

**A Discourse Analysis of Gender Differences in the Use of Hedging  
Devices in Applied Linguistics Research Articles**

**Mohammad Taghi Hassani\***

*Assistant Professor, Imam Hossein University*

**Motahareh Dastjani Farahani**

*MA in TEFL, University of Alborz*

**Abstract**

Hedges are recognized to be of great significance in research articles since they are the tools to which the academic writers resort in order to give an appropriate representation of their findings. Many variables such as language, discipline, culture and language proficiency can influence the frequency of hedges in research articles. This study, however, focuses on the role of gender in the frequency of hedges and aims to investigate whether there is any difference between Iranian males and females in the use of these devices. To this end, 60 applied linguistics research articles by Iranian females and males from well-organized journals were randomly selected and the analyses of the hedges were based on Hyland's (1996a) model. The results of this study showed that there is a significant difference between males and females. Men make use of more hedges than women. Moreover, the findings showed that the discussion section of the articles included more hedges than the introduction section.

**Keywords:** hedges, gender differences, Iranian applied linguistics research articles, hedging devices, introduction, discussion

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\*Assistant Professor, Imam Hossein University, Tehran, Iran

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Email: *dr.mthassani@yahoo.com*

## **1. Introduction**

Men's and women's differences in the use of language have been of great interest for many discourse analysts. In the last several decades, there has been an explosion of research on the nature and existence of differences between men and women (Newman, Groom, Handelman, & Pennebaker, 2008) and gender differences have become an important issue in the study of linguistics. Weatherall (2002) states that there are important relationships between language and gender. According to Tannen (1990), women speak and hear a language of connection and intimacy while men speak and hear a language of status and independence.

Totally, there have been two main theories explaining gender differences in language: "Dominance" and "Difference" theories (Ha, 2008; Litosseliti & Sunderland, 2002; Tannen, 1990; Weatherall, 2002) and "Social Constructionist" theory, which has been recently added to theories of gender differences. The dominance theory on sex differences in speech is concerned with the imbalance of power between the sexes. According to difference theory, possible language differences between men and women are merely a result of different cultures (Karlsson, 2007). In simple terms, although men and women live in the same environment, they establish different relations with society as if each belongs to a different environment and culture the result of which is consequently reflected in the language of both genders (Nemati & Bayer, 2007). And according to the last theory, language shapes and is shaped by gender as a social reality.

## **2. Literature Review**

Research on gender in general and hedging in particular has been strongly influenced by Robin Lakoff's book, *Language and Women's Place* (Dixon & Foster, 1997). Lakoff (1975) argued that women's speech lacks authority because, in order to become "feminine", women must learn to adopt an unassertive style of communication. Lakoff (1975) coined the phrase "women's language" to refer to a group of linguistic devices that serve this function, including hesitations, intensive adverbs, empty adjectives, tag questions, compound requests and also *hedges*.

Hedging is the expression of tentativeness and possibility in language use and is crucial to scientific writing and academic discourse (Hyland, 1996a; Rounds, 1982) which enables academic writers to show their certainty or doubt towards their statements, to demonstrate the amount of confidence they put on their claims, and to start a dialog with

their readers (Falahati, 2004). Hedges are communicative strategies for reducing the force of statements. They convey both epistemic and affective meaning in academic discourse. That is, they not only carry the writer's degree of confidence in the truth of a proposition, but also an attitude to the audience (Hyland, 1996b). Through using hedges, writers leave some room for their readers to judge the truth value of assertion (Salager-Meyer, 1994). Some examples of hedging devices are the use of *may*, *assume*, *unclear*, and *probably*.

Recently, researchers, on the one hand, have become concerned about the use of hedges in scientific discourse, i.e. research articles and scientific texts (Hyland, 1994, 1995, 1996b; Salager-Meyer, 1994; Varttala, 2001; Vold, 2006) and on the other hand, trying to find gender differences in relation to this linguistic feature (Dixon & Foster, 1997; Holmes, 1986, 1990; Tannen, 1990, 1994).

Hedging is the expression of tentativeness and possibility and it is central to academic writing where the need to present unproven propositions with caution and precision is essential (Hyland, 1996a). "Academic writing is extensively hedged" (Hyland, 1995, p.35) since corpus studies show that hedging represents more than one word in every 50 words and this is supported by numerous discourse studies (Skelton; Adams, & Akher, as cited in Hyland, 1995). Moreover, "hedges allow writers to anticipate possible oppositions by expressing their statements with caution" (Hyland, 1996a, p.433).

