

INTRODUCTION

Research articles are pathways for researchers to publicly propose new ideas which are likely to support or contradict findings of other scholars; hence, writers employ judicious language as the acceptance of their research contributions depend to a larger extent on how these are presented to the academic community. "Using cautious language means mitigating the strength of a proposal by increasing or decreasing its illocutionary force through hedging and boosting devices" (Vassileva 2001 in Mojica, 2005). This implies that research articles are relevant to academics, and, given the pressure to publish, it is not surprising that research article writers feel the need to persuade editors and readers of the veracity of their claims. "Y 8

In this regard, gaining expertise in writing to publish is increasingly important for academics in all disciplines, since publications in highly rated international journals have a great impact not only on knowledge construction through the process of writing, which is of primary importance, but also on their basis, universities are funded and scholars are evaluated. Hence, "expertise in writing for publishing develops through a writer's socialization into academic discourse community which shares a set of values and cultural preferences as to what 'good' writing should be like" (e.g., Duff 2007, 2010; Flowerdew 2013; Hyland 2009). *including and their ad their focus*

⁽¹⁹⁹⁴⁾ Hyland believes that "effective academic writing actually depends on interactional elements which supplement propositional information in the text and alert readers to the writer's opinion." (Hyland, 1994). *is it* the writer's ability to provide the reader with a cautious analysis of the collected data is what marks a good article, thus it helps to alternative interpretations. This is because researchers are expected to leave room for other researchers to pursue further claims about a study. S 7

Salager- Meyer (as cited in Choi & Ko, 2005, p. 4) argues that "if research writers use rhetorical devices that are too strong or too weak, readers in academic discourse will have doubt on the validity of their propositions." Conveying an appropriate degree of doubt and certainty is therefore essential to ESL academic writers. These expressions of doubt and certainty are known in literature as hedges and boosters (Holmes, 1990). Hence, writers must present their

propositions with some levels of caution by using appropriate linguistic devices, including appropriate hedges and boosters. 8

Many studies have been conducted on hedges and boosters. For example, ^{year?} Hyland and Bondi (as cited in Alonso, & Mariñas, 2012, p. 48) argue that "hedges and boosting devices are important elements in academic discourse". This is because hedges and boosters pave a way for researchers to apply cautious language and show their degree of certainty. They also create a pathway for scholars to be part of the global academic village. One of the sections of research articles that may contain hedges and boosters to establish the amount of certainty in statements is its conclusion. ~~This is where all the results and findings of the study are generalized and explained.~~ ^{the author} Thus, it is important for ^{the paper} it to be written with utmost effectiveness and credibility. 8 redupl

Despite this interest however, there has been little attention to what hedging and boosting devices are and how these are used in conclusion section in Nigerian research articles. This prompts the need of the present paper. Thus, guided by Hyland's (2004) categories of hedging devices, ^{the} ~~this~~ paper examined the hedges and boosters used in the conclusion sections of twenty research articles in two national journals.

THEORETICAL FRAMEWORK

Appraisal Theory (Martin 2000; Martin & Rose 2003; Martin & White 2005) is developed within SFL as the framework which aims to describe the various ways of the linguistic realisation of interpersonal meanings in language use. Within this framework, therefore, appraisal has been defined as "the semantic resources used to negotiate emotions, judgments and valuations, alongside resources for amplifying and engaging with these evaluations" (Martin 2000: 145). Similarly, this theory was developed with the main purpose of analysing the resources of inter-subjective stance (White 2003) and to trace: 8

[...] a comprehensive map of appraisal resources that we could deploy systematically in discourse analysis, both with a view to understanding the rhetorical effect of evaluative lexis as texts unfold, and to better understanding the interplay of interpersonal meaning and social relations in

the model of language and the social we were developing,
especially in the area of solidarity (Martin 2000: 148).

The researchers, therefore, have chosen appraisal as the theoretical framework for this paper.

