



Hedging and academic writing: an analysis of lexical hedges

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Abstract

Hedging is an important metadiscourse device that should be used for various motives particularly in academic writing because it acts as a face-saving strategy and represents the certainty of the scientists' knowledge on the study field, but nevertheless it is not an obvious consideration for many non-native writers of English. Although the significance of hedging in academic writing is beyond argument, excessive use of it may create a counter-productive result. In other words while underuse of hedging may lead to overstatement, overuse of it may bring about suspicions on the credibility of the statements, therefore a moderate and balanced used of hedging is necessary for the true credibility of the author on the reader. In this regard, the present study investigated academic texts of native writers and non-native writers of English with purposes of revealing the differences between them in terms of hedging strategies while composing an academic text; detecting lexical hedges used by native writers and non-native writers of English and diversity of these hedges through some analyses, creating a list of lexical hedges, and offering some suggestions regarding the use of lexical hedges in academic writing.

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1. Introduction

Lexical conventions that embellish academic texts have come to the fore for various reasons since the discovery of discourse devices, and the ability to use these devices has been commensurate with language proficiency. Therefore, competence in using discourse devices is seen as a sign of being native in the target language. Accordingly, of many discourse devices hedges deserve special attention as incorrect or unbalanced use of them may utterly disrupt rhetorical persuasion on the credibility of the statements of authors.

Hedging devices are "vitaly important" (Slager-Mayer, 1994, p. 241) and should be used even in textbooks on top of academic writing (Hyland, 1994), therefore either you use hedges to distinguish facts from opinion, or "honesty, modesty and proper caution" (Swales, 1990, p. 174), they have undoubtedly been a key issue for all levels of writing. Though, hedging the statements is not an obvious consideration for many non-native writers of English (Hinkel, 2004), which may be because they regard hedges "extremely troublesome" (Hyland, 1996, p. 278). However, that non-native writers avoid being

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assertive in their scientific papers through unnecessary hedges may lead to invisibility of authorial stance over their claims. This shadowy position of the writer in a scientific text may be deemed as a sign of indeterminacy over the discussed issue, and may lower the credibility, which may prompt lack of confidence or doubt in readers. That inescapable conclusion is, out of doubt, undesirable by a writer whose primary aim is to persuade the reader over the claim.

Although the significance of hedging in academic writing is beyond argument, excessive use of it may create a counter-productive result. In other words, while underuse of hedging may lead to overstatement, overuse of it may bring about suspicions on the credibility of the statements. Therefore, hedging should be used evenly by authors. Appropriate use of hedges in academic texts may keep criticisms away from writers, and may increase persuasive power on audiences. In this regard, the present study investigated academic texts of native writers (NWs) and non-native writers (NNWs) of English with the purpose of revealing the differences between NWs and NNWs of English in terms of hedging strategies while composing an academic text, detecting lexical hedges used by NWs and NNWs and diversity of these hedges through some analyses, creating a list of lexical hedges, and offering some suggestions regarding the use of lexical hedges in academic writing.

1.2. Literature review

George Lakoff seems to be the first researcher who introduced the term hedge in linguistic studies. He defined hedges as follow:

“For me, some of the most interesting questions are raised by the study of words whose meaning implicitly involves fuzziness - words whose job is to make things fuzzier or less fuzzy. I will refer to such words as 'hedges' (1973, p. 471).”

After the introduction of hedging, the term was introduced to the linguistics by *Politeness Theory* of Brown and Levinson's (1978), which is widely known as politeness strategies. At this stage, hedges came to be known as face-saving acts, and were analysed mostly in oral conversations (Iida, 2007) as well as in written products. Towards the end of 1980s hedges began to gain attention and ground in English linguistics and English for Academic Purposes with the spreading of contrastive/cross-cultural analyses, and meanwhile, Prince et al. (1982) introduced two new terms in association with hedges: *approximators* and *shields*. According to Prince et al., approximators are linguistic devices that “affect the propositional content” while “shields are linguistic components that affect the degree and type of speaker-commitment that is inferred” (p. 93). However, it was not until Crompton (1997) that hedges caught attention and became widely known in the area of linguistics. Crompton underscored the importance of distinguishing “shields” and “approximators” for academic writing education.

Hinkel (1997) carried a cross-linguistic study based on corpus analysis, and compared native speakers and non-native speakers with the purpose of revealing referential, lexical, syntactic, and rhetorical indirectness devices, i.e. hedges. The results demonstrated that non-native speakers had greater frequencies than natives in using indirectness devices like disclaimers, rhetorical questions and tags, vagueness and ambiguity, ambiguous pronouns, and passive voices; however, a non-significant difference was detected between natives and non-natives in terms of using hedging devices like downtoners, distancing, diminutives, understatements, nominalization, conditional tenses, and other discourse particles. It is understood that differences remain between natives and non-natives in terms of their hedge word preferences. In a similar way of Hinkel's (1997), the present study aims at revealing hedging word preferences of NWs and NNWs but through a different taxonomy.

