LEXICAL PROFICIENCY OF COLLOCATION, BOOSTING, AND HEDGING IN ACADEMIC DISCOURSE: A COMPARATIVE STUDY

CÜNEYT DEMİR

Doctoral Dissertation

Department of Foreign Languages Teaching
Prof. Dr. Mehmet TAKKAÇ
2016

THE UNIVERSITY OF ATATURK

THE INSTITUTE OF EDUCATIONAL SCIENCES

DEPARTMENT OF FOREIGN LANGUAGES TEACHING

DEPARTMENT OF ENGLISH LANGUAGE TEACHING

LEXICAL PROFICIENCY OF COLLOCATION, BOOSTING, AND HEDGING IN ACADEMIC DISCOURSE: A COMPARATIVE STUDY

(Akademik Metinlerde Sözcüksel Eşdizim, Kaçınma ve Vurgulama Yeterliliği: Bir Karşılaştırma Çalışması)
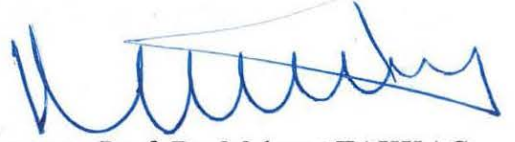
DOCTORAL DISSERTATION

CÜNEYT DEMİR

Supervisor: Prof. Dr. Mehmet TAKKAÇ

ERZURUM
JANUARY, 2016

To Directorate of the Institute of Educational Sciences of Atatürk University,
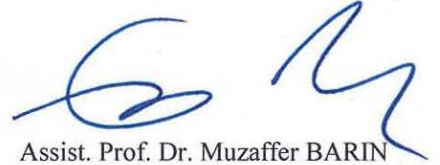
We certify that this dissertation is satisfactory for the award of degree of Doctor of Philosophy in the subject of English Language Teaching.

Chairperson: Prof. Dr. Mehmet TAKKAÇ
Supervisor

Assoc. Prof. Dr. Gencer ELKILIÇ
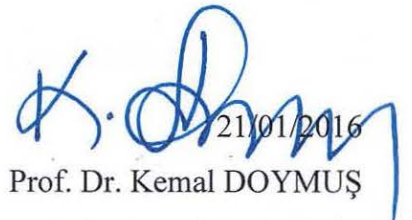
Assist. Prof. Dr. Muzaffer BARIN

Assist. Prof. Dr. Oktay YAĞIZ

Assist. Prof. Dr. Turgay HAN

I certify that these signature belong to the jury members mentioned above.

21/01/2016

Prof. Dr. Kemal DOYMUŞ
Director of the Institute

TEZ ETIK VE BILDIRIM SAYFASI

Doktora Tezi olarak sunduğum "AKADEMİK METİNLERDE SÖZCÜKSEL EŞDİZİM, KAÇINMA, VE VURGULAMA YETERLİLİĞİ: BİR KARŞILAŞTIRMA ÇALIŞMASI" başlıklı çalışmanın, tarafımdan yazıldığı ve yararlandığım eserlerin kaynakçada gösterilenlerden olduğunu, bunlara atıf yapılarak yararlanılmış olduğunu belirtir ve onurumla doğrularım.

Tezimin kağıt ve elektronik kopyalarının Atatürk Üniversitesi Eğitim Bilimleri Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanılmasına izin verdiğimi onaylarım.

Lisansüstü Eğitim-Öğretim yönetmeliğinin ilgili maddelerine uyarınca gereğinin yapılmasını arz ederim.

☐ Tezimin tamamı her yerden erişime açılabilir.
☐ Tezim sadece Atatürk Üniversitesi yerleşkelerinden erişime açılabilir.
☒ Tezimin 2 yıl süreyle erişime açılmasını istemiyorum. Bu sürenin sonunda uzatma için başvuruda bulunmadığım takdirde, tezimin tamamını her yerden erişime açılabilir.

21 / 01 / 2016

Cüneyt DEMİR

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to all of those people who have contributed to this dissertation.

I am deeply indebted to all of my supervisors for providing me with enlightenment, support and encouragement. I would like to thank my chief supervisor Prof. Dr. Mehmet TAKKAÇ for his remarkable supervision, brilliant guidance, enthusiasm and invaluable support throughout the study. I would also like to thank Asst. Prof. Dr. Oktay Yağız for his great inspiration, outstanding teaching, relentless encouragement, invaluable advice, and generosity never terminated from the very outset. He is a true role model for all real academics. Also, my sincere thanks to all other academics at Atatürk University for their helpful advice, detailed comments, suggestions, and ongoing encouragement. I could not have wished for better supervision and support than these people provided.

And of course, very special thanks to my wife, for her relentless supports, understanding, patient, and generosity of time allotted me throughout the doctorate process. Without her, I would be on the half way, which is in fact nowhere.

I would like to extend my heartfelt appreciation and thanks to my family for standing by me and for giving me their unconditional love, care, good will, assistance, and patience.

Cüneyt DEMİR

Erzurum – 2016

ABSTRACT

DOCTORAL DISSERTATION

LEXICAL PROFICIENCY OF COLLOCATION, BOOSTING, AND HEDGING IN ACADEMIC DISCOURSE: A COMPARATIVE STUDY

Cüneyt DEMİR

2016 – Page 276

Three writing conventions which are considered to be useful for writers in order to produce persuasive and efficient academic writings were discussed in the present study, which are namely lexical collocations, lexical hedges, and lexical boosters. Accordingly, the general purpose of the present dissertation is three-fold: (1) statistical investigations, (2) descriptive investigations, and (3) pedagogical implications. In connection to the first purpose, the present study aimed to reveal the differences and similarities between Anglophonic writers and Turkish writers of English in terms of using lexical collocations, lexical hedges, and lexical boosters. In order to achieve the second purpose, Anglophonic and Turkish writers' academic writings were examined, and some authentic examples regarding the use of three linguistic component were illustrated. The last purpose was attained after a series of extensive literature review and individual conclusions.

In total two hundred academic articles written on English language teaching, equally shared by Anglophonic and Turkish authors, constructed the sample corpus. The corpus were gathered randomly from different international English-medium journals. Identifications of collocations, hedges, and boosters were done based on two eclectic taxonomies. The sample data were analyzed manually and through a PC-based software. For quantitative analyses, chi-squire test was applied to the manually analyzed outcomes. For qualitative analyses, content analysis was used with a purpose of revealing authentic usage-based differences between two groups of authors.

The findings evidenced that Anglophonic writers used much more collocations in their academic texts, and the differences at sub-categorical levels were largely statistically significant. It seems that frequent strong collocation usage in non-native writer sample data detract academic writing from being native-like. Therefore, the present study suggested a collocation list compiled from Anglophonic writers' sample data. In addition, the results proved the frequency superiority of Anglophonic writers over Turkish writers in terms of two rhetorical devices; hedging and boosting. The less use of hedging and boosting appears to be in connection to insufficient author awareness regarding the crucial function of rhetorical devices in academic productions. In similar vein, the present study aimed to increase the visibility of rhetorical devices for particularly non-native writers. Accordingly, lists of hedges and boosters compiled from varied dictionaries were provided in the appendices. It is highly expected that non-native writers could get advantage of the lists in the course of composing a scientific text. Besides, the study revealed the high lexical variety of Anglophonic writers when compared to Turkish authors. Another note-worthy event in the present study is the pedagogical implications with respect to how to use collocations, hedges, and boosters in academic writings.

Keywords: collocation, hedging, boosting, academic, writing

ÖZET

DOKTORA TEZİ

AKADEMİK METİNLERDE SÖZCÜKSEL EŞDİZİM, KAÇINMA, VE VURGULAMA YETERLİLİĞİ: BİR KARŞILAŞTIRMA ÇALIŞMASI

Cüneyt DEMİR

2016 – 276 Sayfa

Bu çalışmada, etkili ve ikna edici akademik yazma becerisi için önemli ve faydalı olduğu düşünülen üç temel husus incelenmiştir. Bu hususlar sözcüksel eşdizim, sözcüksel kaçınma ve sözcüksel vurgulama olarak sıralanabilir. Bu çerçevede mevcut eser üç temel amaca sahiptir: (1) istatistiksel incelemeler, (2) betimleyici incelemeler, ve (3) pedagojik öneriler. Birinci amaçta çalışma, sözcüksel eşdizim, kaçınma, ve vurgulama açısından Anglofon yazarlar ile İngilizce yazan Türk yazarlar arasında herhangi bir farklılık veya benzerlik olup olmadığını inceledi. İkinci amaçta Anglofon ve Türk yazarların akademik metinleri incelendi ve yazarların eserlerinden sözcüksel eşdizim, kaçınma, ve vurgulama ile ilgili gerçek örneklerden alıntılar yapıldı. Son amaç yoğun literatür taramaları ve bireysel çıkarımların neticesinde gerçekleştirildi.

Çalışmanın verisi Türk yazarlar tarafından İngilizce yazılmış 100 akademik makale ve Anglofon yazarlar tarafından yazılmış 100 akademik makale olmak üzere toplam 200 İngilizce yazılmış makaleden oluşmaktadır. Makaleler İngilizce yayımlanan çeşitli dergilerden seçkisiz olarak toparlandı. Verilerin incelenmesinde iki ayrı eklektik ölçek kullanıldı. Veriler manüel ve bilgisayar tabanlı bir yazılımla analiz edildi. Nicel analizler için chi-squire testi uygulandı. Yazarlar arasında sözcüksel eşdizim, kaçınma, ve vurgulama yapılarının kullanımını ortaya çıkarabilmek için nitel içerik analizi yapıldı.

Sonuçlar, Anglofon yazarların Türk yazarlardan sözcüksel eşdizim kullanılması açısından istatistiksel olarak farklılaştığını; Anglofon yazarların çok daha fazla eşdizim yapıları kullandıklarını gösterdi. Ayrıca, Türk yazarların çoğunlukla sık kullanılan eşdizimleri tercih etmeleri kendilerini Anglofon yazarlardan ayıran önemli bir özellik olarak ortaya çıktı. Mevcut çalışma özellikle anadili İngilizce olmayan yazarlar için bir eşdizim listesi oluşturdu. Çalışma aynı zamanda kaçınma ve vurgulama gibi retorik kullanımlarda Anglofon yazarların sayısal üstünlüklerini de gösterdi. Çalışma, Türk yazarların daha az retorik yapı kullanmalarını bu konuda hakkında düşük bilinçlilik düzeylerine bağlamakta ve akademik yazımlarda retorik kullanımıyla ilgili düşük bilinçlilik düzeylerini arttırmayı amaçladı. Bu çerçevede kaçınma ve vurgulama yapıları için iki ayrı liste oluşturdu. Bundan sonraki akademik yazımlarda, anadili İngilizce olmayan yazarların bu listelerden faydalanması beklenilmektedir. Ayrıca, bu çalışma istatistiksel olarak Anglofon yazarların daha fazla kelime çeşitliliğine sahip olduğunu da ortaya çıkardı. Mevcut çalışmanın diğer kayda değer faydası ise sonunda sözcüksel eşdizim, sözcüksel kaçınma ve sözcüksel vurgulama ile ilgili sunduğu pedagojik önerilerdir.

Anahtar Kelimeler: eşdizim, kaçınma, vurgulama, akademik, yazım

TABLE OF CONTENTS

CHAPTER III

LIST OF TABLES

viii

LIST OF FIGURES

ABBREVIATIONS

EAP   **:** English for Academic Purpose

ELT   **:** English Language Teaching

ESL   **:** English as Second Language

L1   **:** Mother Tongue

L2   **:** Second Language

NNW   **:** Non-Native Writer

NNWs   **:** Non-native Writers

NW   **:** Native Writer

NWs   **:** Native Writers

SLA   **:** Second Language Acquisition

CHAPTER I

INTRODUCTION

The contemporary writing, with a history that could be tracked from very early times, has peregrinated a long way to its present status. The earliest signs regarding writing, such us cave paintings and glyptic remnants from thousands of years ago, clue us in predicting the importance of writing that ancient primeval people showed even at the very early stages of human history. As time went on, and human beings began to a communal life, the irresistible need in order to record and transmit information expanded in great measure.

Today writing, as it did in the past, sustains its importance even more than ever. Whether you are required to express yourself or to carry a knowledge onto somebody or somewhere else, the safest way will undoubtedly be writing thanks to its protracted endurance and exact same recording feature. The influence of writing is not restricted to a certain field; on the contrary, it is a multifaceted phenomenon. Even though writing is erratic in its script, (i.e. cuneiform, logographic, syllabic, or alphabetic), its expressive power in all disguises makes writing an indispensible part of people's lives all over the world.

Writing is crucial for different spheres of life. Even, it is the foremost ground upon which one's work, learning experience, or intellectual level will be judged at an educational institute, workplace, and in the community. While writing faculty is a requisite for every aspect of the quotidian life, scholarly writing is an indispensible part of an academic's professional life (Yağız & Yiğiter, 2012), since the need for writing in academe is undoubtedly of greatest importance compared to other fields.

As everything has a collocation with which it can tally, the word 'writing' collocates with the word 'vocabulary'. As stated in various linguistic sources, writing is a complex, sophisticated, and multidimensional process; therefore, it is nearly impossible for a writer, as well as an audience and a reader to appraise a written report regardless of taking lexical proficiency and awareness into account. To say the least, the stringent and indispensible correlation between writing and vocabulary, to a large extent, is an irrevocability especially in terms of academic writing.

In the course of time, the ability to produce a cohesive and understandable written text has become an important and essential skill for academic success (Feagans & Applebaum, 1986). However, the focus was not on spelling or punctuation anymore but on content itself. The deflection from spelling and punctuation towards the content has imposed an obligation on writers to use vocabularies efficiently, so that the content would be well-organized and productive for audience. At this juncture, literature emphasizes the importance of two linguistic titles: *metadiscourse* devices and *collocations.* The introduction of metadiscourse into the applied linguistics occurred in the 1980s (Hyland, 2005), and from then on a large number of studies have aimed to examine the issue and to find out the relation between academic writing, vocabulary, and metadiscourse. In another words, what makes vocabularies so vital for writing, accordingly for academic texts, is their metadiscourse power.

The linguistic literature shows that *hedges* are the most frequently used metadiscourse devices of all interactional and interactive metadiscourse devices, meanwhile *boosters* are another ranking metadiscourse devices (cf. Hyland, 2005). Hedges and boosters are two metadiscourse devices functioning under the scope of decreasing or increasing the authorial judgements. Whereas hedging devices (e.g. *may, could, probably*) have a function of mitigating the authorial stance, boosting devices (e.g. *certainly, must, totally*) function reverse by intensifying the authorial involvement through *certainty markers, emphatics, and intensifiers*.

As aforementioned, the other important argument that generates quite a ripple in linguistics and language teaching is the issue of collocation, which is related to the possibility of occurrence of generally two or more words in syntactic or lexical relations. Even if it seems to be a novel term, the importance of collocation in order to be seen native-like speaker of a target language for foreign language learners was underscored in a date that backs to 1930s.

In the present doctoral dissertation, in order to have native-like scholarly writing, three crucial linguistic titles –namely collocations, hedges, and boosters- were investigated from the aspects of native (NWs) and non-native academic writers (NNWs) of English. Furthermore, as well as putting forward the similarities and differences, some aspiring suggestions regarding the use of collocations, hedges, and boosters were suggested for non-native writers of English, which will hopefully help for more natural-

sounding and lexically more productive academic writings. Finally, lists of collocations, hedges, and boosters were created to present into the disposal of NNWs for a more native-like fluency in academic writing.

1.1. Statement of the Problem

In order for a *discourse* to be considered academic, a writer should care for every point meticulously not to miss even the most trivial detail. The place at which writing has been located for academic life is the very heart but nowhere else. The common notion concerning the place of writing in academic life, by all accounts, urges academics on not to overlook any bits with regard to the impeccability of their academic writings. Assuredly, the English language, outstretched its Anglophonic borders long ago, ceased to be a national language and has got under way its pervasive journey from the smallest communities to the biggest ones, leaving very few intact (Yağız & Demir, 2015). This uncontrollable transmission of English language in academic sphere has been unavoidable for academics to develop their writing skills in English in order to be able to make their presence felt in academic world. However, while the skill of cogently writing in L1 poses a trouble for academic scholars, the trouble in L2 writing is an extra challenge for non-native writers. Producing texts suitable for academic *genre* is absolutely not a unilateral process but a sophisticated one. Apart from the well-organised structure and novelty of a writing -which can be summarized as 'complexity, precision, objectivity, responsibility, accuracy, explicitness, and formality-, an author has many other conventions to keep in mind as well as challenges to deal with. That is why, unsurprisingly, academic writing at an advanced level has been a challenge for both native and non-native speakers of English (Yağız, Yiğiter, & Genc, 2009). Establishing arguments, paraphrasing, consciousness on the test itself such as eliminating redundant words and rearranging sentences, grammatical conventions like active&passive voices, rhetorical situations, *intertextuality*, and etiquette are only some of the basic components that should not be dismissed from mind in the course of academic writing. Therefore, writing as a multidimensional ability does not require any evidences, which is blatantly obvious. Beside other things, the last but definitely not the least challenge with scholarly writing is the issue of vocabulary because a writer needs to have a reasonable lexicon in mind; *active lexicon,* not *passive.*

Of many conventions of writing, vocabulary has been an issue notoriously known by the researchers studying Second Language Learning (SLA). The significance of vocabulary was underscored by Harmer (1991, p. 153); *'If language structure makes up the skeleton of language, then it is vocabulary that provides the vital organs and flesh'*. Furthermore, the importance of vocabulary for writing proficiency has given rise to many large-scale empirical studies which establish a link between vocabulary and writing, and there seems no sign of tapering off. Any error or misuse in vocabulary use would not be acceptable in academic world; as stated by Santos (1988) seriously unacceptable. Therefore, there is a strong relationship between vocabulary knowledge and academic writing. As time went on, the relationship was studied under the term of 'lexical proficiency'. Olinghouse and Wilson (2013) correlated vocabulary and writing quality in their study, and struggled to draw attention on the importance of lexical proficiency for high quality academic writtings.

On the top of vocabulary knowledge, the competence of how to use vocabularies appropriately for the content is a skill to be gained. Through lexical competence a writer conveys meaning to the audience, interacts and influences them. Therefore, the composing process of a text is a preliminary scene on which a writer shows off all the competence s/he has. In a study, Raimes (1985) observed that both skilled and less skilled writers were distressed about getting down their ideas on paper, in particular because of lexical competence concerns. This means that the issue of lexical proficiency is not limited to NNWs but NWs as well. Furthermore, a study (Santos, 1988) in which 178 professors were interviewed showed a strong correlation between academic writing and lexical error. According to Santos' findings, professors believed the gravest complication with academic writing was lexical errors. Of the forerunners of SLA, Laufer and Nations (1995) emphasized the significance of vocabulary for scholarly writing by correlating effective composing with effective vocabulary use: "a well-written composition, among other things, makes effective use of vocabulary" (p.307). However, the question of ' how a writer, particularly non-native, should use vocabularies in an effective way' is still suspended.

Lexical proficiency can be measured by examining different linguistic fragments in a text; verbs, modals, adjectives, adverbs etc. However, linguistic literature highlights discourse features rather than semantic or dictionary meaning of vocabularies. A

number of studies indicated that writers who possess discourse knowledge of vocabularies are claimed to compose more efficient and persuasive texts than those who lack the competence of discoursal use of vocabularies (e.g. Benton, Corkill, Sharp, & Khramtsova, 1995; DeGroff, 1987; Langer, 1984; McCutchen, 1986; Olinghouse & Graham, 2009).

Beyond lexical competence, the proficiency of using vocabularies in a way to persuade the readers is another salient issue that has been studied under meta-discourse. Of discourse devices, hedging and boosting are two vital rhetorical devices examined from different aspects. They are used either to mitigate the meaning or to increase credibility. Hedging is "vitally important" (Salager-Meyer, 1994) for academic writings. Either you use it to distinguish facts from opinion, or "honesty, modesty and proper caution" (Swales, 1990, p. 174), hedging has undoubtedly been an important issue for all levels of academic writing. In a study investigated the hedging tendencies of non-native writers in research articles, Hyland (1996) concluded that non-native writers of English find using hedges "extremely troublesome" (p. 278), which may end up with a hindrance to their participation to research world dominated by English. While the importance, even requisite, is readily apparent, authors' use of hedging devices still needs to be investigated particularly in terms of nativeness of writers (Yağız & Demir, 2014) because 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 (Hinkel, 2004) when compared to native writers. While underuse of hedging may lead to overstatement and criticisms, overuse of hedging may bring about suspicions on credibility of the claims that writers have. Therefore, hedging is an issue to be used temperate and carefully by authors, particularly by non-native ones.

The other metadiscourse device 'boosting' can be much more troublesome for academics when compared to hedging. Because it creates an emphatic impression in the reader, it should be included in scientific articles meticulously not to lead any misconception or hyperbole. As stated by Hyland (1998), there needs to be an equilibrium concerning the amount of boosting devices in academic texts. By overusing intensity markers, it is possible to create a counter-effect on reader and reduce the credibility of the statements because much evidence would be needed to cover too

assertive or challenging stances. On the other hand, through precise use of boosting the writer may have the chance of persuading the reader into acceptance of his/her claims. Furthermore, boosting, together with hedging, may function as a speech act, and may be effective in creating illocutionary force by increasing or decreasing the strength of the statement (Holmes, 1984). Therefore, indeterminate knowledge of boosting will undoubtedly be a shortcoming on behalf of writer. Hinkel (2004) claims that non-native writers avoid including metadiscourse devices --hedging and boosting-- in their research articles. That may prompt inadequate metadiscourse devices, and consequently, ineffective research papers in terms of readers. Briefly, boosting is a device from which many non-native writers refrain unintelligibly.

Lexical productivity, in terms of boosting and hedging diversity, is another issue that this dissertation will deal with. Lexical diversity has been investigated heavily in psycholinguistics and applied linguistics (Dewaele & Pavlenko, 2003). There seems to be little doubt that lexical diversity, often connected to language proficiency, is seen as a sign of lexical competence by many journal editors and readers. The linguistic literature shows that native writers use more vocabularies than non-native writers, which proves the superiority of native writers in terms of lexical diversity when compared to non-native writers. There is no doubt that, to a marked extent, lexical diversity is considered as a richness for quality writings, hence should not be overlooked while composing a written product. Accordingly, lexical diversity has been regarded as an illuminative predictor of writers' language competence and an essential indicator of the quality of their writing (Guoxing, 2009). However, lexical diversity is still a daunting issue to be dealt with from non-native writers' perspective immediately. The disadvantage of lexical diversity may be because non-native writers either do not have sufficient lexical knowledge or they have not encountered the vocabulary already; both of which may be the reasons of not enhancing lexical diversity.

Some studies establish a link between collocation knowledge and lexical diversity (cf. Laufer, 2003), and further, they connect the link with more desired academic writings (e.g. Hyland , 2008; Durrant, 2009). However, collocation is a convoluted issue that requires a great amount of conscious attention. A great many of non-native scholars aspire to have native-like written productions, which would be impossible or at least too arduous with indeterminate knowledge of collocation because

native speakers of English use "ready-made chunks" (Robins, 1967, p. 21) while composing a text. In order not to produce a scientific paper with full of odd expressions, the writer should be aware of the importance of collocations that native writers of English heavily employ. But for that, non-native writers may produce inappropriate lexical bundles, which are deemed as incorrect language use (stylistic inappropriateness), and which are foreign to native writers'. As Fox (1998) reported, the main problem as regards producing odd expressions is of collocations, which is a rigour attempt for even very competent non-native writers. It is stated that collocational errors, among all errors types, are the most common errors done by non-native speakers (Gitsaki, 1999), and on account of that they should be extensively studied if writing fluency is demanded (Sung, 2003). Nation (1990), pertaining to low proficiency learners, stated that they have a tendency to "encode words in memory on the basis of sound and spelling rather than by association meaning" (p.3). The situation is not different for non-native writers. A paucity of collocational proficiency is associated with lexical proficiency of the writer. Similarly, collocations tie in with lexical development, notes Ellis (1996). Hence, the reason why non-native writers are not able to use collocations as proficient as native writers may be because non-native writers fail to correlate words on the basis of true and specific word partnership (Sung, 2003). Despite the obvious significance of collocations for scholarly writing and covetable need from the aspects of non-native scholars of English, it has not been studied in an exclusive way that will show the differences and similarities between native and non-native academics, hence will purvey valuable suggestions on how to use collocations in order for more native-like written products.

To sum up, writing is much more sophisticated than ever imagined because there are musts that the writer should keep in mind while composing a text; for instance, grammatical and linguistic features, rhetoric expressions, a great amount of lexicon, semantic and pragmatic usage of words etc. Therefore, while bracing for a writing task, the writer, like equation with multiple variables, should be all set to cover the loads that a writing task will impose on writer. When the difficulties of even a simple writing activity are considered, it will not be difficult to notice how much more an academic writing would pose a challenge particularly for non-native writers. As commonly known, academic writing will not put up with any error at all, especially lexical ones.

