

INTERACTING WITH THE AUDIENCE: METADISOURSE MARKERS IN TOP TEN IMPACT FACTOR JOURNAL ARTICLE ABSTRACTS IN APPLIED LINGUISTICS

Shazia Aziz¹, Dr Fakhira Riaz²

Fatima Jinnah Women University, Rawalpindi

ORCID ID: ¹[0000-0001-9566-5053](https://orcid.org/0000-0001-9566-5053), ²[0000-0002-6369-4498](https://orcid.org/0000-0002-6369-4498)

Abstract

This is a corpus-based investigation of interactional metadiscourse used in the top ten impact factor journal article abstracts in Applied Linguistics published during 3 consecutive years, i.e., from 2019 to 2021. Using a corpus (IFALA 2019-2021) of the 3 years' abstracts compiled during an earlier study of lexical density measures (Aziz & Riaz, 2024), ten sub-corpora were compiled and the markers were studied using Ant Conc software. The hedges were found to be the most frequent occurrence among the markers, and personal mentions were minimal. It points out that keeping in view the increasing trend of the empirical nature of studies in Applied Linguistics, authors are relying on the scientific findings to speak for themselves and not influence the opinions of readers by being present or emphasizing claims. Moreover, they are careful enough to give margin for alternate interpretations to the discourse community they are addressing i.e., the scholars and practitioners in Applied Linguistics by not being emphatic about claims, not introducing personal judgments and not engaging the readers much. This study contributes by adding 15 more items to the metadiscourse markers' list proposed by Hyland (2005).

Keywords: attitude markers; corpus-based; boosters; impact factor; engagement markers; hedges; interactional metadiscourse; self-mentions

1. Introduction

One of the most effective ways to represent interaction is through metadiscourse, which is the “commentary on a text” produced by the text producer while writing or speaking. The author's rhetorical cognizance of the recipient/audience as a discourse participant who may be engaged, led, and influenced by a text that is both understandable and compelling through the selection of metadiscourse devices (Hyland & Jiang, 2018). The things that most obviously indicate the writer's or reader's presence in a text, organize propositional discourse, and reveal the writer's viewpoint are the subject of metadiscourse analysis (Hyland, 2005). One of the most popular methods for analyzing academic writing is metadiscourse analysis because it allows authors to regulate how they establish their presence, convey claims of expertise, and interact with the audience (Pearson & Abdollahzadeh, 2023).

This study analyses the interpersonal metadiscourse markers' use abstracts of the articles published in the top 10 Applied Linguistics impact factor journals between 2019-2021. Due to the dialogic and persuasive nature of the abstract genre, we focused on studying the interactional metadiscourse markers in our corpus of Applied Linguistics journals. Though some researchers have conducted a bundle-driven analysis of metadiscourse markers, too, but since abstract is a brief genre, we considered just studying sentence-initial bundles might bring very minimal results that would not be representative of the whole corpus. Moreover, without context, it would be difficult to gauge the overall presence of the authors, their stance and engagement with the audience. Hence, we conducted this analysis on whole texts of the abstracts in our corpus IFALA 2019-2021 (Aziz & Riaz, 2024).

2. Literature Review

Academic writing is a crucial evaluation instrument that necessitates mastery of abilities including evidence-based reasoning and critical thinking (Irvin, 2010). Academic arguments, in contrast to ordinary arguments, need to be well-structured and fully backed by evidence in order to effectively communicate points of view and enhance the writer's and audience's comprehension of the subject (Huan & Hong, 2024). Language skills improve communication (Javaid et al., 2023; Ramzan et al., 2023; Ikramullah et al., 2023). This is achieved through the use of metadiscourse among other things. Hence, it has been an important area of research since the last 40 decades. Metadiscourse is a significant linguistic feature. It helps the recipient to “organize, interpret and evaluate the information given” (Crismore et al., 1993 p. 40).

The producer's comments on a text is known as metadiscourse (Jiang & Hyland, 2018). Here, we adopt an interpersonal viewpoint and concentrate on metadiscourse as a toolkit of tools at authors' disposal for structuring a discourse or determining their position with regard to the discourse's subject matter or audience. Hyland & Jiang (2018) investigated how, over a 50-year period, professional writing metadiscourse changed across many fields. They observed a large increase in interactive characteristics and a significant drop in interactional kinds after conducting a diachronic analysis of a of 2.2 million-word corpus of papers published in the top ranked journals across four fields. The disciplines of discursive soft knowledge have significantly decreased, whereas science topics have increased significantly, according to interactional metadiscourse.

Authors including Atkinson (1999), Bazerman (1988), Banks (2008), Salager-Meyer (1999), and Valle (1999) also found significant changes in scientific research articles. Hyland & Jiang (2018) investigated if there was any truth to the widely-heard assertion that academic writing has gotten more casual in recent years (Hyland & Jiang, 2017). They discovered that although this may be true in the hard sciences, the social sciences appeared to be moving in the other way. By using a variety of metadiscourse strategies to create a text that is both understandable and compelling, a writer may engage, direct, and sway the reader as a participant in the discourse. This rhetorical awareness is known as interaction. It focuses on the components that indicate the writer's point of view, arrange propositional discourse, and most plainly imply the writer's or reader's presence in the text (Hyland, 2005). Thus, metadiscourse serves to both structure coherent discourse and serve as a collection of rhetorical decisions that assist the writer engage readers and project their perspective.

Academic writing is fundamentally about persuading readers to trust and adopt a certain viewpoint. This persuading takes place in a disciplinary context, which binds the writers to present their points in alignment with their audience's expectations and the field's genre conventions. In the process, writers try to anticipate disagreements and present their arguments according to the assumptions of the disciplinary community. Metadiscourse is very instrumental in determining this interaction. Pioneered by Harris (1959) and further advanced in the field of Applied Linguistics by Vande Kopple (1985) and Crismore (1989) among others, metadiscourse refers to the way language imparts information as well as guides readers in understanding that information. By employing rhetorical strategies like offering commentary, directly addressing readers, etc., writers can control the way their messages are perceived. Metadiscourse helps authors achieve this along with making academic writing more persuasive and coherent.

Hyland's (2004, 2005) model of metadiscourse provide a widely acclaimed framework for analysing the rhetorical strategies text producers employ in order to engage the audience. The

framework refers to two kinds: interactive metadiscourse markers and interactional metadiscourse markers.

“Interactive markers are those focusing on organizing discourse in a way that helps readers navigate the text and recover the intended meanings. These include:

- Transitions i.e., the features that indicate links between ideas, such as addition, contrast and consequence (e.g., “thus”, “but” etc.).
- Frame markers i.e., features that signal text boundaries or indicate structural organization e.g., topic shifts and sequencing (e.g., “to conclude”).
- Endophoric markers i.e., references to other portions of the text that guide readers (e.g., “noted above”).
- Evidentials i.e., references and citations sources external to the text (e.g., “Haris contends”).
- Code glosses i.e., rephrasing or explanations of information to help understanding (e.g., “for instance”).

Interactional resources focus on the participants of the interaction and display the writer's persona and a tenor consistent with community norms. They include:

- **Hedges** withhold the writer's full commitment to a statement (*might/perhaps/possible/about*)
- **Boosters** express certainty and emphasise the force of propositions (*in fact/definitely/it is clear*)
- **Attitude markers** express the writer's attitude to propositions, conveying surprise, obligation, agreement, importance, and so on (*unfortunately/I agree/surprisingly*).
- **Engagement markers** explicitly address readers by focusing their attention or including them in the text through second person pronouns, imperatives, questions and asides. (*consider/note that*)
- **Self-mentions** explicit reference to authors (*I, we, our, my, etc.*)” (Hyland & Jiang, 2018)

This framework is a representation of a long-standing scholarly interest in the pragmatic aspects of discourse (Chafe & Nichols, 1986; Crismore, 1989; Nystrand, 1989;).

The function of interactional metadiscourse in various academic genres—particularly abstracts—has been the subject of several investigations. For example, Hyland (2000) points out that abstracts are a crucial place for metadiscourse, where authors need to convince readers of the study's significance while providing a brief summary of the research. Interactional markers can be strategically used in abstracts to support assertions, emphasize the importance of results, and draw readers in by reflecting expectations or common knowledge.

Research has shown that using metadiscourse devices in a variety of genres has advantages (Hyland, 1998, 2005). The term “metadiscourse” describes the language strategies authors employ to structure their writing, draw readers in, and express their viewpoint on the subject matter (Hyland, 2005). It is essential for directing readers through the work, building the reader-author rapport, and encouraging engagement. Interactional metadiscourse has been thoroughly studied in academic writing because it controls the writer-reader relationship. According to Hyland and Tse (2004), writers can reveal their attitude toward their ideas and engage their audience in a personal conversation through interactional metadiscourse.

These indicators strengthen persuasion, let writers anticipate probable objections from readers, and strike a balance between assurance and caution. Moini & Salami (2015) studied engagement and stance markers in author guidelines of journals published by leading publishers

in Humanities and Social Sciences and found engagement features to be significantly higher in frequency than stance markers. Abbas & Shehzad (2018) conducted a study on the exclusive pronouns used by authors in research articles published in Pakistani research journals covering both soft and hard fields. Their findings indicate that the pronouns used by authors exhibit a bi-covalent and tri-covalent metadiscursive bond, indicating a multifunctional interpersonal role for author exclusivity.