There is no doubt that hedging is an important rhetorical device that “represent a major contribution to the social negotiation of knowledge and writers' efforts to persuade readers of the correctness of their

claims, helping them to gain community acceptance for their work” (Hyland, 2000, p. 89); however, what is challenging for academics is the balance that must be kept between cautious language and assertive language while presenting their ideas (Hyland, 2001). Hyland’s another study together with Milton (1997) showed that how to redress a balance of appropriate certainty in academic texts is a problematic issue. Accordingly, Dafouz-Milne (2008) found that academic texts with a true balance of rhetorical devices became more convincing in terms of audience persuasiveness. In short, hedging have a significant role in constituting central pragmatic features in the process of influencing, persuading, and engaging readers to assent to the writer’s claims (Rubio, 2011). However, what should be kept in the picture is that any immoderate and unbalanced use of hedging could lead to a counter effect on writers’ credibility in the readers’ eyes, which is a challenge that should be dealt with.

Hyland (1998b) placed hedges into the list of the most frequent features of a writer’s perspective because we know that hedging is of paramount importance in scientific papers due to the fact that it both acts as a face-saving strategy and represents the certainty of the scientists’ knowledge on the study field (Meyer, 1997). In addition, hedging devices, in English for Academic Purposes (EAP), have been identified as a basic unit of communication in research articles written in English (for example Adams-Smith, 1984; Hyland, 1994; Hyland, 1998; Hinkel, 2004). According to Hyland (1998b), what makes hedges so necessary is the power of “speculative means” of them; i.e. to leave door ajar to the issues ending with weakness and indecision so that others will have the chance of empowering the issues which cast doubt on full precision. To put it another way, complete precision of scientific statements cannot be invariably possible (Grabe & Kaplan, 1997). Therefore, redundant consistency on a claim may lead to criticism, counter-sayings and prolonged debates in opposition to the author. On the other hand, Hinkel (2004) reported that non-native writers are not as concerned as native writers in employing hedging devices in their papers.

The close relation between academic writing flair and the cautious use of hedges attracted attention and it was studied from different aspects. Accordingly Wu (2017) compared expert and student writing, and found that expert writings included more diverse hedging devices than novice writings. Similarly Sarani and Talati-Baghshahi (2017) conducted an applied study to gauge the effectiveness of hedging devices on student writings. In a longitudinal study, Aull and Bandarage (2017) found that the more a student becomes professional in writing, the more s/he uses rhetorical devices in his/her writings. Regarding the difficulty of scientific communication in a foreign language particularly for non-native writers, Chen and Zhang (2017) advised non-Anglophone academic English writers to enhance their ability in using rhetorical and stylistic expressions like hedging. In brief, writer need to be aware of the importance of hedges in academic writing. Different from other studies in the literature, this study will be useful in terms of clarifying how and to what extent NWs and NNWs use hedges in their academic texts written in English and why hedges should be spotted particularly by NNWs who do not seem well aware of.

2. Methodology

2.1. Corpora

The corpus of the present study was composed of 200 (100 from NWs and 100 from NNWs) scientific articles written in English on ELT. The principal motive behind choosing articles only on ELT is that rhetorical devices are said to have changed across disciplines (Hyland, 2005). Verification about the author status of being native or non-native writer of English was ensured through the name and nationality. In articles where more than one scholar is involved, the corresponding author or the first

author in the affiliation was regarded as the writer of article, hence the nationality of the first or corresponding author determined the nationality of all others.

The articles were selected randomly from diverse journals that accept papers on language education, language teaching, or other language pedagogy issues. The journals that NWs' articles were picked up are shown in the table 1.

Table 1. The journals that built the data for native writers of English.

The name of the journal	Number	%
ELT journal	30	30
English for Specific Purposes System	13	13
Applied Linguistics	10	10
Language Learning	8	8
TESOL Quarterly	8	8
Language Teaching Research	5	5
Journal of Second Language Writing	4	4
Language Teaching	4	4
First Language	3	3
RELC Journal	3	3
Journal of English for Academic Purposes	2	2
Journal of Second Language Writing	2	2
Total	100	100

NNWs of English in the present study are Turkish writers. The table 2 shows the journals and the number of articles.

Table 2. The journals that built the data for non-native writers of English.

The name of the journal	Number	%
Journal of Language and Linguistic Studies	40	40
Hacettepe University Journal of Education Faculty	16	16
The Reading Matrix	8	8
Journal of Language and Literature Education	7	7
Çukurova University Faculty of Education Journal	6	6
Turkish Journal of Education	6	6
Novitas-ROYAL (Research on Youth and Language)	6	6
Atatürk University Journal of Social Sciences	4	4
ELT Journal	4	4
Turkish Online Journal of Qualitative Inquiry	2	2
International Journal of Languages' Education and Teaching	1	1
Total	100	100

To be able to see synchronic variations on the use of lexical boosting, articles published only in the recent years were gathered. Not to cause any reliability concern, the corpora were compiled from equal-length articles as shown in the table 3.

Table 3. Corpus size

Author group	Tokens	Types
Native writers	601025	24076
Non-native writers	590109	22427
Total	1191134	48152

To assure the representativeness of the corpora, a probabilistic sample using simple random sampling technique was used in order to collect articles and to construct the corpora. Probabilistic sample technique refers to a sampling procedure in which “all members of the population have the same probability of being selected” (Schreiber & Asner-Self, 2011, p. 87).

2.2. Identification of hedges

Hedges can be divided into three major headings: (1) rhetorical devices; (2) syntactic markers; and (3) lexical and referential markers (Uysal, 2014). Rhetorical devices are structures in a sentence like denials, disclaimers, ambiguity markers, and vagueness while syntactic markers are hedging devices like passive voices and if conditionals. On the other hand, lexical and referential markers are those that function as point of view distancing, downtoners, demonstratives, discourse particles, diminutives, and indefinite pronouns on which the present study focused.

