

## The Use of Hedging Devices in Conclusion section of the Research Articles of English Teaching by Native and Non- native authors

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**Abstract:** Hedging is a kind of expression which transfers the indeterminacy in message and through which, authors of academic articles can present their claims and arguments cautiously and politely. This article aimed at investigating the types and frequency of hedges used by Persian and English native speakers in the conclusion section of academic research articles in the field of English Teaching. To this end, 80 English teaching research articles published in national and international journals were randomly selected and their hedging devices in conclusion section were analyzed according to Salager-Meyer's (1994) taxonomy. To find out about the significance of difference, Chi-square was run. The results of the study indicated that, there is no significant difference between native and non- native authors in the use of hedging devices. The results evidenced that the majority of the non-native authors uses hedges in the same way as their native counterparts, which reflects the fact that the use of hedging devices is more related to discipline, rather than nationality of authors and non-native authors can exploit their linguistic devise to present their ideas more effectively as native authors. The findings of this study could be applied in genre based academic writing instruction focusing on rhetorical structures.

**Keywords:** Hedging devices, Conclusion section, Salager-Meyer's (1994) taxonomy

### Introduction

A communicative interaction between authors and readers is an important factor in all academic research articles. Academic research authors by the use of rhetorical strategy marker, like hedging devices try to define and prove their close relationship to the research community.

Corpus linguistics was the first discipline in which hedging was studied in academic writing (Hyland, 1998; Myers, 1989; Salager-Meyer, 1994). Hedging has been explained as "words or phrases whose job is to make things more or less fuzzy" (Lakoff 1972).

Hedging devices are significant in academic paper, because they have double responsibility of both confirming the individual's professional personality and representing a critical element in the rhetorical means of gaining acceptance of claims (Hyland, 1996)

According to Hinkel (1997), hedging devices are among vital features for essential elements of academic argument for supporting or rejecting hypotheses or theories. Through hedging, authors

can express their own ideas and interpretations, and have an independent position for presenting their claims (Hyland, 1998). Hedging devices can be used as a factor for decreasing or increasing the effects of statements (Hyland, 1994). Holmes (1982) explains hedging devices main role as a rhetorical device for expressing politeness and respect toward others and providing an opportunity for readers to disagree.

For House and Kasper (1981) hedging devices are regarded as mitigating devices like down-toners, under-staters, or play-downs.

Hyland (1996b), elaborates that hedging can be used for expressing tentativeness and possibility and in his article refers to two main purposes for using hedging devices as follows: 1) when there is a lack of complete commitment to the reality of a proposition and 2) When there is a desire for not expressing that commitment.

In the same way, Bruce (2010) relates hedging to all situation of text in which there is a lack of commitment and pointed out that the effect of hedging devices on the discourse can be measured by considering their effects on the whole meaning or the message of the text.

Implication of vague and acceptable statements for the reader and reducing the risk of negation in interpretations are two main purposes that Salager-Meyer (1994) claimed for the use of hedging devices. In this regard, Geyer (2008) mentions that hedging devices are among the types of politeness strategies. The idea that hedging devices can be regarded as a positive politeness strategy because it reflects positive face of the hearer has been ratified by Crompton (1997) as well. In contrast to the mentioned ideas, Riekkinen (2009) asserts that hedging devices are applied as a kind of negative politeness; because, there is a tendency in the authors to be indirect and try to change the statements in order to make it more acceptable to reader.

There are several taxonomies for analyzing hedging devices like that of Myers (1985), Hyland (1996a, 1996b) and Salager-Meyer (1994). The present study following the studies of Vázquez & Giner, (2008), Jalilifar, (2011), Bonyadi, Gholami & Nasiri, (2012) has worked on Salager-Meyer (1994) taxonomy that is categorized into five types.