Researchers have also started studying the diachronic transformations in employing these markers e.g., Hyland & Jiang (2018) studied it in research articles in 4 fields published over a period of 50 years, and Huan & Hong (2024) studied this aspect in reviews of Linguistics books over 20 years using Hyland's (2005) Interpersonal model. The findings indicate that these markers were used consistently during the course of the study years. They discovered that among interactional metadiscourse, hedges were the most common, followed by engagement indicators and other elements. Between 2002 and 2022, they did see a little decrease in interactional indicators, though. Using a diachronic viewpoint, Gillaerts and Van de Velde (2010) concentrate on three characteristics of abstractions from a single subject. Hyland and Jiang look at journals with high impact factors in two different fields. Researchers studying metadiscourse are also becoming interested in spoken genres, despite their lack of research. For example, Metadiscourse signals in academic oral presentations in English language and discipline-based classrooms were examined by Singh et al. in 2023. They discovered that the employment of both types of metadiscourse markers varied little throughout courses. Yang (2023)

investigated Interactional Metadiscourse Features in English speeches prepared by Chinese university students.

Some researchers have also recently conducted a bundle-driven analysis of metadiscourse. Li et al. (2017) and Huang (2024) e.g., employed a bundle-driven approach to studying metadiscourse markers. Huang (2024) used a bundle-driven approach to examine interactional metadiscourse bundles in the argumentative writing of Chinese College students. Their examination of IMBs revealed that attitude indicators and self-mentions are often used to accomplish interpersonal communication in written texts.

Saidi and Karami (2024) carried out a cross-move study of interactional metadiscourse markers in abstracts published in Iranian and foreign history journals, realizing the close relationship between movements and metadiscourse. Both in the worldwide corpus and in Iranian abstracts, they discovered a high frequency of introduction, purpose, and product shifts. In both sets of abstracts, the category of interactional metadiscourse indicators that appeared the most frequently was boosters.

Hedges were more frequently used by the local authors while the international researchers made a higher use of self-mentions.

In their 2023 systematic review, Pearson & Abdollahzadeh examine the study on metadiscourse in academic discourse through an analysis of high-quality empirical papers that were published between 1990 and 2021. They discovered that cross-sectional corpus-based analysis utilizing intercultural rhetoric was employed in more than 80% of study projects. About 37% of corpus-based studies adhered to the "thin" tradition, prioritizing marker frequency counts above interpretations that are context specific.

Research has revealed that Metadiscourse is discipline specific as well. Metadiscourse works as a "recipient design filter," (Hyland & Jiang, 2018) making it clear how the authors want the

recipients to interpret their messages, and thus, it demonstrates the writer's understanding of the discourse community that they are addressing (Hyland, 2005; Hyland & Tse, 2004), and the particular discipline they are interacting with.

Early in the 1990s, studies on academic metadiscourse were conducted. Most of these studies compared English writings with those produced in other languages (Hu & Cao, 2011; Mur Dueñas, 2011) or by non-native English speakers (Hong & Cao, 2014; Li & Wharton, 2012). Previous study has examined English literature, such as research articles, with an emphasis on abstracts and introductions (e.g., del Saz Rubio, 2011; Gillaerts & Van de Velde, 2010). Comparisons across disciplines and genres are frequent. As an illustration of the disparities in goals across various genres, Kawase (2015) discovered that writers employ more metadiscourse in research article openings than in PhD theses.

Studies conducted across disciplines have yielded particularly valuable insights, pointing out differences in the application of metadiscourse not only in research articles (e.g., Cao & Hu, 2014; Jiang & Hyland, 2018), but also in undergraduate textbooks (Hyland, 1999), postgraduate dissertations (Charles, 2006), undergraduate essays (Noble, 2010), and academic book reviews (Tse & Hyland, 2006). Language challenges impact higher education whereas cognitive impact of discourse and artificial intelligence enhance language communication (Javaid et al., 2024). Bruce (2010) noted that there are notable distinctions between the essays written by students in sociology and English, pointing out that they use distinct textual resources and rhetorical devices.

These studies reveal the diverse ways disciplines approach academic persuasion, showing how conventions emerge through participation in specific academic communities, thereby reflecting shared contexts and norms.

Top-tier publications employ highly developed rhetorical tactics, according to research on metadiscourse in quality journals. Scholarly research across cultures and disciplines (Hyland, 2005; Gillaerts & Van de Velde, 2010) has shown that esteemed journals typically display a deliberate balancing act among metadiscourse indicators in order to optimize comprehensibility and reader interaction. In order to fulfill the demands of a worldwide audience, journals with greater impact factors typically require a more rigid structure and stronger engagement tactics.

More in-depth research has recently been done on the metadiscourse policies of prestigious Applied Linguistics publications. In a significant study, e.g., Pho (2020) examined the interactional markers found in abstracts from high-impact publications. The study discovered that in order to walk the tightrope between authority and humility, good writers employ a mix of hedges and boosters. Additionally, engagement markers and self-mentions are consistently employed in these journals, demonstrating a tendency toward personalizing the discourse and speaking directly to the reader—a characteristic that strengthens the authorial presence.

Another research by Basturkmen (2021) looked at articles and found that writers in prestigious journals are using engagement indicators like rhetorical questions and direct appeal to readers ("we") more frequently. These techniques work well for engaging readers in the discussion and highlighting the study's importance. Moreover, self-mentions—which were formerly frowned upon in scholarly writing—have gained acceptance in high-impact journal abstracts, especially in Applied Linguistics though its frequencies have declined over the years according to Hyland & Jiang's (2018) diachronic study.

While previous research has presented useful insights into the role of interactional metadiscourse markers in journal abstracts, there are still gaps that warrant further exploration.

Given the evolving nature of academic writing conventions, the growing emphasis on open science, and the increasing pressure on scholars to produce impactful, globally recognized research, metadiscourse is an important dimension to study in the current context. Even while earlier studies have provided insightful information on the function of interactional metadiscourse in journal abstracts, this recent period is noteworthy because academic writing traditions are undergoing transformations as shown by diachronic studies in the field (Hyland & Jiang, 2018) and the review of literature (Pearson & Abdollahzadeh, 2023), open science is becoming more and more important, and scientists are under more and more pressure to produce influential, internationally acknowledged research.

3. Corpus and method

The 10 sub-corpora from our corpus of the abstracts of the top 10 Applied Linguistics journals published between 2019 and 2021, IFALA 2019–2021 (Aziz & Riaz, 2024), were examined for this work. In all, there were 1172 abstracts using 199172 tokens. Table 1 gives a description of the corpora:

Table 1: IFALA 2019-2021 Corpus Description

Journal	Abbreviated title	Impact Factor	No of abstracts	No of tokens
Applied Linguistics	APP Ling	5.7	116	19156
Computer Assisted Language Learning	Comp Assis Lang Learn	4.7	109	20,689
Modern Language Journal	Mod Lang J	4.7	104	18937
Language Learning	Lang Learn	4.6	87	12994
Lang Learning and Technology	Lang Learn & Tech	4.3	47	8862
International Journal of Bilingual Education	INT J BILING EDUC	4.1	219	38368
Studies in Second Language Acquisition	STUD SECOND LANG ACQ	3.9	121	19253
Language Teaching Research	Lang Teach R	3.8	105	18929
Journals of Second Language Writing	J SECOND LANG WRIT	3.5	71	13184
Bilingualism-Language and Cognition	BILING-LANG COGN	3.5	193	28489
			1172	199172

Total				
-------	--	--	--	--

Source: 2021 Journal Impact Factor, *JCR 2021*, Clarivate JCR,

Clarivate

In accordance with Hyland & Jiang (2018) and Huan & Hong (2024), AntConc software version 3.5.9 was used to ascertain the types and frequencies of interactional metadiscourse indicators as recommended by Hyland (2005). Using the concordance tool Antconc, we next searched each of the 10 sub-corpora for the components included in Hyland's (2005) list of the most common interpersonal metadiscourse markers in academic writing (Anthony, 2011). The original common context size was ten tokens on either side of the marker. The phrase was extended to 15 tokens, and if necessary, to 20 tokens on each side, when the context within a 10-token range was insufficient to fully comprehend the statement.

