AN ANALYSIS OF GENDER DIFFERENCES IN THE USE OF METADISCOURSE MARKERS IN PAKISTANI ACADEMIC RESEARCH ARTICLES

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ABSTRACT: *The objective of the study is to identify the difference in the number of meta-discourse markers: hedges and boosters used by Pakistani male and female authors in the abstract, discussion and conclusion sections of their academic research articles and to investigate either female use more hedges than males or females use more boosters than males in the Pakistani context. Research article authors take various stances to represent the true value of their claims while writing. Gender plays a very vital role in the use of rhetorical devices and the author's gender could have a very significant effect on how much or what type of meta-discourse is used. Males and females not only differ in their psychological and physiological nature but also in their use of language. A comparative study was made to probe into the frequency of hedges and boosters in these three sections. To do so 50 research articles written by Pakistani authors were selected. Hyland's [2005] meta-discourse taxonomy was employed to identify the list of hedges and boosters. The results demonstrated that Pakistani female authors used more hedges than male writers and used fewer boosters than males.*

Key Terms: Meta-discourse markers, Hedges, Boosters, Gender, Hyland's taxonomy, Rhetorical device

1. INTRODUCTION

Males and females, not only differ in their psychological and physiological nature, but also in their use of language. A researcher [2] presented in his study that gender plays a very vital role in the use of rhetorical devices and the author's description of gender could have a very significant effect on how much or what type of meta-discourse is used. The present study deals with the differences between Pakistani male and female research article authors in their use of two interpersonal discourse markers: hedges and boosters. Another scholar [3] in her study stated that in both disciplines, females used more hedging devices in research articles: applied linguistics and chemistry. Gender is a socially created phenomenon, and gender is not concerned with what an individual "has," but with what an individual does" [4]. Language-gender partnership, nothing else is transparent and controlled.

A group of researchers in their studies [5; 6;7] defined the term meta-discourse as a significant rhetorical characteristic and an important strategy in the creation of any piece of discourse. The researcher [8] was the very first person to introduce and elaborate functional categorization of meta-discourse and refers the term meta-discourse to all those features which authors use in their written or spoken discourse to make readers decode the encoded message, share their ideas, views, and perspectives and they resonate the peculiar customs, traditions, and norms of their culture.

Hyland [1] defines the concept of meta-discourse as a cover descriptor for personal self-expression used to exchange interactional meanings in a text, enable the author or speaker of any text or conversation to convey a message, and establish contact with readers as members of a specific community. [9;10;11;12] in their studies discuss the usage of meta-discourse and explain that they are used for literary and communicative functions. According to them, interpersonal meta-discourse aims to communicate with the reader about some concept, content or suggestion.

An author [8] also provides the definition of textual discourse markers as the devices which perform the task of organizing the written texts and spoken conversations for the readers. In the present study, the researcher has worked on two interpersonal markers namely hedges and boosters.

A researcher [13] in her study provides the definitions of hedges and boosters. Hedges are defined as markers that show full certainty about the statements given in the text either written or spoken. Examples include may, might, perhaps, would, probable, maybe, etc. From a linguistic point of view of the author has categorized hedges as epistemic verbs (may, might, would), probability adverbs (perhaps, maybe) and epistemic expressions (it is likely, it is probable). Boosters or certainty markers, in comparison, show full commitment and certainty about the ideas, propositions, and statements presented by the author in a text or by a speaker in a conversation. Examples include of course, obviously, sure, certain, etc.

A group of authors [14] defines hedges and boosters in their study. According to them, hedges describe the writers' or speakers' indirect stance, their decision to recognize other voices, points of view, ideas and propositions. The speakers and authors while using hedges become open to negotiation with the hearers or readers. They define boosters and devices which allow the writer or speaker assumes and avert substitute, opposing ideas by showing certainty in place of doubt.