Thus, non-native writers should necessarily have a high lexical proficiency if the demand is of scholarly writing. According to linguistic literature, the power of vocabularies lies behind their discursive power. In their articles and books, Hyland, Hinkel, and Skelton underscore the significance of two lexical metadiscourses: hedges and boosters. While Hyland (1998b) and Hinkel (1997) emphasized the importance of hedges in academic writings, Skelton (1997) mentioned about the essentialness of boosters. Careful, meticulous and appropriate use of hedges and boosters in academic texts may keep criticisms away from writers, and may increase persuasive power, hence, may have a persuasive effect on audiences. Nonetheless, as stated earlier, the issues of hedging and boosting still remain unclear, and do not get due attentions. Without hedging and boosting, the scientific papers of non-native scholars would have an impact neither on journal editors, nor on readers. As well as lexical hedges and boosters, collocations are one of the crucial lexical issues. As they are for L2 learners (McCarthy, 1990), collocation appropriacy is a troublesome process that non-native writers should go through for it is one of the important ways that takes NNWs to the ashore of being native-like, and any miscollocations can higly be considered as "a major indicator of foreignness" (McArthur, 1992, p. 232). To be able to have fluency and get rid of foreignness, non-native writers should adapt their stylistic appropriateness to the native writers'. In the thick of such a competitive academe, those who get the advantage of scholarly writing through efficient use of three irrevocable and substantial linguistic devices --lexical collocation, hedge and booster-- will have a more durable place in substantiation of their writings and in making their names in scientific world. A study comparing native and non-native writers' academic writings will be of great importance in two ways; one of which is to determine the possible differences between native and non-native writers in using lexical collocations, hedges and boosters, and the latter is to find possible solutions and suggestions.

1.2. Significance of the Problem

Three writing conventions -which are considered to be useful for writers in order to produce persuasive and efficient academic writings- will be discussed under three subheadings; (1) lexical collocations, (2) lexical hedges, and (3) lexical boosters.

While composing a text, words, more often than not, have an inclination of occurring in ready-made chunks (Kjellmer, 1987). Out of other ready-made chucks "fixed, identifiable, non-idiomatic phrases, recurrent word combinations" (Benson, Benson, & Ilson, 1986), collocations are lexical or phrasal structures being preferred unconsciously by native writers. The term 'unconscious' appears to be an outright expression because native writers have a lexicon of collocations stored intuitively. Therefore, they use word combinations, i.e. collocations, without making reference to memory through a conscious effort. On the other hand, the process of unconscious word combinations occurring in a native writer's mind does not function in the same way as it does in a non-native writer's mind. The collocational proficiency is generally a result of learning through a series of attentions or through interlacing different words creatively. However, the attempt to create a collocation which is not learnt from a native source often culminates in inappropriate collocations that are considered weird and peculiar by native speakers of English, which is a situation that is not behoved to an academic writer. The situation into which a non-native writer will fall due to inappropriate collocations is not a venial error that common readers or editorial readers will ignore easily.

Important for communicative competence, the use of collocations is not all the same; on the contrary, it changes depending on the environment that they are used (Partington, 1998). Therefore, a writer should be accustomed to the sphere in which collocations are used. For instance, an academic writer should have the knowledge of collocations that are common in his/her academic field. A study conducted in media or in other irrelevant contexts will not provide a reliable data on collocation attainment for other fields. For this reason, the problem of collocation of a non-native writer should be solved inside the sphere the writer is in. In brief, the problem is exigent, and warrants to be solved so that proper suggestions and pathways be presented for non-native writers. Another mainstream fact with collocation is the impact that it has on vocabulary acquisition. In that sense *Lexical Approach* of Lewis (2001) aimed to teach vocabulary on the basis of collocation. Opposed to individual items, this approach signifies teaching vocabularies in their ready-made chunks. It is seen that, in addition to the benefit of collocations in producing native-like expressions and word combinations in academic texts, collocations have a distinctive place in teaching vocabulary. The

aforementioned points reveal the necessity of collocations, specifically for academic text in order to cope with foreignness in expressions while a text is composed by non-native writers of English. On the other hand, one other problem with collocations is that to what extent non-native writers access to formulaic language is not yet clear (Durrant & Schmitt, 2009). Kjellmer (1990) claimed that even advanced language producers tend not to know much about formulaic language and collocations, which is an unlike situation with native writers.

Another significant lexical conventions embellishing academic texts are discourse devices; namely hedges and boosters. The ability to use discourse devices is commensurate with language proficiency, or more distinctively, with the degree of nativeness in a language. For this reason, competence in using discourse devices appropriately is seen as a sign of nativeness in language use. To start with, hedging is generally used with a purpose of rhetorical persuasion. Slager-Mayer (1994) stated that hedging devices are "vitally important" (p. 241) in academe while Hyland (1994) drew attention to the importance of hedging by indicating the necessity of it in even textbooks on top of academic writings. In a later study, Hyland (1998b) placed hedges into the list of the most frequent features of a writer's perspective, with which the significance was embodied. The issue of 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). There appears to be no doubt about the significance of hedging in academic text. Nevertheless, Hinkel (2004) reports that non-native writers are not as concerned as native writers in employing hedging devices in their papers. The paucity of hedging devices in non-native writers' papers is hard to explain through a reasonable explanation; while their importance is stark obvious as the figures of Hyland (1998b) showed. Hedging is reported to be critical for academic writings (Hyland, 1998b), and the question of 'why is that' with regard to the criticality of hedging for academic texts was explained by researchers who are in the vanguard in the field. The answer for Hyland (1998b) was the power of "speculative means"; 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. Yet, hedging has a positive impact on the readers if used prudently. Students who were exposed to a written document including hedges developed more positive attitudes than towards the texts containing fewer hedges (cf. Crismore & Vande Kopple, 1997). Therefore, possibly, it will not be too assertive to claim that the higher positive attitude from readers means the higher probability over the acceptance of authors' claim. On the other hand, excessive use of hedging devices in a text may create an adverse effect on the credibility of the claim, hence, on writer (Sanjaya, 2013). All discussed so far emphasises to the significance of hedging for authors writing academic texts.

Although hedging devices contribute to developing positive attitudes with the readers, overusing of them makes a counter-effect, and diminishes the credibility of the writer's claims. The use of hedges on *low level claims* will not help, even, will give rise to a backfire because it will be thought as if the writer did not have sufficient scientific knowledge on the issue being discussed. In sum, while the effect of hedging on readers is an accepted truth, excessive self-effacing will clearly be insufficient to persuade readers (Myers, 1985); then it will harden to evidence the writer's maturity over the discussion point; and ultimately it may occasion a grave failure in accomplishing the purpose of the written work. Therefore, a writer should be balanced in using uncertainty markers; hedges, and instead s/he should use some degree of certainty markers when needed. From this vantage point, it is relatively easy to observe the fragile equilibrium between hedging and boosting.

It is often claimed that non-native writers avoid being assertive in their scientific papers, which leads to invisibility of authorial stance over their claims. The shadowy position of a writer in a scientific text may be deemed as a sign of the writer's indeterminacy over the discussed issue, and thus, the lowering credibility may prompt lack of confidence or doubt in readers. That inescapable conclusion is, out of doubt, undesirable by the writer whose primary aim is to persuade the reader on his/her claim. As in hedging, there should be an equilibrium between overuse and underuse of boosters in academic writings. Whereas underuse of boosters in a scientific text may

cause some credibility problems, too many of them, particularly on *high level claims* may lead to much more trouble from the writer's aspect. It is a truth that boosters in a text represent for the writer's self-confidence with respect to the plausibility of his/her statements (Holmes, 1982). However, over self-confidence does not raise the prospect of credibility; to the contrary, it creates a suspicion in readers' minds about factuality and trueness of the utterance. For this reason, as well as its benefits, a boosting device is not released from jarring effects.

Non-native writers are in a better position in publishing articles in international journals when compared to the past. It is not uncommon anymore to encounter a non-Anglophonic name in the author indexes of English medium international journals. Although Swales (1987) argued that non-native speakers' publications in ostensibly international journals were once scarce, recent researches show that there has been a significant increase in NNWs' article submissions to English medium journals in the last years (Buckingham, 2008). Despite the recent numerical developments of NNWs' scientific articles on international level, non-native researchers are still at the back rankings, especially in social sciences, which require a more elaborate language competence.

Briefly, as never before, linguistic literature and prominent researchers in ELT have built a consensus on significance of three lexical conventions for a more complete academic writing, and have mentioned infelicities that a writer with indeterminate competence on these lexical conventions will take on in scientific world. In academic written discourse, the precise use of rhetorical devices like hedging and boosting are of great importance in order for persuasiveness of the paper and credibility of the claims that a writer put forwards in his/her study. Whilst hedges and boosters make contributions to the stylistic appropriateness of a paper as well as its persuasiveness, the other crucial convention, collocation is an absolute must for non-native writers in order to have native-like fluency, and to eliminate foreignness and odd expressions in their discourses. Fillmore (1979) argued that the source of fluency in a language comes from the knowledge of how to associate words in collocations adequately. Therefore, any indeterminacy with these conventions may give rise to unenviable corollaries from the writer's aspect. Briefly, the competence of collocations, hedges, and boosters lays the foundation for not to have a breakdown in academic writing.

1.3. Purpose of the Study

The general purpose of the present dissertation is three-fold: (1) statistical investigations, (2) descriptive investigations, and (3) pedagogical implications.

The first objective was achieved through making comparisons between NWs and NNWs of English in terms of employing lexical collocations, lexical hedges, and lexical boosters from the discipline of ELT. In this fold of purpose, this study largely meant to elicit the similarities and differences between research articles of native and non-native writers of English. Because both similar and different occurrences apropos of employing lexical collocations, hedges and boosters in two groups of research articles were sure to be detected, whether differences -the rate of deploying lexical collocations, hedges and boosters- were statistically significant or not were investigated. Due to the fact that collocations, hedges, and boosters have a large scope of research and content field (for example grammatical, phrasal etc.), the present study investigated only their lexical forms so that more specific and detailed result could be obtained.

The second purpose aimed to shed light on how native and non-native writers of English deployed lexical items. More specifically, the common patterns regarding the use of lexical collocations, hedges, and boosters of native and non-native writers were investigated. At this point, the typical investigation questions were 'to what extent each lexical hedge and booster was employed'; 'were there any common patterns of lexical collocations, hedges, and boosters between NWs and NNWs'; 'what are authentic examples used in the corpora'; and 'whether or not native writers were superior than non-native writers in terms of lexical diversity'. Lexical diversity superiority is of significance because it is seen as an indicator of richness of the content and showcase of the writer by a great number of readers. That is why academic writings with a high lexical diversity get much more kudos from readers when compared to those with low lexical diversity. Therefore, by providing some window on the issue through findings, some awareness and aspiration regarding the importance of it may be evoked with non-native writers.

The last aim of the present dissertation attaches particular importance to non-native writers of English. Content analyses carried out across the corpora propose a list of collocations which native writers included in their research articles. To be more specific, it is aimed to put collocations constructed by native writers at non-native writers' disposal. Thanks to the collocation list gathered from native writers' academic texts, non-native writers of English are going to have an opportunity of reaching to disparate word combinations, and native expressions. In addition to the list of collocations compiled from native writers' research articles, I built up lists of hedges and boosters after a series of intensive dictionary scanning, which will be of utmost benefit for particularly non-native writers. That non-native writers have a chance to access to a vast variety of hedges and boosters thanks to the list the present study offered will deliver an opportunity for NNWs in terms of scaling up hedge and booster diversity, which may put an end to parochial academic papers of non-native writers from the aspect of lexical productivity. Ultimately, it is aimed to present three lexicon lists (collocations, hedges and boosters) for NNWs, and the lists which were created in the present dissertation are hopefully expected to be used in NNWs' prospective studies, and to function as a preventive shield against erroneous lexical use in the target language. In this connection, NNWs will have an invaluable opportunity in diversifying their lexical richness in their academic papers, in lowering foreignness in their scientific writings, and hence, in raising the prospect in creating native-like academic texts.

The present dissertation is home to varied purposes. It aims:

1. to find out whether there are similarities or differences between NWs and NNWs in terms of using lexical collocations in their academic works;
2. to investigate whether there is a statistically significant difference between NWs and NNWs in terms of lexical collocation frequencies;
3. to provide NNWs with an academic word list of collocations that NWs included in their studies;
4. to find out whether there are similarities or differences between NWs and NNWs in terms of including lexical hedging and boosting;
5. to find out whether there is a statistically significant difference between NWs and NNWs in terms of lexical hedge and booster frequencies;

6. to provide NNWs with an academic word list of hedges and boosters;

7. to provide NNWs with suggestions with regard to the use of lexical collocations, hedges, and boosters in order to have native-like scientific texts.

8. to help NNWs construct their articles through the academic list of hedges and boosters which were gleaned from different sources thanks to the present study.

9. to raise awareness of collocations, hedges, and boosters which are dominant language components in academic society, hence, to provide beneficial additional opportunities in enhancing NNWs' writing quality.

1.4. Significance of the Study

As mentioned before, the primary purpose of the present study is to help non-native writers achieve native-like scientific writings. Academic writing is a multidimensional and sophisticated issue, therefore, infelicities with regard to it cannot be thoroughly worked out in a unique study. Keeping all under consideration, the present study aimed to help non-native writers effectively use collocations and two rhetorical devices; hedging and boosting, in their writing.

One of the common features of poor writing among non-native writers described by Hinkel (2003) is vague constructions. Unless an author overcomes vague constructions in his/her scientific writings, it will be all but impossible to have nativeness in a language. Collocations are in the front rank that occurs in mind if one talks about vague expressions (cf. Hinkel, 2003). Therefore, they are regarded as a salient component of fluent linguistic production. Hyland (2008) summons collocations as "bundles, chunks or clusters", and consider them crucial in contributing to our sense of coherence in a written product, and hence, in shaping the meaning. Another remarkable point in Hyland's research is his claim that collocations are more common than expected by chance. Similarly, Lewis (1997) calls for attention to the fact that collocations "co-occur naturally with greater than random frequency" (p. 25). What Hyland and Lewis said can be understood in a way that collocations are not accidental or unintentional word combinations but knowingly and wilfully. Therefore, it will not be incorrect to express that collocations are structures-aware employed by writers. So far, it has been forthrightly voiced that collocations are learnable and intentional word combinations. What has been told germane to learnability and consciousness of collocations should not be understood as a piece of pen-and-paper. Any simplification

pertaining to collocation use in scientific writings will definitely be a faulty step because they are much more complicated than expected. While lexical bundles in a native writer's mind are well-linked and easily retrieved (Aghbar, 1990), a non-native writer is, out of question, in trouble with them because of his/her insufficient knowledge and lack of awareness of collocations. This deficiency and unawareness prompts inappropriate word combinations and accordingly odd expressions in non-native writers' academic writings, which is a case that would not behove to a scholar. Up until now, it has become overt that native and non-native writers of English are not on equal footing in the process of composing. Because of that, NNWs are not on par with NWs. While NWs have intuition for word partnership, NNWs do not have. On the other hand, Hyland and Lewis have captured non-native writers' imagination by expressing that the intuition for collocation is not something that is inherited; on the contrary it is a learnable linguistic component. But the question is "how such a intrinsic, mostly intuitively learnt thing could be learnt by someone else outside the sphere of being native speaker?". That is the outright question, the answer of which is curiously being longed by non-native writers. Through the present study a list of collocations is going to be constructed from the corpora of native writers' academic texts, and put into service of non-native writers. That may not be a natural way of acquisition, but thanks to the list, it is hoped that non-native writers will find a chance of seeing collocations that native writers use, and accordingly invigorate their academic texts by including the proposed collocations in the list. Also, as time goes on, it is presumed that the collocations on the list will be employed by non-native writers and they will partly become intuitive. What is noteworthy and unique regarding the list that the present study compiled is that the linguistic literature has not offered such a huge list of collocation so far.

Having completed qualitative content analyses, all collocations that native and non-native writers had used were listed. The listing of collocations which belong to both groups of writers is necessary in order to make a statistical analysis. Even if you make a small literature review, a great many of comparative studies will welcome researchers because conducting comparative studies is such a widespread habit among researchers. As regards the significance of comparative studies, it can be said that they are required in order to comprehend quantitative superiority of one group over another. Accordingly

the present study compared and contrasted native and non-native writers. This is crucial in order to find out the similarities and differences between two groups of writers. Through comparing and contrasting a reader can gain some advantages and opportunities, some of which can be summoned as; deeper understanding of the items being studied, focussing more easily on argumentative issue of the study, constructing further connections between texts or ideas being compared or contrasted, and deciding on the better choice while making a selection or giving a decision. Accordingly, because the present study makes a comparison and contrast, it is essential in providing data on similarities and differences between NWs and NNWs of English. Due to the fact that no studies studying English lexical collocations together with lexical hedges, and boosters among Anglophonic and Turkish authors are available so far, this study will be unique with these scope of aims.

As stated at the beginning of the title, apart from lexical collocations, two rhetorical devices were investigated in the study. Thanks to the recent studies, researchers are aware of the fact that rhetorical dimension of a scientific writing is as important as actual content (Flowerdew, 2000). In order for an academic persuasion and interpersonal negotiations between a writer and a reader, successful discursive practises through employing rhetorical devices are of greatly essential. Among all rhetorical devices (bare, hedge, booster, vague stance, and reader-inclusive) that lay foundation for an authorial stance, two types of linguistic resources -hedges and boosters- proved their strength in convincing the readers and in affecting their postures to the subject matter handled in the text (Crismore & Vande Kopple, 1997). In the event of specialised articles written in English, "rhetorical awareness" is referred by Swales as "being able to guess how referees will react to a particular text", and he continues that "a phenomena only acquires fact-like status by consensus and that consensus may not be achievable without rhetorical persuasion" (1990, p. 112).

Last few years have witnessed the soaring intention to communication devices in academic papers, one of which is indispensably hedges. It is widely known that hedging devices are fundamental in academic texts (Hyland, 1998b) because full precision with a scientific statement may not always be possible (Grabe & Kaplan, 1997). Despite the criticality of hedges for academic writings, non-native writers do not use as many hedges as native ones do (Hinkel, 2004), and Turkish authors are not an exception (cf.

Yağız and Demir, 2014). There could be two reasons of why Turkish authors do not use as many hedges as their native counterparts: They either have insufficient awareness of hedging or do not have lexicon of hedges to a certain degree. This study is of importance in investigating hedge frequencies of Turkish authors and Anglophonic authors through a large corpus. The large corpus of this study will contribute in generating an idea on understanding to what extent Turkish authors use hedges in their scholarly writings when compared to Anglophonic writers. Descriptive findings of the present study are important in two ways: (1) in order to gain an insight on numerical superiority of the writer groups and (2) in order to provide a source for further and prospective researches. In addition, this study compiles three lists of hedges belonging to (1) Turkish authors, (2) Anglophonic Authors, and (3) lexicographical ones. Thanks to the first two lists, the reader finds the opportunity of comparing and contrasting Turkish and Anglophonic authors on which hedges they tally with or differ from one another. The last list was compiled in consequence of arduous scanning of various advanced dictionaries and thesaurus (Collins, 2006; Cambridge, 2008; Hornby, 2011). The scanning have delivered up a large number of hedges that can be utilized by particularly non-native writers while composing their text, through which they are going to have a chance for expanding their lexical diversity. As indicated before, the paucity of hedges in non-native writers' scientific text could be due to the writer's lack of awareness on hedging or lack of hedge lexicon. Thanks to implications that this study will suggest, writers' awareness the on importance of hedges in their academic writings is going to be endeavoured to enhance; meanwhile, lexical hedge list gleaned from various dictionaries is going to let non-native writers notice myriad hedges existing in English. At the very last, lexical productivity of non-native writers in terms of hedge diversity is assumed to broaden.

Boosting is the other subject discussed in this study. Academic papers should include boosting devices to some extent in order to "boost the illocutionary force of the speech act asserting the proposition, expressing great certainty or conviction concerning its validity" (Holmes, 1984, p. 348). Therefore, boosting devices should not be ignored by writers if the ultimate aim is to persuade the reader. As with hedges, boosters employed by NWs and NNWs were investigated, and then similarities and differences were provided. From linguistic data aspect, to endow the literature with that type of

descriptive data will be of service as a reference point or for further and prospective studies. Another thing that is surely to the good for particularly NNWs is the boosters list. As constructed with hedges, a list of boosters was compiled after a thorough scanning of reference dictionaries. The existence of a boosting lexicon in the linguistic literature is going to categorically offer an advantage for NNWs to achieve communicative competence by enhancing their lexical diversity. It is expected a carpenter to have lexical competence, and include lexical diversity while describing a piece of wood because it is his area of specialization. From all accounts, when seen in this light, the same expectation is for a writer as well since academic writing is a scholar's area of expertise.

Concisely, the three lists constructed in this study are going to be purveyors of lexical productivity and diversity for NNWs. By virtue of collocation list compiled from native writers' corpora, NNWs are going to dispose of foreignness imprints, and become more native-like. Under favour of hedge and booster lists gleaned from various dictionaries, NNWs are going to expand their lexicon of hedges and boosters; hence, they are going to widen their lexical richness, which is a sign of nativeness. What is an established fact is that NNWs are in the rear of NWs in terms of lexical variety (cf. Sanz, 1999; Schneider, 1999). Furthermore, by means of hedge and booster lists, the writer, lexically, is going to have more expressing power to effectuate the illocutionary force over the readers.

1.5. Operational Definition of Terms

Some definitions of operational terms frequently used in the present study were explained, and the terminological list was arranged in alphabetical order as follows:

Academic writing

Academic or scholarly writing is the process of using deductive reasoning, breaking down ideas according to the speciality of the topic, using the formal voice, and keeping neutrality. It is about what you think and what evidence has contributed to that thinking. Of broad panorama of L2 writing, writing in the academic disciplines is constructed in a different way than other types of writing genres like free writing, fiction, or personal report (Yağız, 2009) because it requires much more attention, care, content-knowledge, citation, and linguistic competence. By many non-native scholars of English, it is a

daunting issue due to the fact that there are numerous underlying subjects in mind to deal with; for example, the genre of the writing, purpose of the study, message transmission way, context, audience, linguistic challenges etc (cf. Irvin, 2010).

Awareness

With linguistic definition, it is the state of being aware of a linguistic structure whether context-dependent or context-independent. For instance, lexical awareness means that the person who is addressed to has knowledge of some specific features of the lexis; language awareness refers to the improvement in language users of an expanded consciousness of and sensitivity to the structures, functions and forms of a language (Carter, 2003). Therefore, depending on the context in which it is used, the meaning gains an enhanced sphere of influence.

Boosting

A linguistic device which is used to show full commitment of the writer in an attempt to persuade the reader over the claims or statements; put it differently, "the linguistic means expressing intensification of the illocutionary force" (Sandova, 2011, p. 170). Boosting and its sub-categories are called by a various number of researchers; as "up-graders" (House & Kasper, 1981), "strengtheners" (Brown & Levinson, Politeness: Some universals in language usage, 1987), "intensifiers" (Quirk, Greenbaum, Leech, & Svartvik, 1985), "commitment" (Vassileva, 2001), "certainty markers" (Rubin, 2010), "accentuation markers" (Urbanová, 2003), and "amplifiers" (Xiao & Tao, 2007). *Certainly, totally, always, no doubt etc*. are only some examples of boosters.

Collocation error

Collocation errors refer to mis-collocations which violate the co-occurrence restriction (Cruise, Language, meaning and sense: Semantics, 1990). Examples of such lexical collocation violations include *hot regards* or *hearty regards* instead of *warmest regards* (Benson, Benson, & Ilson, 1986).

Collocations

With an early description -though there exist disparate descriptions- collocations can be shortly defined as two or more words that have a high tendency to occur together

(Halliday, McIntosh, & Strevens, 1964): for example, *set an alarm, alarms ring, intimately acquainted, make an impression, etc.*

Competence

A thesaurus dictionary (Collins, 2006) will give you the synonyms of "competence" as *capability, ability, capacity, expertise, skill.* Therefore, it will not be incorrect if it is defined as "capability in doing something accurately and suitable to certain criteria". For example, lexical competence refers to having more knowledge on lexis and the ability to utilize them appropriately while communicative competence may be referred to the skill of making a contact with the interlocutor in a successful way.

Foreignness

The characteristics of foreignness in a language are the notions that are mostly noticed by native speakers of the language. Ehlich (2009) describes foreignness in language as proximity differences, false friends, and degrees of distance constitutive. As for me, foreignness is "linguistic infelicities that execute as semantic and cognitive stimulants in a reader's mind against the writer's competence", and hence, adversely affect the readers toward the content of the text.

Hedge

Hedges, which are called by different names, include any linguistic devices employed to indicate a lack of full commitment to the value of an accompanying claim; or the wish not to articulate the claim categorically (Hyland, 1998b). Recently, it has been mentioned about *cautious language* that is positioning yourself under varied disguises like referring to someone else while presenting a claim or reducing commitment. Some common examples of hedges in scientific writings are *generally, numerous, often, to appear, to predict, almost etc.*

Lexical diversity

Lexical diversity, which was frequently linked to productivity, is evaluated through a type-token ratio which is a measuring technique conducted through the comparison of the total words number (tokens) with the number of different words (types) (Dewaele &

Pavlenko, 2003). What it means more specifically is that the more different words you use in a writing, the higher lexical diversity you will have or vice versa. Authors largely raise lexical diversity in their academic writings by containing synonyms or antonyms instead of repeating the same vocabularies.

Lexicon

It is the knowledge of lexical categorization and appropriate use of words that a speaker knows about. It is a mass noun, therefore, the term covers semantic, pragmatic and other associational knowledge of vocabularies that exist in a speaker's mind. For example the statement *hedge lexicon* in this study denotes all active hedges and their knowledge of usage in the speaker's mind.

Mis-collocation

Same with collocation error.

Nativeness

It is a situation in which a speaker is accustomed to the nature of linguistic components of a language in all rounds. Nativeness includes successful word combinations, pragmatic and prosodic features of the language. Right opposite meaning of "nativeness" is "foreignness". In the linguistic terrain of academic writing, the nativeness paradigm has constructed a binary classification of speakers: native speakers and non-native speakers (Brutt-Griffler & Samimy, 2001). As of now, it is a term that has been used mostly in the ELT profession rather than other academic disciplines.