AntConc
File Edit Settings Help

Target Corpus
Name: temp
Files: 1
Tokens: 39225

KWIC Plot File View Cluster N-Gram Collocate Word Keyword Wordcloud ChatAI

Total Hits: 133 Page Size 100 hits 101 to 133 of 133 hits

	File	Left Context	Hit	Right Context
15	b ...	for students learning in a second language. In this article	we	provide support for this learning for students from the
16	6 ...	d to explore possible crosslinguistic influence between their two languages.	We	provided speakers with a receptive task in which the
17	6 ...	who migrated to the area from the southern Negev area.	We	relied on semi-structured in-depth interviews with 18 participants
18	6 ...	which they drew to make sense of the new environment.	We	review key findings and offer suggestions for the enhancement
19	6 ...	practices as a way of reaffirming and empowering those students.	We	shall describe the funds of identity uncovered, the implementation
20	6 ...	the contextualized realities of teachers we work with, and that	we	should continue exploring these issues relationally and holistically in
21	6 ...	identity options thanks to this multilingual education. In this way,	we	show that 'desire in language' is not limited to
22	6 ...	improve when the child is provided with a model story.	We	studied the narratives of Polish-English bilingual children (n = 75,
23	6 ...	estern and heritage cultural internalizations on English learning are unclear.	We	surveyed 172 EFL students from Macao and found that those
24	6 ...	single language or for both languages but using independent samples.	We	systematically compared ratings of valence, emotional intensity and subject
25	6 ...	e language abilities differ between sequential bilinguals and monolinguals.	We	tested 4-6-year-old English monolinguals' and English-Mandarin sequential
26	6 ...	and her students' moments of language learning and meaning-making.	We	theorize that linking one's experiences with multiple interacting
27	6 ...	of conflicted identities and reduced proficiency in the language concerned.	We	thus propose that there is a vicious circle that
28	6 ...	observations was enhanced by semi-structured interviews with the teachers.	We	took a close look at six 3-year-old children -
29	6 ...	and challenging demands on the educational system. In this study,	we	use a minority language rights framework to examine how
30	6 ...	different academic contexts, with one third studying in EMI courses.	We	used open-ended and closed questionnaire items to collect
31	6 ...	unpublished studies on the predictive validity of the C-test.	We	wish to contribute to the ongoing discussion of the
32	6 ...	view of the complexities of the contextualized realities of teachers	we	work with, and that we should continue exploring these
33	6 ...	in Hong Kong. With illustrative episodes presented in this paper,	we	would argue that 'curriculum genres' and 'task structure' can

Search Query Words Case Regex Results Set All hits Context Size 10 token(s)

we Start Adv Search

Sort Options Sort to right Sort 1 1R Sort 2 2R Sort 3 3R Order by freq

Progress 100%

Figure 1 Screenshot of Concordance lines from Antconc Software

Moreover, additional items were added that were unique to our corpora and were not on the list provided. Their frequencies were discovered in line with Hyland & Jiang's (2020) claim that the 500 items suggested by Hyland (2005) serve only as a starting point for disciplinary

analysis and that metadiscourse is fundamentally an open category to which new items can be added by the writers in accordance with the contextual needs. Furthermore, frequency counts only show patterns of metadiscourse occurrence in uneven-sized corpora since metadiscourse is frequently realized by signals that might extend to clause or sentence length (Hyland & Jiang, 2018).

In order to ensure that these items performed as metadiscourse (in accordance with the aforementioned criteria), the concordance lines constituting each manifestation of the markers listed were personally reviewed, and unnecessary incidences were removed. Before reaching a consensus, the two writers individually went through a sample of some cases, reaching an inter-rater agreement of 95%. Next, in order to facilitate cross-corpora comparison, the findings were normalised to per 1000 words.

We attach the list of markers examined in appendices A through E, per the recommendation of Pearson and Abdollahzadeh's (2023) systematic review; present a list of the articles included, clarify how metadiscoursal function was checked, and provide examples illustrating difficult coding decisions for ensuring transparency.

4. Findings and discussion:

Using the concordance function and manual analysis of context, the frequencies of the five interpersonal metadiscourse markers were noted down. The raw frequencies of the metadiscourse indicators included in the abstracts of each sub-corpus and publication are displayed in Table 2 below.

Table 2: Raw Frequencies of Interactional Metadiscourse Markers in IFALA 2019-2021 Corpus

Category	Ap p Lin g	Com p Assi s Lang Lear n	Mo d Lang J	Lang Lear n	Lang Lear n & Tech	INT J BILIN G EDUC	STUD SECO ND LANG ACQ	Lang Teac h R	J SECO ND LANG WRIT	BILIN G- LANG COGN	Tot al
Hedges	232	181	152	157	70	440	235	213	104	339	2123
Boosters	162	131	110	102	04	235	181	129	115	220	1389
Self- mentions	165	75	106	118	22	156	91	65	46	130	974
Engagem ent markers	100	64	54	36	02	153	178	105	123	87	902
Attitude marker	39	29	20	24	07	78	37	35	21	60	350
Total	698	480	442	437	105	1062	722	547	409	836	5738

As the total no of tokens can't be controlled in corpus studies, to make the data comparable, the raw frequencies were normalized to one thousand words. The normalized frequencies of the markers are shown in Table 3 below.

Table 3: Normalised Frequencies of Interactional Metadiscourse Markers (per 1000 words) in in IFALA 2019-2021 Corpus

Category	APP Lin g	Com p Assi s Lan g Lear n	Mo d Lan g J	Lan g Lear n	Lan g Lear n & Tec h	INT J BILIN G EDU C	STUD SECO ND LANG ACQ	Lan g Teac h R	J SECO ND LANG WRIT	BILIN G- LANG COGN	Tota l
Hedges	12.11	8.75	8.03	12.08	7.90	11.47	12.21	11.25	7.89	11.90	10.66
Boosters	8.46	6.33	5.81	7.85	0.45	6.12	9.40	6.81	8.72	7.72	6.97
Self- mentions	8.61	3.63	5.60	9.08	2.48	4.07	4.73	3.43	3.49	4.56	4.89
Engagem ent markers	5.22	3.09	2.85	2.77	0.23	3.99	9.35	5.55	9.33	3.05	4.53
Attitude marker	2.04	1.40	1.06	1.85	0.79	2.03	1.92	1.85	1.59	2.11	1.76
Total	36.44	23.20	23.34	33.63	11.85	27.68	37.50	28.90	31.02	29.34	28.81

Findings and discussion

As Table 3 presents, attitude markers were found to be the least frequently used in the corpora i.e., 1.76 times per 1000 words overall, and the most frequent markers are hedges with a frequency of 10.66 per 1000 words overall. This shows that the authors try to keep the abstracts as objective as possible by giving minimal chances for personal opinions affecting the perceptions of the audience, and also try to allow for different interpretations of the claim by using more hedges. Boosters are next in maximum frequency after hedges, i.e., 6.96 per 1000 words.

Self-mentions were 4.89 per 1000 words and engagement markers were 4.53 per 1000 words in the whole corpus. Overall, the use of metadiscourse markers in the corpus was found to be 28.81 per 1000 words, which is quite similar to 38.882 found by Yasmeeen (2019) in Social Sciences abstracts; and Šandová’s (2021) diachronic study of article abstracts spanning 4 decades which found a decline of interpersonal metadiscourse markers from 43.25 per 1000 words in the 1980’s to 35.01 in the 1990s and 31.89 in the 2000s and further 25.98 in the 2010’s.

As shown in bold in the appendices, this study found some additional items apart from those suggested by Hyland’s (2005) list of markers. We added these markers to the list by Hyland in the respective categories: Hedges, Boosters, and Self-mentions, on the basis of their occurrence in the present corpus. They are given in Table 4:

Table 4: Additional markers found in IFALA 2019-2021 Corpus

Hedges	General Certain Most Main Believe
Boosters	Well-established Determined Co-determined
Self-mentions	The writers The writers' The researcher The researcher's The researchers The researchers' Ours

Moreover, it was realised that the given lists use British spelling of expressions like ‘analyse’, but it was revealed during analysis that some abstracts in the corpus had used the American spelling, too i.e., ‘analyze’. So, both spellings were considered while finding and counting the markers in such cases where two alternate spellings exist. It is suggested that an option be added to the list to cater to alternate/American spelling, too for an inclusive representation. The following parts of the section discuss the findings regarding the 5 interpersonal markers in greater detail.

Hedges

In line with Hyland & Jiang (2018), hedges were found to be the most frequent devices among interactional markers in IFALA 2019-2021 corpus. However, this feature is not used by Applied Linguists as much now as they were used in earlier years of the field since 1965 (Hyland & Jiang, 2018). Noting the decline in the use of hedges in Applied linguistics over time, Hyland and Jiang (2018) observe that there is a decrease in words that express hypotheticalness (would), possibilities (may, may, and could), and presumption (should and ought). Rather than depending on the consistency of logical reasoning or the whims of observable facts, writers tend to employ hedges to arrive at more speculative interpretations by relying on the ambiguity inherent in human judgment. We observe the same in our corpus, e.g.,

We argue that online interactions with members of the target culture can be as beneficial as studying abroad and that it is at least more beneficial than traditional classroom language learning in the development of L2 learners’ perceived ICC. (Lee & Song, 2019).

Hedges are frequently a wise choice for authors since they let them indicate that their assertions are tentative and open to criticism at the time of writing (Hyland & Jiang, 2018). By lowering the confidence of their statements, authors can more carefully connect their new assertions with the current thinking of a disciplinary readership and deliver their arguments in a

more nuanced manner. For example, we can observe writers adopting a position that strives to include readers in their validation of statements in these cases.

The word “certain” was added to the list of hedges because in some cases, it pointed out non-specific quantities or entities e.g.,

begins when the participants encounter certain (for them, unknown) word and ends when a need to use a (they use) in reading self-efficacy were certain profiles who received strategy-based significantly greater for learners of instruction, with implications for

as the word ‘certain’ also occurred with words other than those suggested by Hyland’s (2005) list i.e., ‘amount’, ‘extent’ and ‘extent’ as in the example above. In a context like the above, it serves as a hedge in the sense of “not specific” or “some but not all.” So, in such cases, “certain” was counted as a hedge.