THEORETICAL FRAMEWORK

The current study has adopted the Hyland's (2005) meta-discourse taxonomy. The hedges and boosters include the words given below according to this taxonomy:

Table1: Hedges

About, almost, amount, apparent(ly), appear, around, argue, assume, approximately, broadly, could, claim, doubt(full) , estimate, essentially, frequently, feel, fairly, felt, from my perspective, guess, generally, likely, largely, in my opinion, indicate, maybe, mostly, mainly, might may, might, ought, often, perhaps, probable, possible, postulate, plausibly, quite rather relatively, suppose, suggest, somewhat, sometimes, seem, should, would, tend to, uncertain, unlikely, usually, unclear, well, suspect.

Table2: Boosters

Actually, always, belief, believes, beyond, believed, doubt, certainly, certain, clear, clearly, conclusively, decidedly, definite, definitely, doubtless, demonstrate, demonstrates, demonstrated, evident, establish, established, evidently, find, found, in fact, indisputably, incontrovertible, incontestable, incontrovertibly, indeed, indisputable, know, known, (possibility), never, no doubt, obvious, obviously, of course, prove, prove, proved, realize, realize, realized, really, doubt, show, shows, showed, shown, sure, think, thinks, truly, truly, though, truly, true, undeniable, undisputedly, undoubtedly.

Source: Hyland's [2005] meta-discourse taxonomy

STATEMENT OF THE PROBLEM:

Research article authors take different positions to represent the true meaning of their arguments while writing. The problem that how writers emphasize or de-emphasize the true validity of their arguments while writing different academic research articles has been under debate for a long time. Metadiscourse markers namely hedges and boosters reveal the writers' certainty about a proposition. Males and females perform differently in various contexts but the use of hedges and boosters in Pakistani research papers written by males and females has not yet been researched. This gap inspired the researcher to investigate the role of gender differences in applying hedges and boosters in academic research articles.

RESEARCH QUESTIONS:

1. Is there any difference in the employment of a number of hedges and boosters by Pakistani male and female authors in the abstract, discussion and conclusion sections of their academic research articles?
2. Do females use more hedges than males in the Pakistani context?
3. Do females use more boosters than males in the Pakistani context?

RESEARCH OBJECTIVES:

1. The study aims to identify the difference in the number of hedges and boosters used by Pakistani male and female authors in the abstract, discussion and conclusion sections of their academic research articles.

2. The study aims to investigate either female use more hedges than males or females use more boosters than males in the Pakistani context.

SIGNIFICANCE OF THE STUDY:

The significance of the current study is that the researchers in the fields of applied linguistics and gender studies can get an insight into the language strategies used by the various authors and further the writing styles of both the genders can be predicted. One more significance is that the culture of a particular nation can be somewhat analyzed by the choice of hedges and boosters of both the genders of the nation.

2. LITERATURE REVIEW

The literature review in this study covered meta-discourse markers, categories of meta-discourse markers, Hedges, boosters, and gender variations in hedge and booster use.

METADISCOURSE MARKERS:

Hyland [1] describes meta-discourse in his book. According to him, "the term meta-discourse was first proposed by Zellig Harris in 1959 to provide a medium of interpretation of language in use, reflecting the attempts of a writer or speaker to help a reader to understand a text".

A group of researchers [15, 16,17] have taken meta-discourse as a particular characteristic of academic discourse in written texts whereas [18;19] considers meta-discourse as an important feature of spoken conversation too and that not only covers written material. Meta-discourse has not only been discussed with regard to written or spoken discourse but other genres and settings have also been taken into account are explained by the researcher [12].

HEDGE

The meta-discourse marker hedge was defined as those words that perform the functions of making ideas, statements and propositions to a certain extent unclear and indistinct [20]. From among the meta-discourse markers, hedges include the words which reduce the writer's certainty or mitigate their allegiance to the statements, in comparison to the boosters that perform the function of increasing the certainty in the ideas and statements presented by the authors.

Hyland [7] asserted that expressing the factors of doubt and certainty is an important element in the rhetorical and bilateral nature of academic writing. He was of the view that the importance of these factors can be understood by the phenomena that research writers make their research claims accepted by creating a balance between persuasion and carefulness, either presenting ideas or statements showing confidence by providing information that is authentic, or with an element of doubt and inauthenticity of information.