Although different taxonomies have been used for the categorization of hedging (e.g. Skelton, 1988; Hinkel, 1997; Crompton, 1997; Koutsantoni, 2004), the taxonomy for this study came from Hyland's suggestions (1998c) with some minor changes. They are:

1. *Modal auxiliaries and semi-modal verbs (may, might, can, could etc.)*
2. *Verbs (seem, believe, appear, estimate, argue etc.)*
3. *Epistemic adjectives (possible, approximate, uncertain)*
4. *Epistemic adverbs (slightly, presumably, merely, partly etc.)*
5. *Quantifiers/determiners (a few, some, many)*
6. *Nouns (assumption, estimate, suggestion, claim)*

2.3. Data analysis and procedure

The corpora were manually scanned although there were PC-based word processing software programs. A PC based software program, namely a concordance program, was not employed for some grave reasons. First of all, making a scan of the corpora manually by researcher is necessary to be able to detect the semantic referring of the words; however, a concordance program would only give the statistical information about the words but not semantic or pragmatic data. In other words, a concordance program would provide a result regardless of the illocutionary meaning of a word; however, many modal verbs have multiple meanings that change depending on the context they are used in. More specifically, a modal may be epistemic (possibility), deontic (obligations), or dynamic (self-willingness or ability) depending on the context. For example, the modal verb ‘can’ in the example *the results can provide valuable information about...* is a modal verb acting as hedge while in the example *it can be seen* it does not function as a hedge but more generally a directing word. Therefore, in order to ensure whether a word functions as a hedge or not, a manual scanning of the data is of great importance to find out the exact meaning that the words have.

Having scanned the data and picked up hedge words, the researcher categorized these words according to the taxonomy stated in 2.2. Then each category was inserted to SPSS program and Chi-square test was used to investigate whether there were statistically significant differences between NWs and NNWs in terms of lexical hedges.

3. Results

3.1. Numerical findings

The figure 1 provides total and categorical numbers of hedges. As seen, there is a parallelism between NWs and NNWs. In total, epistemic verbs is the most used category while the category of nouns is the least used; respectively, 2976; 303. On the other hands, regarding total use of hedge words NWs are ahead of NNWs; respectively, 5487, 3813.

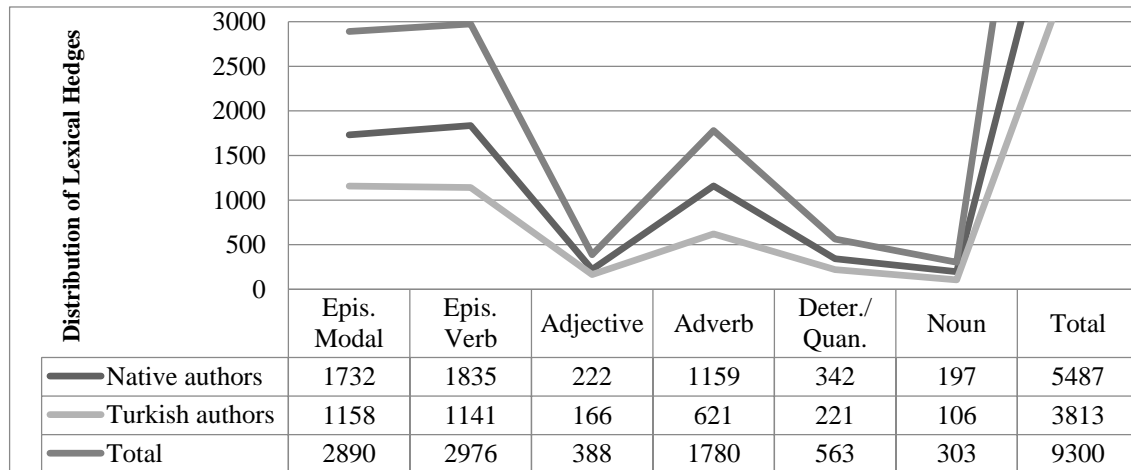


Figure 1. Total and categorical number of hedges in the data.

The figure 2 provides hedge diversity of the groups. *Epistemic verbs* is the category to which both NWs and NNWs inclined the most while the second and the third most frequent hedge types are the same for both groups: *epistemic modal* and *adverbial hedges*. Similarly, *Nouns* is the category that is the least frequent hedge category both for NWs and NNWs. Furthermore, native authors of English have a higher lexicon of hedges when compared to non-native writers of English. NWs used 2424 different hedges while NNWs had only 1489 hedges.