Lakoff (1975) maintains that men and women are different in the use of linguistic forms. In her book, *Language and Women's Place*, Lakoff (1975) suggests ten features for women's language. However, in language and gender studies, there is a fact that should be accounted for here. It is related to the inconsistency of the results of studies; some of them support Lakoff's ideas but some reject them. Carli (as cited in Ghafarsamar & Alibakhshi, 2007) has reported that intensifiers have been found to be a feature of women speech while hedges are frequently used by men. Moreover, Holmes (1995), in her reanalysis of women's language, has argued that "women's use of hedges expresses interpersonal warmth and not linguistic tentativeness, as many researchers have maintained. It is typically men who "employ hedges to convey imprecision and tentativeness" (p. 89).

On the other hand, "most research on gender and language has focused on oral communication, typically examining conversational dominance and largely concluding that men and women make different use of linguistic resources available to them in interactions" (Tse & Hyland, 2008, p.1233). According to Sunderland (as cited in Waskita,

2008), most of gender studies have focused on spoken language and just a few studies have been conducted on written discourse of individuals. This could be explained by the fact that speaking skill is commonly used as the measure of language ability.

Many studies (Brown & Levinson, 1987; Ghafarsamar & Alibakhshi, 2007; Ha, 2009; Holmes, 1986) have focused on the use of linguistic forms in the language of men and women in different kinds of written and spoken discourse, but no study has been conducted on Iranian men's and women's use of hedging in their writing. To shed more light on this issue, this study aims to focus on the use of hedging in applied linguistics research articles to see whether there are any differences between men and women regarding the use of hedging.

The study of gender and language began with Robin Lakoff's 1975 book entitled *Language and Woman's Place*. In this book Lakoff (1975) pointed that there is a "women Language" or "register" which shows women's inferior role in society. She stated that women use a kind of language that is representative of how they are treated in society and how they are expected to behave. This type of language which is specific only to women and not to men is the one that is not standard enough compared to men's. Obviously, Lakoff considered women's language "to be inferior to men's language, which she described as direct, clear and succinct" (Weatherall, 2002, p. 57).

Many scholars like Tannen (1994), Coates (1996), and Priesler (1986, as cited in Dixon & Foster, 1997) supported her ideas. Priesler (as cited in Dixon & Foster, 1997) for instance, supported Lakoff's theory of "women's language" in a study in which he concluded that "British women participating in group discussion used more signals of tentativeness than men" (p. 90). On the other hand, many other researchers like Holmes (1990) and O'Barr and Atkins (1980) did studies on this issue and concluded that Lakoff's theory of "women's language" does not exist.

O'Barr and Atkins (1980), for example, did a research to investigate whether female witnesses differed linguistically from male witnesses in the court, focusing on the 10 features which were suggested by Lakoff (1975) as "women's language". They investigated 159 hours of trials in 30 months. They found that "women's language" was a language of "powerlessness" and the features offered by Lakoff are, by no means, limited to women. According to their results, both women and men made use of the ten features. This finding indicated that the factor of gender in the use of these features was irrelevant and that both women and men used the features when they had low social status. For instance,

the frequency of the features in the speech of one of the female witnesses who was a doctor was less than that of a male witness who was the driver of an ambulance. Another factor influential in the presence of the features of “women’s language” in the speech of both female and male witnesses was recognized by O’Barr and Atkins (1980) to be the previous experiences of the speakers in the courts (Coates, 1990 ). In a nutshell, O’Barr and Atkins (1980) rejected Lakoff’s (1975) theory and suggested that “powerless language” is a better term for those ten features.

However, it should be taken into account that although her theory has been called into questions by different scholars for being based on personal observations, hypothetical examples and “anecdotal methods” (Rhiannon, as cited in Nemati, 2002, p. 24), no one can deny that her *Language and Woman’s Place* has been a landmark in gender and language studies in many different fields of research such as linguistics, anthropology, sociology, and psychology (Weatherall, 2002) and that her work has inspired many studies and theories in this field of study. Moreover, the name of Lakoff as the pioneer of gender studies is referred to almost in most of the research done so far in this area.

Accordingly, the main question of this study is if there is any significant difference between Iranian men and women in the use of hedging devices in their applied linguistics research articles.