1. Shields which consists of modal verbs expressing possibility; semi-auxiliaries, possibility adverbs and their derivative adjectives, epistemic verbs and their derivative nouns.
2. Approximators of quantity, frequency, degree and time
3. Expressions of the authors' personal doubt and direct involvement
4. Emotionally charged intensifiers that are used for projecting the authors' reaction
5. Compound hedges which are composed of strings of hedges and could be double hedges, treble hedges and etc.

According to Simpson, (1990), the use of hedging in academic articles depends on the readers or audiences, who are addressed by that journal. There is an approximately fixed pattern to be followed up regarding the case of using hedging devices in academic research articles

Spillner (1983), cited in Abdi, & Behnam (2014) pointed out that field of the research is another factor that has a deterministic role in the appropriate use of hedging devices, for instance, in the majors in which the use of statistics and logical reasoning is not common, by the correct use of hedging devices, credibility can be achieved and the author can persuade the readers that he is putting forward acceptable ideas and interpretations. Interestingly, there are some studies which have emphasized on the deterministic role of kind of language on the frequency and types of hedging devices to be used in academic research articles. (Connor, 1995).

In support of the above mentioned claim, Bloor and Bloor (1991) pointed out that there exist crystal clear differences in amount of directness encouraged in academic research articles in different languages.

Several studies, like the one by Vande Kopple and Crismore (1990), pointed out that readers are more enthusiastic and evaluative toward the reading of hedged texts. The importance of hedging in academic research articles for making them more textually precise and improving the underlying interpersonal relationship has been emphasized in Varttala (1999).

Salager-Meyer (1997), regarding the importance of hedging device use refers to the point that a style of writing that lacks appropriate hedging devices could not be taken seriously by academic journal editors. It could be clarified in this way that, hedging device use could have some benefits like producing a friendly and open atmosphere and sets the scene for reader to express his or her ideas freely and criticize the claims that was mentioned by the author of article. Lack of hedging may cause that authors ideas and interpretations seems to be offensive and arrogant. (Abdi, & Behnam 2014)

Generally, it could be pointed out that, the authors who employ hedges in writing their research articles and academic papers would appear to have greater opportunities to get their papers published than the ones who do not use these devices.

The present study tries to investigate the types and frequency of hedges used by Persian and English native speakers in the conclusion section of academic research articles in the field of English Teaching to find out about the possible similarities and differences in rhetorical structure, and the use of hedging devices between native and non- native authors. It is expected that the findings of this study would be of help to Iranian academic authors to be more successful in publishing research articles in national and international journals.

### **Review of Related Literature**

Regarding the case of investigating the types and frequency of hedges used by Persian and English native speakers in the conclusion section of academic research articles in the field of English Teaching, Vassileva (2001) has worked on the analysis of linguistics research articles in in English, Bulgarian, and Bulgarian English for investigating the similarities and differences in interpersonal metadiscourse markers. The results showed considerable differences in the use of hedges in the article.

Atai & Sadr (2008) on their study have worked on the effect of language/culture on the use of hedging strategies by English and Persian Native Speakers in English applied linguistics research articles and concluded that there were some significant differences between use of hedging devices by these two groups. English academic authors use a variety of hedging devices for expressing tentativeness and their commitment in their findings. In the same line with this study, Samaie, et al. (2014) in their study, after examining the types and frequency of hedging devices used by Persian and English speakers in the introduction part of research articles in the field of literature, indicate that English authors in putting forward their claims and in rejecting or confirming the ideas of others are more tentative in comparison with Persian authors.

Mojica (2005) worked on the comparison of using hedging devices between engineering and linguistics research articles and found no significant difference in two groups of authors' ways of expressing commitment and detachment to their ideas.

Results of the study by Martin (2008), about analyzing hedging devices in Spanish and English written academic research articles in Clinical and Health Psychology disciplines has shown that, although there are some differences between the authors in two disciplines, but it is not significant and in line with several studies, pointed out that the role of proficiency in writing style is more important than nationality of academic research article authors.