PROLIFERATION OF HEDGES AND BOOSTERS IN ACADEMIC WRITING

The extensive body of literature on metadiscourse elements in academic writing ^{shows} suggests that various researchers have attempted to define the concept of hedging and boosting (Brown & Levinson, 1987; Crompton, 1997; Hyland, 1994; 1998; Lakoff, 1973; Myers, 1989; Salager-Meyer, 1994 in Duman 2016). The term 'hedge', to begin with, was coined by Lakoff (1973), who pointed out that hedges are words "whose job is to make things fuzzier or less fuzzy" (p. 471). In other words, hedges are used to avoid or degrade the certainty of statements.

Hedges have been given different definitions by different researchers (Crompton, 1997; Hyland, 1996, 1998; Myers, 1989; Salager-Meyer, 1994, 1997). Hyland (1998) suggested that in academic writing, hedges "imply that a statement is based on plausible reasoning rather than certain knowledge, and allow readers the freedom to dispute it" (Hyland, 1998, p. 4). This means that, hedges are used by writers to express tentative doubt about their claims and open doors for compromise. They are used when a writer wants to detach himself from making an absolute truth claim.

researcher's side (KAW)

In this regard, Yuksel and Kavanoz (2015) argue that the application of hedges is central to academic writing where writers ^{have} ~~are presented with a platform~~ to differentiate facts from opinions. Hence, hedges are communicative tactics employed by writers in order to register their stances in an academic manner without the risk of receiving Face Threatening Acts from the discourse community. They also grant readers the freedom to dispute claims ~~made by writers or speakers~~ (Haufiku 2016).

To this end, Hedges refer to those expressions used to communicate the author's tentativeness, cautiousness and circumspection on an assertion (Crismore, Markkane and Steffensen, 1993 in Wang and Zhang 2016). More than this, they are employed to open up a discursive space for readers' alternative voices and viewpoints (e.g., Hyland & Jiang, 2016) by holding the author's claims as provisional. By hedging an argument, authors strategically negotiate their opinions

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with the intended readers and seek agreement for new arguments, in the meanwhile, the former conveys modesty and respect for the latter (Holmes, 1990). It is thus vital for authors to weigh the degree of commitment that they intend to invest in their claims since either too much or too little may engender undesired reactions from the readers.

Boosters, on the other hand, refer to those words and phrases used to communicate the author's certainty, conviction and assertiveness in an argument (Crismore et al., 1993 in Wang and Zhang 2016). Contrary to hedges, boosters are employed to close down a discursive space for alternative voices and head off conflicting views (Gillaerts & Van de Velde, 2010). By means of boosters, authors project an authoritative persona into the arguments with a confident voice. It is therefore ~~true to agree with the claim~~ ^{the claim} that boosters emphasise certainty about a proposition or confidence in an assertion (Abdi et al., 2010 in Hu and Cao, 2012), express authorial commitment to a proposition (Millan, 2008 in Hu and Cao, 2012) or close off alternative viewpoints by strengthening the asserted position (Gillaerts and Van de Velde, 2010 in Hu and Cao, 2012) position against other voices. We

Studies have observed that successful writers are required to gain mastery use of hedges and boosters to express their doubt and certainty in the written discourse (Hyland, 1998; Hyland & Milton, 1997; Uhm, Moon, Lee, & Oh, 2009). They ought to pay more attention to the use of hedges and boosters in stating how to claim or disclaim. Furthermore, the importance of hedges and boosters in academic discourse lies in their contribution to an appropriate rhetorical and interactive tenor, conveying both epistemic and affective meanings. That is, they do not only carry the writer's degree of confidence in the truth of a proposition, but also an attitude to the audience. S

PREVIOUS STUDIES ON HEDGES AND BOOSTERS

There have been some researches on hedges and boosters in academic writing for both L1, as well as L2 (Holmes, 1988; Hyland, 1994, 1996, 2000; Hyland & Milton, 1997). These researches ~~have examined the use of hedges and boosters in various genres.~~ redupl
Hu and Cao (2011), to begin with, examined the difference between hedges and boosters used by applied linguists publishing in Chinese and English medium journals, and between authors of empirical and non-empirical academic articles. Through quantitative analyses, they found out that English medium journals

→ What follows
are parts of papers.
just give

Research article (RA)

research article
contrast (RAA)

are marked with more hedges than those published in Chinese, and that abstracts of empirical research articles used more boosters than those of non-empirical studies.

