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PROFESSIONAL EDUCATION AND TRAINING | RESEARCH ARTICLE

A comparative study on the use of hedging devices across ELT MA and PhD theses

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Abstract: A growing body of literature is concerned with how L2 writers in English make their claims in academic discourse when compared with L1 writers. However, there is not enough research that compares writers with different levels of academic achievement in the same discipline. This study aims to fill this gap by focusing on the distribution of hedging devices and possible variations in how hedging devices were employed by MA and Ph.D. graduates in English Language Teaching Discipline in their theses. To this end, a corpus with a 93725-word count from discussion sections of 24 MA theses and a parallel corpus with a 145498-word count from 14 Ph.D. theses were compiled, and the data were carefully analyzed via the AntConc software program. The results were reported with tables and interpreted in detail, revealing that MA theses tend to include significantly more hedging devices, which can be attributed to the MA students' need to make the 'writer's stance' relatively less obvious in their theses when compared to their Ph.D. counterparts.

Keywords: hedging devices, booster, research articles

Research articles and un/published theses are the ways to publicly propose new ideas or perceptions that can support or contradict the findings of other researchers. To make these propositions open to public discussion and avoid direct assertions, scholars use certain devices that become mitigating forces between their propositions and the audience. Such devices have been generally used to reduce the strength of the assertions, resulting in the production of less categorical and certain expressions. Hyland (1998) asserts that scholars need linguistic identification of unwillingness to make a complete commitment when new knowledge items have been proposed. These devices have also been used to understand the distinction between the propositions with the status of facts and propositions that have the status of claims (Crompton, 1997; Hyland, 2004). This discourse modulation is called "hedges," which refers to the idea of "barrier," "limit," "defense," or to the means used to protect or defend oneself. (Cabenes, 2007, p.140). The term 'hedge' was first used by Lakoff (1973, p.194) to mean "words whose job is to make things less fuzzy." Several researchers built their knowledge upon what Lakoff defined and developed various definitions and explanations of hedging devices. Burrough-Boenisch (2005) emphasized the significance of hedging by stating that they are crucial for scientific discourse in signaling a commitment to a claim, for instance, indicating certainty about research findings. To touch upon the importance of hedging in academic discourse, Hyland (1996) stated that when a researcher pursues to gain recognition in his field by making factual claims, he will possibly challenge existing hypothesis; therefore, to avoid impairing colleagues' research agenda, researchers need to use hedges effectively in their research articles. For this reason, a cautious language that mitigates the strengths of a proposal by increasing or decreasing writers' intention in producing that utterance is needed in academic discourse.

This phenomenon has attracted the attention of various researchers (Choi, 2005; Dallyono, 2008, Doyuran, 2019; Ekoç, 2010; Gethkam, 2011; Hinkel, 1997; Hyland, 2000; Nivales, 2011, Vilnius, 2011) who aimed to investigate the use of such devices in written and spoken discourse. Fraser (2010) emphasizes the significance of hedging by stating that in addition to its frequent use, hedging assists us in reaching our communicative goals appropriately and failing to use them effectively and where it is expected may hinder conveying the message across, creating possible misunderstanding problems. The researchers' purpose is to provide their claims in their writing to convince the readers of the validity of their claims successfully. Therefore, presenting their position as too strong or too weak results in some doubt about the validity of the shares (Choi & Ko, 2005). That is why hedging is a fundamental pragmatic aspect of academic writing and should be searched with careful analysis.

2. Literature review

Recently, the studies on employment hedging devices in academic discourse have been well studied, and a great deal is known on this topic. Various use of hedging devices across the different fields and research traditions have been investigated. To see differences in disciplines, Karimi et al. (2015) explored the frequency of hedging devices in research articles by comparing three disciplines of physics, computer engineering, and applied linguistics. They have found that computer engineering writers hedged their propositions more than physics writers. When they compared Persian writers of applied linguistics with English writers of applied linguistics by intra-discipline analysis, the results revealed that Persian writers of English used more hedges than native speakers. To find out which section of articles included more hedging devices, Getkham (2011) investigated hedging devices employed in applied linguistic research articles across research sections and journal titles and found that the most frequently used hedging devices are modal verb hedges, which are heavily used in the introduction and discussion sections of research articles. To reason his findings, he claimed that non-native writers resort to more hedging devices due to the author's avoidance of face-threatening acts. Apparent hedging devices used in these articles were modal verbs, lexical verbs, and adverbs, concluding that hedges appear more in conclusion sections of computer science research articles.