Jalilifar (2007a) did a study on the context and frequency of hedges in Humanities and Natural sciences articles by English and Iranian authors and found some insignificant differences that clarify intention of research article authors to be objective and direct in proposing their claims and presenting their results.

After comparing Japanese and American research articles, Iida (2007), found out that there was no significant difference in the frequency of hedges devices use in all parts of medical research articles. The results of Winardi (2009) research on the difference between Chinese and American authors in applied linguistics major has shown that, the proficiency of both groups in the use of hedging devices were similar, but, they were different in the application of different types of hedging devices.

Šeškauskien (2008) investigates the use of hedging devices according to Swales' IMRAD model in the introduction part of English articles by Lithuanian and found out that, these non- native

students has the potential to produce texts which are rich in terms of hedging devices comparable with native authors of English research articles.

Clyne (1991) worked on a study about the use of hedging devices in research articles of two languages of English and German and reach to the conclusion that German authors use more hedging devices than English authors. In another similar study Burrough-Boenisch (2005) after analyzing the discussion section of research articles of authors from eight countries found out that French scientists have a tendency to under-hedge.

Behnam & Mohseni (2014) in an article with the name of “The use of hedging in research articles” in which they examine introduction and conclusion parts of 30 academic research articles from English and psychology disciplines, found out that authors in both disciplines mostly preferred to use type 3 and regarding the types 2 and 4 show the least preference.

In another study, Yang (2003) after comparing Chinese and English in material sciences reaches to this conclusion that, Chinese authors because of having higher amount of approximators and lower amounts of shields has authoritative tone and are more direct in their academic research articles.

Regarding the occurrence of hedging devices in English and Persian research articles Davoodifard (2006), concluded that English authors used more hedging devices than Persian authors in their academic research articles.

To the best of our knowledge regarding the investigation of the types and frequency of hedges used by Persian and English native speakers in the conclusion section of academic research articles in the field of English Teaching, no work has been done yet in Iran and other countries. The following question guided the study:

1. Is there any significant difference between native and non-native English Teaching articles in the frequency and types of hedging devices used in their conclusion part?

## **Method**

### **Corpus**

The corpus of the present study was 80 English Teaching articles from national and international journals of, “TELL”, “Journal of Language Teaching and Research”, “Theory and Practice in Language Studies” and International journal of language learning and applied linguistics world” that 40 of them were written by native authors and the other 40 articles were written by non-native or Iranian authors. It should be pointed out that all the articles were published after 2000, so that, there wouldn't be any interfering effect related to the change of style during the time.

### **Procedure**

After selecting the articles from the international journals, the conclusion part of them was selected and carefully read several times word by word to locate, count, tabulate and classify hedging devices based on taxonomy of Salager-Meyer (1994). This taxonomy is composed 5 categories which are as follows:

Type 1 are called shields and include words like, ‘can’, ‘could’, ‘may’, ‘might’, ‘would’, ‘to appear’, ‘to seem’, ‘probably’, ‘to suggest’.

Type 2 are related to approximators of degree, quantity, frequency and time, like, ‘approximately’, ‘about’, ‘often’, ‘occasionally’.

Type 3 are the phrases which show, the authors' personal doubt and direct involvement, like, ‘I believe’, ‘to our knowledge’, ‘it is our view that’.

Type 4 included emotionally-charged intensifiers, like, ‘extremely difficult’, ‘really interesting’, ‘of particular importance’, ‘unexpectedly’, ‘surprisingly’.

Type 5 are compound hedges and include phrases and statements like, ‘could be suggested’, ‘would seem likely’, ‘would seem somewhat’.

After identification of hedges, the next step was to run Chi-square to find out, whether there are any significant differences between native and non- native authors of English Teaching articles in the utilization of frequency and type of the hedging devices.

## Results and discussions

### Data analysis

Using SPSS 18, the frequency of occurrence of hedging devices in English Teaching articles of native and non-native authors was calculated and tabulated in Table.1.