### **3. Method**

#### *3.1. Data and Data Selection Criteria*

The data for this study consists of 60 applied linguistics research articles written by Iranian men and women (30 by men and 30 by women). They were published in leading international and Iranian journals during the last decade from 2005 to 2011. Research articles were selected based on similarities of content and language. These similarities (Falahati, 2004) were based on three criteria: the first major criterion is the approximation of the topics. Approximation of topics refers to the similarity of the content of the research articles which could be tested through searching key words, titles, type of study, and also list of references. The second criterion is the traditional IMRD (Introduction, Method, Results, and Discussion) sections in the research articles. This study focused on two rhetorical sections of the research articles, introduction and discussion, because in these two sections, according to Hyland (2000, as cited in Falahati, 2004), “writers mainly establish the significance of the study and make generalizations regarding the major findings” (Falahati, 2004, p.41). The third criterion is the date of RAs publication. All articles were limited to those published within the last ten years. It is assumed that

time influences the style of the writers and due to the limitation this factor has been taken into account (Falahati, 2004). For the purpose of the study, all footnotes, long quotations, tables and figures which appeared in the research articles were removed from the data. Once the research articles were selected, they were analyzed in terms of the frequency of hedges. The methods and procedures used for analyzing the data are discussed in the next section.

### *3.2. Procedures of data analysis*

The main objective of this study was to examine the frequency of occurrence of hedges across the two sets of data: Iranian applied linguistics research articles written by men and women. In order to meet this goal, two rhetorical sections of sixty research articles consisting of 95,064 words were analyzed.

The data were analyzed both in terms of forms and function of hedges. In the first analysis, the lexical items acting as hedges according to a list from Holmes (1988), Hyland (1996a, 1998), Hyland and Milton (1997), and Varttala (2001) were identified and classified into five categories of analysis: modal verbs, lexical verbs, adverbs, adjectives, and nouns.

After determining the frequency of hedges in two rhetorical sections of research articles and classifying them into five categories of forms and one category of function, the total words used in each section were counted. Because of the variation in the size of research articles and two rhetorical sections, the researchers decided to calculate the frequency of hedges per 1,000 words. Therefore, in order to show the distribution of hedges across two sets of data and two rhetorical sections of research articles, the frequency of occurrence of forms and function of hedges were calculated per 1,000 words in these two sets of data.

To find out the difference in the category distribution of hedges between Iranian men's and women's applied linguistics research articles, the frequency of each category of hedges per 1,000 words and their percentage were also computed in the two sets of data. Moreover, in order to test whether there is a significant statistical difference between these two sets of data in the distribution of hedges across two rhetorical sections of articles, the Chi-square test was used.

## **4. Results and Discussion**

### *4.1. Results*

The researchers will present and discuss the results of the present study as follows:

1. Those related to rhetorical distribution of hedging in Iranian applied linguistics articles of men and women researchers.
2. Those related to categorical distribution of hedging in Iranian applied linguistics articles of men and women researchers.

#### *4.1.1. Rhetorical Distribution of Hedges in Men's and Women's Applied Linguistics Research Articles*

In order to find out the differences between Iranian men and women researchers in the distribution of hedging devices, first the researcher calculated the distribution of hedging devices in two rhetorical sections of research articles and their overall distribution in the two sets of data. Then the distribution of hedging in each category was also computed to find any similarity or difference between Iranian men's and women's applied linguistics research articles in the use of different categories of hedging devices.

##### *4.1.1.1. Rhetorical Distribution of Forms of Hedges*

The frequency of forms of hedges was calculated per 1,000 words across two rhetorical sections of the two sets of data: introduction and discussion. Table 1 presents the total number of words, the frequency of forms of hedges across two sections of men's applied linguistics research articles.

Table 1.

#### *Frequency of Forms of Hedges across Two Rhetorical Sections of Iranian Men's AL Research Articles*

	Introduction	Discussion
Total words	20,541	28,384
Forms of hedging	751	1,190
Frequency per 1000	34.80	43.45

As it is shown in Table 1, the frequency of forms of hedges in introduction of men's articles is 34.80 per 1,000 words, the frequency of forms of hedges in discussion section is 43.45 per 1,000 words and the total frequency of the forms of hedges is 40.50 per 1,000 words. It also indicates that the highest occurrence of forms of hedges is in the discussion section.