Interestingly, there were some examples of double hedges used simultaneously within one context e.g., “typically assumed”, seems to suggest”, ‘seems likely’ as in the following cases:

are related to concreteness in a more nuanced way as typically assumed in conceptual metaphor theory: metaphors high in the A recent study on reading non-adjacent collocations seems to suggest similar processing advantages as for adjacent collocations (Vilkaitė 2016), but an impact on their daily life. seems likely not to produce this upshot report, it is Indeed, if the caller

There may be further explanations to the frequent use of hedges in the corpus e.g., one reason could be to express the possibility that the same study may yield different findings if it is replicated. Moreover, it could imply that the findings may not be overgeneralised. In some other cases, the researcher(s) may be investigating a complex phenomenon subject to multiple interpretations.

Boosters

As Hyland and Jiang (2018) contend, the most obvious indicators of a writer's authorial standing are most likely attitude markers and boosters, which convey the writer's dedication to and emotional evaluations of the topic. However, in the present corpus, boosters were less frequently used than hedges. Moreover, it was observed that boosters were mostly used in recommendations instead of making a strong claim on personal notions e.g.,

Teachers should consider error types so that DDL can promote accurate error correction in L2 writing and serve as a practical option in L2 classrooms (Satake, 2020).

This supports the finding made by Hyland and Jiang (2016a). The most prominent and frequent boosters i.e., ‘demonstrate’, ‘demonstrated’ and ‘showed’ (see Appendix B) pointed towards the study’s findings instead of the writer’s beliefs. This shows a more scientific and evidential stance than a personal one.

The word ‘certain’ has different connotations, which were checked in context to decide where to put it e.g. “certain” meaning “sure” was counted as a booster.

Self-mentions

Self-mentions enable authors to be more present in their writings by indicating their presence, accepting accountability for their words and deeds, and taking ownership of their interpretations (Hyland & Jiang, 2018). When self-mentioned in data interpretations and claims of innovation, it conveys a more intimate and direct authorial involvement.

However, the authors are less frequently mentioning themselves recently than in the past.

As can be seen in Appendix C, in our IFALA 2019-2021 Corpus, self-mentions made **a %** of the total. It is noteworthy that in case of a single author, self-mention was rare but it was generously used in case of plural authors. So, out of a total of 974 self-mentions, 132 were singular [I (64), me (1), my (53), the researcher (13), the researcher's (1)], and in case of more than one author, it was 852 [we (621), us (18), our (193), the authors (5), the authors' (2), the researchers (1), the researchers' (2)]. 'The writer's' was used once in the journal Language Learning and Technology, but its context did not refer to the author, so it was not counted. So it suggests that authors use personal mentions more for a purpose of expressing community consciousness and not as an expression of the self.

Engagement markers

Engagement markers **made** 4.53 per 1000 words only as shown in Table 3. As Appendix D demonstrates, the most prominent engagement markers included consider (n=23), contrast (n=28), demonstrate (n=34), determine (n=28), develop (n=42), find (n=22), increase (n=25), key (n=50), measure (n=30), our (n=41), should(n=50), show(n=152), and we (n=116). As mentioned in case of personal mentions too, engagement markers were used to established a consciousness of the community to which the writer and the audience belong.

In this study, we will look at the predictive validity of a practical, low-stakes, web-based academic reading and vocabulary screening test.

Attitude Markers

As can be seen in Appendix E, 'appropriate' (n=29) , 'even' (n=64), 'important' (99), 'importantly' (20), and 'interest' (29) were the most frequent expressions among attitude markers while the rest occurred very sparingly in the whole corpus. Since affect is rarely expressed in academic research writing (Biber et al., 1999) and is typically implied rather than explicitly stated, attitude indicators came from a considerably smaller base. However, since they are a marked decision, they have a bigger impact when they do happen and convey strong opinions, whether favorable or unfavorable.

A less definite capacity to depend on the persuasive efficacy of in-group understandings of procedures, ideas, and the relevance of findings may thus be somewhat offset by more interventionist engagement strategies that actively guide readers toward certain points of view.

5. Conclusion

In conclusion, though interactional metadiscourse markers play a vital role in article abstracts, and help authors communicate effectively enhancing reader engagement, managing persuasion, and building rapport with the audience, this study did find a moderate use of them owing to the gradually increasing empirical nature of studies in Applied Linguistics.

This study has contributed by adding 15 more items to the list of interpersonal metadiscourse markers that future researchers can explore in their corpus/data/contexts. It was

found that personal mentions were used more as a plural, i.e., in case of more than one author, and less in case of a single author, as shown in Appendix C (Plural nouns and pronouns being more than singular), which indirectly shows authors' desire to display a sense of community engagement and collectivity.

Moreover, the use of attitude markers is also scarce. This is consistent with the findings of Hyland and Jiang (2018), who found that, in contrast to earlier times, authors are currently utilizing fewer features to express their opinions and interact directly with readers. The social circumstances that metadiscourse aids in constructing are intimately tied to its application. Although reader awareness of the text has increased elsewhere, nearly all interactional measures have seen a considerable reduction in the discursive soft knowledge categories.

The decrease in their use in applied linguistics thus indicates a shift in the way writers perceive their readers and the appropriate degree of certainty they might feel comfortable with. Consequently, when calculating conviction, it seems wise to invest in a claim, which often depends on what readers in the field are likely to accept. Less hedges (and boosters) than in the past suggest a more measured approach to epistemic attitude and cautious handling of authorial interference. This might be connected to what some have seen as a rise in scientism in the social sciences as a result of a stronger emphasis on science in its predominate techniques and approaches (e.g. Glynos & Howarth, 2007).

According to Hyland & Jiang (2018), Applied Linguistics was a relatively new field in 1965 with limited literature and an emphasis on first-hand reports of language instruction. The way assertions are argued and accepted has been significantly impacted by the increase of empirically oriented research, the discipline's progress to include a larger range of concerns, and the vast extension of the literature supporting its academic objectives.

References:

- Abbas, A., & Shehzad, W. (2018). Metadiscursive role of author (s)'s exclusive pronouns in Pakistani research discourses. *International Journal of English Linguistics*, 8(1), 71-85.
- Anthony, L. (2011). AntConc 3.5.9. <https://www.laurenceanthony.net/software/antconcl>
- Anthony, L. (2022). AntConc (Version 4.1.4) [Computer Software]. Tokyo, Japan: Waseda University. Available from <https://www.laurenceanthony.net/software.html>.
- Atkinson, D. (1999). *Scientific discourse in sociohistorical context: The philosophical transactions of the Royal Society of London, 1675-1975*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Aziz, S., & Riaz, F. (2024). Comparing the Two Lexical Density Measures: The Case of Ten Highest Impact Factor Journals in Applied Linguistics. *Pakistan Journal of Law, Analysis and Wisdom*, 3(4), 220-229.
- Banks, D. (2008). *The development of scientific writing: Linguistic features and historical context*. London: Equinox.
- Basturkmen, H. (2021). Stance-taking and interaction in research article abstracts: A case of high-impact journals. *Journal of English for Academic Purposes*, 49, 100937.
- Bazerman, C. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison: University of Wisconsin Press Madison.
- Bruce, I. (2010). *Textual and discursive resources used in the essay genre in sociology and*

- English. *Journal of English for Academic Purposes*, 9(3), 153-166.
- Cao, F., & Hu, G. (2014). Interactive metadiscourse in research articles: A comparative study of paradigmatic and disciplinary influences. *Journal of Pragmatics*, 66, 15-31.
- Chafe, W., & Nichols, J. (1986). Evidentiality: The linguistic coding of epistemology. *Advances in Discourse Processes* 20. Norwood, NJ: Ablex.
- Charles, M. (2006). The construction of stance in reporting clauses: A cross-disciplinary study of theses. *Applied Linguistics*, 27, 492-518.
- Crismore, A. (1989). *Talking with readers: Metadiscourse as rhetorical act*. New York: Peter Lang.
- Crismore, A., Markkanen, R., & Steffensen, M. (1993). Metadiscourse in persuasive writing. *Written Communication*, 10(1), 39-71.
- del Saz Rubio, M. M. (2011). A pragmatic approach to the macro-structure and metadiscoursal features of research article introductions in the field of Agricultural Sciences. *English for Specific Purposes*, 30(4), 258-271.
- Gillaerts, P., & Van de Velde, F. (2010). Interactional metadiscourse in research article abstracts. *Journal of English for Academic Purposes*, 9(2), 128-139.
- Glynnos, J., & Howarth, D. (2007). *Logics of critical explanation in social political theory*. London: Routledge.
- Harris, Z. (1959). *Computable syntactic analysis: Transformations and discourse analysis papers*, Vol. 15. University of Pennsylvania, Philadelphia.
- Hong, H. Q., & Cao, F. (2014). Interactional metadiscourse in young EFL learner writing a corpus-based study. *International Journal of Corpus Linguistics*, 19(2), 201-224.
- 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, 2795-2809.
- Huan, B. L. Y., & Hong, A. L. (2024). Interpersonal Metadiscourse: Changing Patterns in Linguistics Book Reviews. *GEMA Online Journal of Language Studies*, 24(2).
- Huang, H. (2024). A Study of Interactional Metadiscourse Bundles in Chinese College Students' Argumentative Writing. *Region-Educational Research and Reviews*, 6(6), 244-250. DOI:10.12238/rerr.v6i6.2256.
- Hyland, K. (1998). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of pragmatics*, 30(4), 437-455.
- Hyland, K. (1999). Talking to students: Metadiscourse in introductory coursebooks. *English for specific purposes*, 18(1), 3-26. [https://doi.org/10.1016/S0889-4906\(97\)00025-2](https://doi.org/10.1016/S0889-4906(97)00025-2).
- Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. Longman.
- Hyland, K. (2004). *Disciplinary discourses, Michigan classics ed.: Social interactions in academic writing*. University of Michigan Press.
- Hyland, K. (2005). *Metadiscourse: Exploring interaction in writing*. Continuum International Publishing Group Ltd.
- Hyland, K. (2010). Metadiscourse: Mapping interactions in academic writing. *Nordic Journal of English Studies*, 9(2), 125-143.
- Hyland, K. (2017). Metadiscourse: What is it and where is it going? *Journal of Pragmatics*, 113, 16-29. <https://doi.org/10.1016/j.pragma.2017.03.007>.
- Hyland, K., & Jiang, F. K. (2017). Is academic writing becoming more informal?. *English for specific purposes*, 45, 40-51.