**Table 1:**

**Descriptive statistics for hedging devices use in conclusion part of English Teaching articles of native and non-native authors**

Hedging Type	Type 1:	Type 2:	Type3:	Type 4:	Type 5:	Total
Native or Non-native	Shields	Approximators	Authors' personal doubt and direct	Emotionally-charged intensifiers	Compound hedges	

Authors			involvement			
Native Authors	166	59	0	10	8	243
	68.5%	24%	0%	4%	3.5%	100%
Non-native Authors	158	68	0	12	10	248
	64%	27%	0%	5%	4%	100%

As the above table illustrates, approximately, the frequency of using hedging devices by native and non-native authors are the same. Among hedging devices, type 1 which is “shields” is the most frequently used hedging device by native and non-native authors of English Teaching articles. This result is in accordance with the results of Smith (1984) who pointed out that type 1 or “shields” are the most employed hedging devices in academic papers. In the same way, another study reported that in 1 out of 100 words in academic papers, modal auxiliary verbs which are included in type 1, are used (Butler, 1990). In addition, findings of Salager-Meyer (1994) and Trimble (1985) also supported this result. Regarding type 2 of hedging devices which are “approximators”, non-native authors tend to show their uncertainty toward the result more than native authors which could be related to Asian or Iranian way of thinking that they prefer to claim that their findings cannot be overgeneralized. “Authors personal doubt and direct involvement” category had the zero frequency for both native and non-native authors and it implies that in academic papers, authors are not interested in adding personal doubt or having direct involvement in conclusion of their research articles regardless of their nationalities.

The number of type 4 which is related to “emotionally-charged intensifiers” hedging was 10 for native authors. Non-native authors had the frequency of 12 for type 4 of hedging devices. The frequency of last hedging device which is type 5 or “compound hedges” was 8 for native authors and 10 for non-native authors. It should be pointed out that frequency of these last types of hedging devices in comparison with type 1 and 2 was rare. It may have this implication that authors of academic research articles try to base their conclusion on real facts and avoid using intensifiers and at the same time try to use brief, rather than long compound hedging devices.

In the next step for finding out, whether there is any meaningful difference between the number and types of hedging devices used between native and non- native authors of English Teaching articles, a Chi-square analysis was run for each type of hedging devices except the third one that had the frequency of zero for native and non- native authors.

**Table 2:**

**Chi-square analysis for the use of shields by native and non- native authors**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.000 <sup>a</sup>	3	.456
Likelihood Ratio	9.703	3	.238
Linear-by-Linear Association	2.0195	1	.925
N of Valid Cases	4		

As the above table illustrates, there was no significant difference in using shields as hedging device between native and non- native authors of English Teaching articles. These finding is in accordance with Nasiri (2012) who found that there was no significant difference in using shields by American and Iranian in writing Psychology articles.

In this study, approximators used less than shields, but were the most frequent of the rest of hedging devices. The present finding corroborated Hyland (1994) who pointed out that adverbials, nouns and adjectives are used less than lexical and modal verbs and their main function is expressing modality in texts. Like the case of shields, there was no significant difference in using approximators as hedging device between native and non- native authors of English Teaching articles. The results of Chi-square analysis for the use of approximators are given in table 3.

**Table 3:**

**Chi-square analysis for the use of approximators by native and non- native authors**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.000 <sup>a</sup>	3	.456
Likelihood Ratio	9.703	3	.238



Linear-by-Linear Association	0.890	1	.925
N of Valid Cases	4		

As the third type of hedging category “authors' personal doubt and direct involvement”, was not used by native and non- native authors as evidenced in table 2. It could be explained that, authors of academic papers based their conclusions on the academic findings of themselves and other researchers, rather than their personal ideas or interpretations.

