

# How Gender Influences Arab Academics' Using of Certainty Markers

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## Abstract

One of the most significant abilities of professional communication in academic writing is articulating uncertainty and conviction. In this context, this study aims to identify whether a researcher's gender affects their use of interactional metadiscourse, particularly certainty markers, in published research articles written by Arab academics. The study data is collected from twenty research articles from international refereed journals. As the study analyses the effect of two variables (male vs. female) on the use of interactional metadiscourse (certainty markers), a t-test was used to analyze the data. The data analysis revealed significant differences in the effect of gender on the use of interactional metadiscourse markers in favor of female researchers. Based on these findings, the study recommends that educational institutions offer systemic training packages to help postgraduate students and novice researchers to write theses and research articles that reflect these developments.

**Keywords:** Arab academics, certainty markers, gender, professional communication

## 1. Introduction

The metadiscourse features of research articles have been extensively studied in the last three decades (Abdi, 2012; Lee and Casal, 2014; Bruce, 2016). Generally speaking, metadiscourse refers to the devices or resources writers use to organize discourse, engage the audience, and signal the writer's attitude towards both the propositional content and the audience.

The above studies fall into three categories: metadiscourse and culture, metadiscourse and disciplines, and metadiscourse and genre. Writers' cultural backgrounds, and their native languages, are found to have a significant influence on their use of metadiscourse.

Previous research has identified genre, language, culture, and cross-disciplinary factors as the significant variables shaping metadiscourse in academic texts. However, most of these studies (e.g., Cao, 2014) have focused on interactive aspects of metadiscourse, more specifically on textual metadiscourse, which concerns the use of cohesive devices and expressing semantic relations between main clauses. Moreover, of the few studies, such as Hu and Cao (2011) that have focused on interpersonal relations in metadiscourse, very few interactional metadiscourse markers such as hedges, boosters, or engagement markers have been addressed.

Little is known about metadiscourse as a means of conceptualizing interpersonal relations and of how the writer's gender might affect the use of metadiscourse. Therefore, this study seeks to compare the use of metadiscourse in research articles from the humanities written by Arab academics of both genders. In more specific terms, the present study seeks to investigate how gender may affect the use of metadiscourse in academic discourse, particularly in the genre of research articles.

## 2. Research Questions

1. Does gender affect the use of metadiscourse in academic articles?
2. Do female Arab academics use hedges more frequently than their male counterparts?
3. Do male Arab academics use boosters more frequently than females?

## 3. Aims of the Study

This paper aims to identify whether there is any relationship between gender and the use of interactional

metadiscourse, with particular emphasis on the different uses of hedges and boosters in academic articles written by both male and female Arab academics.

#### 4. Literature Review

One of the most crucial professional communication competencies and the ability to convey uncertainty and assurance in scholarly work. Hyland (1998) believes that, because of their interactional features in the process of writing, the expression of doubt and certainty cannot be maintained separately from academic writing. The importance of this writing style stems from the role they play in articulating a balance of conviction and precaution, which makes research writing more probable to be accepted by academics. Several studies have shown the omnipresence of boosters and hedges as rhetorical devices in the English research paper. Apparently, not only in verbal argumentation but also in harder knowledge, such as physics (Hyland 2005; 2006). This proves that hedges and boosters, as components of metadiscourse, play an influential role and form central pragmatic features in involving inducing and convincing readers to satisfy the writer's claim. However, studies reported the fields of discipline could affect the amount and use of rhetorical devices.

Similarly, studies found differing findings on whether writers were more cautious or tentative (i.e., employed hedges at more effective rates) than non-native colleagues in other languages. "An overwhelming literature has shown the centrality of this socio-pragmatic phenomenon in Anglo-American scientific/academic writing using different approaches," Salager-Meyer (2011) argues, "but no genuine consensus has been reached." One of the unsolved problems regarding the utilization of hedges and boosters in research articles centered on the degree of something like the sociocultural context in which the articles were published and the researchers' field of study. Other research has studied how such interpersonal features are employed in English, and other languages, including Persian, French, and Norwegian (Vold, 2006b). Readers considered articles with an appropriate balance of hedges and boosters more persuasive than texts with a skewed frequency of any of these strategies, according to Dafouz-Milne (2008). In his work "comparative study of boosting in academic texts: he studied boosters in media articles," Yagiz, O., and Demir, C. (2015) aimed to ascertain if Japanese EFL learners or native English writers used boosters in their writings. This revealed that non-native Japanese, whether they were EFL or ESL learners, lacked lexical variation of boosting procedures. In this regard, my finding concurs with the present study.

Kobayashi (2009) examines the corpora in terms of statistical inclusion of certainty markers in research papers published in English by Turkish, Japanese, and Anglophonic writers and then explains the results of analytical techniques in terms of linguistic and cultural aspects. The data for this study came from a corpus of 60 published research authored in English by 20 Anglophonic authors, 20 Japanese authors, and 20 Turkish authors. As per the results, Anglophonic authors used the most adverbial boosters, while Turkish authors used the least. Japanese authors come out on top when it comes to adjectival enhancing devices, whereas Anglophonic authors come in last. Anglophonic writers utilized verbal boosters 157 times, whereas Japanese and Turkish authors employed them practically at the same rate: 143 and 144 times, respectively. The use of epistemic modal boosting devices was taken into account. The findings of this investigation back up the findings of the present study on the use of boosting devices.

Vassileva, I. (2001). In English and Bulgarian academic writing, examined commitment and detachment. The finding showed that Bulgarians are ignorant of the need for hedges, failing to match the discourse community's expectations.