Native writer vs. Non-native writer

The native/non-native issue is controversial from a sociolinguistic perspective and it is equally at issue from a purely linguistic point of view (Medgyes, 1992). To evaluate a native writer from the aspect of competence will not be a reasonable and true way of judging because it is possible for a non-native writer to be as competent as a native writer in terms of linguistic components. Therefore, a native writer can be defined as the one whose mother tongue is the same with the language of the written products while it

is L2 for a non-native writer. Shortly, first language acquisition may be the selection criterion to determine the nativeness of a writer.

Proficiency

With a glossary meaning it can be defined as a high degree of skill. In this study, phrases like "lexical proficiency, language proficiency, boosting proficiency etc." can be turned up. The term has a broader meaning when compared to the term "competence" because it covers knowledge, fluency, accuracy, discursive strategies, and all other linguistic skills when used in the field of ELT.

Research article

A research article is a scientific writing that is usually composed of a summary of the whole research "abstract"; a description of the research "introduction"; "methodology"; "results"; "discussion"; "conclusion"; and if any, "suggestions". It is hard to find basic summaries or general introductions to the topic in research articles (Texas, 2015). Research articles are much more original than any other writing types thanks to their topics to investigate, methodological otherness, findings or other metafunctional components.

Rhetoric

It is a stylistic linguistic component that studies argumentation and discourse styles of a writer or speaker in order to persuade, motivate or inform particular audiences in certain situations. It has a vast scope of study, and is used in a multitude of different applications ranging from literature to architecture (Vickers, 1995). The study of rhetoric trains learners to write effectively, as well as to critically understand and analyze discourse (Smith, 2011). This study will investigate two sub-components of rhetoric: hedging and boosting.

1.6. Limitations of the Study

Hedging shows variance depending on the context it has been used. In other words, hedging and other features of opinion positioning (like boosting) are said to differ across disciplines (Hyland, 2005b). Therefore, the present study compiled a

corpus of only ELT research articles; otherwise cross-disciplinary corpora could spoil the reliability of the study.

This study investigated collocations, hedges, and boosters from lexical aspect. However, there are other aspects of collocations, hedges, and boosters: for example syntactic markers like *passive voices* and *if conditionals* are common hedging devices, therefore, could be investigated. Furthermore, phrasal boosting constructions are certainly not rare in the written literature. "Grammatical collocations" (Granger & Paquot, 2008) *-verb+preposition, adjective+prepositions-* are one of two collocation types being widely used in linguistics. It seems that collocations, hedges , and boosters are the issues within a vast sphere of study area. Therefore, it needs to be clarified that the present study decided to examine collocations, hedges, and boosters only from lexical aspect, in the opposite case the research area for the present study would be too large to obtain stable and specific results.

Cross-cultural research in using rhetorical devices like hedging and boosting has a significant place in order to find out intercultural communication and socio-pragmatic variations among different communities. Accordingly, in the genre of academic discourse, the issue has been studied sizably. Yet, the present study has nothing to do with socio-cultural differences in using hedges and boosters because it is a descriptive study. This study investigated hedges and boosters by the way of linguistics and illustrations. To briefly state, any results regarding cultural background of NWs and NNWs were not provided in this study.

This study investigated articles only in the field of Language Teaching. Other than inter-disciplinarily as is in the present study, collocations, hedges, and boosters are three important writing conventions which can be examined cross-disciplinarily. Cross-disciplinary studies could provide a result of vast information on disciplinal differences in using collocations, hedges, and boosters. However, it may harden to evaluate the results, and hinder to suggest reliable pedagogical implications for NNWs.

1.7. Framework of the Study

This dissertation is composed of five chapters; namely *(1) Introduction, (2) Literature reviews, (3) Methodology, (4) Results, (5) Discussion & Conclusion*. This chapter includes the purposes of the study, definitions of terms, and discusses the

statement of the problem, the significance of the problem, and finally significance of the study. In the content of chapter one, the reader shall find the significance of collocations, and rhetorical features of hedges and boosters in scholarly writing. In addition, chapter one attempts to construct a reasonable base-line on why the issue should be studied.

Chapter two presents a complete literature review and theoretical framework scanned and adopted for the present dissertation. Chapter two begins with some detailed definitions of the discussed issues in the study. Some literature review on academic writing and academic writing challenges follow definitions. Then, former studies bound up with the discussed issue of the present study are summoned under associated sub-titles in order to allow reader to see the studies in the literature that are at variance and in congruent with the present study in terms of size and scope, purposes, and pedagogical offerings. Terminally, after presenting studies conducted so far regarding the use of lexical collocations, hedges, and boosters, some theoretical explanations, which make the present study unique and distinctive, have been provided in this chapter.

The methodological design descriptions are in the chapter three. The size of the corpora and how it was built are disclosed in this chapter. Apart from that, the chapter presents identifications of linguistic devices and how the data analyses were done; that is, into which categories lexical collocations, hedges, and boosters were divided. Also provided in chapter three are information on data analyses and research instruments.

Chapter four is the place in which the reader may find the detailed findings of the study. The findings for the use of lexical collocations, hedges, and boosters by NWs and NNWs are presented. Some comparative and contrastive statistical analyses were conducted, and as consequence, quite a few significant tables and figures were delivered cautiously. Frequency distributions of lexical collocations, hedges, and boosters were also yielded in this chapter. Furthermore, after a series of statistical analyses, whether there were any statistically significant differences between NWs and NNWs in terms of use of lexical collocations, hedges, and booster were elucidated in that chapter. As last, the chapter presented the lists of lexical collocations, hedges, and boosters that the NWs and NNWs used in their research articles.

Discussion and conclusion part of the dissertation built the fifth chapter. The findings were organized in a way appropriate to the literature, to theory, and to practice. The research questions posed in the introduction were answered, and the hypotheses were tested. Furthermore, the findings were related to the literature and expectations through former studies. Regardless of whether or not the quantitative results were statistically significant, all the results relating to the research questions were addressed. On the other hand, conflicting and unexpected findings were provided. Besides the chapter effectuated the core of the study. It summoned the whole study and principles implications of the findings, and then indicated about strengths and weaknesses of the present study. Also, the significance of the results and conclusions on their influence on our knowledge and understanding of the problem were examined. Chapter reached to the peak in importance with pedagogical implications on lexical collocations, hedges, and boosters in research article of NNWs, which was subsequently followed by some suggestions for further research. Furthermore, the chapters direct readers to the lists of lexical collocations, and lexical hedges and boosters that were gathered from the corpus of NNWs and different dictionaries, respectively.

1.8. Research Questions

The present dissertation primarily stays focussed on the contribution of lexical collocations, lexical hedges, and lexical boosters to non-native writers' academic writing development. Although specific research questions of the present study were delivered, it will be useful to indicate that the present study dedicated itself to a central research question; 'Do native and non-native writers of English employ lexical collocations, hedges and boosters differently in their research articles, if so, how should the findings be interpreted to be able to make suggestions to non-native writers in order to have native-like scientific texts?'. While native-writers are represented by Anglo-phonic writers, Turkish scholars represent non-native writers.

In total, there are twelve research questions under three different headings: *(A) lexical collocations, (B) lexical hedges,* and *(C) lexical boosters.* All the sub-questions were organized in similar ways because the purpose of the present study concerning each writing convention, namely *collocations, hedges,* and *boosters*, were not dissimilar in principle. The terms 'overall and separately' in the first questions of each heading

(A1, B1, and C1) have a meaning that interprets the corpora of the study. Lexical collocations, hedges and boosters are composed of varied categories; for example, while lexical collocations have seven major types (see 3.4.1.), lexical hedges and boosters have six sub-categories (see 3.4.2. and 3.4.3.). Therefore, the term 'overall' embodies the total of all sub-categorizations whilst the term 'separately' serves to represent each sub-category of the writing conventions. The second research questions (A2, B2, and C2) investigated the frequency of each sub-category of lexical collocation, hedges, and boosters, and those with the highest frequency were determined through quantitative analyses. The same research questions required to reveal an outcome pertaining to lexical variety. The first and second research questions may be seen as if they could be fended off, however they are convenient in order to provide a descriptive data that may hopefully be a reference point for prospective and further studies. Having been used appropriate statistical tests, the third research questions were answered. The statistical test results are of great importance in reaching to precise conclusions. Therefore, the third questions were answered after a series of statistical calculations, which were decided by evidences drawn from literature. The inclusion of last research questions (A4, B4, and C4) are purely pedagogical, which have a invaluable purpose of compiling pedagogically oriented implications from literature for non-native writers of English. For example, a finding discovered Turkish scholars' underuse of hedging devices or lack of collocations might mean that Turkish scholars need to consider to contain more hedges or need to pay attention to collocations in their scholarly writing if the authentic aim is to have native-like fluency.

In particular, research questions which were set out to answer through the present study were provided:

A. Research questions with regard to lexical collocations

A.1. Both overall and separately, to what extent do NWs and NNWs use lexical collocations in their RAs?

A.2. What are the most frequent pivot words in lexical collocations that NWs and NNWs use in their RAs?

A.3. Both overall and separately, is there any statistically significant difference between NWs and NNWs in terms of lexical collocation frequency and collocation diversity?

A.4. What do the literature and research findings suggest about the use of lexical collocation in academic discourse?

B. Research questions with regard to lexical hedges

B.1. Both overall and separately, to what extent do NWs and NNWs use lexical hedges in their RAs?

B.2. What is the most frequent lexical hedge category that NWs and NNWs use in their RAs? Are there any differences between the two groups in terms of lexical diversity of hedges?

B.3. Both overall and separately, is there any statistically significant difference between NWs and NNWs in terms of using lexical hedges?

B.4. What do the literature and research findings suggest about the use of lexical hedges in academic discourse?

C. Research questions with regard to lexical boosters

C.1. Both overall and separately, to what extent do NWs and NNWs use lexical boosters in their RAs?

C.2. What is the most frequent lexical booster category that NWs and NNWs use in their RAs? Are there any differences between the two groups in terms of lexical diversity of boosters?

C.3. Both overall and separately, is there any statistically significant difference between NWs and NNWs in terms of using lexical boosters?

C.4. What do the literature and research findings suggest about the use of lexical boosters in academic discourse?

CHAPTER II

LITERATURE REVIEW

2.1. Definitions

Because collocations, hedges, and boosters are commonly used terms in this study, they were defined as following. The definitions belong to various researchers who studied the issue of collocation.

2.1.1. Collocation

Instead of sharing a single common explanation, the literature diversifies the definitions of collocations. It is understood that there are sub-categories of collocations such as lexical collocations, grammatical collocations, solid lexical collocations, and mis-collocations.

Collocations

1. A collocation addresses to syntagmatic relations, the meaning of which is not directly committed to the conceptual meaning (Firth, 1957).
2. Collocations are two or more words occurring together with a strong tendency (Halliday, McIntosh, & Strevens, 1964).
3. Contextually, collocations are appropriate forms of language. They have the power of specifying one another's occurrence (Kororsadowicz-Strazynska, 1980).
4. Because a collocation is a sequence of lexical item that occurs habitually together, it is idiomatic. Yet, there is a difference that makes a collocation different from an idiomatic expression, which is that a collocation is wholly transparent, and a semantic constituent (Benson, 1985). In another description of Benson (1985), it is stated that collocations in English are word combinations that are statistically more prone to appearing together than accidental chance.

5. A collocation is a type of semantic cohesion in which varies by the constituent elements in mutual degrees. The co-occurrence between lexical units in a collocational constituent may be strong or weak (Cruise, 1986).

6. A collocation is composed of two co-occurring words that are connected in a native-speaker's memory (Aghbar, 1990).

7. A collocation in English is described as a formulaic, prefabricated, and conventionalized combination of two or more words (Zhang, 1993).

8. The term collocation is utilized to show the repeated co-occurrence of lexical items (Martelli, 2006).

9. Collocations describe a sequence of two or more words that are utilized by native speakers and indicate native speakers' capability of coining new words (Pahlavannezhad & Ebrahimi, 2012).

In addition to these definitions, Hausmann's definition (1989) deserves a distinctive place, because it provided an explanation of the constituent parts of a collocation. Hausmann introduced two terms concerning collocational constituents: *base* and *collocator*. While the base is the semantic nucleus, the collocator is the modifier of the base. For example, in a *noun+verb* collocation *a bird flies*, here what we are talking about is *bird*, which makes it the base. The verb *flies* is the collocator for providing information on what the bird does. In brief, collocations are two or more words with a high co-occurrence possibility, which are conventionalized in time due to frequent usage.

When the term "patterned speech" has been mentioned, it is almost certain that many fixed patterns are going to come to mind. These patterned speech includes (Becker, 1975; cited in Kennedy, 1990):

formulaic speech	*(as a matter of fact)*
prefabricated patterns	*(that's a .....)*
unassimilated fragments	*("to meet you" as a greeting)*
prefabricated routines	*(how are you)*
sentence builders	*(that's a .....)*
idioms	*(kick the bucket)*

clichés   *(as a matter of fact)*

lexicalized sentence stems   *(as a matter of fact)*

set phrases   *(in brief; at the present time)*

polywords   *(the powder room)*

deictic locutions   *(as a matter of fact)*

situational utterances   *(I'm glad to meet you)*

verbatim texts   *(oozing charm from every pore)*

phrasal constraints   *(by pure coincidence)*

non-canonical forms   *(on with the show)*

fixed phrases   *(in brief; at the present time)*

Although collocations include majority of the patterned speech, they do not cover all of them. For example, idioms are patterned speech that should not be merged with collocations. Therefore, every patterned speech must not be considered as a collocation which is "recurring sequences of words" (Kennedy, 1990, p.217).

Lexical collocations vs. Grammatical collocations

Collocations, which previously had been regarded as a single title, were divided into two as lexical and grammatical collocations by Benson, Benson, and Ilson (1986). Grammatical collocations include an adjective, a verb or noun, plus an infinitive, a preposition or clause. The patterns of a phrasal grammatical collocations form from a lexical unit and a pattern that specifies the sub-categorization property of the head (Bentivogli & Pianta, 2003). Similarly, verb+noun, preposition+noun, and infinitive verbs have dominant places in grammatical collocations, said Fontenelle (1998). On the other hand, lexical collocations, as stated by Bahns (1993), do not include infinitives, prepositions, or clauses; instead, various combinations of adjectives, adverbs, verbs, and nouns. Again, if compared to closed class structure of grammatical collocations, lexical collocations are composed of two equal open-class lexical items, and include no subordinate element (Fontenelle, 1998). This study investigated lexical collocations rather than grammatical collocations.

Solid lexical collocations

When compared to lexical collocations, solid lexical collocations are much more rigorous in constructing a lexical word combination. The term was first used in a dissertation titled "Personal Communication" in 2002 under Dr. Aghbar' advising (cited from Sung, 2003) to refer to sequences of lexical items that occur so repeatedly; and hence, the lexical combination gets a strong bound to each other. There is such a strong interconnection among lexical items in solid lexical collocations that the native speaker hardly considers them as separate items or free combinations. *High winds, acute pain, light drizzle* can be considered as examples of solid lexical collocations. The present study did not make a distinction between lexical collocations and solid lexical collocations, and investigated them as lexical collocations.

Mis-collocation

As indicated earlier, mis-collocations, contrary to well-established collocations, are in contravention of co-occurrence restrictions (Cruise, 1990). Though, they are very prevalent in NNWs' writings. For example, a native speaker would say *the fast train; rancid butter;* or *a quick shower* but not *the quick train; rotten butter;* or *a fast shower.* Incorrect collocations are not acceptable in academic discourse at all, and they are regarded as "a major indicator of foreignness" (McArthur, 1992, p. 232).

2.1.2. Hedging

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. 1 will refer to such words as*
> *'hedges'* (1973, p. 471).

After the introduction of hedging into Linguistics, the term immediately started to be used in pragmatics intensely. Then, Linguistics was introduced by *Politeness Theory* of Brown and Levinson's (1978), which is known as politeness strategies. Later, hedges came to be known as face-saving acts, and were analysed mostly in oral conversations (Iida, 2007) as well as in written products. Contrastive/cross-cultural analysis of hedges

became influential in the early 1980s, and towards the end of 1980s hedges began to gain attention and ground in English linguistics and English for Academic Purposes (EAP). 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, either by adapting a term to a non-prototypical situation, or by indicating that some term is a rounded-off representation of some Figure; 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) mentioned about approximators and shields that they caught attention and became widely known in the area of Linguistics, and other language depended disciplines. He underscored the importance of distinguishing "shields" and "approximators" for academic writing education. Since the introduction of hedges to Linguistics and ELT, hedging has been an issue gaining popularity in especially Linguistics in the recent years. Many renown linguists including those in ELT and other language depended disciplines have studied the issue from various aspects. Some of the studies investigated cross-linguistic aspects of hedges while the others conducted cross-disciplinary or cross-cultural studies on hedging. Although hedging is a linguistic concept that evades itself any precise definitions, the rising popularity together with a great many of studies brought along new descriptions of hedging, which are as follow chronologically:

1. Hedges are words that contribute to the interpersonal function (Halliday & Hasan, 1989).

2. Hedging devices are not only statements that communicate voices but the author's attitude to readers as well (Halliday, 1978 cited in Hyland, 1998c).

3. Hedges are used to separate the facts or the real from opinions, or from "honesty, modesty, and proper cautions" (Swales, 1990, p. 174).

4. Hedges are linguistic components that are used to convey purposive vagueness and tentativeness (Salager-Meyer, 1994).

5. Hedges are items of language that speakers or writers use to obviously qualify their commitment deficiency to the truth of a propositions (Crompton, 1997).

6. Hedges refer to a group of devices that supposedly mitigate utterances by signalling non-commitment and imprecision (Dixon & Foster, 1997).

7. Hyland (1998b) made a description of "hedging" as "any linguistic means used to indicate either a) a lack of complete commitment to the truth value of an accompanying proposition, or b) a desire not to express that commitment categorically" (p. 1). Another definition of hedges that belongs to Hyland is that hedges are "the means by which writers can present a proposition as an opinion rather than a fact: items are only hedges in their epistemic sense, and only then when they mark uncertainty" (1998b, p. 5).

8. Hedging is a type of negative politeness since the writer or the speaker makes the content of the utterance fuzzier rather than keeping its original meaning (Riekkinen, 2009).

9. Hedging is one of the most important strategies of lessening claims by allowing the speaker or writer to express possibility and tentativeness in their academic writings or conversations (Yang, 2013).

10. Hedges may be defined as a type of tentative language to abstain from any certainty or to assuage the propositions and statements to avoid possible criticism (Yağız & Demir, 2014).

The definitions provide insight into understanding how hedging are regarded in different disciplines depending on their usage. For example, pragmatists, theoretical linguists, or applied linguists provided definitions of hedging in association with their points of interest. Therefore, it can be concluded from the definitions that hedges have a vast sphere of use and influential. The definition of this study is that hedging is a way of mitigating authorial involvement not to be seen over-assertive which is a situation that may lower credibility towards the argument as well as the writer himself/herself.

2.1.3. Boosting

Boosting, also called certainty markers, intensifiers, emphatics interchangeably in the present study, has been studied as an issue under metadiscourse. It generates a certainty impression in the reader, i.e., an impression of emphatics, assurance and conviction. To put it differently, boosters can be considered as rhetoric devices with a

purpose of strengthening authors' claims or statements on the issue, thus it creates a heftier conviction and persuasion influence on the stockholder. Along similar lines, Boosters seek to increase the claims or statements, hence to prove the author's commitment and engagement to her/his statements (Hyland, 1998c). Briefly to illustrate, boosters are certainty markers which intend to prove the writer's stance on a colossal scale by trimming discursive space.

The act of boosting can be considered as the illocutionary force of speech, therefore it may be treated under indirect speech acts of Austin (1962) and Searle (1969). Holmes (1984) touched the subject by indicating: "Modifying the illocutionary force of speech acts involves increasing or decreasing the strength with which the illocutionary point is presented" (p. 347). The commitment in the illocutionary force might entail a perlocutionary act by contributing to the impact of the discourse, which ends up with a concrete impact on the stockholder.

Although hedging and boosting are two important pragmatic aspects of linguistics, boosting is a discursive functional device which has caught less attention when compared to hedging. The case is similar as regards definitions, which means linguistic literature has fewer definitions of boosting than of hedging. Though, boosting is an issue gaining ascending significance in the last decades (cf. Gillaerts & Velde, 2010).

Disguising under different names in various studies, boosters, as a covering term, were called as intensity markers (Behnam & Mirzapour, 2012); commitment (Vassileva, 2001); intensifiers (Lim & Hong, 2012); certainty markers (Kim & Suh, 2014); emphatics (Bondi, 2008); and authority marker (Cook, 1990). The present study used the terms interchangeably. Crompton (1997) stated that boosting is a linguistic device that is referred to make an overstatement. He emphasized authorial commitment through his description of boosting. Different from Crompton, Hyland (2005) approached to the issue from a different point, and said that boosters are generally used to create an opinion of fact with the reader about the writer's existing or proposed claims. The point on which he aims to gather attention is the convincing power of boosters on readers. Therefore, according to Hyland, boosters are persuasive agents in academic writings. Another description of boosting is that boosters are metadiscourse devices that notify writer's stance over the whole allegation (Hu & Cao, 2011). It can be

understood through the description that boosters do not have an impact on only individual sentence but on the entire proposition. What is understood from this description is that boosters should be employed carefully because they have an effect not only on the sentence in which boosters are used but on the whole writing. This study has its own description of boosters: boosting, depending on the context in which it is used, is a linguistic device that signals the writer's commitment to his/her proposition(s) to convince the reader on the credibility of his/her statements.

2.2. Academic Writing

The proliferation of colleges, universities and other educational institutions in the past several decades has made academic writing a fact of life for scholars. Afterwards, the issue of scholarly writing has widely been a topic of interest for particularly NNWs. Accordingly quite a few prominent researchers concerned themselves about the issue from different points of view. For example, while Hinkel (2003) stated the importance of grammatical competence in academic writings, researchers such as Allison, Cooley, Lewkowicz and Nunan (1998) discussed the problems in organization of the script on a macro and micro levels. On the other hand, there are researchers who argued the impact of L2 writing competence over L1 writing skill (cf. Shi, 2002; and Hirose, 2003). In conclusion, what made all researchers to stand in the same place is the requirement of an academic writing for being scholarly.

Bailey (2006) divided academic writing into three. The first is t*he writing process*, which includes *avoiding plagiarism, from titles to outlines, evaluating texts, understanding purpose and register, selecting key points, note-making, paraphrasing, summary writing, combining sources, planning essays, organising paragraphs, organising the main body, rewriting,* and *proof-reading*. What can be understood from the first stage of academic writing is that writing is a cognitive process. Therefore, the writer is to be braced for writing with complete meta-cognitive awareness. Furthermore, it is seen that academic writing is not a work that can be done arbitrary, but a serious work that needs well preliminary preparation. The second stage concerns e*lements of writing*, which contains *argument, cause and effect, cohesion, comparison, definitions, discussion, examples, generalisations, numbers, opening paragraphs, references and quotations, restatement and repetition, style, synonyms, variation in sentence length,*

and *visual information*. The second stage highlights the importance of structural arrangements of an academic writing. Structural arrangements remain the foremost feature of a writing in creating a penetrative impression over the reader. The last stage is a*ccuracy in writing*. This, no doubt, engrosses contextual dependency, which is maybe the most crucial stage because the content is all for an academic writing. The third stage lays emphasize on *abbreviations, academic vocabulary, adverbs, articles, caution, confusing pairs, conjunctions, nationality language, nouns, adjectives, prefixes, suffixes, prepositions, punctuation, relative pronouns, time words and phrases,* and *lexical formality*.

Among features of academic writing, the literature provides seven pillars which are: complexity, formality, precision, objectivity, explicitness, hedging, and responsibility. Because academic writing is not an issue restricted to a certain group or sphere of people, you may find a huge amount of information on it. For example, a report prepared by Argentina (2013) proposes some tips and features of L2 academic writing. They are:

1. Linguistic competence: a) focus on grammar, b) focus on spelling, c) focus on vocabulary, d) focus on writing models
2. Discourse competence: a) focus on reference, b) focus on connective devices, c) focus on punctuation, d) focus on text structure, e) focus on paragraph
3. Pragmatic competence: a) focus on style, b) focus on communicative function
4. Strategic competence: a) focus on text planning, b) focus on data collection, c) focus on data analysis and interpretation
5. Intercultural competence: a) focus on L1 and L2 cultural contrasts

Further, a PhD dissertation written by Baratta (2006) specified his study on three distinctive linguistic features of academic writing - normalizations, subordination and passive voice. The general view as regards taxonomy of features of academic writing concentrates on three fields: (1) linguistic features; (2) organizational features; and (3) content-driven features. Linguistic features largely focus on morphological or lexical categories, such as "verb, adjective, nouns" and so on. Organisational categories, as understood from its name, are generally interested in structural arrangements of academic text as stated under *Elements of Writing* before. The last is content-driven

feature which requires of an author to be content-wise, hence, requires much more effort of the author.

The language of science should bear some attributes for a good scientific writing. "Clarity in scientific writings, objectivity in scientific writings, and accuracy in scientific writings" are three basic accepted qualifications which cannot be ignored in the process of scholarly writing.