In contrast, boosters are heavily used in the introduction sections. Literature studies have also indicated that hedges in academic discourse vary among native and non-native speakers of English, and they pose difficulty for especially non-native speakers. For instance, Yang's (2013) study revealed that the number of hedges appearing in English scientific discourse doubled the ones used in Chinese-authored English scientific discourse. Hinkel (2005) analyzed the types and frequencies of hedges and intensifiers that NS and NNS L1 and L2 students employ in their academic essays. He focused on lexical and syntactic features of written discourse, which are important for L2 instruction in an academic writing course. He analyzed the frequencies of uses of various types of hedging devices and intensifiers. The results revealed that L2 writers employ a very limited range of hedging devices, generally associated with conversational discourse and casual spoken interactions. In a similar vein, Vassileva (2001) compiled a corpus from the Introduction, Discussion, and Conclusion parts of research articles to see the overall distribution of hedges and boosters in these parts. He found that variations between these groups are attributed to the different rhetorical and educational traditions; therefore, findings seemed to be essential to facilitate the teaching of academic writing in English to Bulgarians. Blogojevic's (2004) research on the comparison of 15 research articles by native speakers of English and 15 by native speakers of Norwegian on the use of hedging devices showed that Norwegian writers employed more hedging devices than their English counterparts. The results indicated that English writers tend to use more emphatic and fewer hedges when they express their personal opinions in their compositions. It is assumed that the underlying reason for using hedging devices frequently is the writer's tendency to hide himself/herself in the text. (Tıkaç, 2013). In light of research on hedging devices, implications of previous research have been tested in L2 classroom instruction. Wishnoff (2000) conducted an experimental study to see the effects of instruction on pragmatic acquisition in writing to see how hedging devices were employed in writing productions of foreign language learners. The experimental group received treatment with a less-planned, less formal, and computer-mediated type of writing,

through which increasing meta-pragmatic awareness and improving their ability to use hedging devices were targeted. They found that the experimental group showed a statistically significant increase in the number of hedging devices in their writings. In light of the literature, the current study aimed to investigate the use of hedging devices for the academic level of achievement.

3. Research questions and methodology

1. How do researchers at MA and Ph.D. levels in English Language Teaching Department hedge their propositions in the discussion part of their theses?
 - a. What are the most frequent hedging devices employed in these two corpora?
 - b. Which hedging devices are overused and underused when these two corpora are compared?

3.1 Corpus description

Data for the study include MA and Ph.D. theses written between the dates 2010 and 2016 in the field of English Language Teaching. Few considerations determined the selection of this discipline. The first consideration was that L2 writers from other disciplines face both linguistic and discursal challenges while writing in English; however, those majoring in English Language Teaching only face discursal challenges with which they can cope easier as they already know discourse conventions while writing in English. Additionally, it is also thought that by keeping the discipline constant, possible differences in the use of hedging devices in two academic levels of achievement can be elicited. The corpus was compiled by downloading the theses from the electronic source entitled "Turkish National Thesis Center". All MA and Ph.D. graduates must upload their theses after defending their thesis. All theses written between 2010-2016 in the field of English Language Teaching were downloaded from this center. Nearly all theses followed the Introduction-Literature Review- Methods- Findings and Discussion and Conclusion sequence of scientific reporting. The focus of the research was only on the discussion sections of these theses; therefore, only the discussion sections were used in the analysis. Discussion sections were chosen to be analyzed because research revealed that nearly 70% of hedges appear in discussion parts of the articles as findings are interpreted and propositions are made depending on the previous research (Hyland, 1999; Yang, 2013). Generally, it is the introduction, discussion, and conclusion parts of the theses that are investigated due to the fact that it is mainly in these parts that researchers need to use hedging devices more (Yagız & Demir, 2014). In their study, Yagız and Demir (2014) analyzed the frequency of hedging in the introduction, discussion, and conclusion parts of the research articles. The findings revealed that it was the discussion part where hedging reached the peak value for both native and non-native researchers. Similarly, Vassileva (2001) also found out in her research that the discussion parts of the English research articles were the richest parts when compared with the introduction and discussion parts in terms of the inclusion of hedges and boosters. Being the part where hedging is employed the most discussion parts of the theses are chosen in an attempt to shed light on the use of hedges.