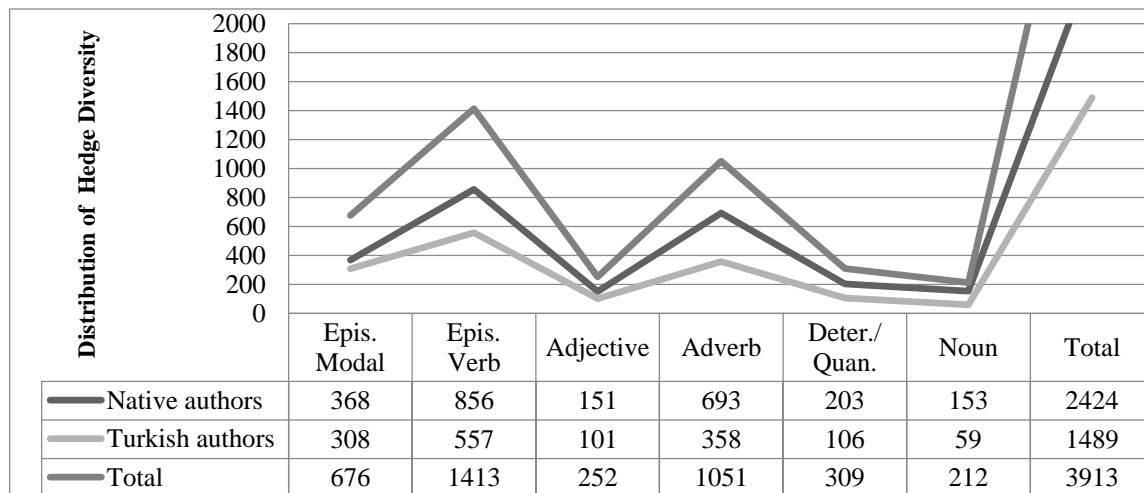


Figure 2. Total and categorical number of hedging word diversity in the data.

3.2. Statistical findings

The present study employed two statistical analyses. The first analysis calculated whether there was a statistically significant difference between NWs and NNWs in terms of the number of hedge diversity while the second analysis was done to detect whether there was a statistically significant difference between NWs and NNWs in terms of total and categorical hedge number. As the table 4 shows, a statistically significant difference was found between NWs and NNWs in terms of modal hedges ($X^2(5)=17.910$, $p=.003$); in terms of verbal hedges ($X^2(15)=52.749$, $p<.001$); in terms of adjectival hedges ($X^2(6)=17.559$, $p=.007$); in terms of adverbial hedges ($X^2(12)=73.539$, $p<.001$); in terms of determiner/quantifier hedges ($X^2(6)=37.035$, $p<.001$); in terms of noun hedges ($X^2(6)=47.709$, $p<.001$); and in terms of total hedges ($X^2(33)=93.518$, $p<.001$). In brief, NWs have a larger lexical repertoire of hedge words than NNWs.

Table 4. Statistical Findings of Hedge Diversity

<i>Variables</i>	<i>Value</i>	<i>df</i>	<i>Sig. Value</i>
<i>Modal</i>	17.910	5	.003**
<i>Verb</i>	52.749	15	.001**
<i>Adjective</i>	17.559	6	.007**
<i>Adverb</i>	73.539	12	.001**
<i>Deter/Quan</i>	37.035	6	.001**
<i>Noun</i>	47.709	6	.001**
<i>Total</i>	93.518	33	.001**

** represents for a p value at .01

The results of the second analysis were given in the table 5 which shows that there is a statistically significant difference between native and non-native writers of English in terms of modal hedges ($X^2(38)=55.033$, $p=.036$); in terms of verbal hedges ($X^2(39)=72.479$, $p=.001$); in terms of adverbial hedges ($X^2(21)=73.506$, $p<.001$); in terms of determiner/quantifier hedges ($X^2(13)=36.359$, $p=.001$); and in terms of noun hedges ($X^2(8)=42.444$, $p<.001$). However, a statistically significant difference was not found between NWs and NNWs in terms of adjectival hedges ($X^2(9)=13.695$, $p=.134$), and in terms of total hedging word ($X^2(73)=85.343$, $p=.153$).

Table 5. Statistical Findings of lexical hedges

<i>Variables</i>	<i>Value</i>	<i>df</i>	<i>Sig. Value</i>
<i>Modal</i>	55.033	38	.036*
<i>Verb</i>	72.479	39	.001**
<i>Adjective</i>	13.695	9	.134
<i>Adverb</i>	73.506	21	.001**
<i>Deter/Quan</i>	36.359	13	.001**
<i>Noun</i>	42.444	8	.001**
<i>Total</i>	85.343	73	.153

* represents for a p value at .05

** represents for a p value at .01

3.3. Descriptive findings

3.3.1. Findings for native writers

EPISTEMIC MODALS. NWs are more prone to using *may* than any other epistemic modals while downtoning their statements. Below you can see the authentic examples collected from NW corpus.

- (1) ... speakers of more distant languages **can** be expected to encounter fewer difficulties...
- (2) Future work that explores these qualitative differences **could** substantially further our understanding of...
- (3) ... dominant norms for expert writers **may** not be a dominant norm for second language student writers...
- (4) ... local languages **might** work together as languages of education...
- (5) The target **should** be the acquisition of a multilingual model.
- (6) It **would** seem possible to argue, therefore, that...

In the form of lexical and referential markers, NWs generally use hedging devices such as *may* and *might* in order to create indirectness in their statements. The figure 3 shows the epistemic modals acting as hedges from top-down order.



Figure 3. Epistemic modals acting as hedges in NWs data.

VERBAL HEDGES. Evidential verbs (e.g. look, seem) are common in the NW sample data. The table 6 provides verbal hedges that were compiled from NWs' data.