Clarity in scientific writings

For an effective reading, the text meaning should be clarified (Bailey, 2011). Therefore, writers are to give primacy on clarity but they should evade any initiative of constructing sophisticated texts unless they reach to a certain degree in language competence and proficiency because it might lead to ill-formed sentences, hence disrupt the meaning and clarity. Similarly, Bailey (2006) states that the best thing that an author should do if s/he is indefinite about how to advance in terms of clarity is to wait patiently until being an established writer; without of which it would be difficult to transmit personal goals to readers in a clear way. Hence, the audience will see accurately and exactly what an author wants to be seen from his/her writing. Expanding manuscript clarity at the word and sentence level is a necessary process of editing (Richards & Miller, 2005); however, being clear in writings is not something only with word choice and sentence constructing, but also with graphs, tables, and organisational layout of a scientific writing. Tables should be clear enough for a reader to understand the point that it tells, and graphs need to be visible to make sure that they are clear to audience. The framework of a scientific writing is mostly expected to be bottom-up or deductive. Shortly, while writing for the academic world, authors are to make their definitions clear (Fulwiler, 2002).

Objectivity in scientific writings

One of the forefront objectives of scientific writings is to make the audience believe to the author's utterances, and then persuade them to stick to the trueness of the utterances in order to spread the information. Fulwiler (2002) asserted that the writer should be completely objective and impartial when conducting research, and s/he must

strictly adhere to code of objectivity. In addition to that the issue of objectivity is problematic, it is at the hub of numerous challenges to the academic tradition (Richards & Miller, 2005). Richard and Miller (2005) indicated that the writer can achieve impartiality through linguistic devices such as inclusion of passive voices, and plural pronouns, or s/he can provide statistical (quantitative) accounts. The characterization of a good scientific writing is commensurate with its objectivity, which means that a proper scientific text must present a balanced discussion of various views and value judgements (Smyth, 1996). Smyth further claimed that "when you write an academic paper, unless you attribute an opinion to someone else, it is understood to be your own. Phrases such as 'in my opinion' or 'I think,' therefore, are superfluous and a waste of words" (pp. 2-3).

Accuracy in scientific writings

Accuracy is another crucial component of academic writing, through which the writer supplies credibility for his/her claims. Accuracy can be evaluated through proof-readings and other content-wise peer reviewers. Whereas proof-readings are realised in order to detect any language related problems, content-wise peer reviews are applied to seek any content-related misdirection on the topic. As indicated before, writing is a multidimensional process; that is to say: there are a lot disparate factors that could affect the writing process. Accuracy is simply one of the factors that could negatively disrupt the credibility of writing. It is true that while all kinds of writing tasks carry high expectations of accuracy, the expectation of accuracy is even stricter for academic writings than any other types of writings; because any deficiency in accuracy with an academic text will not be acceptable for the writer's credibility. That is because the importance of accuracy in academic world cannot be underestimated for on-demand writing purposes (Richards & Miller, 2005). Native writers may come across with contextual accuracy problems in their articles; however the matter is double-fold for non-native writers because they may have contextual accuracy problems as well as the accuracy of language. Both editors and peer-reviewers examine the academic submissions to ensure authors' accuracy of scholarly and scientific knowledge. However, the accuracy problem of language is much more common among non-native writers; as can be guessed.

So far, it has been told about the features and fundamentals of academic writings. There are certain dos and don'ts which authors should not miss in the process of composing a scientific text; whether it is an empirical or conceptual study. Shortly, the thing which is common among all types and classes of academic writing is the fact that the ideas seize the centre stage, human factor is in the background, and the representation of any ideas or insights belonging to the author has no place (Monippally & Pawar, 2010). Objectivity, clarity, accuracy, and other crucial components of academic writing have two basic goals: "to establish the truth", and "to convey the knowledge". It is possible for a text to bear all the musts of being scientific, and yet, not successful to create the desired effect on the readers. De facto, there are some other invisible but potent conventions of a scientific writing; for example, rhetoric powers of words. Rhetorical devices such as hedging and boosting are generally overlooked in the books aiming academic writing trainings and suggestions (exceptions Hinkel, 2004; Hyland, 2005). Therefore, together with impersonal style, accuracy, clarity and other features of academic writing, rhetorical devices should also be mentioned strictly. While reporting research results or making claims, a writer must use cautious language or assertive language when needed. Henceforth in the chapter, the relationship among academic writing, metadiscourse, rhetorical devices, and challenges in academic writing were illustrated.

2.3. Academic Writing and Metadiscourse

Even if it seems as if it was a recent term, *metadiscourse* has a long past that that goes back to 1959 in which Zellig Harris (the owner of the term *metadiscourse*) proposed a way of understanding communicative language representing a speaker's or writer's attempts to guide a receiver's perception of a written or spoken text (Hyland, 2005). Later on, the concept of metadiscourse was developed further by prominent linguists like Crismore (1989), Vande Kopple (1985) and Williams (1981) who collected a range of discoursal devices (particularly on hedging and boosting) to investigate the effect of them on interlocutors' or receivers' receptions. It is a well establish fact by linguists that awareness of language or language competency has

greatly changed from the focus of language itself as form and structure to language use as pragmatics. What was crucial in the past was crucial again; however the tendency of language had converted its face from heavy contented grammar books to the streets, where the language is for communication. A marked milestone in language teaching, also be recognized as communicative language teaching, belonged to Hymes (1974) who steered the notion of communicative competence and the focus of syllabus design away from the grammar based syllabus for an effort to identify the nature of a communication based syllabus (Munby, 1978). Apparently, differences remains between grammar based and communicative based syllabuses. In other words, the notion of communicative competence is based primarily on native speaker's abilities while grammar competence –once upon a time was linguists' primary aim- is something with reading comprehension. It is explicit that the use of even the most basic items such as *hi, thanks* or *good evening* used in a syllabus can possibly bring about cross-cultural misunderstanding owing to pragmatic and communicative differences between languages.

It is seen that, on contrary to formerly thought, communication is much more than just exchanging the words semantically between interlocutors. Hyland (2005) emphasized that metadiscourse is not only the exchange of information but it embodies assumptions, personalities, and attitudes. What is more is that the utterances may have implicit meanings underlying their overt expressions. The use of linguistic components such as adverbs, adjectives, imperatives, evaluative commentary, etc. in a rhetoric manner open new windows on discovering writer's real or intended message submitted to the reader. Therefore, if these rhetoric features were removed, the content would possibly become less interesting, less personal and less easy to follow. Therefore, offering these metadiscourse features systematically provides readers with access to the insight of the content massage and allows readers align themselves with the writer (Hyland, 2005). Again, with a judicious use of metadiscourse, Hyland (2000) stated that a writer is able to alter an uneventful text into a coherent prose; furthermore the writer can relate the text to a given context and transmit his/her credibility, personality, audience-sensitivity to the message. It should not be missed that writing is a multifaceted skill that requires to keep several spontaneous processes under consideration in order to interpret the meaning in a way that will not disrupt the

intended meaning. A writer's positions, interests, perspectives and values are not always easy to convey to the readers through plain texts because they are not always there standing to convey the message. In order for a successful audience communication, comprehension or involvement, there must be a mutual act of understanding between producers and receivers. And, to construct that mutual act of understanding is a tough job from the aspect of writer. To be able to achieve the desired communication, it is expected to use words more than their unbending and dormant meanings, which is one of the main functions of metadiscourse devices.

In the former title, how text structure of a scientific writing should be was told; and sine quibus non were provided. As well as structural and mechanical prerequisites such as objectivity, accuracy, and clarity, a scientific text demands other additions to provide a reader engagement, persuasion, and credibility. Hedging and boosting which are two rhetorical devices being studied heavily since their introduction to linguistics may be a remedy (not a panacea though). According to many prominent linguists such as Crismore, Farnsworth, and Hyland, hedging and boosting are two essential metadiscourse elements of argumentative and persuasive discourse in academic writings. It may be thought that they are for to have more elaborate scientific writings, however, mainly they are for to offer a scientific writing which is more explicit, objective, and accurate. Through the clarity of boosting, it is easier for a reader to be explicit and certain about the possibility of a claim. Again, one of the main functions of hedging is to present objective statements by avoiding to be assertive on an issue (for further cf. Hyland, 2005 p. 5). The book of *Metadiscourse: Exploring Interaction in Writing* shows us that rhetoric is a concept increasingly important in compositions. The term has been studied from different aspects in order to shed light on its importance on varied fields; for example Schiffrin (1980) studied metadiscourse in casual conversations; Norrick (2001) in oral narratives; Crismore and Farnsworth (1990) in school textbooks; Hyland (2000) in undergraduate textbooks; Bunton (1999), Hyland (2004), and Swales (1990) in postgraduate dissertations; Fuertes-Olivera et al., (2001) in advertising slogans; Hyland (1998d) in company annual reports; Taavitsainen (1999) in medieval medical writings; and Atkinson (1999) in scientific discourse from the late seventeenth century.

As seen, metadiscourse has a vast area of research from formal academic writings to informal slogans. Due to the fact that writing has an overarching significance in academic genre, the use of metadiscourse devices is an important mean of supporting an authorial position, facilitating communication, increasing readability, and building a connection with the audience (Hyland, 2005). Furthermore, it is through rhetorical devices that become possible to present a writer's real opinions, evaluations and interests in a text by refining possible reactions that a reader could develop. According to Ong (1983), rhetoric was named differently through its long history. Since Aristotle's book *rhetoric*, it has been referred as one of the most vital components of all academic issues. The notion of rhetoric inclined to carry adverse connotation for formal proof in the recent past because it was thought that it suggested unscrupulous manipulation and coercion but nowadays it is one of the central concepts to whom working in written communication and text analysis (Hyland, 2005). Mauranen (1993) underlined this importance and stated that:

> *"The study of rhetoric has been rediscovered not only as a means of improving efficiency in verbal presentation, but as an analytical tool that can be used by different disciplines for uncovering certain aspects of discourse (p. 20)."*

The close relationship between rhetoric, persuasion, and academic writing has been an issue studied from different aspects. Rhetoric is essential for making claims, creating a sense to the reader, stylistic appropriateness, organization of the argument, internal consistency, clarity of the claim, and surely persuasion. Therefore, in order to have an effective argumentative writing which aims to persuade that your ideas are accurate and valid, rhetoric must be used in a careful way. Now that rhetoric is the art of persuasion, a writer must be aware of the knowledge on how to use main rhetorical styles effectively. The literature shows that there are three styles of rhetoric that a writer needs to know to be an effective writer, which are *Ethos, Pathos*, and *Logos*. They are the terms coined and categorized by Greek philosopher Aristotle, which are summarized as follows:

Logos are rational appeals reasoning ability of readers. This is the place in which writer use the sense of logic in order to persuade the reader over the argued issue. It

refers to the internal consistency of claims through inductive and deductive reasoning. The writer may use concrete evidences to support his/her arguments. Logos include case studies, facts, statistics, experiments, analogies, anecdotes, logical reasoning, and authority voices (Van, 2015). Every claim that an academic writer make should carry a rationality inside it so that the reader may find it plausible and reasonable. A writer will have quite a few difficulties to persuade the reader on any illogical claim even if he/she asserts that he/she has proofs. Therefore, a scholar should use logos properly in order to avoid any logical fallacies while composing a text.

The word e*thos* means "character" in Greek, which is a word that refers to the trustworthiness of a writer. Different from logos which cover rationality, ethos are in association with credibility or other ethical appeals. One of the main problems that a writer could face in academic world is the matter of proving himself/herself to the reader that you are the one worth listening to. Therefore, if a writer carries ethos into effect successfully, they may function as credibility appeals by catching readers' respects towards the argumentation as well as the writer himself/herself. The words that can define ethos are credibility, reliability, trustworthiness, reliable sources, and fairness (Van, 2015). A writer's reputation is an issue which may be categorized under ethos. Hauser (1986) stated that ethos should not be regarded as a static attribute or quality, but as something dynamic which changes in each time.

Pathos are emotional appeals like belief in fairness, love, pity, greed, revenge, etc. As aforementioned, one of the features of an academic writing is to have objectivity. Any affective focuses or appeals will certainly be seen as a setback of the text as well as the writer's himself/herself. However, what is told through Pathos is that the scientific text should focus on readers' characterization, i.e. inner worlds. Therefore, pathos are related to the words sympathy, pathetic, affinity, compassion, and empathy. Shortly, Pathos can be defined as art of persuasion by referring to the reader's emotions. This type of convincing is largely used in advertisements, or charity organisations. Though, it is possible to see the traces of pathos in academic writings because some scientific texts needs to touch to an audience's values, needs, and emotional sensibilities in order to persuade him/her. On the other hand, pathos must be used properly; for example, in order to support a truth, or reveal a reality, but not to misrepresent an issue or frighten people (Weida & Stolley, 2013).

Depending on the situations in which e*thos, pathos*, and l*ogos* are used, their level of importance may alter, but all of these rhetoric characteristics are equivalently significant.

It was widespread in the past that academia, which is a place for directness, had not place for rhetoric, but over the last decades we know that academic writing has gradually turned its face from traditional tags as rigid, impersonal, and structured form of discourse and come to be as a convincing endeavour involving interaction between readers and writers (Hyland, 2005). Extra-logical or extra-factual expectations on arguing subjects restrict a writer's workplace, and most of the time this ends with a parochial paper that cannot provide ethos, pathos, and logos. However, the primary and foremost purpose of an academic writing is to stay away from parsimonious accounts as farther as possible, and to enhance its sphere of impact by employing all persuasive techniques that may be influential. In another say, academic writings do not only simply produce plausible and strict accurate texts or knowledge, but construct a negotiation between the writer and reader through improving social relations.

In his book *Metadiscourse: Exploring Interaction in Writing*, Hyland mentions about two modality markers; hedges and boosters, which are two metadiscourse devices that broaden our view of ethos on a perspective of writer-reader interaction (Crismore & Farnsworth, 1989). Then, to some extent, these two metadiscourse devices have been included in academic writings as a communication strategy in order to increase credibility of the claims, and hence, persuade the readers. However, before Crismore & Farnsworth, and Hyland, Grice (1975) had stressed personal pronouns like *we* and *our* to make hedged assertions and propositions. For Grice, the choice of personal pronoun was not a simple referring, but a persuasive initiative. Since then on, the use of first person plural pronoun has been considered as a kind of hedging strategy particularly in linguistics while the use of first person singular pronoun has been considered as a boosting device.

Although there are different categorizations of metadiscourse, the most featured and used belongs to Vande Kopple (1985) who divided metadiscourse into two as *textual metadiscourse* and *interpersonal metadiscourse*:

1. Textual metadiscourse

- *Texts connectives* – are linguistic components that are used to connect sentences or parts of a text to one another (first, next, then, etc.)

- *Code glasses* – are those that provide help for better understanding the writer's intended meaning; for example, giving an example, using parenthesis, etc.

- *Validity markers* – are those that are used to express the commitment and detachment to the truth or probability of a claim. These are boosters and hedges which enhance the writer's position. Validity markers are two main issues which are discussed in the present study.

- *Narrators* – the source of the information from which or whom the knowledge has derived; for example, *the party spokesman said that, according to the report, etc*.

2. Interpersonal metadiscourse

- *Illocution markers* – are used to elicit the discourse act that is being performed by the writer; for example, *we assume, to summarize, I hypothesize, etc.*

- *Attitude markers* – are those that refer to the authorial attitude to the propositional claim (interestingly, fortunately, desperately, etc.)

- *Commentaries* – are used in order to draw the readers towards to the point that the writer would like to see; for example, *you had better see the chapter II again, you will certainly agree with the idea that, etc.*

As seen from Vande Koople's categorization, metadiscourse has a wide area of influence in a writing text. In the title 2.4., the close relationship between metadiscourse, audience, and interactional process was dealt with.

2.4. Metadiscourse, Audience, and Interaction

The main point to be addressed is the way that a writing text achieves communication with its readers. Old discussions regarding whether writing should be regarded as an interactive process or not stayed bygone long ago thanks to the new era studies on writing that proved writing to be a bilateral and mutual process. Therefore, transmission over negotiation through writing is to be viewed as a dialogue process -in line with informative and interactional aspects- rather than monologue. Given that

writing establishes a link with its readers through interactivity attribute of it, it will not be incorrect to claim that managing social relationship through writing is highly possible. On the other hand, a writer can achieve to interpret and assess readers effectively through the use of matadiscourse because a text communicates freely with its audience (Hyland, 2005).

The interactional connection between a writer and reader through a writing text is certain. However, as can be understood by the word "interaction", this interactional connection is not unilateral as from writer to reader; or from reader to writer. Obvious impact of writing over its audience does not mean that the impact is one-way as from writer to reader. Grabe and Kaplan (1996) highlighted readers' five main parameters which affect writing:

1. Some basic knowledge of readers influences the use of rhetorical choices. They are: the number of readers, and for whom the text is written; i.e. whether the audience is a heterogeneous or homogeneous group; a single person or a group etc.

2. The degree of closeness is another issue that affects involvement and interactional features in the text. Therefore, familiarization with the readers is a factor affecting the writer, hence the writing.

3. The relative status of audience; both the writer and the audience should have a similar status in order to have a good rapport. A writer is the one who should point to the issue, and adjust accordingly.

4. The extent of shared background knowledge – it is likely that writers be more explicit while using metadiscourse. That is why they need to assume the reader's lack of institutional, social, or cultural familiarity with the issue being discussed.

5. The extent to which topic is shared specifically – as indicated earlier, writing is a multidimensional process, and one of the musts that the writer is to keep in mind is the amount of detail that a reader can have or cannot have. How far the writer knows about the reader's elaboration ability of the issues is an evidential support required to construct a writing text in line the reader's taste.

On the basis of what has been told up to now, it can be said that a writer has a strong bond with the reader; a bond which was built with metadiscourse devices.

Therefore, writer, reader, and matadiscourse erect three edges of a triangle in realising an interaction.

The relation between writer and reader is well-established from the aspect of reader's effect on writer, but writer's effect on reader is still at issue. As readers, we almost have no trouble in decoding the texts that the writer has submitted, because we are all set to receive the writer's intended messages; to identify the author's objectives and the context it was designed to create otherwise we would not be his/her readers. The impact of a writer on his/her audience is partly true with which no one can belly, yet there are situations that readers are not able to catch the cues or tips that the writer endeavours to present. Particularly metadiscourse devices such as hedging and boosting may be difficult to notice by audience because they can easily be invisible inside the text. It is claimed that audience mostly ignore metadiscourse devices, which hinders to transmit the message fully to the readers (Hyland, 2000; Hinkel, 2004). In conclusion of that, the author cannot achieve to create the desired effect such as persuasion on the audience. Therefore, metadiscourse which is a crucial link of a text with its context has certain forms of functions like revealing a writer's understanding of his/her readers as well as a reader's understanding of his/her writer. It is through this mutual understanding that a successful social, cognitive, and affective interaction may occur between writera and readers, only through which a scientific writing may accomplish the purpose of reaching to the audience.

We see that the concept of metadiscourse, a communicative and social engagement, is neither context-independent nor reader-independent, and it offers better understanding of the way we present our scientific thoughts into our texts to convey the knowledge. Writing and knowledge are not independent from the actions of members of communities (Geertz, 1983); therefore discourse devices cannot be understood from the perspective of a single individual but of a society (Faigley, 1986). Thanks to metadiscourse, a writer does not only focus on how to present or convey his/her knowledge, but s/he encourages the reader to establish a social interaction with the writer as well. As time goes on, the interactivity of a writing task has emerged different from the times in which writing was considered as a one-way, unilateral process. That is why metadiscourse devices are important in achieving interpersonal communication besides its pragmatic advantages. "With the growth of discourse analysis as a key tool

in understanding language use, the importance of interaction in writing as much as in speech has become ever more obvious, and metadiscourse has emerged as a way of bringing these interactional features to prominence (Hyland, 2005, p.14)". Briefly, it is recognized that readers would not be able to contextualize a text without metadiscourse, which would unable the writer to communicate effectively.

2.5. Challenges in Academic Writing and Metadiscourse

Writing, out of question, is an essential skill in every sphere of daily life. Whether it is used for simple or vital tasks, writing does not cease to be an indispensible component in the contexts where knowledge needs to be negotiated. Besides its steady influence over all types of documents from casual situations to top secret documents, writing has an exclusive and privileged position in scholarly writing for which academic writers aspire.

A quick literature review will strongly suggest that the process of productive and effective writing is not an easy task, and it is not uncommon for even the most veteran scholars to encounter challenges in the process of composing a text productively and effectively (McCormick & Whittington, 2000; Hinkel, 2004; Meyer-Salager, 2008) because effective and productive writing desperately requires a well-organization and complete content knowledge. However, "Academic writers are not solely expected to produce texts that will conceivably represent an external reality, but to use language to offer a salient and dependable illustration of themselves and their work, and to establish social relations with readers through acknowledging and negotiating (Yağız, 2009, p. 42)", and this categorically requires the use of metadiscourse devices appropriately and proportionally.

Hedging, one of two metadiscourse devices that the present study deals with, is a rhetoric device that is gaining importance with a growing need for academic writers. While it poses a challenge even for native writers, particularly non-native writers needs to be very skilful in their act of making rhetorical appeal; i.e. hedging appeal, because the use of hedges necessitates a great amount of attention depending on the context of rhetorical section in which they are used. Academic writers should include hedges in their academic texts adequately and well-balanced. Otherwise, high frequency of hedges in an academic writing could lead to some infelicities such as misconceptions about

claim credibility, and suspicions on writer knowledge. With other say, using excessive number of hedges on low level claims will not be regarded as a kind of detachment strategy; on the contrary, it may cause a backfire since it may be considered as though the owner of the claim or statement did not braced himself/herself sufficient for a decided claim. Furthermore, what will be more desperate regarding the author who has high hedged texts on even low level claims is the suspicion about writer's insufficient knowledge over the issue (Sanjaya, 2013). Therefore, to employ ambiguous and noncommittal statements, or evasive and intentionally vague language in academic texts may not yield to an expected impact on audience, because readers may not be persuaded through sentences that were constructed with too many confidently uncertain statements by using cautious language: hedging.

On the other hand, it is known that texts including hedges led to positive attitudes from the readers when compared to the texts that did not include hedges (Crismore & Vande Kopple, 1997), which is a testament to the positive effect of hedges on readers (Iida, 2007). Hedges are necessary for readers in order to distinguish facts from claims. Furthermore, by toning down their statements, writers can reduce the risk of opposition in academic discourse, and can report their results more precisely (Birkbeck, 2013).

Boosting, the latter of two metadiscourse devices, is the other challenging rhetoric that must be used in equilibrium. A study conducted by Dahl (2008) reported that, as a rhetorical strategy, academic writers in the fields of economics and linguistics preferred to present their propositions in Introduction sections of their research articles with a high degree of assertiveness in order to win the publishing competition, because they considered that the assertive statements including more boosters could persuade audience to their new claims. Similarly, Vázquez and Giner (2008, p. 174) highlighted the significance of assertiveness in scholarly writings: "A major characteristic of academic discourse is the presence of elements whose purpose is to modulate assertions or emphasise statements." However, Being assertive over high level claims could reduce a writer's credibility because it necessitates a substantial amount of evidence for verification.

There is no doubt that hedges and boosters are two crucial rhetorical devices 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), but what is challenging for academics is the balance that must be kept between cautious language and assertive language while presenting their ideas in their academic writings (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, hedges and boosters 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 truly in the picture is that any immoderate and unbalanced use of these rhetorical devices could lead to a counter effect on writers' credibility in the readers' eyes, which is a metadiscourse challenge that should be dealt with.

2.6. Collocation and Nativeness

The direct relation between collocation proficiency and nativeness is almost certain according to the linguistic literature. Whether associate them to "ready-made chunks (Robins, 1967, p. 21)", or to "mutual expectancy (Zhang, 1993, p. 1)", collocations are word combinations which are well-linked in a native speaker's memory (Aghbar, 1990). According to Fillmore (1979), the proficiency of how to combine words in association with one another is a source of fluency. Therefore, knowledge of collocation undoubtedly brings benefits to non-native writers who desperately long for nativeness in target language.

It is understood that collocations are word combinations that occur in a native speaker's mind intuitively (Sung, 2003), which is a situation occurring without restoring to vocabulary memory purposely but instinctively. The instinctive formation of word combinations in a native speaker's mind can be attributed to its association with nativeness, because there is a strong positive correlation between nativeness and automation on a linguistic component (Nation, 2001). According to Allerton (1984), words in non-native writers' minds do not co-occur freely; instead they lead to co-occurrence restrictions. Hill (2000) commented on the natural way of word

combinations occurring in mind as: "within the mental lexicon, collocation is the most powerful force in the creation and comprehension of all naturally occurring text" (p. 49). Concerning non-native writers' characterization of collocation fallacies, Korosadowicz-Struzynska (1980) quoted that "errors in the use of word collocations surely add to the foreign flavour in the learner's speech and writing and along with his faulty pronunciation they are the strongest markers of 'an accent (p. 115)." On the other hand, Stubbs (2001) emphasized the relation between collocation and nativeness with his own words: "Native speakers' unconscious knowledge of collocation is an essential component of their idiomatic and fluent language use and an important part of their communicative competence (p. 73)." Until now, it is blatantly apparent that the collocation competence differentiates native and non-native speakers from one another (Wouden, 1997; Nation, 2001; Ellis, 2001; Koya, 2006). Due to the fact that knowledge of collocation is an essential component of communicative competence (Partington, 1998) and a source of fluency, non-native writers should object to gain the competence of collocation, which will contribute them to have nativeness in the target language (Coxhead, 2000; Olson, Scarcella, & Matuchniak, 2013; Sonbul & Schmitt, 2013).