An author [21] conducted a study by investigating the differences in the use of meta-discourse markers. The corpus for this study was research articles that were written in both English and Persian languages and they were published in Iranian and international journals in the fields of ELT and Psychiatry. To limit the corpus, only discussion sections were selected for analysis. The total articles for analysis were 90 in number. The author identified boosters in his study according to the taxonomies of meta-discourse markers. The results of the study showed that there were notable variations in frequency, type, and functions of boosters in these research articles. This variation may be due to factors that there is very little awareness about the traditional rules of English language rhetoric, Persian writers have very little knowledge about writing research articles in the English language. Furthermore, different pragmatic and sociolinguistic rules of the English language are not explicitly taught to Persian researchers. Moreover, they are not provided proper instruction and exposure of the English language.

BOOSTER

Meta-discourse markers that act as devices to show strong opinions are known as boosters. Some examples of boosters include clearly, in fact obviously, etc. These devices enable writers to convey a strong belief and describe an idea or statement confidently. If an emotional perspective is taken

into account, these devices are also a sign of participation and concord with the readers, emphasizing shared information, a grouping of members and involvement with the audience [7].

A study has been conducted concerning the role of boosters to persuade the audience in written research articles. In this study a corpus of research articles was selected for three fields of study: Marketing, Biology and Mechanical Engineering and the use of boosters was analyzed. The results showed that a different number of boosters was used in different fields of study. Overall, various rhetorical designs in the fabrication of information cause variation across different disciplines. Furthermore, they were of the view that softer sciences were in dire need of increasing the propositional content in the containing declarations, on the other hand, harder sciences focused on the correctness of the data employed in their research as appropriately demonstrative to convey the truth of their ideas and propositions [22].

Another group of researchers [23] presented in their study that hedges and boosters are significant meta-discourse markers for writers to symbolize their cognitive point of view and position author-reader relations. They conducted a comparative analysis in their study and analyzed the use of meta-discourse markers in the abstracts of research papers. Corpus consisted of 649 abstracts to investigate the variation in hedges and boosters among applied linguistics published articles in Chinese and English medium journals and also between empirical and non-empirical research articles. Results of the study showed that more hedges were used in abstracts that were published in English-medium journals than the abstracts that were published in Chinese-medium journals while in comparison the abstracts of empirical research articles showed more use of boosters than the abstracts of non-empirical research articles. Further textual analyses revealed that the different designs of hedges and boosters in Chinese and English abstracts had a joint, bilateral impact on the certainty of the author and confidence expressed through it.

GENDER AND METADISCOURSE MARKERS

Scholars conducted various investigations on the use of meta-discourse markers particularly hedges and boosters by males and female academic writers.

Ädel [2] explained in his study that gender plays a vital role in the employment of rhetorical devices and the author's gender can be taken as a significant factor in deciding the number of kinds of meta-discourse being used.

A group of researchers [24] investigated the impact of gender on American and Finnish academic writings. The results showed that Finnish females used most hedges while in comparison US males used the least hedges. Additionally, Finnish females used more hedges than US females. Some other researches were conducted in this field and [25; 26] in their respective studies found that males were more assertive than females and their writing style was expressed more confidence than the style of females. If empirical studies exhibit clearly that there is a persistent variation across males and males in multiple studies across varying types of texts and contexts then the result can be predicted that there might even be irregular connections to social or biological gender and the inclination for the employment of meta-discourse.

Another important study pertaining to the role of gender in the use of hedges and boosters in academic writing is important in this context. An author [27] conducted a study in which it was asserted that females were more inclined towards showing firm commitments to their statements as compared to males. Another tendency was that both genders showed remarkably higher use of both hedges and boosters.

If the above researches and discussions are taken into account, it is concluded that there are yet very less empirical researches relating to the role of variations across gender in the use of hedges and boosters in research papers in general and in Pakistani context particularly, therefore, it is needed to present complete research in grave detail.