- Hyland, K., & Jiang, F. K. (2018). "In this paper we suggest": Changing patterns of disciplinary metadiscourse. *English for specific purposes*, 51, 18-30.
- Hyland, K., & Jiang, F. K. (2020). Text-organizing metadiscourse: Tracking changes in rhetorical persuasion. *Journal of Historical Pragmatics*, 21(1), 137-164.
- Hyland, K., & Tse, P. (2004). Metadiscourse in scholastic writing: A reappraisal. *Applied Linguistics*, 25(2), 156-177.
- Ikramullah, Ramzan, M. & Javaid, Z. K. (2023). Psychological Factors Influencing Pashto Speaking ESL Students' Pronunciation of English Vowels. *Pakistan Journal of Society, Education and Language (PJSEL)*, 9(2), 52–63.
- Irvin, L. L. (2010). What Is "Academic" Writing?. *Writing spaces: Readings on writing*, 1, 3-17.
- Javaid, Z. K., Andleeb, N., & Rana, S. (2023). Psychological Perspective on Advanced Learners' Foreign Language-related Emotions across the Four Skills. *Voyage Journal of Educational Studies*, 3 (2), 191-207. DOI: <https://doi.org/10.58622/vjes.v3i2.57>
- Javaid, Z.K., Chen, Z., & Ramzan, M. (2024). Assessing stress causing factors and language related challenges among first year students in higher institutions in Pakistan. *Acta Psychologica*, 248, 104356. <https://doi.org/10.1016/j.actpsy.2024.104356>
- Javaid, Z.K., Ramzan, M., Ijaz, S. (2024). A systematic review on cognitive and motivational impact on English language learning through artificial intelligence. *International Journal of Literature, Linguistics and Translation Studies*, 4 (1), 44-71.
- Jiang, F. K., & Hyland, K. (2018). Nouns and academic interactions: A neglected feature of metadiscourse. *Applied linguistics*, 39(4), 508-531.
- Kawase, T. (2015). Metadiscourse in the introductions of PhD theses and research articles. *Journal of English for Academic Purposes*, 20, 114-124.
- Lee, J., & Song, J. (2019). Developing intercultural competence through study abroad, telecollaboration, and on-campus language study. *Language Learning and Technology*. 23(3), 178–198.
- Li, L., Franken, M., & Wu, S. (2017). Bundle-driven metadiscourse analysis: Sentence initial bundles in Chinese and New Zealand postgraduates' thesis writing.
- Li, T., & Wharton, S. (2012). Metadiscourse repertoire of L1 Mandarin undergraduates writing in English: A cross-contextual, cross-disciplinary study. *Journal of English for Academic Purposes*, 11(4), 345-356.
- Moini, R., & Salami, M. (2015). Stance and engagement discourse markers in journal's "author guidelines". *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, 34(3), 109-140.
- Mur-Dueñas, P. (2011). An intercultural analysis of metadiscourse features in research articles written in English and in Spanish. *Journal of pragmatics*, 43(12), 3068-3079.
- Noble, W. (2010). Understanding metadiscoursal use: Lessons from a 'local' corpus of learner academic writing. *Nordic Journal of English Studies*, 9(2), 145-169.
- Nystrand, M. (1989). A social interactive model of writing. *Written Communication*, 6, 66-85.
- Pearson, W. S., & Abdollahzadeh, E. (2023). Metadiscourse in academic writing: A systematic review. *Lingua*, 293, 103561.

- Pho, P. D. (2020). Exploring metadiscourse in research article abstracts from top-tier journals in Applied Linguistics. *Discourse Studies*, 22(3), 329-347.
- Ramzan, M., Javaid, Z. K., & Ali, A. A. (2023). Perception of Students about Collaborative Strategies Employed by Teachers for Enhancing English Vocabulary and Learning Motivation. *Pakistan Journal of Law, Analysis and Wisdom*, 2(02), 146-158.
- Ramzan, M., Javaid, Z. K., & Fatima, M. (2023). Empowering ESL Students: Harnessing the Potential of Social Media to Enhance Academic Motivation in Higher Education. *Global Digital & Print Media Review*, VI (II), 224-237. [https://doi.org/10.31703/gdpmr.2023\(VI-II\).15](https://doi.org/10.31703/gdpmr.2023(VI-II).15)
- Ramzan, M., Javaid, Z. K., & Khan, M. A. (2023). Psychological Discursiveness in Language Use of Imran Khan's Speech on National Issues. *Global Language Review*, VIII (II), 214-225. [https://doi.org/10.31703/glr.2023\(VIII-II\).19](https://doi.org/10.31703/glr.2023(VIII-II).19)
- Saidi, M., & Karami, N. (2024). A Cross-Move Analysis of Interactional Metadiscourse Markers in Abstracts of Local and International Journals of History. *Journal of Language Horizons*, 7(4).
- Salager-Meyer, F. (1999). Referential behavior in scientific writing: A diachronic study (1810–1995). *English for Specific Purposes*, 18(3), 279-305.
- Šandová, J. K. (2021). Interpersonality in research article abstracts: A diachronic case study. *Discourse and Interaction*, 14(1), 77-99.
- Satake, Y. (2020). How error types affect the accuracy of L2 error correction with corpus use. *Journal of second language writing*, 50, 100757.
- Singh, K. K. M., Chu, I. L. Y., & Vijayarajoo, A. R. R. (2023). Metadiscourse Markers in Academic Oral Presentations: A Corpus Analysis. *International Journal of Academic Research in Social Sciences*. 13(11).2825-2844.
- Thompson, G. (2001). Interaction in academic writing: Learning to argue with the reader. *Applied Linguistics*, 22(1), 58-78.
- Tse, P., & Hyland, K. (2006). Gender and discipline: Exploring metadiscourse variation in academic book reviews. *Academic discourse across disciplines*, 177-202.
- Valle, E. (1999). A collective intelligence: The life sciences in the royal society as a scientific discourse community, 1665-1965. University of Turku.
- Vande Kopple, W. J. (1985). Some exploratory discourse on metadiscourse. *College Composition & Communication*, 26, 82-93. <https://doi.org/10.2307/357609>.
- Xu, X., & Nesi, H. (2019). The rhetorical structure and functions of interactional metadiscourse in research article abstracts: A cross-disciplinary study. *Journal of English for Academic Purposes*, 41, 100773.
- 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.
- Yang, X. (2023). A Study of Interactional Metadiscourse Features in Chinese University Students' Prepared English Speech. *International Journal of Linguistics, Literature and Translation*, 6(5), 97-103.
- 2021 Journal Impact Factor, *JCR 2021*, Clarivate JCR, Clarivate