The relation between collocation and nativeness is well-established, but what about if a writer is not native? Is it coherent to claim that collocation competence is not possible to acquire by non-native writers because it is a skill that is intuitively used? We know that collocations are ready-made chunks just like other fixed expressions and idioms (Benson, Benson, & Ilson, 1986), and it is possible to teach ready-made chunks, including collocations, to all types of learners (Approach, 1993). Likewise, Wray (2002) claimed that learning formulaic language like collocations through conscious effort is possible. Therefore, any propositions about the relation between collocation and nativesness could be acceptable, but the claims that address to impossibility of teaching collocations must be proven, because the literature shows that although collocations are intuitive word combinations by native speakers, they can be acquired by non-native speakers of a target language.

Now that collocations are considered to play a significant role in written language (Wei & Lei, 2011), and now that it is a skill gained intuitively by native speakers, it will not be difficult to guess that a non-native writer with insufficient collocation knowledge will have difficulties and some infelicities regarding their

academic position while composing a scientific writing. One important problem that could rise due to insufficient collocation knowledge is inappropriate word combinations. McArthur (1992) stated that a failure to use collocations appropriately is a principal indicator of foreignness in academic texts. Therefore, any collocational inappropriacies, i.e. wrong word combinations may give rise to lack of confidence to writer's language ability no matter how the content of the writing is unique. It is difficult for a non-native writer to escape seemingly inept and unnatural expressions in their written production without appropriate knowledge of collocation, because the knowledge of collocation is critical for L2 writers to be able to have full communicative mastery of English (Bahns & Eldaw, 1993). Therefore, writers who want to improve their writing fluency need to have a collocation knowledge at a certain extent (Sung, 2003).

To sum up, native speakers, different from non-native speakers, are aware of the words that could occur with other words. They can combine words together in a large number of ready-made chunks and in other various ways in a particular context. The knowledge of co-occurrence words is significant for a non-native writer to be native-like, and in order not to fall into collocation failures that adversely affect writer's written production.

2.7. Fundamental Lexical Aspects of Academic Writing

There are various fundamental factors in the process of academic writing. Two very basic of them are grammatical and lexical based conventions. For decades the effect of grammar teaching was regarded as a predominant factor in academic writing, but as time went on we witnessed a reorientation from grammar to vocabulary (Bahns, 1993). According to the language instructors, this orientation is a step in the right direction. The present study aimed to study lexical aspects, which specifically mean "word based differences that affect writing proficiency"; i.e. how words may contribute to non-native writers in increasing the quality of their academic texts. As indicated earlier, out of various lexical conventions, three main lexical aspects were picked up to investigate in the present study: collocations, hedges, and boosters.

Lexical collocation

Regarding its significance it can be said that collocation is recurrence of two or more words in a way more than arbitrary, and is instinctively used by native writers in large quantities in their academic production. In contrast with the views that often regard collocations as arbitrary, it is known that many wording preferences in English sentence structure cannot be explained on the base of syntactic or semantic grounds, but on the base of relations between words that mostly occur together (Smadja, 1989). However, its frontseat in linguistic was not always sure as it is now. Many important facts that were previously neglected as *extralinguistic* gradually started to expand its influence (Telia, Bragina, Oparina, & Sandomirskaya, 1994), including collocations. The impact and role of *phraseology* have received due recognition in foreign language teaching. Thanks to the advent of corpus linguistics, phraseological patterns in academic texts became visible, which ended up with valuable building blocks in vocabulary learning of a learner (Jurko, 2010). Later, it was Nation (2006) who pointed out L2 word combinations as units that deserved special attention. Once considered as trivial, collocations began to gain importance, and a considerable interest was attributed to lexical collocations, which were largely seen as pre-fabricate language units at earlier times (Cowie A. , 1994). Now, it is definite that lexical collocations have big roles in ELT particularly in vocabulary acquisition and phraseology.

Lexical hedges

Lakoff introduced the term "hedge" into linguistics in 1973, which was a dim time for hedging popularity. Arising from Rosch's (1973; 1983; 1999) investigations based on *prototype theory* and Zadeh's (1965) *fuzzy-set theory*, the term hedge has been defined by many researchers since then on. 1980s were starring years for hedging researches through spreading of cross cultural and contrastive studies particularly in EAP (Iida, 2007). As to 1990s, hedging had already got its fame in linguistics and ELT with a growing number of studies by a great many of researchers; hedging was considered as a term, influence of which exceeded its frontiers in linguistics. Meanwhile, Hyland had already begun to classify hedges in order to get the utmost

advantage of them (cf. Hyland, 1998b). He categorized hedges into two as *lexical hedges* and *strategic hedges*; lexical hedges include modal verbs, epistemic adjectives, epistemic lexical verbs, nouns, and adverbs while strategic hedges include "reference to limiting experimental situations", "admission to a lack of knowledge" and "reference to a model, theory, or methodology (p. 114)." Hyland's distribution of hedges has affected academic discourse communities differently, and led to interdisciplinary studies. As time went on, the focus was diverted from quantitative (e.g. Vold, 2006; Tran & Duong, 2013) to qualitative investigations of hedges (e.g. Hu & Cao, 2011; Zarei & Mansoori, 2011); and qualitative researches have contributed to better see the effect of hedging on academic texts; accordingly on stylistic appropriateness. Now, hedges are "critical" (Hyland, 1998b) and "vital" (Salager-Meyer, 1994) components of academic writing especially when the emphasize is on persuasiveness and credibility of writer statements.

Lexical boosters

The linguistic literature shows that boosters concerned less when compared to hedging. However, discursive-functional perspective of effective scientific writing is not only composed of hedges, but also boosters. When the term "booster" was used by Holmes (1982) to refer to lexical items which can be used to reflect writer's strong commitment, it was hardly known by linguists that boosters, a metadiscourse device, had such a conviction power on readers. As aforementioned, later on the term was diversified by different linguists: they were called as intensity markers (Behnam & Mirzapour, 2012); commitment (Vassileva, 2001); intensifiers (Lim & Hong, 2012); certainty markers (Kim & Suh, 2014); emphatics (Bondi, 2008); and authority marker (Cook, 1990). No matter how the researcher calls, boosters have been getting increasing attention since their introduction, particularly to academic discourse. Following Holmes, Myers (1985) stressed that persuasion in academic texts could be achieved by creating a persona through the use of boosters because hedging on its own would not be sufficient in order for the accomplishment of conviction on readers (1985b). 1990s and 2000s continued to witness the significance of boosters for academic discourse (e.g. Hyland, 1998c, 1998d, 2001; Varttala, 1999; Vassileva, 2001; Silver, 2003; Peacock, 2006; Yağız & Demir, 2015b)

2.8. Discussions of Collocations

Having provided discussions on importance of collocation that existed in the literature, this study categorized collocations into different subtitles on an involved path. The literature provides us with data that prove the benefit of collocations for language producers. The first is that collocations are valuable for learners in order to increase their lexicon knowledge and language proficiency. The second benefit is that brain seems to work better with chunks and formulaic expressions follows; however, L1 influence in meta-cognitive issues is a major challenge that needs to be overcome. The third reason to acquire knowledge of collocation is related to the fact that "collocation is the key to fluency" (Hill, 2000, p. 164). As indicated before, collocation may assist writers to have native fluency, accordingly native-like written productions, because it is through collocations that a language user has native-fluency in their spoken or written discourses. The last part contained miscellaneous studies that emphasized the importance of collocations on other language components.

2.8.1. The importance of collocations

First introduced by Palmer (1933) and then brought to the discipline of theoretical linguistics by Firth (1957), collocations have had a wide range of influence in ELT. One important sphere of influence is on vocabulary teaching, on which Lewis (2001) caught all attentions through his theory of *Lexical approach*. Lexical approach entails teaching vocabulary to learners by using the power of word combinations already in their chunks, namely collocations. Accordingly, a vocabulary knowledge is not only to know its dictionary meaning but to understand a number of details about the word. In addition to possible combinations of words, their derivational aspects such as suffixes and prefixes, their semantic behaviour, and their sociolinguistic attributes have importance in familiarizing with a word (Richards, 1976), which what Richard said proves that collocation competence is important in order to use words more accurately. Furthermore, "the importance of prefabricated speech routines in language behaviour" was underscored by Nattinger (1980, p. 337). Nattinger also added that word combination predictability plays significant role in determining the way we use

language, and likewise, prefabricated sentences taught in units make the learner to store and recall the words readily.

Not all researchers made a consensus on the issue of collocation and its influence over other components of English language. For instance, Kennedy (1990) reported his doubts about whether or not collocation truly existed, which is a view in stark contrast with other researchers (e.g. Lewis, Nattinger, Pawley) who achieved an agreement on overwhelming prevalence of collocations in English language. As with Kennedy, Krashen and Scarcella (1980) denied the views of that a large part of language included collocations. However, the objections were to the benefits of collocations, but to whether collocations in English language were common or not. Therefore, even the objections to collocation do not refute the significance of collocations for both language producer and the language itself.

The close relationship between collations and specialized translations is worth mentioning distinctively. Some researchers (e.g. Castro, Martinez, & Faber, 2014) established a tight junction between specialized translation and correlation. Specialised translation cannot be achieved only with accurate meaning transfer but adjustment to format specifications, punctuality in delivery (Bonet, 2002), satisfaction of communicative expectations (Montero, Silvia, & Mercedes, 2001), and understanding the concepts formed by various types of specialized lexical units; for example terminological phrases and terms (Montero, Silvia, & Pedro, 2002). It is understood that -to a great extent- phraseological units composed of prefabricated chunks and collocations contribute to achieve better specialised translations. Similarly, Castro et al. (2014) stated that collocations are extremely crucial for both decoding and encoding the texts in the course of specialized translation. According to Rundell (2010), even grammar is not more important than collocations because collocations make writers sound fluent.

It is becoming gradually apparent that "language is largely formulaic in nature, and that the competent use of formulaic sequences is an important part of fluent and natural language use" (Durrant & Schmitt, 2009, p. 157). This influence has made collocations evident in academic writings as well. Although to what extent NNWs use collocations is not evident (Durrant & Schmitt, 2009), it is stated that non-native writers tend not to know much about collocations (Kjellmer, 1990), which are ready-at-hand

and pre-constructed in minds of natives. That is not a no-objection case in terms of having native fluency because the strong bond between academic writing and collocations is well-established. Furthermore, Howarth (1998) reported that ESL/EFL learners may become native-like writers if they realise the important role of collocations, and pay the necessary attention on collocation competence. Brown (1974) stressed that collocation competence enables language producers to realize formulaic expressions or language chunks used by natives in their writings, and to get the intuitive use of word combinations in a natural way as natives do. Thanks to collocations, a writer may shift his/her concentration from individual words to structures of the discourse, which is a case done through teaching lexical phrases in ELT, and the most important reason to teach lexical phrase is that it leads to writing fluency (Li C.-C. , 2005).

We have witnessed different studies persevering on the benefits of collocations on behalf of language users in the last decade. For example, an early experimental study by Zhang (1993) was conducted to detect the effect of collocations on EFL/ESL writings. Then, the relationship between collocations and general language proficiency was aroused some researchers' interests (e.g. Al-Zahrani, 1998; Bonk, 2000). The literature points to studies which aim to detect the relation between collocation and four English skill: collocation and listening (Hsu & Hsu, 2007); between collocations and reading (Lien, 2003), between collocations and speaking (Sung, 2003; Hsu & Chiu, 2008), and collocation and vocabulary acquisition (Kennedy G. D., 1990).

Of what has been told so far, it is apparent that collocation does not only have an influence on writing skill but also on other basic skills like speaking, reading, and speaking. Furthermore, the most significant benefit that collocation competence brings is to writing quality. In other say, there is strong evidence that collocation competence or knowledge of competence allows non-native writer to have native fluency, and native-like academic writings.

2.8.2. Collocations, lexical competence, and general English proficiency

Some studies focused on positive correlation between collocational knowledge and level of lexicon (cf. Wray, 2002). To start with, the foremost of them belongs to Nation (2001) who claimed that a language producer's collocational knowledge

constitutes "one important aspect of vocabulary knowledge" (p. 328). There are passive and active vocabularies in our mind. Active vocabularies are much faster than passive vocabularies in recalling when needed. Wu (1996) conducted an empirical study in order to find out whether passive vocabularies could be turned into active vocabularies through the frequent use of lexical collocations. Wu concluded that a good command of lexical collocations is a useful way to turn passive vocabularies into active.

The relationship between language proficiency and lexical competence attracted researchers as a rising issue. A study (Zareva, Schwanenflugel, & Nikolova, 2005) that aimed to determine what features of language were associated with the macrolevel of lexical competence showed that word associations increased lexical competence of language producers, and accordingly their L2 proficiency. Likewise, turning to Nattinger's study (1980), it is understood that there are some prefabricated phrases and sentences that could be taught in chunks. According to Nattinger, if vocabularies are taught in chunks, a learner could get use of them by expanding their lexicon, which is to say in brief; collocations may assist writers in enhancing their vocabulary fluency and accuracy in L2 by improving communicative functions of language. Similarly, an earlier study (Howarth, 1998) made a comparison between NWs and NNWs in terms of gauging their language performances. Its findings put forth that lexically competent writers internalized collocations successfully, which made the relation between collocation and lexical competence even brighter.

It is hardly possible to find a study in the literature that does not mention about positive correlation between knowledge of collocations and lexical competence. One exception for that belongs to Tekingul (2012) who had a purpose of finding out whether explicit collocation teaching or single-item vocabulary instruction is more successful on reading comprehension. She reported an inconclusive result, which proved no significant difference between collocation teaching treatment and single-item vocabulary instruction treatment. Though, she did not deny the importance of collocation on vocabulary teaching, but only stressed no superiority regarding the two teaching methods.

Some other studies expanded the circle of influence, and established a link between collocation and overall language acquisition. The issue of whether lower-level language users had limited knowledge of collocations when compared to higher-level

language users was investigated, and it was concluded that language users with lower collocational knowledge demonstrated lower language proficiency when compared to learner with high collocational knowledge (Bonk, 2000). Bonk's results can be expanded to academic writers as well. Writers who have higher competence of collocations may purport higher proficiencies in their academic writings than writers with low competence of collocations. Another study (Nizonkiza, 2011) assessed the relationship between lexical competence, EFL proficiency, and collocational competence. Nizonkiza performed an experiment with 104 freshmen, sophomore, and senior students in total, and the results clearly revealed that lexical competence is a reliable predictor of L2 proficiency, and mastery of collocations is found to be related to frequency and to predict lexical competence. To be able to enhance academic performance, and make a voice in the wider community, together with lexical competence, Turner (2004) stressed the importance of improving, what he called, "collocation repertoire" (p. 107). It is understood from Turner's articles that collocation is at least as much important as other linguistic features in academic prose. An empirical study with a purpose of measuring the direct effect of collocation on English language proficiency was carried out by Rahimi and Momeni (2012). In their study, sixty learners were grouped into two as experimental and control, the former of which were taught collocations through using corpus-based activities and concondancers while the latter group had traditional way of teaching. Their statistical findings demonstrated that experimental group had a higher performance than control group, implying that systematic teaching of collocation can enhance learners' language proficiency. Cloze tests are generally designed to gauge the general English proficiency of learner due to its large sphere of measuring area ranging from vocabularies and prepositions to basic grammar skills. Whether there was a correlation between collocational competence and cloze test proficiency was investigated (Keshavarz & Salimi, 2007), and statistical analyses yielded a statistically significant difference between performance on cloze tests and competence of collocation, which may be construed as the effect of collocational knowledge on general English proficiency.

2.8.3. Collocations, meta-cognition, and L1 influence

Since Ellis's (1986) attention on the issue, L1 influence has always been a factor that should not be kept outdoor while investigating any linguistic titles. The issue of collocation has received its share as well.

It is highly common for non-native English speakers to transfer their L1 word combinations into target language, which is a major cause of errors in non-native speakers' language productions (Koosha & Jafarpour, 2006). The negative effect of L1 on L2 collocation acquisition was studied by Gabrys-Biskup (1992), and the interference was seen as the prime cause of errors in collocation use. A year later, the interference of L1 into L2 setting turned up an argument claimed by Bahns and Eldaw (1993) who argued that non-native speakers of English could convey their L1 collocational knowledge conventions into target language inappropriately. The negative cause of collocational differences between L1 and L2 is an obvious matter for non-native speakers of English as proven in Sadeghi's (2009) study. Sadeghi aimed to discover whether native language might be a obstacle for non-native speakers in the course of acquiring English collocations. Sadeghi's findings revealed that negative transfer of linguistic knowledge of L1 into L2 context was a troublesome issue that must be dealt with immediately.

Sadeghi had studied with Persian speakers; could it be possible to get different results if the participants had been changed? This time, possible similar effect was gauged from the aspect of Italian speakers. Martelli (2006) gathered a group of advanced Italian students of English in order to detect the influence of L1 in L2 lexical collocation use. Martelli had a purpose of detecting and describing miscollocations made by students in the production of word combinations. Unsurprisingly, he corroborated the role of L1 interference in the generation of wrong lexical collocations. Different from other studies, Martelli's study yielded that certain types of collocation errors are more prone to occurring than others, which carried the issue to a different point. Martelli prompted us to notice that some types of collocations could be affected from L1 influence more than other types of collocations. Martelli's findings corroborated Li (2005) who detected that *verb+noun* collocation types are the most common errors while *adjective+infinitive* errors are the least experienced ones, which proved that not all types of collocations are affected by L1 interference on an equal basis. Another study (Fan, 2009), the participants of which were from Hong Kong,

provided results in line with previous studies. It attempted to have a deeper understanding of collocation usage and problems by adopting a task based approach while analysing British and Honk Kong ESL learners' written texts. Again, apart from absolute L1 influence, the study found that any lexical or grammatical inadequacy in L2 could adversely affect L2 collocation use efficiently.

L1 influence is not only involved in acquisition of L2 lexical collocations but grammatical collocations as well. A sample of sixty advanced non-native speakers were investigated in order to purport the possible influence of L1 over L2 grammatical collocation acquisition, use, and errors (cf. Mohammed & Mustafa, 2012). The study that was subscribed to the role of L1 in L2 collocation learning concluded that the majority of errors made by the group are due to cognitive source of errors, i.e. speakers' mother tongue interference. Likewise, Darvishi (2011) aimed to detect the source of unacceptable and odd collocational expressions of non-native writers in terms of both lexical and grammatical. Darvishi obtained different reasons for inappropriate collocations such as interlingual or intralingual transfer, shortage of collocational knowledge, and lack of collocational concept. It is understood from Darvishi's findings that mother tongue is not the only factor in inappropriate collocation constructions in non-native writers' written productions. Collocation is an issue that can be investigated more specifically. Seen in this light, Nesselhauf's study divorced itself from other studies in the literature by specifying its aim only on *verb+noun* collocations rather than all types of collocations. Nesselhauf (2003) analysed free written productions belonging to non-native writers, and ended her study with a conclusion that *verb+noun* word combinations are considerably influenced by mother tongue interference.

Like idioms, collocations are a part of formulaic language. Assuming that free combinations, figurative idioms, pure idioms, and restricted collocations are four types of lexical collocations, Huang from Texas University purported to measure EFL learners' knowledge of lexical collocations. Huang (2001) ended with that free combinations are much easier whereas pure idioms are the most challenging ones for learners. Furthermore, Huang demonstrated that collocation errors can be attributed to negative L1 transfer, and insufficient knowledge of collocations is widespread among non-native speakers of English. Similarly, another study in tune with all others that was conducted to investigate prefabricated patters such as collocations and lexical phrases

emphasized the important role of L1 in the acquisition of prefabricated patters in advanced ELF writings (Granger, 1998). Shortly it can be said that formulaic language in non-native speakers' productions is not free from L1 interference (Ellis, Simpson-Vlanch, & Maynard, 2008)

However not all studies proved the influence of L1 on L2 collocation acquisition and use. One example for it includes Dechert and Lennon's (1989) contrastive pragmatic study. They studied with advanced speakers of English, and did not find a significant effect of interference, which is nearly a unique study with its disparate finding.

2.8.4. Collocations and native fluency

According to Prodromou (2003), on the path of achieving native-fluency in written productions, the use of collocation is a potential difficulty that non-native writers usually face. Prodromou, like many other researchers, claims that there is a close relationship between collocations and native fluency. Some researchers carried their allegations further, and made experimental and/or theoretical investigations in order to prove the relationship. One of these valuable studies belongs to Martynska (2004) who had a study with a twofold purpose; one of which was to reveal non-native English speakers' level of collocational competence, and the latter of which was to take attention on the role of collocation in the process of L2 learning. Martynska concluded that the knowledge of how to combine words into chunks efficiently is imperative, and non-native speakers of English are bound to have collocational competence if they want to achieve native-like proficiency. Furthermore, Martynska reported that "the richer in collocations the learner's lexicon is, the higher precision, accuracy, coherence and authenticity of his/her speech, which is a perfect way to fluency and proficiency in the language as well as to greater language competence" (p. 11).

Mainly different from Martynska, Hsu (2007) compared Taiwanese English majors' and non-English majors' written texts in order to obtain some insights on how Taiwanese English majors and non-English majors used lexical collocations in their writings. The findings showed a statistically significant correlation between two types of majors in terms of writing scores and frequency of lexical collocations. Furthermore, the analysis put forth a significant correlation between subjects' online writing scores

and their variety of lexical collocations. As consequence, the finding proved the effect of collocational variety and frequency on writing scores. Diversity and frequency of lexical collocations in an academic paper obtained higher writing scores.

The effect of lexical collocation awareness on writing skill is an issue that was investigated by some researchers. A recent study (Eidian, Gorjian, & Aghvami, 2014) with the aim of investigating the possible effect of collocation awareness on writing quality established a strong link between them. In other saying, lexical collocation awareness developed the writing components of vocabulary, and helped the writers have fluency in their essay writings.

Natives' and non-native writers' level of collocation use was a crucial issue that should be investigated in order to create a database for further studies, and the mission was undertaken by Durrant and Schmitt; two important linguistic researchers in their field. Durrant and Schmitt (2009) suggested that claims concerning indeterminacy of non-native writers' collocation and formulaicity is a problematic issue requiring to be solved immediately. At the end of their analyses, Durrant and Schmitt found that non-native writers depend heavily on high-frequency collocations, while at the same time they underuse less frequent but strongly associated collocations which are decidedly salient for native writers. Also, their findings reported that idiomatic phraseology is an issue on which non-native writers have deficiencies. In brief, Durrant and Schmitt's study allowed us to gain an insight on that there are differences between native and non-native writers in terms of collocation use, particularly of collocations which are less frequent. What can be understood from their study is that non-native writers must have awareness of collocations particularly of those that are less frequent in order to have native fluency in their academic writings.

Brain function is an important process in collocation acquisition. In terms of brain functionality, the processes of learning a collocation involve the same paths as learning a vocabulary. Different from vocabulary, a collocation involves sequences of words, and these sequences of words are processed in a more efficient way because these single memorized units can be processed more easily and quickly than the same sequences of words that are produced creatively (Pawley & Syder, 1983). Conklin and Schmitt (2008) investigated the processing of formulaic sequences by comparing reading times for nonformulaic phrases and formulaic sequences of native and non-

native speakers of English. The findings showed that nonformulaic phrases were read more slowly than formulaic sequences, which proved that formulaic sequences have a processing advantage. At the end of their study, Conklin and Schmitt advised non-native speakers to get accustomed to formulaic sequences if they want to enjoy the same type of processing advantages as native speakers do.

Processing and production of collocation are issues that are largely studied through corpus based sources. These issues were investigated by Siyanova and Schmitt (2008) in terms of L2 learners. Their investigations yielded that nearly 45% of all learner collocations are appropriately constructed, and that very little difference existed between native and non-native speakers of English in terms of frequent and strongly associated English collocations. However, "Unfortunately, the high percentage of appropriate collocations does not mean that NNSs necessarily develop fully native-like knowledge of collocation (p. 429)" added Siyanova and Schmitt, which means that using high frequency and strongly associated word combinations is not sufficient to be seen native-like; i.e. non-native speakers should also use less frequent collocations (cf. Durrant & Schmitt, 2009). Shortly, Siyanova and Schmitt summarized their results by reporting that L2 learners are capable of generating a great number of correct and appropriate collocations but that the fluency with collocations and underlying intuitions of even advanced speakers or writers do not sound to match those of natives.

To sum up the studies regarding collocation and nativeness, overall viewpoints report that there is a relationship between collocation knowledge and native fluency. However any shortfall in non-native speakers' competence of word combinations is due to inadequate input, rather than non-native approach of learning (Durrant & Schmitt, 2010).

2.8.5. Collocations and miscellaneous investigations

Hitherto, it is apparent that a large number of researchers conducted studies to detect the possible effect of L1 interference into L2 collocation use or acquisitions, and to investigate whether there is a relationship between collocational competence and native-fluency in language use. However, it will be too restrictive to narrow the effect of collocation on only writing fluency. Assuming that the views trying to establish a link between collocation and other language components are worth investigating, some

researchers studied the possible effect of collocation competence on other linguistic features. To begin with, it is stated that collocations help readers speed their reading and comprehension (Grabe & Stoller, 2002). Keeping that knowledge in mind, a study (Webb, Newton, & Chang, 2013) investigated the effect of reading repetition on the learning of collocation. The findings demonstrated that it is possible for learners to acquire collocational competence through readings, and you do not need a formal teaching setting because the learning can be achieved incidentally at the course of readings. Further, the study put forth that the more you encounter collocations, the more sizable learning gains may occur.

A small-scale experimental study (Boers, Eyckmans, Kappel, Stengers, & Demecheleer, 2006) investigated whether the use of formulaic sequences can help learners have native oral proficiency. The result suggested that helping learners construct a repertoire of formulaic sequences may be useful for improving non-native speakers' oral proficiency. Therefore, according to the findings of Boers et al., it will not be incorrect to claim that "the use of formulaic sequences was shown to be especially beneficial to perceptions of learners' fluency and range of expression (p. 257)". Similar to the former study, Hsu and Chiu (2008) explored lexical collocation competence and its relation to the speaking performance of advanced EFL speakers, and what they found was not different from Boers' et al. The results demonstrated a strong significant correlation between EFL learners' speaking proficiency and their knowledge of lexical collocations.