Table 2 also presents the total number of words, the total frequency of forms of hedges and their frequency in two sections of women's applied linguistics research articles. The results of Table 2 show that the total frequency of forms of hedges in women's applied linguistics research articles is 29.84 per 1,000 words. Table 2 shows that the discussion section is more hedged than the introduction section.

Table 2.

*Frequency of Forms of Hedges across Two Rhetorical Sections of Iranian Women's AL Research Articles*

	Introduction	Discussion
Total words	21,173	25,966
Forms of hedges	626	781
Frequency per 1000	29.56	30.07

A comparison of the distribution of forms of hedges between these two sets of data indicates that articles written by Iranian men are more hedged than those written by Iranian women.

*4.1.2. Rhetorical Distribution of Function of Hedges*

The frequency of function of hedges was also calculated per 1,000 words across two rhetorical sections of the two sets of data: introduction and discussion. Table 3 presents the total number of words, and the frequency of function of hedges across two sections of men's applied linguistics research articles.

Table 3.

*Frequency of Function of Hedges across Two Rhetorical Sections of Iranian Men's AL Research Articles*

	Introduction	Discussion
Total words	20,541	27
Functions of Hedges	161	381
Frequency per 1000	7.83	13.91

As Table 3 shows, the frequency of function of hedges in introduction section of men's articles is 7.83 per 1,000 words, and the frequency of function of hedges in the discussion section is 13.91 per 1,000 words. The frequency of function of hedges in introduction section of women's articles is 4.91 per 1,000 words and in discussion section is 8.39 per 1,000 words.

A simple comparison of these two tables indicates that the distribution of function of hedges in men's and women's applied linguistics research articles is different. In order to find out the differences in the distribution of categories of hedges in the two sets of data, first the frequency of hedges in each category per 1,000 words and then their percentages were calculated.



Table 4.

*Frequency of Function of Hedges across Two Rhetorical Sections of Iranian Women's AL Research Articles*

	Introduction	Discussion
Total words	21,173	25,966
Function of Hedges	104	218
Frequency per 1000	4.91	8.39

#### 4.1.3. Categorical distribution of hedges in men's and women's AL RAs

Table 5 shows the distribution of five categories of hedges in men's applied linguistics research articles. According to this Table, modal verbs (25.66%) and adjectives (22.99%) are the mostly used categories as hedges in men's research articles

Table 5

*Categorical Distribution of Forms of Hedges in Men's AL Research Articles*

Categories of Forms	F per 1,000 w	percent	Raw Number
Nouns	.42	11.12	212
Adjectives	9.13	22.99	438
Adverbs	7.19	18.11	345
Modal Verbs	10.20	25.66	489
Lexical Verbs	8.78	22.09	421
Total	39.72	99.97	1905

Note. F= Frequency, W= Words.

Table 6 presents the distribution of five categories of hedges in women's applied linguistics research articles. It shows that modal verbs (30.27), lexical verbs (20.68) and adjectives (20.35) are the most frequently used hedging devices in Iranian women's research articles.

In order to test whether there is a significant difference between the frequency of hedges across two sections of the articles in these two sets of data, a Chi-Square test was used. The Chi-square observed value of 134.91 ( $P = .000 < .05$ ) indicates that there is a significant difference between Iranian men and women in their use of hedging devices in their applied linguistics research articles. Thus the null-hypothesis is rejected.

Table 6

*Categorical Distribution of Forms of Hedges in Women's AL RAs*

Categories of Forms	F per 1,000 w	percent	Raw Number
Nouns	3.89	13.00	183
Adjectives	6.04	20.35	285
Adverbs	4.70	15.77	222
Modal Verbs	9.03	30.27	426
Lexical Verbs	6.17	20.68	291
Total	29.83	1000	1407

Note. F= Frequency, W= Words.

#### 4.2. Discussion

The main purpose of this research was to study the role of gender in the frequency of hedging devices in applied linguistics research articles. Moreover, this study investigated the role of different rhetorical sections of articles in the occurrence of the hedges, focusing on introduction and discussion sections of articles.

In order to answer the research question, 60 articles written by Iranian men and women were analyzed based on Hyland's (1996a) framework of hedges. The results, as presented in the previous sections of this article, showed that Iranian men made use of more hedging devices in their research articles than Iranian women. More specifically, out of different lexical devices acting as hedging forms in these research articles, *modal verbs* and *adjectives* were more common in men's articles and quite similarly but with lower frequency *modal verbs*, *lexical verbs* and *adjective* were the most popular hedging devices in the articles written by women.