The use of emotionally charged intensifiers by native and non- native authors, is used for showing responses that are related to shared knowledge, goals and experiences, rather than an individual or personal discovery or response (Myers 1989). The results of Chi square in table 4, has shown that native and non- native authors act the same way and use this type of hedging moderately. This could be justified that, authors of academic papers need to be meticulous and cautiously use emotionally charged intensifiers.

**Table 4:**

**Chi-square analysis for the use of emotionally charged intensifiers by native and non- native authors**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.000 <sup>a</sup>	3	.456
Likelihood Ratio	9.703	3	.238
Linear-by-Linear Association	0.257	1	.925
N of Valid Cases	4		

From the following table, it can be inferred that there was no significant difference in using compound hedges between English teaching articles of native and non- native authors. Furthermore, it can be understood from Table 4 and 5 that neither native nor non- native authors had the tendency to use these two types of hedging devices in their academic articles.

**Table 5:****Chi-square analysis for the use of compound hedges by native and non- native authors**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.000 <sup>a</sup>	3	.456
Likelihood Ratio	9.703	3	.238
Linear-by-Linear Association	0.255	1	.925
N of Valid Cases	4		

Generally, it could be pointed out that, the results of this study is in line with the findings of Winardi's (2009) pointing out that academic authors are more influenced by their professionalism in their major than their nationality .This could explain the reason for equality in using hedges between native and non-native authors.

**Conclusion**

This study intended to find out if there was any significant difference in the use of hedging devices between native and non- native authors in conclusion section of English Teaching articles. After analyzing 80 English teaching research articles based on Salager-Meyer's (1994) taxonomy, both groups of authors used type 1 "Shields" hedging as the most frequent ones and type 2 "Approximators" as the second most frequent one. There was no significant difference between native and non- native authors in the use of hedging devices as a whole which is in line with the results of the study by Bonyadi, Gholami and Nasiri (2012). Generally, it can be claimed that disciplinary backgrounds is more important than the nationality and cultural backgrounds of academic authors (Nasiri, 2011).

It should be pointed out that without having enough knowledge of the conventions of presenting and organizing ideas, one cannot communicate properly with other people. Hedging is an important part of this knowledge for learners and novice authors (Bonyadi, et al. 1012).

Novice authors need to learn hedging if they want to be successful in academic community. They should learn to be "confidently uncertain" for presenting their ideas in an academic setting (Biook .& Mohseni 2014). It seems that the explicit teaching of hedging is a useful strategy for making students familiar with background knowledge of how to present their ideas more effectively in academic papers.

### **Pedagogical Implications**

Academic texts have their own way of hedging devices application. So, it's a necessity for authors to have awareness and information in using these devices. Following Salager- Meyers contention that "hedging in scientific discourse is considered a necessary and vitally important skill", there is a need for making students and novice authors familiar with direct instructions and raise their awareness in the correct use of hedging devices.

Because of common desire for non-native authors to publish their articles in international journals in English, consideration of linguistic description and of rhetorical devices is vital. The present study suggests that sufficient attention be paid to descriptions of linguistic and rhetorical devices in English if non-native speakers wish to publish their academic writings in scholarly journals.

The results of present study could be useful for both teachers to raise their student's awareness toward using hedging devices, and syllabus designers for allocating time for teaching the correct use of hedging devices in the academic writing syllabus (Holmes, 1988).

### **Limitations and suggestions for further research**

The present study had some limitations. First of all, it was just limited to the conclusion part of 80 English Teaching articles. It would be good idea that other studies focus on other sections of this discipline research articles or work on conclusion part of other fields. It is suggested that the effect of gender as an independent variable be investigated to find out about male and female authors' use of hedging devices.

Although in the present study Salager-Meyer's (1994) taxonomy, which is one of the most widely used scale for analyzing hedging devices in the text was used, similar studies could further explore hedging devices using other taxonomies such as Hyland (1998) and Crompton's (1997) .

The corpus of this study was limited to English Teaching research articles which were published online, so the results of this study cannot be over generalized and should be applied cautiously.

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