A study was conducted [28] by investigating the use of meta-discourse markers in academic essays that were written by male and female students. A total of 40 essays were selected for analysis. Among these 20 essays were written by female students of the field of EFL and 20 essays were written by EFL male students. The framework used for analysis was a meta-discourse framework proposed by Hyland [1]. The results of the study revealed that both genders used more interactive markers than interactional markers. Interactive markers include transitions, frame markers, endophoric markers, evidential and code glosses while interactional markers include hedges, boosters, attitude markers, and self-mentions. There was the frequent use of transitions by both genders. This study presented another important finding that gender is not the sole factor impacting the employment of meta-discourse markers.

3. METHODOLOGY

THE CORPUS

To conduct the present study, 50 research papers were selected that were published in different Pakistani journals and these research papers were written by Pakistani academic writers. For these Pakistani writers, English was a second language and their first languages were different according to their regions and cities. Among these 50 research papers 25 papers were written by female writers and 25 research papers were written by female writers and convenient sampling was used in the selection process of research papers. For conducting the current research study, articles were selected from various disciplines and fields of study and it was taken care of that all the selected research articles followed an experimental design as in this way the research would be able to get the discussion section for analysis. As far as the date of publication of these articles was concerned, they all were published within the last ten years. As the time passage affects the writing style of various writers, so the time factor has been taken into consideration to ensure a recent style of writing trend.

PROCEDURE AND DATA ANALYSIS

To figure out the variations in hedges and boosters used by male and female research article writers, the entire abstract, discussion and conclusion sections were arranged in two different word documents, one document was for males and the other document was for females. Each document of the word contained more than 12,000 words. After this, hedges and boosters were counted manually to ensure the correctness in each document. Subsequently, the data collected from manual counting were placed into SPSS software program

and frequency; mean and median were run for findings.

4. RESULTS AND DISCUSSION

HEDGE RESULTS

Table 4.1: Mean and Median score of Hedges

Total number of Hedges	306
Mean	16.5339
Median	2.0000

Table 4.2: Frequency difference of Hedges by both Genders

Gender	Frequency	Percent
Male	101	33.0
Female	206	67.0
Total	306	100.0

Table4.3: Frequencies of Frequent Used Hedges by both Genders

Hedges	Frequency	Percent
Indicated	21	6.9
About	50	16.3
Suggested	09	2.9
Mostly	17	5.6
Seems	14	4.6
Sometimes	09	2.9
Think	10	3.3
Relatively	10	3.3
May be	09	2.9
Somewhat	06	2.0
Quite	07	2.3
Indicate	04	1.3
Almost	10	3.3
Appear	05	1.6
Will	34	11.1
Rather	22	7.2
Could	10	3.3
Would	13	4.2
Felt	10	3.3
Estimates	05	1.6
Unlikely	10	3.3
Thought	05	1.6
Might	10	3.3
Often	05	1.6
Total	**306**	**100.0**

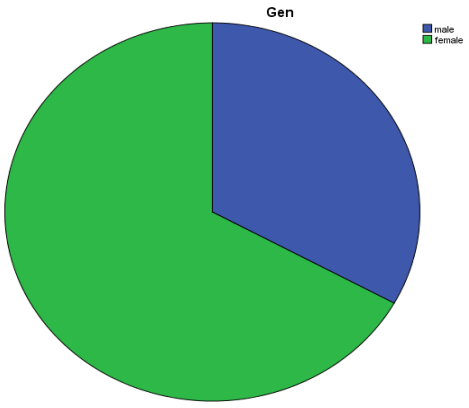

Figure 1: Graphic representation of Hedges Scores

BOOSTER RESULTS

Table4.4 Mean and Median score of Boosters

Total number of Boosters	314
Mean	10.6242
Median	8.0000

Table 4.5: Frequency difference of Boosters by both Genders

Gender	Frequency	Percent
Male	172	54.8
Female	142	45.2
Total	314	100.0

Table4.6: Frequencies of Frequent used Boosters by both Genders

Boosters	Frequency	Percent
Certain	09	2.9
Found	42	13.4
Find	28	8.9
No doubt	05	1.6
Evident	04	1.3
Should	25	8.0
Prove	11	3.5
Show	62	19.7
Established	11	3.5
Shows	13	4.1
Demonstrates	09	2.9
Clearly	09	2.9
Demonstrated	04	1.3
In fact	07	2.2
Claimed	05	1.6
Showed	17	5.4
Must	08	2.5
Believe	08	2.5
Know	05	1.6
Clear	07	2.2
Never	02	1.9
Actually	02	0.6
Obvious	02	0.6
Surety	02	0.6
Realize	02	0.6
Definitely	03	1.0
Shown	08	2.5
Total	**314**	**100.0**