Some quantitative studies worked with numbers, and presented some descriptive results for the literature. One of them belongs to Shin and Nation (2007) who investigated a huge amount of data and compiled the most frequently used 100 collocations in order to have oral proficiency. The highest three frequency of spoken English collocations based on carefully applied criteria was ranked top-down: (1) you know, (2) I think, and (3) a bit. Very like Shin and Nations, Durrant (2009) investigated the viability of a collocation list for academic purposes. After a series of corpora analyses, Durrant created a list of top 100 academic collocations that can be used in academic writing; different from Shin and Nation whose list had been created for speaking proficiency. The first three collocations in Durrant's list are reported as: (1) this study, (2) associated with, and (3) based on.

As an crucial factor in SLA, culture is another factor that is wondered whether it has an effect on collocations or not. The study by four researchers (Telia, Bragina, Oparina, & Sandomirskaya, 1994) was dedicated to reveal if it could be mentioned about the effect of culture on collocations or "collocator" (op. cit. p. 368). Their findings showed that the choice of the collocator seem to be determined by cultural determinants.

2.9. Discussions of Hedges

In the present study, hedging was categorized into four to lead to any convoluted explanation because hedging is an issue that was studied from a multidimensional perspective. The subtitles are those: *Cross-linguistic hedging studies; Cross-disciplinary hedging studies; Nativity and the use of hedges;* and *Miscellaneous hedging studies.*

2.9.1. Cross-linguistic studies on hedging

Cross-linguistic investigations on hedging strategies have spread over a large area. To start with a famous researcher, Hinkel (1997) carried a cross-linguistic study based on corpus analysis, and compared native speakers and non-native speakers with a purpose of revealing referential, lexical, syntactic, and rhetorical indirectness devices they employed. The results demonstrated that non-natives had greater frequencies than natives in using indirectness devices like disclaimers, rhetorical questions and tags, vagueness and ambiguity, ambiguous pronouns, and passive voices. However, not in all hedging types were they in common; for example 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 from Hinkel's study that differences remain between natives and non-natives in terms of their hedge preferences.

Cross-linguistic variation of metadiscourse devices was investigated cross-sectional by Lee and Casal (2014). They analysed result and discussion chapters of theses written in English and Spanish in the field of engineering. Unsurprisingly, they found a significant difference between English authors and Spanish authors, which English authors were ahead of Spanish authors in overall frequency of hedges. In spite

of greater overall hedge frequencies, English authors did not have more hedges in all subcategories. The results showed that there were some hedge types that Spanish authors used more than English authors, which may be seen as a proof that sub-categorization of hedges is important in order to reveal detailed and more precise outcomes; as the present study did. Another similar study that compared Spanish and English written texts was conducted by Guinda (2003) in order to explore the contractual role of modality as embedded and convergence strategy. This time, the data were composed of fifty research articles written in the field of aeronautical engineering and related disciplines. The findings put forth that although Spanish authors had their publications published in renowned international journals, they still had pragmatic failures of metadiscourse devices, particularly of hedging and boosting, and these failures may be attributed to instructional factors.

The use of hedges across academic writing corpora is an issue that calls attention from researchers. With a purpose of exploring Chinese and English writers' cultural and linguistic variations in using hedges, Yang (2013) had a elaborative scanning of both Chinese and English scientific writings. Yang's findings were not different from other studies. Yang found out that English authors included hedges nearly twice as frequently as in Chinese-authored scientific discourse. Furthermore, sectional differences were discovered, for example *Results* and *Discussions* were sections that included over %70 of all hedges in the corpora. Consequently, Yang concluded that Chinese academic community prefer more assertive and authoritative way of presenting scientific claims while English-medium journals encourage indirectness devices to mitigate authorial commitment.

Yuxiu and Le (2014) collected data from Chinese and American courtroom discourse through analytical and theoretical frameworks, and aimed to detect cross-linguistic influence on hedges. Despite sub-categorization differences, the results demonstrated a greater influence of hedges on English speakers than on Chinese speakers in overall. Hun and Li (2015) were another researchers who studied epistemic modality in L1 and L2 written argumentative essays cross-linguistically. Their findings showed that Chinese learners modify their statements with indirectness devices, and use more tentative expressions than they use in their L1. Therefore, it can be said that language change has an effect on metadiscourse devices. Divorced from other studies in

the literature, their findings claimed that language proficiency has no influence on discourse competence, because regardless of language proficiency, learner groups at different language proficiencies provided similar results.

A thesis (Algı, 2012) that investigated hedges and boosters in L1 and L2 of Turkish speakers found out that Turkish speakers used slightly more hedges and boosters in their Turkish argumentative paragraphs than in English paragraphs. In addition, Algı found that frequencies, functions and types of hedges did not differ significantly in learners' L1 and L2 writings. Shortly, Algı indicated that swift from L1 to L2 does not have much influence on hedging and boosting. Another similar study (Uysal, 2012) aimed to reveal cross-linguistic differences between Turkish authors and Anglophonic authors lent credibility to the claim made by Algı (2012). Uysal's results revealed that both Turkish and Anglophonic authors were largely similar in terms of indirectness devices.

Some cross-linguistic studies preferred to study hedges in atomistic way rather than holistic. One example belongs to Orta (2010) who investigated the use of modals acting as hedges through a corpus of research articles in various disciplines. The results obtained in Orta's study pointed a deviant handling of indirectness devices by Spanish writers when compared to writers from other nationalities. Furthermore, Orta found out that Spanish writers experience troubles in establishing a proper tenor while writing in English. Furthermore, Orta remarked that Spanish writers expressed epistemic stance in a way different from English writers by employing modal hedges like *can* instead of *may* to express possibility.

Hedging is an issue that may be investigated not only for frequency or descriptive conclusions but for many other purposes. Itakura's study (2013) can be shown as an example for this because he aimed to see how hedges are used in English and Japanese book reviews. For Itakura, hedges are linguistic expressions that qualify statements and opinions, and the use of them in book reviews can reflect reviews' authentic and positive politeness and willingness towards the book that is evaluated. The findings showed that Japanese reviewers use more hedges, which may be because they wish to remain non-committal through impersonal syntactic structures. Another Japanese researcher (Iida, 2007) analysed hedges in medical articles written in English and Japanese. Iida's research ended with a result that emphasized a number of specific

differences between two types of authors. According to the findings, Japanese authors employed epistemic adjectives and adverbs less frequently than their English counterparts. Iida's investigation of medical articles in order to detect cross-linguistic difference did not much differ from other studies that collected a corpus of different disciplines. However, not all studies ended with similar results as in Sanjaya's (2013). Sanjaya had a purpose of revealing rhetorical difference between Indonesian and English authors in terms of hedge utilization and frequency. The finding did not mention about any difference between two author types; neither regarding within-language nor within-discipline comparison.

2.9.2. Cross-disciplinary studies on hedging

The linguistic literature provides that a great amount of data on cross-disciplinary studies focused on hedges. Vázquez and Giner (2008) compared soft (marketing) and hard sciences (Biology and Mechanical Engineering) in order to reveal whether there were disciplinal differences in using hedges. The results indicated that Mechanical Engineering is the discipline in which hedges are used less frequently while Marketing includes the highest frequency of hedging devices. Biology appears to be the discipline between Mechanical Engineering and Marketing in terms of hedge number. Their study provided a vision on whether it might be claimed that soft sciences include more tentative and indirect language than hard sciences because hard sciences require more certainty while having a claim or statement.

The role of hedges attracted Turkish scholars as well. Doyuran (2009) aimed to determine the role of hedges by identifying distribution, purposes and major forms of hedges. She gathered a data comprised of Geological Engineering and Linguistics. Doyuran's results were similar to that of Vázquez and Giner in that Linguistics, which is a soft science, included significantly more hedges than those in Geological Engineering which is a hard science. Ekoç (2010), another Turkish scholar, conducted an investigation in order to reveal Turkish students' lexical hedging strategies in MA theses abstracts, and to analyze whether there is any specific variation in terms of employing hedges with respect to frequency on lexical bases. She compared a number of disciplines namely Chemistry, ELT, Biology, International Relations, and Political sciences. The results indicated that there is not a significant difference among the

disciplines in terms of using hedges, though, slight differences in hedge frequencies may be due to the constrictions of the disciplines itself.

Similar to Ekoç's and Vázquez and Giner's studies, the comparison of hard and soft sciences was realised by two researchers (Tran & Duong, 2013). This time, results and discussions sections of Applied Linguistics and Chemical Engineering were compared to one another. The aim of analyzing the data sectional was to detect a possible differentiation between sections. The results were not surprising at all, and were totally congruent with the former findings in the literature. Obviously and significantly Applied Linguistics included much more hedges than Chemical Engineering did. Again, the literature showed us that soft science disciplines heavily use indirectness devices in order to mitigate the statements.

Up to now, it is ensured that soft science disciplines use more hedges, hence become more tentative when compared to hard sciences. But, what could be said if the comparison was realized between two soft science disciplines? Biook and Mohseni (2014) sought an answer for the question and made an experiential study in order to evince the results. They selected ELT and Psychology disciplines to make content analyses regarding hedging strategies. Their results demonstrated a non-significance, i.e. both fields of study had used a similar number of hedges, which is a significant result for further discussions. In addition, distancing phrases were the most frequently used hedge type in both disciplines while engagement markers were the least used hedge type. Similarly, two sub-disciplines of Business, Marketing and Management, were analysed by Li and Pramoolsook (2015) so that move structures (*introducing purpose, describing methodology, summarizing results, presenting conclusions by Bhatia (1993)* and hedging strategies could be revealed. The results provided similar findings for both disciplines. The use of hedging was common in Marketing as well as in Management.

Nivales (2011) favoured to collect data from novice writers to detect their commitment to the proposed ideas. Nivales wanted to see how novice writers used indirectness in their writings. She compared Psychology and Mass Communication because she thought that Psychology requires a tentative and detached language while Mass Communication use a certain language. The analysis results proved an apparent difference between two disciplines. In accordance with Nivales' thought, Psychology

used a more tentative language, and appeared more detached whereas writers of Mass Communication seemed more authorial and committed. As last, Nivales remarked that impersonality is a writing convention that should not be ignored.

The use of hedges in medical texts is corroborated by the studies stated earlier (e.g, Taavitsainen, 1999; Iida, 2007). With a purpose of comparing articles in Education and Nursing, Rabab'ah (2013) collected 50 academic articles in total from two disciplines, and analyzed them. The results were significant in total as well as in sub-categories. Writers in Education used more hedges in order to sustain their communicative strategies to qualify their authorial commitment, to reduce the force of statements, to avoid being assertive, and hence to save writers' face. The high frequency use of hedges is not surprising, because it is known that medical discourse requires to be more certain, unravelling, and steady.

Form, frequency, and function of hedges were investigated by comparing 100 quantitative and qualitative research articles (cf. Behnam, Naeimi, & Darvishzade, 2012). Having applied the taxonomy to classify and identify the hedges in their corpus, the researchers used independent-samples t-test. According to the analysis results, there was a statistically significant difference between two types of data: qualitative and quantitative. It was seen that the number of hedges used in two types of corpora was superior in qualitative research articles when compared to quantitative research articles. The findings are not distractive because in qualitative studies writers frequently use metadiscourse devices in order to create an impact on the reader or to convince them on the debated issue while the role is realised through numbers and concrete analysis results in quantitative studies.

A empirical study that compared United States Legal Discourse (USLD) and English for Lawyers (EL) aimed to reveal whether feedback on hedging had any impact on improving students' hedging strategies. In the process of experiment, EL group took three months feedback so that they could enhance their use of hedging devices while USLD group received no treatment. At the end of the feedback process, it was seen that EL group used more hedging devices and reduced assertive and direct statements while no significant progress was detected regarding USLD group, which can be seen as a testament to the positive influence of feedback on expanding hedge use.

The strong relation between hedges and textual communicative function has almost always be regarded as unflinching because hedges are markers that regulate a writer's communicative style by proportioning the authorial stance on a balanced amount. Salager-Meyer (1994) discussed how the communicative objective of varied rhetorical sections of case reports and research papers in medical English could influence the categorical distribution and frequency of hedges which he called as *modulation devices* (p. 149). He found that discussions and conclusions are the sections in which hedges were heavily engaged. In conclusion, according to Salager-Meyer, the use of hedges is determined by communicative purpose of the discourse, by authors' pretension to generalization and universality, and by the force of the claim the author wishes to make.

Undoubtedly, socio-cognitive aspect of hedging devices is not a negligible issue. In spite of this, there are almost no studies regarding it except for Vass' (2004) study. Vass had a purpose of comparing two same genre of disciplines to detect textual and pragmatic perspective of hedges that were included in the field of Law. To be able to reach a conclusion, Vass compared U.S. Supreme Court opinions and American law review articles from intra-disciplinary, socio-cognitive, and comprehensive aspects. The result indicated a correlation between communicative purposes and hedging incidence, functions, and strategies. More specifically, The addresser's micro-level intensions, understanding of context, degree of shared background knowledge, and the discourse community's macro-level expectations are crucially effective factors that determine similarities and differences in hedging incidence and functions.

2.9.3. Nativity and the use of hedges

Comparative studies are famous among researchers because they provide clear results, and the descriptive outcomes after a series of comparative analyses can be construed for enriched insights that may broaden new and further horizons for other researchers' benefit. The linguistic literature engrosses a great many of studies that compare native and non-native speakers. These studies allow us to determine the similarities and differences between native and non-natives, which shed light on possible troublesome points regarding the nativity effect on the discussed issue.

In that sense, a thesis (Hamamcı, 2007) examined the instance of hedges and their subcategories through a corpus compiled from research articles by NWs and NNWs of English in the field of Social Sciences. Hamamcı aimed to detect possible differences and similarities between the two groups in terms of functions and occurrence of hedges. The results demonstrated dissimilarities in terms of both quality and quantity. To state in detail, NNWs neglected adverbial and adjectival hedges while displayed preference for verbs, modal verbs, and nouns in order to realize the need for hedges. Furthermore, Hamamcı detected a sectional discrepancy between two groups. NWs had a high frequency of hedges in Discussion and Conclusion parts while the preference for NNWs was for Introduction part.

Another similar study (Yağız & Demir, 2014) made a comparison between Anglophonic and non-Anglophonic authors; namely Turkish authors. They compiled a corpora of 100 research articles, and made a cross-sectional analysis in order to reveal both sectional and overall differences. The findings proved NWs' superiority in terms of hedge frequency. However, the superiority was not sure for all subcategories of hedges; they were some subcategories which NNWs used more hedging devices with an effort of weakening their statements. For instance, NNWs used more *introductory phrases* like *it is our view that..., we feel that* etc. than NWs. Yet, there was a statistically significant difference between NWs and NNWs in overall hedge frequency in NWs' favour. However, at variance with Hamamcı's study, *introduction* was not the section in which Turkish scholars included hedges most. *Discussion* and then *conclusion* were two sections where NNWs preferred to use more hedges as NWs did.

The use of first person is regarded as a metadiscourse strategy by many researchers, and it has a key role in the building of persona concerning the authorial stance (Martinez, 2005). Martinez conducted a study with a corpus of Biology that were compiled from native and non-native writers of English to detect the role of first person as a hedging device in scientific writings. Martinez focussed on the function and distributions of first person in the different sections of the corpus. Finally, he discovered that there were statistically significant differences between NWs and NNWs in all sections; namely introductions, discussions, and conclusions. What is in congruent with other studies stated earlier is that the section of results had the most notable difference

with regard to hedge frequency and function. Finally, Martinez stressed the importance of first person to empower NNWs' academic discourse.

2.9.4. Miscellaneous studies on hedging

The issue of hedging is not limited to cross-linguistic, cross-disciplinary, or comparative studies, but is an issue being investigated through a wide range of empirical and theoretical frameworks. One fashionable convention intervening into nearly all linguistic issues in our day is culture. Cultural influence on hedging has been the subject of a number of studies. With a purpose of investigating NWs' and NNWs' indirectness in the conference proposals, a cross-cultural study was conducted by Uysal (2014) through making a comparison of Turkish, Japanese, Indians, and Anglophonic speakers of English. The outcomes of the analyses showed significant differences across the cultural groups in both functions and frequencies of hedging markers According to the findings, Turkish and Japanese authors employed more hedges when compared to Indians and Anglophonic authors. Uysal evaluated the results by taking cross-cultural variations into consideration. For Uysal, Eastern and Western texts have unique discourse characteristics affecting the authorial stance.

Another study (Ozdemir & Longo, 2014) compared and contrasted the use of hedging markers in USA and Turkish MA thesis abstracts written in English. The results indicated that Turkish authors' MA thesis included more hedges than USA thesis. Ozdemir and Longo attributed the results to cultural context implied by the communication situation. Likewise, a cross-linguistic study (Mojood & Kuhi, 2014) aiming to reveal metadiscourse strategies in newspaper genre in English and Persian texts explored generic conventions and cultural factors on the use of hedges as well as other rhetorical devices. Their results disclosed that differences remained between two newspaper editorials genre in the construction of persuasion. Findings partly linked the difference to editorials' cultural and linguistic backgrounds.

The use of metadiscourse devices at different levels of English proficiency was tested by some researchers (Oliveira, Akerson, Colak, Pongsanon, & Genel, 2011) in order to elicit the implicit communication in epistemology and science during discussion panels. The samples were gathered from elementary teachers and kindergarten teachers. The researchers examined hidden social meanings,

epistemological meaning and explicit thematic patters through the corpora. The results demonstrated that kindergarten teachers' conversations included mostly unhedged and direct statements whereas fourth grade teachers' discussions were predominantly tentative and hedged. The results cause the reader to think that the addressee setting affects the prolocutor's style of speaking as well as rhetorical preferences.

Academic reading necessitates a high degree of reading ability, or else, reading may become less efficient, which hinders readers to get the utmost benefit from the text. A study (Figueiredo-Silva, 2001), the aim of which was to prove the importance of rhetorical devices in improving academic reading, conducted an investigation in Agricultural college in order to pinpoint the effect of hedge knowledge over academic reading fluency. The findings suggested that hedging familiarity as a writing convention may facilitate reading of academic texts, and hence increase the efficiency of reading. Therefore, according to the results, hedging should be seen as an issue that must be learnt, accordingly courses regarding teaching academic reading are supposed to include topics to teach learners hedging devices to be able to have a more efficient reading skill.

While Figueiredo-Silva (2001) gathered attention on the importance of hedging for more efficient academic reading, Crompton (1997) had stressed its necessity for academic writing. Based on treatment given to hedges in EAP writing textbooks, Crompton stated that any ignorance of empirical use of hedging devices in EAP texts may mitigate the power of expression, which definitely would be out of favour in a setting -academe- in which persuasion is of utmost importance. Similar to Crompton, Hyland (1998b) conducted a descriptive study to be able to reveal frequencies of various lexical hedge categories in the corpora gleaned from academic journals. The findings showed that lexical verbs are the most preferred hedge type, which is followed by adverbs, and then adjectives. By providing percentile figures, he should be aimed to raise concern over the point of hedge usage density in academic texts.

Although the essentiality of hedging devices for academic writing is verified by many studies, there are suspicions on to what extent readers notice the hedging strategies applied in a writing. An exploratory investigation (Lewin, 2005) of readers' and authors' identification of hedging in scientific texts questioned a group of writers and readers in order to reveal whether hedges were mutually recognized by readers and authors, and at the end, to create a certain description of hedging by them. On the basis

of findings, Lewin made three claims which are: writers' choices of hedging devices did not coincide with definitions reported in the literature; there existed a substantial divergence between writers' and readers' identification of hedges; and hedging was not directly linked to politeness by the authors. Lewis' study did not cite former conventional and ordinary reflections of hedging, but instead, carried a new insight onto linguistic literature about hedging, that is why it is unique to provide some unprecedented illustration on the issue.

To avoid being explicit during written of spoken conversations and to be careful not to seen partial, the language producer should keep a balance in his/her words by employing hedging strategies circumspectly. Medical discourse is a medium that absolutely requires the use of language attentively not to cause an undesired psychological effect on the interlocutor. In that sense, Varttala (1999) investigated the communication functions of hedges in scientific texts and in specialist daily discourse on Medicine. It was demonstrated that popular scientific articles on Medicine do not include as many hedges as in specialist daily conversations. In other say, mutual conversations between interlocutors included more hedges than those in unilateral scientific texts. Likewise, Lehtinen (2013) compared clients' and doctors' talk about medical information in terms of hedging usage. Lehtinen analysed doctors' responses to patients' presentation of personal information, and discovered that doctors' interactional patterns in the counselling sessions displayed an orientation of tentative language, particularly when commenting on the symptoms and prognosis of the patients.

Systemic functional linguistics is a system that relates language structures to language meaning and functions. In other words, it is a system that adjusts grammar to interactional and communicative utilization. A study (Yang, Zheng, & Ge, 2015) lent credibility to the use of systemic functional linguistics functioning as epistemic modality in English-medium medical research articles. After analysing of 25 research articles from s systemic functional perspective, the researcher argued that writers in medical field depend on tentative, objective and reserved way while making their claims, which may be seen as a significant sign regarding the importance of hedges for writings on medical.

As stated before, one of the main and crucial functions of rhetorical devices is the power of persuasion over the readers. Efficient and appropriate usage of hedging

may leave a power of sanction on the interlocutor. The essentiality of persuasion is needed at different levels in varied fields. Patent application is one of the fields that persuasion is of great importance, if the commercial interests of inventors are desired to gain. Aware of the significance of hedge knowledge in patent applications, Pellon and Guinda (2010) made a descriptive study with regard to U.S. patents. To efficiently safeguard the value of hedges, following the analyses of 343 US electro-mechanical patents, they found that hedges are chief in the vague quantifications such as *most, many, several, a few* etc. Also, it was suggested that a balanced coexistence of hedges and boosters would maintain the persuading influence in patent writing.

As important in patent applications, the power of persuasion is crucial in theses or dissertations. As known, the principal purpose of a thesis or dissertation is to prove the main theme of the study, hence, to corroborate the truthiness and necessity of the issue discussed throughout the thesis. To be able to realise the purpose, the writing should have a persuasive language, which only could be done through appropriate rhetorical devices. Kondowe (2014) investigated dissertation abstracts in order to reveal hedging and boosting devices that function as interactional metadiscourse. Sixty abstract analyses demonstrated that hedges were used three times more than boosters, which signalled dissertation writers' prevalence of low commitment.

Due to the fact that comments are evaluations that may affect addressee's psychological state, too assertive or mitigated language may indispensably give rise to undesired psychological situations particularly in which education is the primary concern. In the process of feedback, too many certainty markers could discourage the learners while a very loose language could partly prevent to convey the message to learner. From Birmingham University, Lee (2013) measured the amount of hedging in academic written feedbacks. More specifically, Lee only investigated the use of epistemic modal hedges, and found that *could*, *might* and *would* are the top three modal verbs used in the linguistic corpus. Therefore, the top three modal verbs that Lee explored would be better if used in the process of giving feedback not to use extreme linguistic structure.

The literature includes some intra-disciplinal studies on hedge usage. One of them (Buitkienė, 2008) investigated hedges in newspaper discourse. With an attempt to analyse distribution and occurrence of hedging devices, the data were gathered from news stories and editorials, and analyzed. The findings showed that both editorials and news stories included considerable number of hedges, the number was slightly higher for editorials, though. On the other hand, Clemen (2002) intended to prove the occurrence of hedges in economic texts, and analysed periodicals dealing with economic affairs and political economy. The results proved the epistemic use in English journals of Economics is of great interest.

Talking about a prospective event or trying to foresee an expectation is not easy at all; particularly if the remarked statements are recorded. Not to be mistaken about a former statement, the language must be clear from directness as well as other intensity and certainty markers. If used befittingly, the use of tentative and indirect language may work as a shield that protects the speaker against possible critics. Mclaren-Hankin from Heriot-Watt University conducted a study in order to identify the relationship between hedging and forward looking statements. The corpora was gleaned from press releases. The results showed that certainty markers must be held off while talking about situations on which the writer cannot be 100 percent sure, and a flowery i.e. indirect language must be preferred.

2.10. Discussions of Boosters

This title was further divided into four subtitles as *Cross-linguistic studies on boosting; Cross-disciplinary and intra-disciplinal studies on boosting; General descriptive and comparative studies on boosting;* and *Miscellaneous studies on boosting*. Under the first subtitle, boosting preferences in native and target languages were written down so that L1 influence, personality traits or writing characterizations on boosting usage could be revealed. In the second subtitle, studies that compared and contrasted different disciplines were provided. Furthermore, information on how boosting is used intra-disciplinal was provided so that disciplinal difference in employing boosters could be noticed. In the third subtitle, studies written in English by those from different language backgrounds were provided to illustrate the differences between native and non-native writers of English in terms of using boosters in academic

texts. This subtitle, in addition, included descriptive studies like corpus investigations. The last subtitle included various studies investigating the issue of boosting from varied perspectives.

2.10.1. Cross-linguistic studies on boosting

A dissertation (Sanjaya, 2013) that examined boosting structures in English and Indonesian research articles compared and contrasted English and Indonesian scholars. The within-language comparison findings demonstrated that academics from two language background did not utilize boosters at comparable rates. Besides, the frequency of boosters was not influenced by sociocultural context in which RAs were produced. In brief, no statistically significance were found between English and Indonesian written RAs in terms of boosting strategies and frequencies. Curiously enough, the results suggested that boosting, as a rhetorical feature, was used by both groups of scholars to build up a particular identity.