Using Kaplan's contrastive rhetoric theory, Nivales (2011) examined 144 pages of introduction and conclusion sections in various research articles of five different courses from both the arts and sciences disciplines to know how novice writers show their confidence in or detachment to their statements. She found out that Psychology writers appear to be more detached while mass communication writers seem more committed. Similarly, Nasiri (2012) studied the hedges in the discussion sections of 10 RAs by American writers and 10 RAs of Iranian writers. He classified the obtained hedges based on Salager-Meyer's (1994 in Liviyska, 2019) taxonomy and found out that the number of hedging devices used by American writers was more than what Iranians used.

In another publication, the use of hedges and boosters in 90 scientific letters from letters journals was explored by the author (Hyland (2004). They were in the area of (Biology, Chemistry and Physics). Hyland (2004) found that there was little difference between the disciplines in the occurrence of hedges and boosters in the letters. Hedges constituted about two-thirds of all such expressions in each field of science. However, there was around 50% more boosters in the scientific letters than in the research articles analysed earlier by the same author, especially in the introductions and conclusions, which point to the strong need to promote the findings published in these venues.

More recently, a study comparing the use of hedges and boosters in research articles written in English as a foreign language (EFL) by Iranian and by Anglo-American writers was carried out by Abdollahzadeh (2011). He focused on 60 conclusion sections of research articles in Applied linguistics and found that the texts written by Anglo-American writers generally use more metadiscourse markers. Both groups of writers used an equal proportion of hedges but Anglo-American writers employed more boosters in their writing. These markers also performed slightly different functions in the texts of the two groups of writers. The author ascribed the differences to the writers' varied rhetorical sensitivity and awareness of the audience.

All the reviewed literature attempted to compare the use of hedges and boosters in various forms of academic writing. These studies tried to establish connection between the said hedging devices and the writers': field of specialization (Nivales, 2011); language (Hu and Cao, 2011); gender (Serholt, 2012) and nationality (Nasiri, 2012). Each had successfully described and compared the use of hedges and boosters but none had come up with the results possible

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Based on the findings, hedges are the most frequently used markers in both ~~the~~ journals with the overall occurrence of sixty times in the articles (accounting for 63.83%) for JOLAN and forty six time (accounting for 70.77%) for JESAN. Thus, qualitative analyses were conducted to identify and appraise the discourse functions of hedges and boosters used by writer while urging the readers to see the importance of their study as tabled below:

Distribution of Hedges and Boosters

	JOLAN		JESAN	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Hedges	60	63.83%	46	70.77%
Boosters	34	36.17%	19	29.23%
Total	94	100%	65	100%

When drawing conclusions from arguments or guessing knowledge claim from the articles, the selected subjects tended to hedge their claims by displaying a degree of caution and tentativeness while concluding their articles. As Myers (1989) suggests, a knowledge claim without hedging might not be "a statement of new knowledge" (p. 13). This strategic deployment of hedges thus allowed the article writers to argue confidently and at the same time to humble themselves before their readers (Hyland, 1996a, 1996b, 1998a, 1998b and Myers 1989). This pattern is illustrated in the following examples extracted from the conclusion sections of some of the research articles:

1. "This, in most cases, does not give room to differentiating between formal and informal domains." (JOLAN)
2. "This implies that the frequent switch in all these context/situations makes it almost difficult for students to keep informal and formal choice of language use apart." (JOLAN)
3. "The Igbo speakers should be ready to exhibit some form of language loyalty." (JOLAN)
4. "English teachers should give more essay writing exercises and discourage students who consciously or unconsciously adopt the 'new GSM writings'." (JESAN)
5. "This may in a way cast doubt on its relevance to the content of the text." (JESAN)
6. "English is a global language, so global comprehensibility and acceptability should be our target." (JESAN)

