover what communicative strategies from the particular discipline they can use to present persuasive oral arguments. These tasks can help learners to distinguish both the options available to them and their influence (Hyland, 2004a).

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Regardless of the findings of this study, one should be cautious in making generalizations from these findings because the scope of this study was to examine the boosters of the MICAS. Other metadiscourse features or other corpora data were not considered here. In addition, this study presented only a quantitative analysis of boosters, and a qualitative one was not done to exactly consider the occurrence of these markers or control their functions. The thesis does not engage with the age of the speakers or the intra-analysis of academic divisions in the MICASE. The reader should bear in mind that the study was based on four variables, academic divisions, levels of interactivity, gender, and academic role and it did not consider the speech event type, participant level, or first language of the speakers as other variables determined in the MICASE. Another potential problem is that this study only considered two groups of language users, North American English speakers and non-native speakers, native speakers of non-American English. It did not focus on the other groups like near-native speakers, native speakers of non-American English, or unknown ones. Therefore, further research regarding the use of boosters in the corpora collected from people of different first languages, levels, and ages, across various speech event types and classroom events would be of great help.

References

Abdullah, S. S. (2022). A Pragmatic Analysis of Metadiscoursal Markers (Hedges and Boosters) in Linguistics and Biology MA Theses: A Linguascientific Corpus-based Study. *International Journal of Early Childhood Special Education*, *14*(1), 1173-1185. http://dx.doi.org/10.9756/int-jecse/v14i1.221134

Cazares-Cervantes, A., LaGue, A., & Dykeman, C. (2019). *Authorial Stance in Counseling Research Articles.* http://dx.doi.org/10.31234/osf.io/8q539

Dixon, J. A., & Foster, D. H. (1997). Gender and Hedging: From Sex Differences to Situated Practice. *Journal of Psycholinguistic Research*, 26(1): 89-107. https://doi.org/10.1023/A:1025064205478

Donadio, P., & Passariello, M. (2022). *Hedges and boosters in English and Italian medical research articles: A cross-cultural comparison. International Journal of Language Studies, 16(1),* 1-20. http://www.ijls.net/pages/volume/vol16no1.html

Dutra, D. P., & Gomide, A. R. (2016). Compilation of a University Learner Corpus. *BELT - Brazilian English Language Teaching Journal*, *6*, 21-33. https://doi.org/10.15448/2178-3640.2015.s.21311

Farnia, M., & Gerami, S. (2021). *Comparative Study of Interactional Metadiscourse Markers in the Discussion Section of Soft and Hard Science Research Articles: Hedges and Boosters in Focus. Jordan Journal of Modern Languages and Literatures, 13(2), 263-280.* https://journals.yu.edu.jo/jjmll/Issues/vol13no22021/Nom5.pdf

Hryniuk, K. (2018). *Expert-like use of hedges and boosters in research articles written by Polish and English native-speaker writers. Research in Language, 16(3), 263-280.* https://doi.org/10.2478/rela-2018-0013

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

Hyland, K. (1998a). *Boosting, hedging and the negotiation of academic knowledge. Text & Talk, 18(3), 349-382.* https://doi.org/10.1515/text.1.1998.18.3.349

Hyland, K. (1998b). *Persuasion and context: The pragmatics of academic metadiscourse. Journal of Pragmatics, 30(4), 437-455.* https://doi.org/10.1016/S0378-2166(98)00009-5

Hyland, K. (2004a). *Disciplinary discourses, Michigan classics ed.: Social interactions in academic writing. University of Michigan Press.* https://doi.org/10.3998/mpub.6719

Hyland, K. (2004b). *Disciplinary interactions: Metadiscourse in L2 postgraduate writing. Journal of Second Language Writing, 13(2), 133-151.* https://doi.org/10.1016/j.jslw.2004.02.001

Hyland, K. (2005). *Metadiscourse: Exploring Interaction in Writing.* Continuum.

Khabbazi Oskouei, L. (2011). *Interactional variation in English and Persian: A comparative analysis of metadiscourse Features in magazine editorials* [Doctoral dissertation, University of East Anglia]. https://ueaeprints.uea.ac.uk/35688/1/2011Khabbazi-OskoueiLPhD.pdf

Meyerhoff, M. 1992. *"A sort of something — hedging strategies on nouns." Working Papers on Language. Gender, and Sexism 2(1), 59-73.* https://www.academia.edu/45682739/A_sort_of_something_Hedging_strategies_on_nouns

Mokhtar, M. M., Hashim, H., Khalid, P. Z. M., Albakri, I. S. M. A., & Jobar, N. A. (2021). *A Comparative Study of Boosters between Genders in the Introduction Section. Arab World English Journal, 12(1), 515-526.* https://ssrn.com/abstract=3826866

Mu, C., Zhang, L. J., Ehrich, J., & Hong, H. (2015). *The use of metadiscourse for knowledge construction in Chinese and English research articles. Journal of English for Academic Purposes, 20, 135-148.* http://dx.doi.org/10.1016/j.jeap.2015.09.003

Sepehri, M., Hajijalili, M., & Namaziandost, E. (2019). *Hedges and boosters in medical and engineering research articles: A comparative corpus-based study. Global Journal of Foreign Language Teaching, 9(4), 203-213.* http://dx.doi.org/10.18844/gjflt.v9i4.4342

ilva, R. S. (2012). Fairy tales and moral values: a corpus--based approach. *BELT - Brazilian English Language Teaching Journal*, *3*(1), 133-145. https://revistaseletronicas.pucrs.br/ojs/index.php/belt/article/view/10326

Simpson, R., Lee, D., & Leicher, C. (2002). *The Michigan Corpus of Academic Spoken English*. Quod. https://quod.lib.umich.edu/m/micase

Skorczynska, H., & Carrió-Pastor, M. L. (2021). *A cross--disciplinary study of verb boosters in research articles from Engineering, Medicine and Linguistics: Frequency and co-text variations. Revista Signos, 54(106), 575-599.* http://dx.doi.org/10.4067/S0718-09342021000200575

Söğüt, S., & Keçik, İ. (2020). A corpus-based analysis of stance adverbials as hedges and boosters in English argumentative essays of American university students and Turkish non-native university students. Konin Language Studies, 8 (1), 11-30. https://www.ceeol.com/search/article-detail?id=989627

Ulrich, C., & Barreto, S. (2012). A corpus-based study of anaphora related to indefinite pronouns. *BELT - Brazilian English Language Teaching Journal*, *3*(1), 59-61. https://revistaseletronicas.pucrs.br/ojs/index.php/belt/article/view/10332

Vázquez Orta, I., & Giner, D. (2009). Writing with conviction: The use of boosters in modelling persuasion in academic discourses. *Revista Alicantina de Estudios Ingleses, 22*, 219-237. http://dx.doi.org/10.14198/raei.2009.22.14

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