As has been repeated earlier, the generalization of a study finding is not basically an easy task because it is possible to encounter some unconsidered factors such as cultural, contextual, or personality factors. As in Sanjaya's, a thesis (Algı, 2012) was carried out to investigate whether there was any significant difference between L1 and L2 written productions of Turkish authors of English. Furthermore, Algı aimed to uncover L1 interference of boosting devices in the process of L2 argumentative paragraph writing. The result showed the L1 paragraphs were slightly employed more certainty markers than those in target language. Shortly, Algı lent credibility to the claims that Turkish authors are a little more certain while they write in their mother tongue. Likewise, with a purpose of exploring cultural influences and L1 interference, Uysal (2012) examined argumentation across L1 and L2 writings of Turkish authors. Analyses made within a cultural-educational framework showed a strong tendency in participants in terms of using assertive devices such ase overstatements and intensifiers as well as hedging devices such as denials and disclaimers. As a result, it was concluded that there existed common patterns in Turkish authors' writings used in both similar and different ways across L1 and L2 .

Some Iranian researchers (Yazdani, Sharifi, & Elyassi, 2014) investigated articles. They had a claim of illuminating the role of boosters in English and Persian

news articles written on the same issue. After the analyses of randomly collected 30 English and Persian news reports, they concluded that Iranian news articles used a more certain language at significant rate when compared to American news articles. Similarly, another study (Jalilifar & Alavi-Nia, 2013) investigated televised American and Persian presidential debates. The result demonstrated a significant difference between two presidential debates in terms of not only frequency but functional use of boosters. The diverse tendencies towards employing boosters contained sub-categories of boosters which are: *intensifying, personal involvement, boosting epistemic, force-indication[1], expressing emphasis, accentuating, source-tagging, seeking solidarity,* and *presupposing verification.* Of all these sub-categories of boosters, only bounding emphatics did not differ in two presidential debates. Shortly, the number of boosters used in conversations of Iranian presidential candidate was higher than one in American presidential candidate.

Based on a corpus of 649 abstracts gleaned from journals of applied linguistics, Hu and Cao (2011) examined boosting usage in Chinese and English mediums. Qualitative analyses demonstrated that English-medium journals featured significantly more hedges when compared to the abstract published in Chinese-medium journals. Furthermore, the number of boosters used in the abstract of Chinese-medium journals was markedly higher than those in English-medium journals. Conclusively, to state cross-linguistically, Chinese authors are more assertive in their statements, and the nature of authorial certainty and confidence is common in Chinese-medium journals.

The curiosity on cross-linguistic variations of metadiscourse gave rise to a study (Lee & Casal, 2014) that analyzed interactive metadiscourse categories such as transitions[2], frame markers[3], endophoric markers[4], code glosses[5] as well as interactional metadiscourse categories like hedges, boosters, and attitude markers.

100 theses written in English by Anglophonic speakers and 100 theses written in Spanish by L1 Spanish speakers constituted the corpus. The findings of the comparative

---

[1] Devices used by the speaker in order to lay particular emphasis on the illocutionary force of the statement; e.g. *I want you, In fact, I ask you* etc.

[2] Devices stating internal relationship between discourse parts such as *also, although, therefore* etc.

[3] Devices indicating text boundaries and structures, e.g. *first, overall, objective, now* etc.

[4] Devices directing a reader to other text parts

[5] Items functioning to clarify writer's intended meaning, like *i.e., for example* etc.

analysis marked a cross-linguistic differences for overall and categorical frequencies of metediscourse devices. If to talk about only the results of boosters, which will be in association with the present title, the number of boosters as well as hedges was included in the theses written in Spanish than those written in English, which is an indicator regarding assertive and direct writing styles of Spanish speakers.

In some cases, hedging and boosting are considered as supplementary communicative units functioning as rhetorical devices. Aware of that, Viktorova (2014) analysed discourse markers in Russian and English medium research articles. The study had a purpose of investigating the dependence of boosters in the course of language dialogue. On the basis of comparative discourse analyses, Viktorova ended with a conclusion that dialogue communications included more boosters than monologue communications, which is to say that the use of boosters is more common in spoken discourse than in written discourse. Furthermore, it was revealed that boosters prevailed in Russian data more frequent than in English data; in other words, English discourse is non-imperative and softened in comparison with Russian data.

The differences between different language speakers in terms of using boosting are not surprising because a review study (Khedri, Heng, & Hoon, 2013) that investigated cross-linguistic and cross-disciplinary perspectives on metadiscourse devices in academic writing already set forth that there are varied tendencies on metadiscourse use by speakers from different language background.

2.10.2. Cross-disciplinary and intra-disciplinal studies on boosting

The literature presents some cross-disciplinary as well as intra-disciplinal studies on boosting. One cross-disciplinary study (Vázquez & Giner, 2008) that contrasted Biology, Marketing, and Mechanical Engineering in order to detect their discourse styles showed that the authors in Mechanical Engineering appeared more precise, direct, and certain about the truth of their affirmation. Therefore, using boosting is generally a common habit among authors in Mechanical Engineering. In association with Vazquez and Giner's, this time intensity markers in Electrical Engineering and Applied Linguistics were contrasted (Behnam & Mirzapour, 2012) in an attempt to investigate the frequency, type and functions of boosters employed in both disciplines. In contrast with Vazquez and Giner who found a high frequency of intensity markers in

Mechanical Engineering which is a hard science discipline, Behnam and Mirzapour discovered that Applied Linguistic included intensity markers at a rate higher than in Electrical Engineering which is a hard science discipline as well like Mechanical Engineering. Both studies demonstrated that it may not be easily possible to state that hard science use a more precise language when compared to soft science, or vice versa. It seems that disciplinal differences remain in terms of using boosters.

With a curiosity on whether hard or soft sciences use a more precise language through the use of boosters, three researchers (Khedri, Ebrahimi, & Heng, 2013) from Malaysia conducted a study on the issue. Soft sciences contained ELT and Economics, and hard sciences included Biology and Civil Engineering. After the analyses of sixteen RAs, the results did not demonstrate a statistically significant difference between soft and hard sciences in terms of booster frequencies, though there were noticeable differences. According to the findings, ELT had the highest ratio for per 1000 words with 35, and Economics had a word average of 27.7, which both were disciplines in soft science. Meanwhile, both Biology and Civil Engineering had a ratio of word average lower than ELT and Economics. In brief, a significant difference was not yielded between soft and hard sciences in terms of using boosters; nonetheless, it cannot be mentioned about an absolute non-significance.

As known, examination of a large corpus requires tough effort. With an effort to examine the roles of boosters in academic texts from the aspect of persuading readers on the validity of author claims, Peacock (2006) constructed a corpus of 1,250,000 composed of Environmental Science, Physics, Public and Social Administration, Language and Linguistics, Law, and Business; then analyzed them through a mixed method. The results provided some valuable implications for our understanding of a developed knowledge of boosting, which was seen an essential competence in research writing. Peacock concluded that there existed a considerable interdisciplinary variation in the form of boosters among disciplines: for example Language and Linguistics was the field that hosted the highest ratio of booster per 1.000 word; 10.98, which was accompanied by Law; 10.05. Similarly, Pho (2008) aimed to explore the rhetorical moves and the linguistic realizations of authorial stance in the fields of Educational Technology and Applied Linguistics. The analyses discovered that writers had a strong inclination for semi-modal and modal boosters in the field of Applied Linguistics. If we

summarize, it seems that Language and Linguistics are the fields that mostly use metadiscourse devices like boosting, as shown in the former study (cf. Khedri, Ebrahimi, & Heng, 2013).

Different from other studies with its purpose, the relationship between CEOs' statements and financial performance of the company was investigated in terms of emphatics usage by Maria (2008). The results simply showed that CEOs' statements were not influenced by the company's financial performance when the overall use of boosters was taken into consideration. Another study that seems distinctive from other studies in the literature belongs to Koutsantoni (2004) who aimed to determine the expressions of certain knowledge in scientific research articles. Koutsantoni compared Electronic and Electrical Engineering in terms of authorial involvement from the aspect of certainty markers. Thanks to analyses, it was inferred that certainty markers assisted authors in asserting their authority while presenting claims. Furthermore, it was pointed out that strong appropriate authorial stance assist to gain readers' agreement and community consensus.

The studies in the literature that has been stated in here so far compared or contrasted different disciplines to one another or merely one-disciplinary. On the other hand, a researcher (Abdi, 2012) who aimed to reveal evidence marking investigated a corpus of research articles regardless of their field of discipline. Abdi concluded that appropriate employment of metadiscourse strategies including boosters are indispensible in order to strengthen the evidentiality in research article writing, therefore they are suggested for writers.

2.10.3. Descriptive and comparative studies on boosting

Comparative Studies

Among many comparative studies existing in the literature, Vassileva's (2001) study is one of the most crucial ones. Examining English and Bulgarian academic texts cross-linguistically and comparatively, Vassileva aimed to reveal the degree of commitment and detachment in English, Bulgarian, and Bulgarian English academic writing, hence to reveal similarities and differences from frequency and pragmatic perspectives. It was a cross-sectional study, therefore Vassileva provided different results for different parts of the data: namely, introductions, discussions, and

conclusions. The overall number of boosters in Bulgarian English appeared to be slightly over than native English. Despite this, the results did not yield a statistically significant difference because the range was not large ostensibly.

Chen (2012) conducted a contrastive analysis of epistemic expressions in native and non-native Chinese writers of English by analysing written documents obtained through examinations. Based on the examination of the corpus, the study showed a great similarity between native and non-native Chinese writers in the total number of epistemic devices. However, epistemic device diversity were low in NNWs documents, and unwarranted strong assertions were markedly included in NNWs written texts when compared to those of NWs. Regarding non-native Chinese writers of English, Chen suggested that there should be an improvement in the knowledge of appropriate commitment use.

Akin to Chen's study, Kim and Suh (2014) made a study to investigate epistemic rhetorical stance of L1 and L2 (Korean) students' English writing. Based on the consideration that a writer's argument should be delivered with an appropriate degree of assertion and mitigated expression, their study aimed to examine whether positioning statements was with a balanced qualification, whether certainty statements remained a challenge for L2 writers, and whether there was any difference between Korean writers of English and native writers in using the expression of certainty. The findings indicated that Korean writers of English took a stronger stance in their claims compared to their Anglophonic counterparts. Furthermore, Korean writers' lexical diversity was narrow with simpler constructions. The study provided almost exactly the same results with Chen's, who examined Chinese students. It seems that Korean and Chinese writers, both from far East, have similar authorial voices -assertive- in their English reports.

Descriptive studies

Amplifiers, which is a sub-category of boosters, are lexical words such as *very, absolutely, so* etc., which function to increase the authorial commitment to the statements or claims. A corpus-based study (Xiao & Tao, 2007) aimed to explore amplifiers in British English from sociolinguistic and extralinguistic perspectives. The researchers determined 33 amplifiers across different dimensions which are: gender, age, publication data, discourse mode, register, education level, audience gender, and

audience age. The study analyzed amplifiers in two discourses namely written and spoken. Regardless of categories that the researcher constructed, it was detected that *very, quite,* and *really* are the most frequent amplifiers used by all groups in both spoken and written discourse. As for the least used amplifiers, the results presented *absolutely* and *bloody*. Thanks to the study, it is understood that writers have a common tendency for some types of amplifiers.

Another corpus-based study (Aull & Lancester, 2014) compared freshman and senior students at a university with veteran authors who made their writing published. The researcher examined over 4,000 argumentative essays to reveal freshman students' linguistic expressions of stance in comparison with those of upper-level students' and professional authors'. The findings showed that freshman students shared linguistic stance markers in a similar way; however great differences emerged between freshman students and more advance writers. According to the results, freshman students used boosters more than upper-level students and advance writers; particularly with amplifiers of *very* and *much*.

In an attempt to explore a group of advance Italian students' use of boosters in their writing, Morgan (2008) built a small-scale corpus. The results illustrated that student writers rely heavily on modal verbs, and overuse of informal devices of spoken discourse. Another finding which is in line with other non-native writers' characterization is that Italian student writers had a tendency to overstate their commitment to propositions.

Interpersonality in Linguistics is an issue being fascinated by some researchers (e.g. Beuchot & Bullen, 2007; Lorés-Sanz, Mur-Deñas, & Lafuente-Millán, 2010; Hewings, Lillis, & Vladimirou, 2010) but it seems that only a study by Gillaerts and Velde (2010) associated interpersonality and metadiscourse in academic writing from boosting perspective. The results indicated that the use of interactional metadiscourse including boosters has undergone a number of changes in the course of the past three decades. More specifically the findings showed that the degree of interpersonality realised by boosters and other metadiscourse devices like hedges and attitude markers has diminished over time. Shortly, Gillaerts and Velde claimed that the use of boosters by academics has dropped, which may be a new rhetoric strategy of dynamic academe.

As has been stated before, rhetorical devices are of great importance in creating a persuasive text. Keeping that knowledge on the top, Mills and Dooley (2014) aimed to study hedging and boosting in order to teach how to use these two rhetorical devices. For them, writers should be completely aware of boosters to be able to realise the effective power of rhetorical persuasion; therefore, novice writers need to be explicitly taught a range of boosting techniques and they should have an expanded lexicon of boosters. Only in this manner, a writer could develop his/her effect on reader and make them accept the idea she/he proposed.

2.10.4. Miscellaneous studies on boosting

The issue of persuasion through intensification is not restricted to academic studies; to the contrary, it has an area of influence ranging from very trivial issues to the issue of utmost importance.

Political discourse is one of the areas in which persuasion is everything for the prolocutor to be able to create a profound impact on addressee. Accordingly, with an effort to explore modality markers in political speeches, Dontcheva-Navratilova (2009) analysed three Directors-General of UNESCO who spoke at international conferences. The results supported the views claiming that deontic modality is key in constructing an ideologically-based discourse. Also, it was detected that the Directors-General of UNESCO had an inclination to use modal verbs like *should, have to,* and *must*. In a similar way, Sandova (2011) allegedly stated that modifying the illocutionary force of propositions in political interviews that a speaker involved manifests its importance apparently, which may be succeeded through hedging and boosting . By holding that allegation, Sandova investigated boosters that function as pragmatic conventions in political interviews from speaker-oriented perspective. The results demonstrated that speaker-oriented boosters have various pragmatic functions in the genre of political interviews depending on the contexts they are used. In detail, boosters perform in a way to provide subjectivity, assurance, agreement, certainty, and a higher degree of speaker involvement and commitment. Subjectivity was the most frequent pragmatic function that speaker-oriented boosters performed. Consequently, both studies manifest the importance of boosters in political discourse.

Degree modifiers and epistemic stance are not free from the effect they impose on one another. Aware of that knowledge, on the basis of British National Corpus, Simon-Vandenbergen (2008) conducted a descriptive study to obtain information on the use of two adverbial degree modifiers: *almost certainly* and *most definitely*. The research had a desire to detect semantic-pragmatic development of the adverbial modifiers from the aspect of speakers. The results showed that the adverb *certainly* was used for formal registers while *definitely* characterized private and informal registers. Thanks to the study it can be understood that the adverb *certainly* may more appropriately act as a booster in academic genre than *definitely*.

Salek (2014) made a holistic study by examining interactive and interactional markers through English research articles. The results showed that of all interactional markers, boosters were the most frequently used markers in total although there were sectional differences. In line with Salek's research, Hyland (2000b) aimed to learn whether student writers used boosters or hedges while they were modifying their claims. The results manifested that student writers largely attended to the boosters than hedges. However, another study (Kondowe, 2014) that was edited from a dissertation discovered that boosters were not common as much as hedges in PhD dissertations. In fact, the frequency differences regarding boosting may stem from internal or external factors, which is why a study is not corroborated by another in general. Concerning frequency differences or inappropriate use of boosters, an empirical study (Alward, Mooi, & Bidin, 2012) suggested that explicit instruction may have a positive effect on the use of booster.

2.11. Metadiscourse and Gender

At first flush, the relation between metadiscourse and gender might not be obvious, de facto authorial voice is profoundly in reciprocation with gender. Possibly for the first time, Robin Lakoff (1973) built a straightforward bridge between characteristics of women's language and linguistic forms through her study titled *The logic of Politeness*, and since then on the researchers have been attracted by the issue that might be investigated from a linguistic perspective.

The relationship between metadiscourse and gender can be investigated from many different perspectives such as politeness, face-saving, face-threatening,

conversational contact, conversational maxims, social norms etc. Specifically, two subcategories of metadiscourse -hedging and boosting- were reviewed in order to reveal their relevancy with gender; as has been repeatedly indicated, the objective of the present study regarding metadiscourse devices is to investigate lexical hedges and boosters but not all others, which would be a venture nearly impossible to sort out.

The literature review showed that some studies investigate either hedging or boosting on sexual basis while some other studies studied both in the same research. The very first research seems belonging to Holmes (1990) who studied hedges and boosters in men's and women's speech. Holmes ended that women and men have differentiated in style of speech, accordingly that women were more submissive while males more authoritative in the course of speaking. In other words, women had included more hedging devices while men preferred to speak in a way that includes certainty markers in higher frequencies when compared to women. However, in later study, Holmes (1995) claimed that women did not use hedges in order to have a tentative language but to create interpersonal warmth, which may be thought as a politeness strategy.

Dixon and Foster (1997) studied hedging and gender from gender difference. A sample of South African students comprised of males and females were gathered, and the corpus were constructed through 52 dyadic conversations. A number of findings were picked up, one of which was that the impacts of gender was eclipsed by contextual influences. With regard to hedge frequency, no statistically significance was detected for the speaker's gender. Furthermore, both gender used a tentative language when talking to male addresses. However, men deployed more hedges than women while addressing to female speakers.

The speaking style is not free from other external or internal conventions such as cultural, political, or even regional reasons. In other words, the high frequencies of hedges in a female conversations would not bt correct to generalize to all female speakers in the world because as Dixon and Foster (1997) demonstrated that contextual influences have a crucial part in selecting words that will constitute the speaking style. Not only because contextual influences but other influences raging from religion to daily gender expectation are influential factors determining the speaking style of the speaker. Therefore, a study aiming to reveal gender differences in using rhetorical

devices is to be conducted locally, and must be very tentative while generalizing the results acquired.

Role of interaction and stance-taking of Iranian academic authors were investigated on gender basis to be able to reveal mood and modality employed in Biology and Linguistic research papers (Aboulalaei, 2013). The analysis of the data collected from 60 research papers in total demonstrated that female authors slightly tended to metadiscourse devices more than males. Another Iranian study (Yeganeh & Ghoreishi, 2014) with a purpose of exploring the role of gender differences in employing hedges and boosters analyzed 40 English written research papers by Iranian researchers. The results was in harmony with Aboulalaei in that Iranian females tended to use more indirectness while expressing their claims whereas Iranian men utilized more boosters, which is a result that showed the significant role of gender on metadiscourse use. A third research was conducted by Ansarin and Bathaie (2011) in order to examine the gender role in text construction by investigating the linguistic realizations in female and male writings. The results were not at variance with the two other studies that were made with Iranian females and males. A statistically significant difference was yielded between females and males in terms of hedge frequency. Compared with those of males' articles, Females' articles contained more hedges.

A similar result to those of Iranian researchers was obtained by Vasilieva (2004) who compared Russian male and female texts written in English to acquire a scientific finding on adverbial hedges and boosters. On the basis of statistical analyses, Inga indicated that amplifiers such as emphatic adverbs and certainty adverbs engrossed male texts more than they did female texts. In addition, the hedges used by males were mostly used for "explanatory" reasons not reducing authorial voice or commitment.

Al-Harahsheh (2014) investigated phonological variations and conversational styles from gender perspective. After analysing twelve 30 minutes dyadic conversations, the findings claimed that Jordanian women are linguistically more conservative when compared to Jordanian men, which developed a theoretical framework that distinguished linguistic styles of participants on gender basis. The researcher did not directly mention about hedges or boosters but being conservative necessities to talk in an indirect way, which is a feature of hedging. Therefore, it can be

claimed that Jordanian women preferred to use hedges in their conversations more frequently than Jordanian men.

People leave a trace of personality while composing even a simple text. A Indonesian researcher (Pebrianti, 2013) aimed to investigate Indonesian women's language features by analysing the written text of a blog spot. Pebrianti categorized language features into nine *as emphatic stress, superpolite forms, avoidance of strong swear words, empty adjectives, intensifiers, precise color terms, hypercorrect grammar, lexical hedges,* and *tag questions*. The result demonstrated that intensifiers or boosters appeared to be the most frequent language feature used by female bloggers; a result which is out of sync with other studies that found low booster frequencies in women's speech.

2.12. Stylistic Appropriateness

Of all writers who produce texts for different genres, academic writers are those who need to be very sure about appropriateness of their communication. It is definitely true that the style of a particular text must be consistent, but to be proper for the audience as well as the message being conveyed is the other convention of even a simple piece of writing. The use of correct vocabulary (formal or informal), the jargon that the text written with, competence of grammar, etc. are the very prevailing factors that are known by almost all writers in academe; however, not all are limited to them as the recent developments on stylistic have obviously put forward.

This literature has provided some new windows on stylistic appropriateness in academic writing. The stylistic appropriateness was used to be related to the successful use of vocabularies, grammar or complexity of the sentences, but it seems that there is a certain steering from, what used to be mechanical accuracy towards rhetorical competence, which necessitates a meticulous discourse equilibrium without being too assertive or too unpretentious. No matter how complex data or authentic propositions an academic text has, any piece of writing that cannot perform rhetorical strategies in appropriate manner may not create the desired effect, and may be considered of no use. Therefore, not to have a non-academic style, scholars should take the vitality of metadiscourse devices into consideration.

On the other hand, assertiveness, degree of formality, and politeness strategies are not stable elements of style in every setting; to the contrary, they vary from one culture or language to another (Bardovi-Harlig, 2001). In other words, the common habit of discourse among nations are not exactly the same as some studies in this chapter showed. In other words, depending on the contexts, nationalities, background knowledge, or culture, it is obvious that academic writers show similar tendencies about whether to mitigate or boost the statements. But, the existing literature demonstrated that academic writers need to be independent from national, personal, and psychological influences, and need to agree with the rules regarding rhetorical strategies if the focus is reader persuasion over the preposition.

In sum, it is a well-established fact that a sensitive balance between boosting and hedging is needed in the course of writing. Those who do not achieve the fragile balance are in danger of being seen too assertive or too unpretentious, which both cases adversely influence the quality of writing together with writer credibility.

2.13. Factors Affecting Rhetorical Features

The theoretical framework so far illustrated that there exist differences in using hedges and booster. The main source of difference seems related to the writer's nationality. Then, it turned out that knowledge of rhetoric may also be a reason of difference between authors. What is meant with "knowledge of rhetoric" does not refer to a situation in which a user has a degree of knowledge of rhetoric or metadiscourse indeterminacy from lexical or grammatical perspective, but refers to a situation the author is not aware of the importance of rhetorical strategies on readers. However, thanks to the researchers who examined the issue from varied perspectives by shifting their points of views, we know that there may be other factors affecting rhetorical features that the authors use. Accordingly, the present study detected other factors as social and intra-personal.

2.13.1. Social factors

As has been described in the previous titles, rhetorical strategies mainly hedging and boosting are not restricted to a certain set of factors because the influence of rhetorical strategies has a much more diameter than it used to be thought. As far as it is

understood from this literature review, social factors might be important in determining the reasons why an author use more hedges or more boosters while making a claim or having a statement. Therefore, the question is "do aspects of social factors have any significant impact on the frequency of hedges and boosters used in academic writing?".

As regards the relationship between writing and the preferences of rhetorical devices, Connor (2004) stated that writing is increasingly considered as socially situated, and this socialization may give rise to special consideration to purposes, audience, level of perfection, and correspondingly may necessitate varying amounts of attention to detail, revision, and collaboration. Connor linked the use of rhetorical devices to the environmental powers occurring around, which is why contextual factors seemed crucial for her. Alike to Connor's propositions, Mauranen (2001) emphasized the assumption that "in order to arrive at an explanation of why texts the way they are, it is necessary to draw on the social contexts where they occur" (p. 45).

Confronted a similar question, Sanjaya (2013) had a few determinants of rhetorical differences among authors which were: degree of homogeneity of readership, the size of the expected readership, and more importantly cultural characteristics. To clarify Sanjaya's first determinant, degree of homogeneity of readership, it can be said that hedges and boosters are two rhetorical devices that refer to the diversity of voices on the topic or on the issue being raised by the authors. Because of that, degree of voice may change depending on readers' average knowledge and expectations on the issue; for example, authors who have a certain type of audience will possibly talk with more boosters than authors who have a heterogeneous readership because tastes and expectations change from reader to reader, which is a situation that cannot be kept in the background.

The second determinant, the size of readership may be discussed in terms of the size of the community interested in the issue that the author argued. The fewer an author has readers, the better they are know by the author, hence, he/she can accordingly adjust his/her degree of certainty, assertiveness, or indirectness on the statements and claims. It is a common knowledge that there is a correlation between the size of a group and the intellectual or ideological diversity. Therefore, essential to the author's good, the way of addressing must be away from being too decisive or unpretentious not to create an undesired effect even for a small part of audience.