To increase the reliability of the study, direct quotations, footnotes, charts, figures, and interview extracts were excluded from the corpora. Finally, a corpus with a 93725-word count from discussion sections of 24 MA theses and a parallel corpus with a 145498-word count from 14 Ph.D. theses were compiled.

3.2 Procedure

This study is descriptive. A simple frequency count is used, making this quantitative study. The present study used two specialized corpora to analyze hedges: MA theses corpora and Ph.D. theses corpora. Hyland's (2000) list of most frequently used 108 hedges indicating doubt of certainty was used as a framework to identify hedges. The list was divided into categories to make it more specific.

Table 1. List of most frequently used 108 hedges divided into six sub-categories (Hyland 2000)

Lexical Verbs	appear, argue, assume, believe, claim, estimate, guess, imagine, imply, indicate, infer, interpret, perceive, predict, presume, propose, seem, suggest, speculate, suppose, surmise, tend, hypothesize, deduce, discern, doubt, postulate
Modal verbs	could, may, might, should, shouldn't, would
Adverbs of Frequency	(not) always, occasionally, often, rare(ly), seldom, sometimes, usually, frequently, generally, in general
Modal Adverbs	admittedly, apparently, approximately, basically, conceivably, essentially, evidently, formally, hypothetically, ideally, largely, likely, mainly, not necessarily, normally, ostensibly, partly, partially, possibly, predominantly, presumably, probably, relatively, seemingly, superficially, technically, theoretically, typically, virtually, perhaps, unlikely
Modal Adjectives	about, almost, around, certain, most, quite, somewhat, uncertain, unclear, unsure, questionable
Modal Nouns	assumption, belief, prediction, possibility, probability, tendency, contention, conjecture

Some hedging devices such as "about" "could" were evaluated in their context to clarify their functions by the researchers based on the assumption that "... hedges can only be understood in terms of a detailed characterization of institutional, professional, and linguistic context in which they are employed" (Hyland, 1996, p. 433). Hyland (2000) points out that among all these categories, modal auxiliaries are used by the writers to create sympathetic support from the other researchers and to signal tentativeness.

Firstly, the most ten frequent hedges in ELT MA and Ph.D. theses corpus were found by running a concordance analysis to determine the frequency of each word in Hyland's mentioned list. The most frequent ones were noted and shown in a bar graph. Then, keyword analysis was conducted by AntConc software by uploading the Ph.D. corpus as a reference corpus. Chi-Square analysis was selected before running a keyword analysis as both corpora were parallel to each other. Finally, keywords were identified for both overused and underused corpora and written on a table with the keyness values of each hedge.

4. Findings and discussion

The following tables illustrate the distribution of the number of hedges employed in MA and Ph.D. theses.

Table 2. Total number of hedging forms in the discussion section of MA and Ph.D. theses

	MA Theses	Ph.D. Theses
Frequency	1755	2495
Per 1000	18.72	17.14

This finding may also indicate how Musa (2014) defined the function of hedging, explaining that hedging is a means of simultaneously serving the negative face requirements of the sender and a tool for self-protection. In this manner, it becomes possible for the writer to limit his/ her responsibility toward the readers' point of view. Tıkaç (2013) also concluded that Turkish students tended to hide their authorial stance about the argument they developed in their essays through various hedging devices. This can explain why MA students use hedging devices more

frequently than Ph.D. students while writing their theses.