Table 6. Verbs acting as hedges in NW data

1. Advise	10. Consider	19. Indicate	28. Propose
2. Anticipate	11. Demonstrate	20. Look	29. Report
3. Appear	12. Display	21. Maintain	30. Reveal
4. Argue	13. Estimate	22. Observe	31. Seem
5. Assert	14. Expect	23. Offer	32. Show
6. Assume	15. Feel	24. Prone to	33. Suggest
7. Attempt	16. Find	25. Postulate	34. Surmise
8. Believe	17. Guess	26. Predict	
9. Claim	18. Hope	27. Presume	

NWs used 35 verbal hedges in order to make the language more tentative. The verbs *suggest*, *tend to*, *reveal*, *appear*, and *show* are the most frequent ones. Furthermore, it seems that point of view distancing is generally done through the combination of a pronoun and a verbal hedge as can be seen in the examples:

- (7) In this light, we **advise** literacy educators and assessment designers to consider...
- (8) ... they may **assume** that AAL patterns are representative of poor English grammar.
- (9) ... post hoc analysis did **reveal** the intriguing case of...
- (10) We **hope** that the concept of mid-frequency vocabulary will lead...
- (11) we **attempt** to illustrate some of the benefits of researching 'with' children.

ADJECTIVAL HEDGES. Adjectives acting as hedging devices appear not to be as common as verbal hedges in NW corpus as seen in the table 7.

Table 7. Adjectives acting as hedges NW Data.

1. Advisable	7. Possible
2. Conjunction with	8. Potential
3. In consistent with	9. Probable
4. Harmony with	10. Slight
5. In line with	11. Subtle
6. Partial	

Native writers are prone to using adjectives such as possible, potential, partial more than others as seen in the authentic examples:

- (12) One **possible** source of the problem is the underdeveloped area of...
 (13) It then discusses the **potential** exploitation of the learner corpus for pedagogic purposes.
 (14) The present data suggest a **partial** advantage for...
 (15) ... some more **subtle** distinctions might be useful for some applications.
 (16) Although there was a **slight** increase in the use of...

ADVERBIAL HEDGES. Discourse understatements (fairly, rather, slightly) are commonly used as adverbial hedges. You may find adverbs functioning as hedges in NW in the table 8.

Table 8. Adverbs acting as hedges in NW data.

1. About	13. Occasionally	25. Rarely
2. Almost	14. Often	26. Rather
3. Approximately	15. Partially	27. Reasonably
4. Arguably	16. Partly	28. Relatively
5. Fairly	17. Perhaps	29. Roughly
6. Frequently	18. Possibly	30. Seemingly
7. Generally	19. Potentially	31. Slightly
8. Hardly	20. Predictably	32. Sometimes
9. Largely	21. Presumably	33. Somewhat
10. Likely	22. Primarily	34. Supposedly
11. Mostly	23. Probably	35. Usually
12. Nearly	24. Quite	36. Virtually

NWs widely used the adverbial hedges in order to balance their stance between commitment and detachment. Furthermore, NWs had more inclination to using some adverbs than other adverbs. For example, adverbs like *about*, *generally*, *seemingly*, *mostly*, *largely*, and *usually* are more common across the data. Some authentic examples regarding the use of these adverbs were provided in the following:

- (17) It was **generally** easy for them to check concordance structures...
 (18) Given the **seemingly** infrequent transfer here, these are pertinent questions
 (19)... obtained in previous research, which **mostly** found moderate relationships.
 (20) Southern White English is a localized dialect of American English which is **largely** constrained to...
 (21) ... where male authors **usually** do not have a strong presence...

Not only discourse understatements, but also downtoners (almost, partly, hardly, etc.) were also observed heavily in NW sample data. Some authentic examples are:

- (22) Ellipsis is a central feature of all trades talk, **partly** because of...
 (23) Much of the **hardly** voluminous research in this area has centred on...
 (24) he sample contained an **almost** equal balance of...

QUANTIFIERS / DETERMINERS. Determiners found in the data functioned as diminutives (little, few etc.) while quantifiers functioned in a way of vagueness and ambiguity (several, much, more, etc). The table 9 shows the quantifiers and the determiners that were included in NW corpus.

Table 9. Quantifiers and determiners acting as hedges in NW data.

1. (a) Few	6. Much	11. To a lesser degree
2. (a) Little	7. Not all	12. To a minor extent
3. Many	8. On occasion	13. To an extent
4. More or less	9. Several	14. To some extent
5. Most	10. Some	

As seen in the table, 14 different quantifier/determiners were used by NWs. Some examples are:

(25) **Several** factors make important contributions to sophisticated vocabulary learning from...

(26) **To an extent**, one could argue that...

(27)... genre differences explain **much** of the variation between texts and...

Apart from vague and ambiguous lexical quantifiers, some determiners which functioned as diminutives were found in the NW data. Some real examples collected from NW corpus are as follows:

(28) **A few** studies controlled for background knowledge.

(29) Since weaker learners experience difficulty and **little** success in lexical inferencing.

NOUNS. Nouns as hedges were not common in NW writing when compared other lexical indirectness structures. Yet, there are a number of hedge nouns shown in the table 11.

Table 10. Nouns acting as hedges in NW data

1. Assertion	4. Claim	7. Majority	10. Probability
2. Assumption	5. Estimate	8. Possibility	11. Suggestion
3. Attempt	6. Expectation	9. Prediction	12. Tendency

Of all nouns, *majority*, *assumption*, *suggestion*, and *tendency* were the most used ones. Some examples are as follows:

(30) ...it currently represents the 'marked' case for the **majority** of US schools.

(31) An **assumption** could be made that candidates with a Bachelor's degree would...

(32) This **suggestion** for language-focused instruction stems from the lower use of...

(33)... students had a **tendency** to engage in self-assessment...

(34) One **attempt** to answer this question is provided in...