Whereas hedges express students' tentativeness and uncertainty towards propositional content, boosters, in contrary, convey their commitment to and certainty of knowledge. As seen in this analysis, boosters were also relatively common in the sampled conclusions but here their primary role was not overtly interpersonal. Instead, they appeared to support the writers' arguments in the way they served to emphasise the strength of their commitment to a proposition and thereby

sought to convince the reader by their belief in the logical force of the argument. This is achieved in the way they removed doubts and upgraded the significance of claims to emphasise their uniqueness, rarity or originality (Hyland 2010) as well as to showcase their scholarly prowess. Tentativeness was often replaced by unmitigated assertions to help in increasing the impact and significance of the argument. This kind of commitment was conveyed in the extracts below where a variety of boosters were used to carry the writers' authority:

1. This study establishes that Ferguson's functionality parameter for High and Low varieties in diglossic situations cannot be generalized in all sociolinguistic domains. (JOLAN)
2. The analysis showed that different kinds of cohesive strategies are used by the poet. (JOLAN)
3. Igbo teachers at all levels should be encouraged, for any revival to take place, the revivalist must first be revived. (JOLAN)
4. It is an established fact that all literature gets its own inspiration from the happenings of our society. (JESAN)
5. Consequently, all speech groups must be left to maintain and maximally function in their local languages and dictates. (JESAN)
6. Apparently, the Beijing Conference is yet to have the desired impact on the pictorial representation of the Nigerian woman in the newspaper... (JESAN)

From the above examples, it is observed that research article writers are comfortable in showing commitment perhaps because the topics are mostly academic issues on which they probably have held strong opinions on even before the writing of the RAs. Another factor that could account for the gap between boosters and hedges is the need for the writers to persuade their readers to continue reading the RAs. Probably, their desire to persuade the readers of the importance of their topics motivated them to use stronger affecting words which consequently showed stronger commitment in drawing the curtain of their research articles.

To sum the discussion up, in most of the conclusions the sampled proficient academic research article writers conclude their articles by relying heavily on the impersonal subject, such as: "This study...", "This paper...", "What this paper has tried to achieve..." and "Insights from the study..." etc in order to remove all human responsibility and to create objectivity. Thus, hedges and boosters helped to coordinate the moderate smooth flow of their claim in the concluding sections and, by extension, skillfully drew their articles to an end.

CONCLUSION AND RECOMMENDATIONS

As broached, this paper examined hedges and boosters in research articles: an interdisciplinary investigation. Analysis was made by the researchers in which the elements were described, interpreted and analysed. Based on the findings of this study, it can be claimed that research article writers, who are largely academics, will write better and adhere to the principles of English for Academic Purpose if the attention paid to hedges and boosters is maximised and properly utilised.

REFERENCES

- Abdi, R. (2002). Interpersonal Metadiscourse: An Indicator of Interaction and Identity. *Discourse Studies*, 4(2), 139-145.
- Martin, J. R., and White, P. R. (2005). *The Language of Evaluation*. Basingstoke and New York: Palgrave Macmillan.
- Feng, C. (2014). "Metadiscourse in Research Articles: A Comparative Study Across Disciplines and Paradigms". Unpublished PhD Thesis, Nanyang Technological University.
- Haufiku, N. K. (2016). *An Examination of Hedging and Boosting Devices used in Academic Discourse: Cases of 2014 and 2015 Master of Arts in English Studies Thesis at the University of Namibia*. Unpublished M.A Dissertation, University of Namibia.
- Ho, V., & Li, C. (2018). The use of metadiscourse and persuasion: An analysis of first year university students' timed argumentative essays. *Journal of English for Academic Purposes*, 33, 53-68.
- Hyland, K., & Tse, P. (2004b). Metadiscourse in Academic Writing: A Reappraisal. *Applied Linguistics*, vol. 25 (2), pp 156-177.
- Hyland, K. (2005c). *Metadiscourse: Exploring Interaction in Writing*. London: Continuum.
- Hyland, K. (1994). "Hedging in Academic Textbooks and EAP". *English for Specific Purpose*. Vol. 3, pp. 239-256.
- Livytska, I. (2019). The Use of Hedging in Research Articles on Applied Linguistics. *Journal of Language and Cultural Education*, 7(1).
- Wang, L. and Zhang, Y. (2016). An Analysis of Metadiscourse in the Abstracts of English Academic Papers. *Global Journal of Human-Social Science: G-Linguistics & Education*, 16(9).