Table 3. Distribution of hedges in MA and Ph.D. theses

	Master		PhD	
	Frequency	Per 1000 words	Frequency	Per 1000 words
Lexical Verbs	139	1.48	231	1.6
Modal Verbs	683	7.28	747	5.13
Adverbs of Frequency	96	1.02	122	0.8
Modal Adverbs	96	1.02	190	1.3
Modal Adjectives	439	4.68	581	4
Modal Nouns	29	0.3	36	0.24

Table 4. Keyword hedges across ELT MA corpora and Ph.D. corpora

	Overuse				Underuse		
	Keyness	Freq. in MA Theses	Freq. in PhDTheses		Keyness	Freq. in MA Theses	Freq. in PhD Theses
May	85.475	214	152	Appear	0.093	12	17
Approximately	49.515	41	5	Propose	0.105	6	8
Should	38.086	203	172	Might	0.417	57	81
Could	30.379	106	75	Possibly	0.745	7	41
Tend	15.878	15	6	About	1.821	193	269
Almost	14.426	43	28				
Possible	10.276	50	41				
Usually	7.330	12	5				
Sometimes	4.529	22	18				
Most	4.275	198	259				

Table 4 presents the hedging devices applied by the MA and Ph.D. students. It indicates that certain hedges which have been used more frequently in the MA corpus are modal verbs such as "may," "should", "could" and adverbial hedges like "approximately," "almost" and "usually", "sometimes" "most"; and the verb "tend." Considering keywords as "the most significant lexical differences" (Baker, 2004), these hedges seem to be used more by MA graduates. The possible reason behind this result may be the fact that as Holmes (1988) stated, ESL textbooks seem to emphasize the teaching of modal verbs as ways of expressing doubt or certainty to foreign language learners. Šeškauskien (2008) attributes the frequent use of modals with the purpose of hedging among Lithuanian ESL researchers to their fairly easy acquisition by nonnatives. Although Choi and Ko (2005) figured out the similar frequency and sentence structure between the Korean postgraduates and L1 expert writers, they also identified a difference in terms of relying

on modal verbs, the former heavily using them and employing a limited number of hedging expressions. This can be attributed to being a part of a different culture, which makes it challenging for the nonnatives to adopt the pragmatic norms of a different culture.

According to the findings presented in the table, "may, approximately, should, could tend, almost, possible, usually, sometimes" and "most" seem to be the most frequently and overused hedging devices in MA and Ph.D. theses whereas "assume, appear, propose, might, possibly" and "about" seem to be the underused ones in the given corpus. When the usage frequency of these hedging devices is analyzed through the Longman dictionary of contemporary English (2009), it is found that 'may, should, could, tend, almost, possible, usually, sometimes, and most' are among written and spoken top 1000 words, "approximately" is among the written top 3000 words, "perhaps" is among written and spoken top 1000 words, "assume, appear and argue" are among spoken top 2000 and written top 1000 words, "propose" is among written top 2000 words, "predominantly" is in the academic word list, "doubt, might and about" are among written and spoken top 1000 words and "possibly" is among spoken top 1000 and written top 2000 words. These hedging devices are less frequently used may stem from the fact that they are less frequently used in non-academic contexts as well, revealing that they are preferred less.

In his study, Burrough-Boenisch (2005) investigated the reaction of 45 reviewers and non-reviewers (including both native and non-native speakers of English) to the discussion parts of 3 different types of research from the field of Biology and analyzed the hedging devices before and after their feedback. He categorized the treatments under three categories as deletion, substitution, and insertion. The hedges, however, are divided into groups as modal verb forms, modal adverbs, modal adjectives, and other lexical and discourse features imparting uncertainty and vagueness to the text. The results reflected that the participants had a tendency to add hedges to the articles of Dutch researchers, which leads to the conclusion that they under hedge. The findings also illustrate that there is no single 'right' solution in hedging as the participants disagree on what is 'appropriate.