Appendix A: Frequencies of **Hedges** in IFALA 2019-2021 Corpus

Interactional Dimension of Metadiscourse											
Frequencies of Hedges in IFALA 2019-2021 Corpus											
Hedges	Appli	Com	Mod	Lang	Langu	Interna	Studie	Lang	Jour	Bilingu	To

	ed Linguistics	puter assisted Language Learning	ern Language Journal	uage Learning	age Learning and Technology	tional Journal of Bilingual Education and Bilingualism	s in Second Language Acquisition	uage Teaching Research	nal of Second Language Writing	alism: Language and Cognition	tal
Almost	3	0	2	0	0	6	1	0	0	4	16
About	1	0	0	0	0	2	0	0	0	0	03
Apparent	1	0	0	0	0	0	0	0	0	1	02
Apparently	0	0	0	0	0	0	0	0	0	0	00
Appear	2	0	0	0	0	2	1	0	2	1	08
Appear to be	0	0	0	0	0	0	0	0	0	0	0
Appeared	0	2	1	0	0	8	5	0	0	6	22
Appears	2	0	0	0	1	2	1	2	0	3	11
Approximately	0	0	2	1	0	1	0	1	0	0	05
Argue	12	0	2	3	2	16	1	6	1	1	44
Argued	1	0	1	0	0	9	1	1	0	5	18
Argues	2	0	1	0	0	4	0	2	1	0	10
Around	1	0	0	0	2	12	0	2	5	2	24
Assume	0	1	0	0	0	0	1	0	0	2	04
Assumed	2	1	2	1	0	1	0	0	0	3	10
Believed	0	0	0	0	0	0	4	4	1	0	09
Broadly	1	2	2	1	0	0	0	0	0	0	06
Certainties	0	0	0	0	0	0	0	0	0	0	0

n											
a											
m											
o											
u											
n											
t											
Certain extent	0	0	0	0	0	0	0	0	0	0	0
Certain level	0	0	0	0	0	0	0	0	0	0	0
Claim	1	0	0	3	0	3	2	2	1	2	14
Claimed	0	0	0	0	0	2	2	0	0	1	05
Claims	3	0	1	2	0	0	3	0	2	1	12
Could	3	18	5	9	3	11	9	6	0	10	74
Couldn't	0	0	0	0	0	0	0	0	0	0	0
Doubt	0	0	0	0	0	0	1	0	0	0	01
Doubtful	0	0	0	0	0	0	0	0	0	0	0
Essentially	0	1	0	0	0	0	1	0	0	0	02
Estimate	0	0	1	0	0	0	2	0	2	1	06
Estimated	0	0	0	2	0	0	0	0	1	1	04
Fairly	1	0	0	0	0	0	0	0	0	0	01
Feel	0	0	1	0	1	2	2	0	1	0	07
Feels	0	0	0	0	0	0	0	0	0	0	0
Felt	0	1	1	0	0	1	0	1	2	0	06
Frequently	7	2	3	2	0	11	3	2	2	1	33
From my perspective	0	0	0	0	0	0	0	0	0	0	0
From our perspective	0	0	0	0	0	0	0	0	0	0	0

From this perspective	1	0	0	0	0	0	0	0	0		01
Generally	6	2	2	3	0	9	5	6	0	5	38
Guess	0	0	1	0	0	0	0	0	0	0	01
In general	1	2	2	0	2	0	1	3	1	0	12
In most cases	0	0	0	0	0	0	0	1	0	0	01
In most instances	0	0	0	0	0	0	0	0	0	0	0
In my opinion	0	0	0	0	0	0	0	0	0	0	0
In my view	0	0	0	0	0	0	0	0	0	0	0
In our opinion	0	0	0	0	0	0	0	0	0	0	0
In our view	0	0	0	0	0	0	0	0	0	0	0
In this view	0	0	0	0	0	0	0	0	0	0	0
Indicate	7	15	10	1	6	28	8	11	0	24	110
Indicated	4	15	7	6	11	10	13	9	5	6	86
Indicates	0	2	1	1	0	2	2	1	0	2	11
Largely	4	1	9	1	1	11	5	3	1	8	44
Likely	6	1	3	5	1	5	6	3	0	4	34
Little	6	6	4	0	2	16	9	15	10	6	74
Mainly	2	4	1	1	0	3	2	1	3	2	19
May	17	9	9	13	6	44	28	15	0	47	188

May be	5	4	6	3	1	0	5	5	0	0	29
Might	7	8	5	6	2	12	9	3	0	5	57
Mostly	2	2	1	2	0	10	1	3	1	1	23
Not understood	0	0	0	0	0	0	0	0	0	0	0
Often	13	4	11	8	0	19	8	11	0	12	86
On the whole	0	0	0	0	0	0	0	0	0	0	0
Ought	0	0	0	3	0	1	4	1	2	1	12
Perhaps	1	0	0	0	0	1	0	1	1	2	06
Plausible	0	0	0	0	0	0	0	0	0	0	0
Plausibly	0	0	0	0	0	0	0	0	0	0	0
Possible	7	6	2	3	1	9	1	11	0	8	48
Possibly	1	1	0	0	0	1	1	0	0	5	09
Postulate	0	0	0	0	0	0	0	0	0	0	0
Postulated	0	0	0	0	0	0	0	0	0	0	0
Postulates	0	0	0	0	0	1	0	1	0	0	02
Presumable	0	0	0	0	0	0	0	0	0	0	0
Presumably	0	0	0	1	0	0	1	0	0	0	02
Probable	0	0	0	0	0	0	1	1	0	0	02
Probably	0	0	0	1	0	0	0	0	0	0	01
Quite	1	1	0	0	0	2	0	1	1	1	07
Rather	2	0	3	2	0	0	2	0	1	0	10
Relatively	2	1	1	0	2	8	2	7	5	5	33
Roughly	0	0	0	0	0	0	2	0	0	0	02
Seems	3	1	1	3	0	4	0	2	0	4	18

Should	4	8	3	4	2	19	0	7	4	1	52
Someti mes	3	0	0	1	0	1	1	2	1	4	13
Somew hat	0	0	0	1	0	0	1	1	1	3	07
Sugges t	13	9	15	16	10	35	23	17	18	41	19 7
Sugges ted	7	9	0	8	2	12	8	4	5	11	66
Sugges ts	4	3	5	4	1	14	8	6	4	22	71
Suppos e	0	0	0	0	0	0	0	0	0	0	0
Suppos ed	0	0	0	0	0	0	0	0	0	0	0
Suppos es	0	0	0	0	0	0	0	0	0	0	0
Suspec t	0	0	0	0	0	0	0	0	0	0	0
Suspec ts	0	0	0	0	0	0	0	0	0	0	0
Tend to	2	0	0	0	1	0	1	0	0	2	06
Tended to	0	1	2	0	0	0	1	0	0	0	04
Tends to	1	0	0	0	0	2	0	0	0	0	03
To my kno wle dge	0	0	0	0	0	0	0	0	0	0	0
Typical	3	0	0	2	0	3	1	1	0	7	17
Typical ly	4	0	1	6	1	5	2	1	1	6	27
Uncert ain	0	0	0	0	0	0	0	0	1	1	02
Uncert ainly	0	0	0	0	0	0	0	0	0	0	0
Unlikel y	0	0	0	0	0	1	0	1	0	0	02
Unclea r	1	0	2	0	1	2	1	1	1	7	16

Unclearly	0	0	0	0	0	0	0	0	0	0	0
Usually	0	0	1	2	0	1	1	0	0	1	06
Would	5	5	1	1	3	4	1	5	2	4	31
Wouldn't	0	0	0	0	0	0	0	0	0	0	0
General	4	2	5	7	0	4	8	3	4	17	54
Certain	5	4	2	1	2	4	5	0	3	3	29
Most	30	15	6	16	2	33	11	15	6	8	142
Main	4	11	4	1	1	11	4	2	1	8	47
Believe	1	1	1	0	0	0	2	3	0	0	08
Total	232	181	152	157	70	440	235	213	104	339	2123

Appendix B: Frequencies of **Boosters** in IFALA 2019-2021 Corpus

Interactional Dimension of Metadiscourse											
Frequencies of Boosters in IFALA 2019-2021 Corpus											
Boosters	Applied Linguistics	Computer assisted Language Learning	Modern Language Journal	Language Learning	Language Learning and Technology	International Journal of Bilingual Education and Bilingualism	Studies in Second Language Acquisition	Language Teaching Research	Journal of Second Language Writing	Bilingualism: Language and Cognition	Total
Actually	1	0	0	0	0	0	0	0	0	0	1
Always	2	1	2	1	0	4	3	0	0	0	13
Apparent	1	0	0	0	0	0	0	0	0	1	2
Believe	1	1	1	0	0	0	2	3	0	0	8
Believd	0	0	0	0	0	1	4	4	3	0	12
Believe	0	0	0	0	0	0	0	0	0	0	0

s											
Beyond	5	2	7	1	2	8	1	3	0	3	32
Beyond doubt	0	0	0	0	0	0	0	0	0	0	0
By far	0	0	0	0	0	0	0	0	0	0	0
Certain	5	0	0	0	0	0	5	1	3	0	14
Certain that	0	0	0	0	0	0	0	0	0	0	0
Certainl y	0	0	0	0	0	0	1	0	0	0	1
Certain y	0	0	0	1	0	0	0	2	0	2	5
Clear	1	5	0	0	0	11	6	3	1	3	30
Clearly	2	0	2	0	0	2	1	0	0	0	7
Conclu sively	0	0	0	0	0	0	0	0	0	0	0
Decide dly	0	0	0	0	0	0	0	0	0	0	0
Definit e	0	0	0	0	0	0	4/1	0	0	0	1
Definit ely	0	0	0	0	0	0	0	0	0	0	0
Demon strate	7	2	7	2	0	6	4	2	5	8	43
Demon strated	5	7	5	7	0	7	1	8	3	14	57
Demon strates	6	2	1	0	0	1	2	1	0	1	14
Determ ine	7	3	1	2	0	3	7	6	2	3	34
Doubt	0	0	0	0	0	0	1	0	0	0	1
Doubtle ss	0	0	0	0	0	0	0	0	0	0	0
Essenti al	0	1	1	1	0	5	1	1	0	0	10
Establis h	1	1	0	1	0	2	0	0	2	0	7
Establis hed	3	1	3	1	1	6	1	2	0	4	22