3.3.2. Findings for Turkish writers

EPISTEMIC MODALS. NNWs were more prone to using *can* instead of *may*, which is in contrast to NWs who preferred *may* to *can*. Five modal verbs employed by NNWs were provided in the figure 4 in top-down order. The findings also proved that NNWs did not use *would* with a purpose of indirectness device as NWs did.

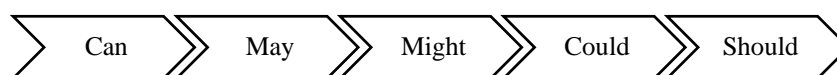


Figure 4. Epistemic modals acting as hedges in NNW data.

Also, *can* and *may* constituted three-fourth of all modal verbs included in the data. Some examples are as follows:

- (35) *The strong influence of gender norms on our behaviour **can** be explained by...*
 (36) *...but they **may** cause serious unhealthy gender stereotypes.*
 (37) *...the reasons for this **might** stem from (a) Turkey being geographically far away from...*
 (38) *These simple steps **could** promise a lot to EFL learners...*
 (39) *Preparing a child for the future life **should** mean to give him command of himself...*

VERBAL HEDGES. Evidential verbs were extensively used. The table 11 shows the verbs that NNWs included in their scientific writings.

Table 11. Verbs acting as hedges in NNW data.

1. Allege	9. Consider	17.Hope	25.Offer	33.Seem
2. Appear	10.Correlate with	18.Hypothesize	26.Recommend	34.Show
3. Argue	11.Demonstrate	19.Imply	27.Report	35.Suggest
4. Assert	12.Display	20.Indicate	28.Reveal	36.Suppose
5. Assume	13.Expect	21.Look	29.Predict	37.Surmise
6. Attempt	14.Feel	22.Maintain	30.Presume	38.Tend to
7. Believe	15.Find	23.Mention	31.Prone to	
8. Claim	16.Guess	24.Observe	32.Propose	

NNWs did not use the verbs *advise*, *anticipate*, *estimate*, and *postulate* while NWs used. Similarly some other verbs that were included in NNW data were not tracked in NW corpus, which were *allege*, *hypothesize*, *imply*, and *recommend*. Some authentic examples including these specific verbs are below:

- (40) *They **hypothesize** that in acquiring an L2, the learner adopts...*
 (41) *... performance differences in this study **imply** the basic language skills...*
 (42) *Definitions and description of types of misbehaviours provided by the participants **appear** to be...*
 (43) *A great number of the teachers **believe** that...*
 (44) *The results **indicate** that the purpose of examinations is...*
 (45) *The same result was **found** by Chacon*

Furthermore, NNWs had a marginal tendency toward using some verbal hedges more than others, which were *appear*, *believe*, *find*, *indicate*, *offer*, *reveal*, *seem*, and *show*.

ADJECTIVAL HEDGES. NNWs did not tend to use adjectival hedges as much as other hedge categories. The adjective acting as hedges are *consistent with*, *in conjunction with*, *in line with*, *in tune with*, *simple*, *possible*, *potential*, and *probable*. In other words, eight adjectival hedges were discovered in NNW corpus. Of all, the word of *possible* was the most preferred adjectival hedges. Some authentic examples collected from NNW corpus were given below:

- (46) *There appears to be three **possible** reasons for...*
 (47) *... it is **possible** for teachers to face with...*
 (48) *In order to minimise the **potential** threat of an FTA, participants mitigate...*
 (49) *... it is quiet **probable** to mispronounce a vocabulary item.*
 (50) *...language exchange communities increased the level of English exposure, which is **in tune with** Krashen's comprehensible input.*

ADVERBIAL HEDGES. Adverbial hedges, which were used as downtoners, took up a significant place in NNWs' academic writing. It was also observed that NNWs had a tendency of using discourse understatements in their scientific writing. You may see the adverbial hedges that NNWs used in the table 12. In pursuit of the table, authentic examples follow.

Table 12. Adverbs acting as hedges in NNW data.

1. Almost	11. Maybe	21. Predictably	31. Slightly
2. Approximately	12. Mildly	22. Presumably	32. Simply
3. Easily	13. Mostly	23. Primarily	33. Sometimes
4. Fairly	14. Nearly	24. Probably	34. Somewhat
5. Frequently	15. Occasionally	25. Quite	35. Supposedly
6. Generally	16. Often	26. Rarely	36. Usually
7. Hardly	17. Partly	27. Rather	37. Virtually
8. Largely	18. Partially	28. Reasonably	
9. Likely	19. Possibly	29. Relatively	
10. Mainly	20. Potentially	30. Roughly	

(51) ...we see that while MCC group **mostly** used...

(52) ...students are **likely** to rapidly forget words...

(53) **Almost** all of these concepts are...

(54) ... **nearly** everyone believes that...

(55) ... teachers **often** explain the aim of each lesson...

QUANTIFIERS / DETERMINERS. Although there are few quantifiers or determiners functioning as hedging devices, they were extensively used. Quantifiers and determiners acting as hedging devices in NNW corpus were (a) *few*, *fewer*, (a) *little*, *many*, *most*, *much*, *to some extent*, *several*, and *some*. In addition to diminutives and vague/ambiguous, NNWs highly used quantifiers/determiners of *many*, *most*, and *some*. Below you may find some real examples picked up from NNW data.