This finding rejects Lakoff's (1975) claim that hedges as one of the ten features of "women's language" are used more by women and are a characteristic of women's language. On the other hand, this finding is consistent with the findings of Holmes (1990) and Yaghchi, Iyeiri, and Okabe (2004) which concluded that men make use of more hedges than women do.

According to the existing literature, the frequency of hedges can depend on some variables such as language (e.g. Atai & Sadr, 2008; Vold, 2006), culture (e.g. Atai & Sadr, 2008), discipline (e.g. Emami, 2008; Falahati, 2004; Varttala, 2001) and language proficiency (Hyland, 1996b). The finding of this study adds the variable of gender as an equally influential factor in the frequency of hedges in research articles, and in this way can enrich the existing literature on hedges and academic discourse.

The reason for the high frequency of hedges in men's applied linguistics research articles investigated in this study might be related to different factors. This can possibly be due to men's language proficiency since according to Hyland (1994; 1996a; 1996b; 2004) language proficiency is influential in the frequency of hedges.

This study also investigated the distribution of hedges in two sections of introduction and discussion in the applied linguistics articles by Iranian men and women writers. The results of the analyses showed that the discussion sections of the articles were more hedged. This finding lends support to the findings of previous studies: Hyland (1996b), Varttala (2001), Falahati (2004) and Emami (2008). All these studies concluded that the discussion sections in research articles, regardless of the disciplines, contain more hedging devices compared to the other sections like abstract, introduction, etc.

This variation between the discussion and introduction sections of the articles analyzed in this study can be explained by the different purposes served by these sections. In the introduction sections, writers usually aim to persuade the readers of the significance of their study, attract the readers' attention and make them interested in the study.

In the discussion section of the articles, writers are supposed to make claims, find reasons for the findings, and offer their interpretations and suggestions by referring to the previous studies. However, the writers are also well aware that they have to be possibly cautious about how they put forward their reasons and interpretations of the results in order to avoid any possible negation or criticism from other researchers (Hyland, 1995; Hyland, 1996b; Salager-Meyer, 1997). In other words, by trying to mitigate the force of their statements in this section which is mostly considered to be the most important part in a research article, the writers try to gain support from the editors of the journals and other researchers to be accepted as a member of the academic community.

## **5. Conclusion and Pedagogical Implications**

Lakoff (1975) claimed that hedges are one of the features of women's language showing their lack of power in society. She stated that women use hedges to show their tentativeness and lack of confidence. After the introduction of this theory, many studies have been done so far to examine the truth value of what Lakoff (1975) recognized as "women's language" (e.g. Holmes, 1990; Nemati, 2002; O'Barr & Atkins, 1980).

However, most of the studies which aimed to investigate gender differences in the use of hedges focused on spoken discourse. This study aimed to fill in the gap and examined the role of gender differences in the use of hedges in the Introduction and discussion sections of applied linguistic research articles written by Iranian men and women writers.

After analyzing and uncovering the hedging devices in the research articles based on Hyland's (1996a) category, the researchers obtained the following results:

- 1) It was found out that articles written by Iranian men are more hedged than those articles written by Iranian women.
- 2) Among the five major lexical words recognized to act as hedges *modal verbs* and *adjectives* were found to be the most common hedges applied in men's research articles. Similarly, *modal verbs*, *lexical verbs* and *adjectives* were found to be the most frequent hedging devices in women's research articles.
- 3) It was also discovered that the discussion section had higher distribution of hedges than the introduction section.

Considering these findings, it can be concluded that Iranian men and women are different in the use of hedges in applied linguistics research articles and the finding that men use more hedges than women rejects Lakoff's (1975) theory.

As for justification for the results of this study, the researchers guess that maybe there are two reasons about why Iranian men use more hedges than Iranian women. First, it might be related to the language proficiency of Iranian men in comparison to women. This means that because men have more language proficiency, they consciously or unconsciously use more hedges in their writing. Or the fact might be related to social status and context of Iran. As such it can be stated that women researchers in Iran do not use more hedges in their writing because they are not fearful of being criticized or maybe they do not feel they have low social status in comparison with men researchers.

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