Even if	1	2	0	0	0	0	0	1	0	0	4
Evident	1	1	0	0	0	1	1	1	1	2	8
Evidently	0	0	0	0	0	0	0	0	0	0	0
Find	8	4	0	1	0	3	1	1	0	4	22
Finds	1	1	0	0	0	1	0	0	0	0	3
Found	15	20	24	21	0	42	25	26	22	38	233
I believe	0	0	0	0	0	0	0	0	0	0	0
In fact	1	0	0	0	0	0	1	0	0	0	2
Incontestable	0	0	0	0	0	0	0	0	0	0	0
Incontestably	0	0	0	0	0	0	0	0	0	0	0
Incontrovertible	0	0	0	0	0	0	0	0	0	0	0
Incontrovertibly	0	0	0	0	0	0	0	0	0	0	0
Indeed	1	1	0	2	0	2	2	3	0	2	13
Indisputable	0	0	0	0	0	0	0	0	0	0	0
Indisputably	0	0	0	0	0	0	0	0	0	0	0
It is clear	0	0	0	0	0	0	0	0	0	0	0
It is known that	0	0	0	0	0	0	0	0	0	0	0
Know	0	0	1	0	0	3	2	0	0	2	8
Known	6	2	3	4	0	15	7	4	2	10	53
Must	5	1	0	2	0	1	3	0	4	1	17
Never	0	0	1	1	0	0	1	0	1	0	4
No doubt	0	0	0	0	0	0	0	0	0	0	0
Obvious	1	0	0	0	0	0	1	0	0	0	2
Obviously	0	0	0	0	0	1	0	0	0	0	1
Of course	0	0	0	0	0	0	0	0	0	0	0
Prove	1	0	1	0	0	0	0	0	0	0	2

Proved	2	1	0	0	0	2	1	1	1	0	8
Proves	1	0	0	0	0	0	0	0	0	0	1
Realize/se	0	0	0	0	0	0	0	0	0	0	0
Realized/sed	0	1	0	0	0	0	0	1	1	0	3
Realizes	0	0	0	0	0	0	0	0	0	0	0
Really	0	0	0	0	0	1	0	0	0	0	1
Should	4	8	3	4	0	19	0	7	4	1	50
Show	28	12	14	11	0	25	15	11	13	24	153
Showed	14	36	22	34	0	26	58	31	19	74	314
Shown	9	5	6	3	0	5	6	3	2	11	50
Shows	13	1	4	1	0	10	3	2	6	1	41
Sure	0	0	0	0	0	0	0	0	1	0	1
Surely	0	0	0	0	0	0	0	0	0	0	0
The fact that	1	0	0	0	0	0	0	0	0	0	1
Think	0	1	0	0	0	3	1	0	1	0	6
Thinks	0	0	0	0	0	0	0	0	0	0	0
Thought	0	0	0	0	0	1	0	0	0	3	4
Truly	0	0	0	0	0	0	0	0	0	0	0
Undeniable	0	0	0	0	0	0	0	0	0	0	0
Undeniably	0	0	0	0	0	0	0	0	0	0	0
Undisputedly	0	0	0	0	0	0	0	0	0	0	0
Undoubtedly	0	0	0	0	0	0	0	0	0	0	0
Well	2	4	16/1	1	0	10	8	1/21 the rest as well as	17	5	49
Well	0	1	0	0	0	0	0	0	0	0	1

known											
Without doubt	0	0	0	0	0	0	0	0	0	0	0
Won't	0	0	0	0	0	0	0	0	0	0	0
True	0	1	0	0	0	3		0	0	1	6
Well-established	0	0	0	0	1	2	0	0	0	0	3
Determined	0	2	0	0	0	3	3	0	0	2	10
Codetermined	0	0	0	0	0	0	0	0	1	0	1
Total	162	131	110	102	04	235	181	129	115	220	1389

Appendix C: Frequencies of **Self-mentions** in IFALA 2019-2021 Corpus

Interactional Dimension of Metadiscourse											
Frequencies of Self-mentions in IFALA 2019-2021 Corpus											
Self-mention's	Applied Linguistics	Computer assisted Language Learning	Modern Language Journal	Language Learning	Language Learning and Technology	International Journal of Bilingual Education and Bilingualism	Studies in Second Language Acquisition	Language Teaching Research	Journal of Second Language Writing	Bilingualism: Language and Cognition	Total
I	25	3	5	0	0	14	4	8	5	0	64
Me	01	0	0	0	0	0	0	0	0	0	01
Mine	0	0	0	0	0	0	0	0	0	0	0
My	01	1	2	0	0	2	0	47	0	0	53
We	89	47	73	100	12	100	73	0	27	100	621
Us	06	3	3	2	1	2	1	0	0	0	18
Our	35	19	22	16	7	35	11	8	10	30	193
The author	0	0	0	0	0	0	0	0	0	0	0
The author'	0	0	0	0	0	0	0	0	0	0	0

s											
The author s	2	1	1	0	0	1	0	0	0	0	05
The author s'	0	0	0	0	0	0	1	1	0	0	02
The writer	0	0	0	0	0	0	0	0	0	0	0
The writer's	0	0	0	0	0	0	0	0	0	0	0
The writer s	0	0	0	0	0	0	0	0	0	0	0
The writer s'	0	0	0	0	0	0	0	0	0	0	0
The resear cher	4	1	0	0	1	1	1	1	4	0	13
The resear cher's	1	0	0	0	0	0	0	0	0	0	1
The resear chers	0	0	0	0	1	0	0	0	0	0	1
The resear chers'	1	0	0	0	0	1	0	0	0	0	2
Ours	0	0	0	0	0	0	0	0	0	0	0
Total	165	75	106	118	22	156	91	65	46	130	974

Appendix D: Frequencies of Engagement **Makers** in IFALA 2019-2021 Corpus

Interactional Dimension of Meta discourse											
Frequencies of Engagement Makers IFALA 2019-2021 Corpus											
Engage ment Makers	Appli ed Lingu istics	Com puter assist ed Lang uage Lear	Mod ern Lang uage Jour nal	Lang uage Lear ning	Langu age Learn ing and Techn ology	Interna tional Journa l of Biling ual Educat	Stu die s in Secon d Langu age Acqui	Lang uage Teach ing Rese arch	Jour nal of Seco nd Lang uage	Biling ualism: Lang uage ad Cognit ion	To tal

		ning				ion and Biling ualism	sition		Writi ng		
The reader's	0	0	0	0	0	0	0	0	0	0	0
About	0	0	0	0	0	0	0	0	0	0	0
Add	3	0	1	0	0	0	0	0	1	0	5
Allow	1	1	0	0	0	0	0	1	2	0	5
Analyse/ analyze	3	0	0	0	0	0	0	4	1	1	9
Apply	1	0	0	0	0	0	0	2	0	0	3
Arrange	0	0	0	0	0	0	0	0	0	0	0
Assess	5	4	0	1	0	0	5	3	2	0	20
Assume	0	0	0	0	0	0	1	0	0	1	2
By the way	0	0	0	0	0	0	0	0	0	0	0
Calculat e	0	0	0	0	0	0	0	0	1	1	2
Choose	0	0	0	0	0	0	0	2	0	0	2
Classify	0	1	0	0	0	0	0	0	0	0	1
Compar e	3	1	0	0	0	2	4	0	2	0	12
Connect	2	0	0	0	0	0	0	0	1	0	3
Consider	3	2	2	0	0	6	0	3	5	2	23
Consult	0	0	0	0	0	0	1	0	0	0	1
Contrast	3	0	2	3	0	5	4	2	2	7	28
Define	0	0	0	0	0	1	0	0	0	0	1
Demonst rate	7	1	4	2	0	6	4	2	0	8	34
Determi ne	4	1	1	1	0	3	7	6	2	3	28
Develop	7	5	4	2	0	11	1	4	8	0	42
Do not	0	0	1	0	0	7	6	0	0	0	14
Employ	0	0	1	0	0	2	1	1	1	0	6
Ensure	0	2	0	0	0	1	0	0	1	0	4
Estimate	0	0	1	0	0	0	2	0	2	1	6