(56) *Teaching of a language has many sub-considerations.*

(57) *Most of the teachers may not make use of this fact...*

(58) ... *they can exert some influence and control their environment...*

(59) ...*there were optimistic results to some extent*

(60) ... *much of this knowledge is culture specific.*

NOUNS. Ten nouns acting as hedges were discovered in NNW data, which are assumption, belief, inclination, majority, possibility, predictable, presupposition, recommendation, suggestion, and tendency. Some examples are:

(61) ...speakers have a **tendency** to identify the unfamiliar sounds...

(62) There is generally a higher **possibility** to publish in a journal...

(63) Another **suggestion** might be to reconsider the cultural topics...

(64) Qualitative analysis is completed with a **belief** that...

(65) These findings are **predictable** considering the background of the participants.

(66) ... the **majority** of the participants enjoyed...

Furthermore, NNWs were highly prone to using the nouns as *suggestion*, *majority*, and *tendency* when compared to other hedge nouns.

4. Discussions and Conclusions

In non-Anglo-sphere academe, rhetorical persuasion does not connote hedging necessarily, and hedging the statements or claims is not an obvious consideration for many non-native writers of English (Hinkel, 2004) when compared to native writers. Accordingly, in a study aimed to find out non-native writers' hedging tendencies in research articles, Hyland (1996) concluded that non-native writers of English find using hedges "extremely troublesome" (p. 278). However, qualitative analyses in the

present study showed that Turkish writers used a great many of hedging devices, which may be because the present study investigated those from the field of ELT. In other words, the writers in ELT have higher levels of English proficiency than those who write in the other disciplines, which may be the reason for the conflicting results with Hinkel's.

Appertaining to hedges, the categories *modal*, *verb*, *adverb*, *determiner/quantifier*, and *noun* indicated a statistically significant difference while the category of *adjective* did not. Besides, no statistically significant difference was detected in total use of hedges between Anglophonic and Turkish writers of English. The study is in tune with Hamamcı's results (2007) who found that there is not a statistically significant difference between Turkish and Native writers of English. Similarly, a small scale study (Ozdemir & Longo, 2014) that compared Turkish students' and American students' thesis abstracts demonstrated statistically non-significant results in terms of total hedge usage. On the other hand, the present study provided a contrastive result with Uysal's (2014) who found that Turkish writers of English used more hedges than Anglophonic writers in conference abstracts. What gave rise to this contrastive result may be because of that Uysal investigated only abstracts, and conventional writing styles of conference abstract may be absolutely different from full text writing styles because writers may assuredly use a tentative language in abstracts due to the fact that the full study had not been conducted up until then.

The most frequently used subcategory of hedging devices is *verbs* for Anglophonic writers while it is *modals* for Turkish writers. These findings are consistent with Akbas' study (2014) which investigated the most frequently used hedges. He found that epistemic verb *can* is the most frequently used hedging device in academic texts written in English by Turkish writers, which is the exact case in the present study. On the other hand, Anglophonic writers used *may* in substantial numbers. This difference may prompt a new linguistic perspective; on whether conventional writing styles of a nation may substantially incline to use some structures or vocabularies over others. In other words, the vast majority of Anglophonic writers and Turkish writers preferred to use different words unique to their group, which appears to be a case that cannot be seen as not better than a chance. Interestingly enough, some conscious or unconscious parameters should be the determinants for writers in deciding their words.

Turning to lexical diversity, unsurprisingly Anglophonic writers had robustly higher hedge and booster diversities than Turkish writers. Besides, the difference between Anglophonic writers and Turkish writers was statistically significant at all sub-categories as well as in total. In other words, Anglophonic writers produced more lexical hedges at all sub-categories in terms of lexical variety, which means that Anglophonic writers preferred to have more lexical variety in their academic writing than Turkish writers of English.

4.1. Pedagogical implications

1. The balanced use of hedging devices is invariably a must for academic writers because excessive use of hedging devices may create an adverse effect on the credibility of the claim, hence, on the writer (Sanjaya, 2013).
2. When the speaker does not want to take full responsibility for the truth of his/her utterances (Brown & Levinson, 1987), he/she can employ hedging modifiers *can* to suggest a hypothetical possibility, and *could* to make the suggestion even more tentative (Leech, 2004).
3. "Native English speakers can be assumed to have drawn on their native intuition about the use of hedging" (Burrough-Boenisch, 2004, p.35), but non-native English speakers are not as much lucky as native ones, therefore they definitely need to spend a large amount of effort and time in learning the precise way of strategically rejecting the claims belonging to others,

how to use hedging devices appropriately, and how to present a new allegation in a persuasive way so that members of the scientific community may accede to the claim (Yang, 2013).

4. The L1 interference may be a problematic obstacle for non-native writers of English because quite a few L2 writers of English incline to construct academic texts that are somewhat inconsistent with the norms and expectations of the target discourse community (Lafuente-Millan, 2014). Regarding the intercultural effect of L1 rhetorical style on L2 rhetoric, which was called “hybridization phenomenon” (Perez-Llantada, 2010), non-native writers should be fully aware of that hidden influence not to constitute blurring rhetorical practices in academic texts.
5. The present study compiled a list of hedges (appendix A) with a purpose of presenting a well-ordered word list that may be used by non-native writers. The ready-made lists of hedging devices may be of great importance to facilitate non-native writers’ effort to find the correct rhetorical word without leaving a stark mark.
6. The genre, discipline, text type, and the issue may require different authorial involvement. Specifically, a very tentative language with mitigating statements, lots of epistemic modals, and ambiguous statements in hard sciences may not be a much acceptable situation from the aspect of claim reliability (cf. Vázquez & Giner, 2008). In brief, your rhetorical style cannot completely be independent from the genre, discipline, text type, and the issue.
7. Plenty of cross-sectional studies which investigated sectional differences in terms of including metadiscourse devices proved that there are significant differences among sections in scientific articles. This may add contribution to a scientific writing to expand its sphere of influence. A tentative language including diminutives, epistemic modals, or evidential verbs may evoke a curiosity in audience to read the whole text. Therefore, a certain amount of hedging can be more tolerable in the sections of abstract and introduction. However, the same degree of uncertainty within discussion and conclusion may cause a counter-effect -- feeling of disappointment in audience because they may have an expectation of finding a precise answer with a relatively more emphatic language to their feeling of curiosity evoked in the *introduction*. Shortly, the sectional use of commitment and detachment in an academic writing should not be stable throughout all sections, but should show variance in amount (cf. Vassileva, 2001; Salek, 2014; Yağız & Demir, 2014; Biok & Mohseni, 2014).