The present study also revealed that MA and Ph.D. students tend to underuse some hedging devices, whereas some hedging devices are never used in their theses, leading us to the conclusion that they are not knowledgeable about those hedging devices. The results also show that the academic writing courses in MA and Ph.D. programs allocate more time and space for the teaching of hedging devices. In a similar study by Vassileva (2001), she attributed the finding that Bulgarians under hedge to the fact that they are unaware of the necessity of using hedges, which results in the failure to meet the norms of the target community, adding that it is not an indicator of a linguistic error but a pragmatic failure.

Hinkel (2005) related research into various types of hedges to politeness, vagueness, hesitation, and indirectness, emphasizing that hedges are a component of pragmatics. Considering that pragmatics can be a troublesome area of the language of nonnatives, the limited range of hedging devices and repetitive use of the most common hedging statements can be more successfully interpreted. Choi and Ko's (2005) study also revealed that the nonnative's use of hedging devices is limited in range, supporting Hinkel's this claim. A careful analysis of hedges and intensifiers by Hinkel (2005) with a corpus of 745 essays and 220.747 words and based on the comparison of native and nonnative writers also revealed that L2 writers apply a critically limited range of hedging devices concerning native writers in academic writing. Therefore, it can be asserted that the underlying reason for this research finding which demonstrates that non-native researchers tend to apply more commonly-used hedging devices in their academic writing, may be linked to the lack of pragmatic knowledge. Ellis (2008) concludes that one of the most substantial findings of the studies focusing on requests is that even advanced learners do not acquire fully native-like ways of using them. To decide how learners' performance differs from the native speakers', it is required to determine the norms of the native speakers, which is troublesome as the native speakers' performance also varies considerably depending on such factors as their social status or gender. Even if a consensus was reached regarding how and when to use hedging devices, it might not be certain whether the natives would find the hedging problematic enough to interfere with their use. In her research, Mauranen (1997) found out that native revisers intentionally preferred not to make any changes

in how non-native researchers use hedging devices as they reflect the author's voice and try to respect this choice as far as possible.

5. Suggestions and implications for language teaching

The study's findings revealed that hedging devices are frequently preferred by MA and Ph.D. students in the discussion parts of their theses. However, this study did not attempt to figure out whether these hedging devices are formulaic expressions or not, which could have shed more light on the use of hedging devices. Further discourse analysis can be done on the linguistic characteristics of these devices in writing. For instance, Hyland (2008) found that postgraduate students tended to employ more formulaic expressions when compared with native academic writers to reveal their capability and expertise in academic writing. Therefore, further research can be conducted on how native and non-native researchers employ hedging expressions. Although it can seem quite similar to Chen and Baker's (2010) study, which compares lexical bundles in L1 and L2 academic writing, the range of hedges in terms of lexical bundles and their variation in native and nonnative researchers' writing can be another research topic, taking into this research one step further. To raise awareness among non-native academic writers, academic writing and reading courses can be designed in a way that efficiently facilitates the use and realization of hedging devices. In her research, Figueiredo-Silva (2001) indicated that becoming familiar with hedging as a component of academic writing can promote reading academic texts. Teaching pragmatic knowledge and awareness to nonnatives is regarded as a complex and challenging issue. However, Wishnoff's (2000) research comparing two groups of graduate students, one of which took courses on hedging to increase their metapragmatic awareness, demonstrated a dramatic increase in the experiment group students' use of hedging devices in their research papers. Although how to employ hedging in written discourse seems straightforward, it can be troublesome for nonnatives with different academic, cultural, and linguistic backgrounds to implement them appropriately. Therefore, graduate students can be provided with the opportunity of taking academic writing courses, which include hedging as a pragmatic aspect of language to facilitate the native-like, appropriate, and adequate use of hedging devices.

6. Disclosure of Conflict

The authors declare that they have no conflicts of interest.

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