Evaluate	0	5	1	0	0	2	2	1	3	1	15
Find	8	2	0	1	0	3	1	1	2	4	22
Follow	0	0	0	0	0	2	1	1	1	0	5
Go	0	0	0	0	0	0	0	1	1	0	2
Have to	0	1	0	0	0	2	0	0	0	0	3
Imagine	0	0	0	0	0	1	0	0	0	0	1
Incidentally	0	0	0	1	0	0	1	1	0	1	4
Increase	0	4	0	0	0	6	5	6	0	4	25
Input	0	0	0	0	0	0	0	0	0	0	0
Insert	0	0	0	0	0	0	0	0	0	0	0
Integrate	0	5	1	0	0	5	0	0	0	1	12
Key	7	4	2	0	0	19	4	1	8	5	50
Let	0	1	0	0	0	0	0	0	0	0	1
Let us	0	0	0	0	0	0	0	0	0	0	0
Let x	0	0	0	0	0	0	0	0	0	0	0
Let x = y	0	0	0	0	0	0	0	0	0	0	0
Let's	0	0	0	0	0	0	0	0	0	0	0
Lets	0	0	0	0	0	0	0	0	0	0	0
Let's	0	0	0	0	0	0	0	0	0	0	0
Look at	0	0	0	0	0	1	1	0	0	0	2
Mark	1	0	0	0	0	0	0	0	0	1	2
Measure	0	1	4	0	0	0	12	3	2	8	30
Mount	0	0	0	0	0	0	0	0	0	0	0
Must	5	1	0	2	0	1	3	0	4	1	17
Need to	0	0	0	0	0	0	1	3	0	4	8
Note	2	0	0	0	0	0	0	0	0	0	2
Notice	0	0	0	0	0	0	0	0	0	0	0
Observe	0	0	0	0	0	0	1	1	0	0	2
One's	0	0	0	0	0	0	1	0	0	0	1
Ones	0	0	0	0	0	/1	0	0/1	0	0/3	5
Order	0	2	0	0	0	0	0	0	7	0	9
Ought	0	0	0	2	0	0	0	0	2	1	5
Our	0	0	7/22	2	0	9	11	8	0	4	41
Pay	0	0	0	0	0	2	0	1	1	0	4

Picture	0	0	0	0	0	0	0	0	1	0	1
Prepare	0	0	0	0	0	0	0	3	1	0	4
Recall	0	0	0	0	0	0	0/22	3/0	0	0	0
Recover	0	0	0	0	0	0	0	0	0	0	0
Refer	0	0	0	0	0	0	0	0	0	0	0
Regard	1	0	0	0	0	0	0	0	2	0	3
Remember	0	0	0	0	0	0	2	0	0	0	2
Remove	0	0	0	0	0	0	0	0	0	0	0
Review	2	0	0	1	0	1	0	4	1	0	9
See	0	1	1	0	0	2	2	2	2	0	10
Select	0	0	0	0	0	0	1	0	0	0	1
Set	0	0	0	1	0	0	2	7/4	3	0	10
Should	4	8	3	4	0	19	0	7	4	1	50
Show	28	11	14	11	0	25	15	11	13	24	152
State	0	0	0	0	0	0	0	1	6	0	7
Suppose	0	0	0	0	0	0	0	0	0	0	0
Take a look	0	0	0	0	0	0	0	0	0	0	0
Take as example	0	0	0	0	0	0	0	0	0	0	0
Think	0	0	0	0	0	2	0	0	1	0	3
Think about	0	0	0	0	0	0	0	0	0	0	0
Think of	0	0	0	0	0	0	0	0	0	0	0
Turn us	0	0	0	0	0	0	0	0	0	0	0
Us	0	0	0	0	0	1	1	0	0	0	2
Use	0	0	4	2	2	2	1	0	0	0	11
We	0	0	0	0	0	2	73	14	27	0	116
You	0	0	0	0	0	1	0	0	0	0	1
Your	0	0	0	0	0	0	0	0	0	0	0
Total	100	64	54	36	02	153	178	105	123	87	901

Appendix E: Frequencies of **Attitude Markers** in IFALA 2019-2021 Corpus

Interpersonal Dimension of Metadiscourse											
Frequencies of Attitude Markers in IFALA 2019-2021 Corpus											
Attitude	Appl	Com	Mod	Lang	Langu	Interna	Studie	Lang	Jour	Bilingu	To

Markers	Journal of Applied Linguistics	Computer Assisted Language Learning	International Journal of Language Learning	Journal of Language Learning and Technology	Journal of Bilingual Education and Bilingualism	Second Language Acquisition	Teaching Research	Journal of Second Language Writing	Journal of Applied Linguistics and TESOL	Total
Admittedly	0	0	0	0	0	0	0	0	0	0
Amazingly	0	0	0	0	0	0	0	0	0	0
Appropriately	1	0	0	0	0	1	0	0	0	2
Agree	0	0	0	0	0	1	0	1	1	4
Agrees	0	0	0	0	0	0	1	0	0	1
Amazed	0	0	0	0	0	0	0	0	0	0
Amazing	0	0	0	0	0	0	0	0	0	0
Appropriate	6	6	0	1	0	13	0	1	2	29
Astonished	0	0	0	0	0	0	0	0	0	0
Astonishing	0	0	0	0	0	0	0	0	0	0
Correctly	0	0	1	0	0	2	0	0	0	3
Curiously	0	0	0	0	0	0	0	0	0	0
Curious	0	0	0	0	0	0	0	0	0	0
Disappointing	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0
Desirable	0	0	0	3	0	0	0	4	1	10
Desirably	0	0	0	0	0	0	0	0	0	0
Disappointed	0	0	0	0	0	0	0	0	0	0
Disappo	0	0	0	0	0	0	0	0	0	0

intingly											
Disagreed	0	0	0	0	0	0	0	0	0	0	0
Disagrees	0	0	0	0	0	0	0	0	0	0	0
Dramatic	1	0	0	0	0	0	0	0	0	0	1
Dramatically	0	0	0	0	0	0	0	0	0	0	0
Even	4	6	2	5	1	14	10	5	2	15	64
Essential	0	1	1	1	0	4	1	1	0	0	9
Essentially	0	1	0	0	0	0	1	0	0	0	2
Even x	-	-	-	-	-	-	-	-	-	-	0
Expected	0	1	0	1	0	2	1	0	0	4	9
Expectedly	0	0	0	0	0	0	0	0	0	0	0
Fortunately	0	0	0	0	0	0	0	0	0	0	0
Fortunate	0	0	0	0	0	0	0	0	0	0	0
Have to	0	1	1	0	0	0	0	0	0	0	2
Hopefully	0	0	0	0	0	0	0	0	0	0	0
Hopeful	0	0	0	0	0	0	0	0	0	0	0
Important	12	6	9	6	3	31	7	11	4	10	99
Importantly	2	1	0	1	1	0	3	2	0	10	20
Interest	4	1	3	0	0	2	5	6	5	3	29
Interestingly	0	2	0	0	0	0	0	2	0	3	7
Inappropriate	0	0	0	0	0	1	0	0	1	1	3
Inappropriately	1	0	0	0	0	0	0	0	0	0	1
Interesting	1	0	0	0	0	1	0	0	0	0	2
Prefer	0	0	0	0	0	0	0	0	0	0	0
Pleased	0	0	0	0	0	0	0	0	0	0	0

Preferable	0	0	0	0	0	0	0	0	0	0	0
Preferably	0	0	0	0	0	0	0	0	0	0	0
Preferred	0	0	1	0	0	1	0	0	0	2	4
Must	5	1	0	1	0	1	3	0	4	1	16
Ought	0	0	1	3	0	1	4	0	0	1	10
Remarkable	0	1	0	0	0	1	0	0	0	0	2
Remarkably	1	0	0	0	1	0	0	0	0	0	2
Surprisingly	1	1	0	2	0	2	0	0	0	1	7
Shocked	0	0	0	0	0	0	0	0	0	0	0
Shocking	0	0	0	0	0	0	0	0	0	0	0
Shockingly	0	0	0	0	0	0	0	0	0	0	0
Striking	0	0	0	0	0	0	1	2	0	0	3
Strikingly	0	0	0	0	0	0	0	0	0	0	0
Surprised	0	0	0	0	0	0	0	0	0	0	0
Surprising	0	0	0	0	1	0	0	0	0	0	1
Unfortunate	0	0	0	0	0	0	0	0	0	0	0
Unfortunately	0	0	0	0	0	0	0	0	0	0	0
Unusually	0	0	0	0	0	0	0	0	0	0	0
Understandably	0	0	0	0	0	0	0	0	0	0	0
Unbelievable	0	0	0	0	0	0	0	0	0	0	0
Unbelievably	0	0	0	0	0	0	0	0	0	0	0
Understandable	0	0	0	0	0	0	0	0	0	0	0
Unexpected	0	0	0	0	0	0	0	0	1	5	6



Unexpectedly	0	0	1	0	0	0	0	0	0	0	1
Unusual	0	0	0	0	0	0	0	0	0	0	0
Usual	0	0	0	0	0	0	0	0	0	1	1
Total	39	29	20	24	07	78	37	35	21	60	350

ABOUT THE AUTHORS

Shazia Aziz is an Assistant Professor of English at COMSATS University Islamabad, Lahore Campus. Her area of specialization is English Linguistics. She has vast experience in teaching at graduate and postgraduate level and research. Her interests include but are not limited to Genre Analysis, Ecolinguistics, Climate Change Discourse, Media and Discourse, ELT Business Communication and Computer-Mediated Communication. She is a well-cited author of scores of research articles in journals of national and international repute and a book chapter published by the Cambridge University Press. She also won a research productivity award and a fellowship under a scholar exchange program for a semester at Duke University North Carolina, USA. She also serves as a reviewer for many reputed international journals. Moreover, she has presented at several conferences and has also conducted several faculty training workshops during her career. This work is from her PhD dissertation done under supervision of Fakhira Riaz (PhD).

Fakhira Riaz Ph.D., is an Assistant Professor at the English Department of Fatima Jinnah Women University, Rawalpindi, Pakistan. Her main research interests include corpus linguistics, phraseology, and vocabulary studies. She is currently working on a project focused on phraseology in academic writing.