#### 5. The Study Method

To meet the research objectives and answer the questions formulated for this study, a corpus of twenty research articles (hereafter RAs) was constructed to represent the data, consisting of ten RAs written by male Arab academics and ten written by female Arab academics). The articles were carefully read word by word to identify and locate examples of interactional metadiscourse, particularly certainty markers (hedges, boosters). The data of the study follow Tse and Hyland's (2004) model of metadiscourse (n MDs) as their model is comprehensive and has been used by recent scholars such as Kawas (2015) and Lee and Deakin (2016). In selecting the RAs, we used a probability sampling method, which involved a combination of stratified sampling with random sampling. All the RAs from the selected journals were published from 2010 to 2017 and were taken from the Michigan university corpus, known as the MICUSP corpus of written academic papers. A link to the corpus is attached in the appendix. They were all extracted and included in the sampling pool. Our focus was on full-length, original RAs, so any non-empirical articles, such as review articles, theoretical discussions, research notes, and brief reports, were excluded. Next, the abstract and method section of every extracted empirical RA was scanned, and the RAs were coded according to the gender of their author(s).

## 6. Procedure

After selecting the RAs from the international refereed journals specified above, the researcher focused on each article's introduction, discussion, and conclusion sections. Then the previous three sections of the chosen articles were carefully read word by word to identify and locate the metadiscourse markers. Finally, a manual frequency count and a machine-supported strategy, UAM Corpus Tool (version 2.8), were used to record the number of words and identify the interactional metadiscourse markers, specifically certainty markers (hedges and boosters).

A T-test was used for the two independent groups to test the difference in the employment of interactional metadiscourse according to the writer's gender. In addition, a statistical test was employed in which the alpha value was set at 0.05.

## 7. Results and Analysis

The following table (Table 1) summarizes the descriptive statistics of each primary type of certainty marker by gender. In terms of frequency of MI per 1,000 words, hedges were the most frequently used primary type of certainty marker in the present study, accounting for an overwhelming majority of the metadiscoursal interactional resources. The relative frequency of boosters was more or less similar in the corpus.

Table 1. Gender differences in the use of certainty markers

| Dimensions    | Groups | N  | Mean  | Std. | T    | Sig.  | Conclusion   |
|---------------|--------|----|-------|------|------|-------|--|
| <b>Hedges</b> | Female | 10 | 105.3 | 8.74 | 29.9 | 0.001 | There is a considerable difference in favor of females between the two groups. |
|               | Male   | 10 | 064.1 | 8.07 |      |       |  |
| Booster       | Female | 10 | 23.11 | 8.42 | 1.30 | 0.193 | In this dimension, there is no substantial difference between the two groups.  |
|               | Male   | 10 | 24.51 | 3.84 |      |       |  |

The T-test run on hedges found that Alpha is significant at 0.05; N= 10; Std. = 8.78 T= 29.5; Sig = 0.001. There is a significant main effect of gender in favor of female RA writers, who used hedges more frequently than their male counterparts. The T-test run on boosters found that Alpha is significant at 0.05; N= 10; Std. = 8.07 T= 1.30.; Sig = 0193. There was no significant main effect of gender found in the use of boosters.

The above analysis suggests that hedges in the RAs' rhetorical Sections can adopt several shapes and serve a range of purposes in the discourse. Hedges were often used by the RA authors in this corpus to vary the degree of certainty in their assessments of study findings, to negotiate explanations, and to speculate on research limits and consequences. The examples of the findings discussed above support the study results that there were significant gender differences in the frequency of the use of hedges. However, there were some discrepancies between the results of this study and those of some previous studies (e.g., Hyland, 1998a, 2005c; Vold, 2006). For example, the normalized frequency of hedges was 9.09 per thousand words used by female writers in this study, which differed somewhat from the frequency of 13.3 per thousand in Hyland (1998a), 18.0 per thousand in Hyland (2005c), and 3.3 per thousand in Vold (2006). The results of this study are more consistent with Lafuente-Millán's (2008) study, where the normalized frequency for hedges was 8.95 per thousand words. Some studies have suggested that men and women favor distinct language features in expressing themselves.

Comparing the use of boosters in this study with the other studies in the literature, there were some discrepancies between the results of this study and some previous research comparing native and non-native writers of English. For instance, Vassivela (2001) found that Bulgarian English authors employ boosting devices more than native writers of English, especially in the discussion sections of their writing, which differs from the results of this study that indicates the opposite. Contrary to both studies indicated above, some scholars, such as Yagiz and Demir (2015), who investigated boosters in media articles, did not report any statistically significant difference between American and non-native news articles regarding the frequency of boosters. Kobayashi and Nozomi's (2009) study, which aimed to detect whether Japanese EFL learners or native writers of English included more boosters in their texts, revealed that the Japanese, as non-native speakers of English, regardless of being EFL or ESL learners, lacked lexical variation in their use of boosting devices. This Japanese study accords with the present study in this regard. Since metadiscourse features such as boosting embed themselves in culture-specific situations and environments where the learners have been trained and thus will differ according to individual cultures, it is recommended that cultural influences should be considered in their study. Therefore, studies with the same aim will not necessarily provide the same results in the different cultural contexts in which they are investigated. Therefore, the indeterminacy of studies in the literature regarding the use of boosting devices can easily be better understood if examined thoroughly from a cultural perspective.

## 8. Conclusion

This study is significant for novice researchers seeking to participate in their respective academic discourse communities. In addition, the study results may have practical pedagogical implications for academic writing courses as the use of metadiscourse features, particularly hedges and boosters, characterizes the academic communities in which writers of academic disciplines engage with texts and represent themselves to their readers. This study has academic implications for the practice of writing. It is also hoped that it may benefit novice writers in assisting them in adhering to the rules and expectations of their academic discipline and satisfy gatekeepers so that novice writers may become more easily socialized into their disciplinary communities.

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