4.2. *Strengths and further research*

The present study collected data only from articles written in the field of ELT; however, rhetorical devices change depending on the genre they are used. Therefore, it would be of use to retain information on how hedges are used in other disciplines. In addition, the present study did not make a distinction in terms of gender; however, gender seems to play a key role in determining rhetorical styles of discourses.

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Appendix A

Hedges List (Page 1/2)

Modals

Can	Might
Could	Should
May	Would

Verbs

Advise	Correlate with	Insinuate	Recommend
Advocate	Demonstrate (show)	Intend	Report
Agree with	Display	Intimate	Reveal
Allege	Doubt	Maintain	Seem
Anticipate	Estimate	Mention	Show
Appear	Expect	Observe	Signal
Argue	Feel	Offer	Speculate
Assert	Find	Opine	Suggest
Assume	Guess	Postulate	Support
Attempt	Hint	Predict	Suppose
Believe	Hope	Presume	Surmise
Calculate	Hypothesize	Prone to	Suspect
Conjecture	Implicate	Propose	Tend to
Contend	Imply	Proposition	Think
Consider	Indicate	Reckon	Try to

Adjectives

Advisable	Liable	Probable	Subtle
Approximate	Likely	Prone to	Suggested
Conjunction with	Partial	Reasonable	(in) tune with
(in) Consistent with	Plausible	Reported	Uncertain
(in) harmony with	Possible	Rough	Unlikely

(in) line with

Potential

Slight

Adverbs

About	Likely	Perhaps	Scarcely
Admittedly	Mainly	Possibly	Seemingly
All but	Mildly	Potentially	Slightly
Almost	Moderately	Predictably	Sometimes
Approximately	Mostly	Presumably	Somewhat
Arguably	Near	Primarily	Subtly
Around	Nearly	Probably	Supposedly
Averagely	Not always	Quite	Tolerably
Fairly	Occasionally	Rarely	Usually
Frequently	Often	Rather	Virtually
Generally	Partially	Reasonably	
Hardly	Partly	Relatively	
Largely	Passably	Roughly	

Quantifiers

(a) Few	Much	To a lesser
Little	Not all	To a minor extent
More or less	On occasion	To an extent
Most	Several	To some extent

Noun

Agreement with	Doubt	In accord with	Proposal
Assertion	Estimate	Majority	Proposition
Assumption	Expectation	Possibility	Recommendation
Attempt	Guidance	Potential	Suggestion
Belief	Hope	Prediction	Tendency
Chance	Implication	Presupposition	
Claim	Intention	Probability	

Kaçınma ve akademik yazım: Sözcüksel kaçınmaların bir analizi**Öz**

Kaçınma, akademik metinlerde çeşitli sebepler için kullanılması gereken önemli bir söylem çeşididir çünkü çalışılan alanda eser üreten bilim insanının kesinlik düzeyini yansıtır. Buna rağmen kaçınma özellikle anadili İngilizce olmayan pek çok bilim insanı tarafından yeterince dikkate alınmamaktadır. Akademik yazımda önemi tartışmasız olmasına rağmen kaçınma ifadelerinin aşırı kullanımı istenmeyen sonuçlara yol açabilmektedir. Başka bir ifadeyle, kaçınma ifadelerinin az sayıda kullanılması aşırı özgüven duygusuna yol açabileceği gibi bu ifadelerin aşırı kullanılması ifadenin doğruluğu üzerinde şüphelere neden olabilmektedir. Bundan dolayı kaçınma ifadelerinin ılımlı ve dengeli bir şekilde kullanımı okuyucu üzerinde doğru bir izlenim bırakabilmesi açısından önemlidir. Bu anlamda, bu çalışma şu amaçları gerçekleştirmek üzere yapılmıştır: akademik bir metin yazarken

anadili İngilizce olan yazarlar ile ana dili İngilizce olmayan yazarların kaçınma ifadelerini kullanım açısından istatistiksel bir fark olup olmadığı; anadili İngilizce olan ve anadili İngilizce olmayan yazarların kullandığı kaçınma ifadelerini ortaya çıkarma ve hangi grubun daha geniş bir kaçınma ifadesi sözcük dağarcığına sahip olduğunu tespit etme; bir sözcüksel kaçınma ifadeleri listesi oluşturma; ve akademik yazımda kullanılan kaçınma ifadeleri üzerine çeşitli önerilerde bulunma.

Anahtar sözcükler: Kaçınma ifadeleri; akademik yazım; söylem; indirgeme; yumuşatma

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