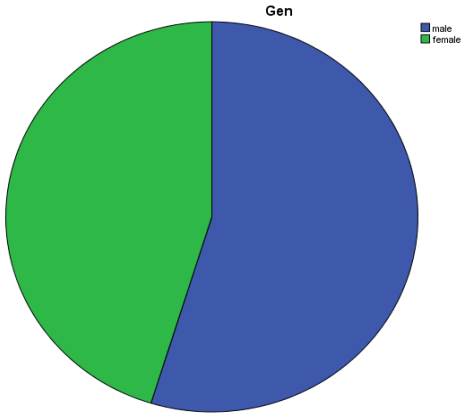

Figure 2: Graphic representation of Hedges Scores

DISCUSSION

The results showed that almost the same number of hedges and boosters were used in these research articles as we see that hedges used were 306 and boosters used were 314, there is only a slight difference in their frequency of occurrence. On the other hand, if the results of hedges used by females are observed it is known that females used more hedges than males and this difference was significant as we come to know while looking at the results that females used 205 hedges while in comparison males used only 101 hedges. This shows a great difference in the number of hedges used by both genders. Most commonly used hedges by bothering genders were *about*, *will*, *rather* and *would* as their number is high. When the results of boosters are taken into account, they show that male authors used more boosters than females. But, here the difference was not as significant as in hedges as there was a difference of 30 in both females and males. Most commonly used boosters were *found* and show. These results take to another important finding which is that females use more hedges and boosters than males collectively meaning that females employ more meta-discourse markers: hedges and boosters.

5. CONCLUSION

The purpose of this study was to distinguish differences in the use of meta-discourse indicators used by both male and female Pakistani research writers whose first language is not English. They have different mother tongues according to their region and they learn English as a second language. For conducting study abstracts, discussion and conclusion sections of research articles were selected and form these sections hedges and boosters were identified. As far as gender differences of male and female writers were concerned, females used more hedges and boosters than males collectively. Regarding hedges and boosters separately, females used more hedges than males while females used less boosters than males.

As it was described earlier in the article that hedges act as sources of adopting a careful and uncertain stance to the claims made, the use of hedges could be a strategy used by writers to "recognize their work" Hyland [1], as hedges give the authors a chance or opportunity to withdraw themselves from their given statement at a later time. So, the findings above can be concluded that females were more cautious in writing and reporting their thoughts than males. One potential reason for this style may be the amount of information and understanding of the writers regarding the use as well as the role of rhetorical indicators in their academic writing. The findings of the present study do not comply with Serholt's [27] previous study in which she claimed that males utilized more hedges than females. This difference and disagreement in findings could be due to the different cultural and social backgrounds of research participants. If the writing style of male writers is taken into account in regard of boosters, it was shown in the results that male gender in Pakistan was more committed to present strong commitments to their ideas and propositional statements than their opposite gender. Boosters are meta-discourse markers that show a high level of certainty in the importance of various results.

In addition, boosters are called the rhetorical devices which convey the author's perception as self-evident or as a widely accepted fact. One potential reason for this may be that males normally give their ideas in a more emphatic way than females and use a more positive writing style. These results are in disagreement with the earlier results of research conducted by [27] in which she presented that female writers employed more boosters than males. In conclusion, Pakistani research article writers have been found to be different in the use of meta-discourse markers to raise concerns (hedges) and certainty (boosters) in the context of their gender. Male writers usually tend to use more boosters than female writers when providing their comments. Moreover, female writers employed more hedges in expressing their ideas and propositions than males. In summary, gender is of vital importance while using rhetorical devices in academic papers. Moreover, these findings showed that females appeared to use more hedges and boosters respectively as relative to their male counterparts.

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