The last determinant, cultural characteristics is apparent to be the most important determinant of all because the importance of culture on hedging and boosting devices has been repeatedly provided in the previous titles in this chapter. Cultural context in which the author was raised is not independent from his/her style of addressing and writing, and affects rhetorical features of academic writing, as substantiated by the findings in the literature (see subtitles *2.9.4.* and *2.10.3.*). Regarding the effect of culture on rhetorical strategies, Hyland (2006) indicated that "every community is composed of individuals with diverse experiences, backgrounds, expertise, commitments, and influence and who differ in how far they subscribe to its various goals and methods, participate in its diverse activities, and identify with its conventions and values" (p. 19). Based on that premise, it will not be incorrect to express that the perceived value of an addressing is sure to change from one community to another sometimes in fundamental changes. Writing confident may leave a positive effect on readers in some communities while in other communities it may be thought as if the author had an intentional purpose of overstating a trivial statement or claim. Therefore, the culture in which both authors and readers have stayed is an influencing factor that determines the way of addressing; whether assertive or mitigated. Shortly, Whether an author should be self-effacing or self-assured is a matter of culture; together with other determinants.

2.13.2. Intrapersonal factors

It is easily understood from what has been reported so far that particular emphasis was given to external influences on usage of boosters and hedges. Therefore, grave reservations may be expressed about argumentations that solely focus on environmental factors in terms of explaining differences or preferences among authors. In other words, of all factors which are offered as determinants on the use of rhetorical devices, intrapersonal factor is one of the major factors determining authors' way of addressing in the process of writing.

It is believed that the use of language carries some individualistic features affecting the authors' tone. Even the writer's personality is an important component in establishing his/her own discourse; being mild-tempered or being agitated affects the selection of vocabulary, the number of boosters as well as hedges, and hence the discourse.

Apart from the author's personality temper, emotional commitment to an issue may also be a determinant in terms of using rhetorical devices. The authorial stance towards a situation which the author finds affective might have a profound effect in constructing the meaning through rhetorical devices fluctuating between the overuse or underuse of hedges and boosters, or other rhetoric devices. In other words, it is possible an author be akin to a point of view, and hence, it is possible she/he shows a tendency to the side which she/he supports through the use of boosters.

Other salient intrapersonal determinant is author's culture. Culture to be discussed here is different from the concept of culture discussed in the previous title in that intrapersonal culture is an issue concerning the cultural setting in which the author was raised while the concept of culture in the previous title pertains to the cultural setting that the author should be in tune with.

In brief, except of social factors that affect the use of metadiscourse by authors, intrapersonal factors are also important determinants that determine the style of writing. Therefore, it had better authors be aware of such external and internal factors that may influence their language in the course of academic writing.

CHAPTER III

METHODOLOGY

3.1. General Hypotheses

Based on literature review, the present study proposed some null hypotheses. It is anticipated to reach concrete results regarding the null hypotheses at the end of statistical analyses.

A. Null hypotheses related to lexical collocations

A.1. NWs may include lexical collocations in their RAs more than NNWs may in overall; however NNWs may outperform in some types of lexical collocations.

A.2. No null hypothesis for the research question A.2.

A.3. In overall, there can be statistically significant differences between NWs and NNWs in terms of using lexical collocations; however when separately analysed, there may not be any difference at certain types of collocations.

A.4. No null hypothesis for the research question A.4.

B. Null hypotheses related to lexical hedges

B.1. NWs may include lexical hedges in their RAs more than NNWs may in overall; however NNWs may outperform in some types of lexical hedges collocations.

B.2. NWs may be superior than NNWs in terms of lexical diversity of hedge.

B.3. In overall, there can be statistically significant differences between NWs and NNWs in terms of using lexical collocations; however when separately analysed, there may not be any difference at certain types of hedges.

B.4. No null hypothesis for the research question B.4.

C. Null hypotheses related to lexical boosters

C.1. NNWs may include lexical boosters in their RAs more than NWs may in overall; however there may be mutual differences between NWs and NNWs in terms of some lexical boosters. C.2. NWs may be superior than NNWs in terms of lexical diversity of boosters.

C.3. In overall, there can be statistically significant differences between NWs and NNWs in terms of using lexical boosters; however when separately analysed, there may not be any difference at certain types of hedges.

C.4. No null hypothesis for the research question C.4.

3.2. Corpus

The corpus of the present study were composed of total 200 English written scientific articles on English Language. The principal motive behind choosing articles only on English language is that rhetorical devices are said to have changed across disciplines (Hyland, 2005b). The corpus were built from two author groups in equal amount; i.e. 100 articles were collected from Turkish authors' articles written in English, which made up the corpus for NNWs; while the rest written by Anglophonic authors, which made up the corpus for NWs. Verification about author nativeness was not ensured by contacting them. Author status of being native of non-native of English was presumed based on his/her name or 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 status of nativeness 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 Table 3.1. provides the name of journals with which the present study constructed the corpus for NWs, and from which the number of articles that were picked up.

Table 3.1.
The Journal Names which the Corpus were Gathered from for NWs.

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

As can be seen from the Table 3.1., the corpus were built through 13 different journals. *ELT Journal* made up the largest proportion in NW corpus with 30%, which is followed by *English for Specific Purposes* and *System*; 13% and 10% respectively. On the other hand, *English for Academic Purposes* and *Second Language Writing* are journals from which articles were received in fewest number. Similarly, the Table 3.2. obviously provides the distribution of journals from which the articles for NNW were picked up.

Table 3.2
The Journal Names which the Corpus were Gathered from for NNWs.

		The name of the journal	Number	%
	1	Journal of Language and Linguistic Studies	40	40
	2	Hacettepe University Journal of Education Faculty	16	16
	3	The Reading Matrix	8	8
	4	Journal of Language and Literature Education	7	7
Journals for NNWs	5	Çukurova University Faculty of Education Journal	6	6
	6	Turkish Journal of Education	6	6
	7	Novitas-ROYAL (Research on Youth and Language)	6	6
	8	Atatürk University Journal of Social Sciences	4	4
	9	ELT Journal	4	4
	10	Turkish Online Journal of Qualitative Inquiry	2	2
	11	International Journal of Languages' Education and Teaching	1	1
Total			100	100

Eleven journals in total built the corpus for NNWs, as seen from the Table. It is apparent from the Table that *Journal of Language and Linguistic Studies* is the journal that is made the most use with 40%. The journal number for NNWs does not include as

many journal as does for NWs, which may be because Anglophonic authors have a wider range of publishing opportunity than Turkish authors thanks to language proficiency advantage. *Hacettepe University Journal of Education Faculty*, a prominent journal in Turkey, takes the second rank in article number constructing the corpus for NNWs. Regarding the journal that comes from behind in picking up articles, T*urkish Online Journal of Qualitative Inquiry* manifests itself with the number of two; and *International Journal of Languages' Education and Teaching* with a number of one.

Only articles written on English language were compiled and analyzed because hedging and other features of opinion positioning devices are said to differ across disciplines (Hyland, 2005b). To be able to see synchronic variations on the use of lexical collocation, hedging, and boosting, articles published only in the last eight years were gathered. Not to lead any reliability concern, it was tried to compile the corpora from equi-length articles (see Table 3.3).

Table 3.3
Corpus size in words.

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

As seen from the Table, the corpus of NW is superior to the corpus of NNW in terms of both word token and word types. Because type/token differs in accordance with the length of the corpus/text, a calculation for type/token ratio (TTR) is used. TTR is informative for a corpus comprising of equal-sized texts. TTR is calculated by taking the percentage of type number in token number. The present study calculated TTR of the corpora that belongs to NWs and NNWs, and found 14.5% for NWs and 13.2% for NNWs. It demonstrated that NWs included more different words, or they had more lexical diversity when compared to the NNWs. The calculations were not made through per word ratio because the corpora were close to one another in terms of both tokens and types.

To assure the representativeness of the corpora (NW and NNWs), 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).

As stated in the Chapter 2, gender may have significant role in rhetorical stances and it may influence the rate and forms of rhetorical devices like hedging and boosting. Therefore, based on author names, the present study made an effort to supply the equality of authors by distributing equal number of male and female authors. In comparative and contrastive studies, as this one reported here, there are some steps to be taken before initiating the study. Regarding it, Connor and Moreno (2005) presented a new term called *tertia comparationis* (p. 154) which is defined as "common platforms for comparison". According to the first *tertium comparationis*, the data are to be collected from the similar number of journals published over the same publication period. Therefore, the publication period may be methodologically important in contrastive and comparative rhetoric studies. Accordingly, As shown in the tables 3.1. and 3.2., the present study built the entire corpus in a synchronic way rather than diachronic; and the corpus was constructed through the articles published between 2007-2015. The second *tertium comparationis* is that the texts that build the data have to be written by the native speakers of the respective languages. Regarding the second *tertium comparationis*, the present study carefully judged the author names not to lead any possible infelicities.

The present study employed *tertia comparationis*; though admittedly there are confounding variables, which are beyond the control, that could affect the research results. One of the troubling point is the educational degree of the authors from both groups. It is well-known that the higher degree of education an author has, the better quality texts are possible to be produced. The other confounding issue is the term of working experience that authors have had. It is rather possible that some authors are new in profession as academic authors while the others are in the profession over a very long period of time, which is a situation that may affect the writing quality. Therefore, the period that the author has passed in profession is of importance in contrastive and comparative studies. A third rough point is educational experience of authors. In other words, particularly non-native writers might have underwent different training programs at different rates. For instance, a non-native writer might have completed his/her BA, MA, or PhD degree in an English speaking country, which would enable a more native

fluency when compared to the author who had his/her education in a non-English speaking country. Therefore, non-native writers who had their education in English speaking countries with native speakers of English may behave more like a native writer than a non-native writer. The last puzzling point concerns name-based data collection method. While deciding the author nationality, Wood's (2001) criterion was used, in which it is stated that authors should have names native to the country; and secondly, names should be affiliated with the university or institution in countries in which English language is the primary or natively spoken as the first language. Accordingly, the present study determined author nationality relying on author name; however it is possible an author has an Anglo-Saxon name but still to be a non-native writer, or vice versa; a native writer with a non-Anglo-Saxon name. Despite all necessary precautions to eliminate these limitations, it seems almost impossible to overcome these methodological troubles that might slightly affect the results even if one of the infelicities stated on here is confronted.

3.3. Unit of Analysis

The identification of linguistic devices in a corpus is an arduous work, which is why it needs carefully planned formative preparations lest the researcher or analyser will not fail to notice the devices being investigated. As has been indicated in the previous titles, the present study investigated three linguistic devices from lexical aspect, which are namely *collocations, hedges,* and *boosters*. Regarding hedges and boosters, the propositions in the corpus were meticulously scanned. The term "proposition" needs further clarification because it was ascribed quite a different meaning than the traditional definition of it. The term "proposition" refers to the meaning of units that makes up the core meaning (Sanjaya, 2013). Further to say, each word cannot be considered as a device functioning hedges or boosters. For example the word "clear" can be an adjective acting as a booster in certain contexts while not in others.

As in all studies including analyses, the present study also determined taxonomies in order to categorize the investigated linguistic devices. In that sense, taxonomies for lexical collocations, lexical hedges, and lexical boosters were constructed. In the process of determining the taxonomies, a comprehensive literature

review was made to be able to decide whether one taxonomy that belonged to one researcher should be used or an eclectic taxonomy constructed by merging varied taxonomies should be used, which would give more freedom. How the linguistic devices that the present study investigated were categorized, and detailed data were provided in the titles henceforth.

3.3.1. Identification of collocations

It may be useful to repeat that collocations were formerly regarded as a single unit by researchers; however later they were divided into two as lexical and grammatical collocations by Benson, Benson, and Ilson (1986). As has been understood from its name, grammatical collocations include linguistic devices, whether lexical or phrasal, like adjectives, verbs, or nouns, plus infinitives, prepositions or clauses. The patterns of a phrasal grammatical collocations are formed from a lexical unit and a pattern that specifies the sub-categorization property of the head (Bentivogli & Pianta, 2003). Similarly, some word combinations like *verb+noun, preposition+noun,* and *infinitive verbs* have dominant places in grammatical collocations, says Fontenelle (1998). On the other hand, lexical collocations, as stated by Bahns (1993), do not include infinitives, prepositions, or clauses; instead, various combinations of adjectives, adverbs, verbs, and nouns. It is easier to create or detect a lexical collocation than a grammatical collocation because lexical collocations are composed of two equal open-class lexical items and include no subordinate element (Fontenelle, 1998), if compared to closed class structure of grammatical collocations. One crucial notice is that this study neglected grammatical collocations, and focused on lexical collocations instead.

Benson, Benson, & Ilson (1986) more systematically divided lexical collocations into seven basic categories. Since two categories are very close to one another in meaning, the present study merged the two categories into one category. Also, an extra category was added to the taxonomy, which is *adverb+verb*. By by-passing one of the categories and adding another one, this study classified lexical collocations into seven categories. Shortly, the corpus were analyzed with the taxonomy borrowed from Benson, Benson, & Ilson with some minor changes, which are as follows:

1. *Verb + Noun* (*to make a difference, to demonstrate the findings, make a mistake*)
2. *Verb + Adverb/Adjective* (*to analyse thoroughly, to stay close*)
3. *Noun + Verb* (*study showed, results proved*)
4. *Noun + Noun* (*an act of violence, gold rush, a ceasefire agreement*)
5. *Adjective + Noun* (*strong evidence, biased view, heavy traffic*)
6. *Adverb + Adjective* (*strictly incorrect, hardly true, extremely generous*)
7. *Adverb + Verb (totally misunderstand, slightly prove, simply show)*

The categorization of lexical collocations is not limited to the taxonomy of Benson, Benson, and Ilson. There are other categorizations; for instance solid lexical collocations. When compared to lexical collocations, solid lexical collocations are much more rigid in constructing a lexical word combination. The term was first used in a dissertation titled "Personal Communication" in 2002 under the advising of Dr. Aghbar (cited from Sung, 2003) to refer to sequences of lexical items that occur so repeatedly; and hence, the lexical combination gets a strong bound to each other. There is such a strong interconnection between lexical item in solid lexical collocations that the native speaker hardly considers them as separate items or free combinations. *High winds, acute pain, light drizzle* can be considered as examples of solid lexical collocations. However, the present study did not make a distinction between lexical collocations and solid lexical collocations, and looked upon both of them as lexical collocations. Another taxonomy for collocations was presented by Hill (1999). According to this taxonomy, collocations could be divided into four (the examples are borrowed from Hill):

1. Unique collocations: these collocations are thought that they do not have an equivalent, therefore should be used as they are without any adding or changing. For example, *leg room* to refer to the space between two seats.
2. Strong collocations: as can be understood from the term name, these collocations are so strong that it is hardly possible to find an equivalent. Although they are not unique, what is clear is that they collocate one another as if there were no alternative combinations. For example, *rancid butter* or *trenchant criticism*.
3. Medium-strength collocations: these type can be considered as collocations between strong and weak collocations. Many language user may find the

distinction hard. For example, *Sun reader* can be regarded as a strong collocation for a people living in the UK while it is weak for a non-native speaker living in a country in which the Sun Paper is not found. Therefore, these types of varying collocations are considered as medium-strength collocations.

4. Weak collocations: These kind of collocations have a co-occurrence chance with "a greater than random frequency". The word combinations that are constructed by using colours may be presented as examples: *red wine, black hair, a white shirt*.

Since the present study focussed on lexical collocations, it did not categorize the collocations according to their collocation strength. To state briefly, collocations in the corpus were categorized under seven types, which are *Verb + Noun, Verb + Adverb/Adjective, Noun + Verb, Noun + Noun, Adjective + Noun, Adverb + Adjective,* and *Adverb + verb.*

3.3.2. Identification of hedges

As Uysal (2014) indicated, hedges are divided into three major headings : (1) rhetorical devices; (2) lexical and referential markers; and (3) syntactic markers. To be more specific, rhetorical devices are structures in a sentence like denials, disclaimers, ambiguity markers, and vagueness. Lexical and referential markers are those that function as point of view distancing, downtoners, demonstratives, discourse particles, diminutives, and indefinite pronouns. Finally, syntactic markers are another common hedging devices like passive voices and if conditionals. As stated before, the present study analysed hedges from lexical aspect, which mostly kept up with the option two while not ignoring the option one. Similarly, in one of his well-known article, Hyland (1998c) categorized hedging devices. First he divided functions of hedges as "content-oriented" and "reader-oriented". He then further divided "content-oriented" into two as "accuracy-oriented" and "writer-oriented". And again, he divided "accuracy-oriented" into two as "attribute hedges" and "reliability hedges". As last but not least, he classified forms of hedging devices into two: "lexical hedges" and "strategic hedges" (p. 103). Lexical hedges include epistemic lexical verbs, nouns, adverbs, epistemic adjectives, and modal verbs while strategic (non-lexical) hedges contain "admission to a

lack of knowledge, reference to a model, theory or methodology, and reference to limiting experimental conditions" (p. 141).

Although different taxonomies have been used for the categorization of indirectness and hedging (e.g. Skelton, 1988; Myers, 1989; Hinkel, 1997; Crompton, 1997; Koutsantoni, 2006) in the literature studies, hedging devices employed in the present study were determined mostly based on Hyland's suggestions (1998c) with some minor changes. The taxonomy of lexical hedges according to which the present study did the categorization is shown:

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)*

As stated, the present study divided lexical hedges into six categories, and accordingly analyzed. The corpus were examined according to the this taxonomy one by one, and general and specific findings were shown in tables not to give rise to a convoluted display.

3.3.3. Identification of boosters

Boosting is a crucial rhetorical device particularly for academic writing, though it has not caught attention as much as hedges have had. In a similar way, the literature regarding the taxonomies of boosters is not rich as much as it is with hedges. The owner of one of the most prominent studies about hedges and boosters Vassileva (2001) criticized Salager-Meyer's (1994) taxonomy of boosters for being not so clear-cut. However, Salager-Meyer had not proposed any taxonomy for boosters but hedges. Keeping that confusion aside, it had better to talk about Vassileva's taxonomy which is comprised of five categories as *modals, epistemic verbs, epistemic adjective and adverbs, grammatical/stylistic,* and *others*. Different from Vassileva, Pho (2008) constructed a taxonomy for boosters by passing the frontiers of traditional sentence

components. His taxonomy included "Grammatical subjects; Modal auxiliaries and semi-modal verbs; Epistemic adjectives, adverbs and nouns; Attitudinal adjectives, adverbs and nouns; Verb tense and aspect; Voice; Self-reference words; Reporting verbs; and *That*-complement clauses".

On the other hand some scholars categorized boosters based on their relationship to discourse meaning, rather than lexical or phrasal categorizations. The very first of this type of classification belongs to Holmes (1984) who divided the functions of boosters into three categories as *speaker-oriented, content-oriented,* and *hearer-oriented*. A very similar function-based taxonomy was built by Urbanova (2003) with a slight change by replacing *content-oriented* with *discourse-organizing*.

The present study used an eclectic taxonomy of boosters which is similar to that of Bayyurt (2010) who sub-categorized boosters as *modals, adjectives, verbs,* and *nouns*. As in the taxonomy of hedges, boosters were divided into six in the present study.

1. *Modal boosters (must, need to, will, have-has to, be to+infinitive)*
2. *Verbal boosters (ascertain, assure, convince, prove, substantiate etc.)*
3. *Adjectival boosters (absolute, adorable, alluring, assiduous, apparent etc.)*
4. *Adverbial boosters (accurately, admirably, assertively, blatantly, categorically, etc.)*
5. *Quantifiers/determiners (many, much, a great amount etc.)*
6. *Noun boosters (certitude, corroboration, eternity, plethora, proof etc.)*

3.4. Research Design

As indicated earlier, the present dissertation primarily stays focussed on the contribution of studying lexical collocations, lexical hedges, and lexical boosters to non-native writers' academic writing development by investigating differences and similarities between native and non-native writers. To achieve the aim, the corpus were manually scanned, there were PC-based word processing software programs, though. A PC based software program, namely a concordance program, was not employed for some grave reasons. First of all, it is absolutely apparent that to make a scanning of the corpora by the researcher manually is a must to be able to detect the semantic referring of the words, but for that a concordance program would only give the statistical

information about the words but not semantic or pragmatic. In other words, an epistemic modal auxiliary, for example, 'will' would not have a function of boosting in every sentence it was used. For Instance, in a sentence 'Now, we will interpret the results', 'will' does not function as a certainty marker, but a 'tense case'. Furthermore, it is rather possible and common to see an epistemic lexical verb functioning not as a booster for conviction, strong commitment or high value, but a lexicographic meaning concentrated only on the action (Yağız & Demir, 2015b). For instance, the case of 'demonstrate' in *Our results demonstrated the efficiency of....* can be considered as an intensity marker while in the sentence *The results are demonstrated in the Table above* cannot be because in the first example the verb *demonstrate* has a meaning of "to evidence or to prove" while in the latter example it functions as a bare stance "to show", which is thought as a hedging word rather than boosting. The situation is the same for hedging devices as well. A statistical research through a concordance program would provide a result regardless of the word illocutionary meaning. Particularly, many modal verbs have meanings that change depending on the context they are used in. As known, a modal may have epistemic (possibility), deontic (obligations), and dynamic (self-willingness or ability) meanings based on the context. For example, the modal "can" is an absolute example: the modal verb "can" in the example t*he results can provide valuable information about...* is a modal verb acting as hedge while in the example *it can be seen* the modal verb "can" does not function as a hedge but more generally a directing word. This distinction is mostly crucial for rhetorical devices like hedging and boosting. Therefore, in order to ensure whether a word functions as booster or hedge, a semantic and pragmatic scanning of the papers is of great importance, particularly to find out whether the words in the text have a role of boosters/hedges or not.

On the other hand, having completed the manual scanning of the corpora, the results were inserted into a PC-based concordance program named WordSmith to be able to calculate the most repeated pivot words in collocation categories.

In order to investigate whether there were statistically significant differences between NWs and NNWs in terms of using lexical collocations, lexical hedges, and lexical boosters, it was decided to employ Chi-squire test through PC-based SPSS software programme. Chi-squire was applied to each statistical data obtained from NW and NNW corpora.

3.4.1. Content analysis

As largely known, comparative or contrastive studies heavily depend on content analysis. It is a method of analysing visual, verbal, and written communication messages (Cole, 1988). Content analysis refers to systematic and replicable analysis of the data composed of all kinds of texts, speeches, articles, films subtitles or music lyrics. Hence, it enables the researcher to Figure out theoretical issues to expand understanding the data (Elo & Kyngas, 2008). Through classification and systematic coding of the content, both qualitative and quantitative methods can be carried out while using a content analysis. Content analysis is efficient in examining both the latent and the manifest content of an ordinary text (Rose, Spinks, & Canhoto, 2015). *Manifest content* is concrete in that it refers to the countable, visible component of the message. Therefore, manifest content can be replicated and tested by some other researchers who query the truth or validity of a study. On the other hand, *latent content* is less visible in a text with a message of disguising itself in relevant-irrelevant pictures or texts. That is why latent content is the meaning that lies behind the manifest content. Whether visible or disguised, undoubtedly both content and latent content require careful interpretations varying in depth (Graneheim & Lundman, 2004). Apart from latent and manifest division, content analysis can be divided into two as substantive and form (Schreier, 2012): substantive refers to what is being said in the message while form features how the message is being given in a text. It is understood that substantive and form features of content analysis of a text make a distinction between the style of discourse and the message given.

Applications of content analysis included two aims, one of which is description and the latter is prediction. In descriptive content analysis, the focus is on describing the message content so that more descriptive data for further understanding of the investigated issue could be acquired, which is of great importance for further studies. In predictive content analysis, the researcher seeks to foresee the receiver or audience reaction on an issue (Neuendorf, 2002). Generally the outcome of predictive content analysis is useful to avoid any possible criticism or unpredictable outcomes regarding a critical issue. On the top of all, content analysis can be carried out in inductive and deductive ways. According to Elo and Kyngas (Elo & Kyngas, 2008), inductive content analysis differs from deductive content analysis in that it is used in cases in which no

previous studies have existed on the phenomenon that is being dealt with. In other words, when the structure of the analysis is done on the basis of previous knowledge, deductive content analysis has overachievement chance to obtain more reliable results.

CHAPTER IV

RESULTS

This chapter was designed under five titles together with some further subtitles. The first title *Overall Statistic Results* provided information on total use of lexical collocations, hedges, and boosters on figures so that the differences and similarities can be seen easily. All the figures in the chapter purveyed three type of results: "native authors, non-native authors, and in total". In the second title, *Descriptive Statistic Results* a general distribution of the results obtained after a series of descriptive analyses was given in order to present the minimum, the maximum, and the mean of each category of collocations, hedges, and boosters belonging to both writer groups. In this title, tables instead of figures were employed because it was considered more apropos to the presentation of data composed of specific numbers belonging to each writer type and each sub-category. The third title *Quantitative Analysis Results* included four additional subtitles so that each lexical component that the present dissertation studied could be unfolded in a non-complex way that would not perplex the audience. The fourth title *Qualitative Analysis results* underscored the authentic use of collocations, hedges, and boosters, and it included sample sentences derived from the corpus. In addition, the fourth title led us to get deeper insight about the authentic usage of the lexical components that the present study investigated. Real example sentences were manually picked up in the sample so that the use of collocations, hedges, and boosters by NWs and NNWs regarding each subcategory could be interpreted by the way of comparisons, which allowed to see the similarities and differences in terms of lexical preferences. The last title summarized all the titles so that quicker information could be picked up.

4.1. Overall Statistic Results

Having analyzed the statistical calculations, the results were displayed in the figures. The figures included both overall and categorical results. Furthermore, each group was given a different colour so that the tracking would be easier.

	Verb + Noun	Verb + Adv./Adj.	Noun + Verb	Noun + Noun	Adjective + Noun	Adverb + Adjective	Adverb + Verb	Total
NWs	904	593	330	365	2074	626	483	5375
NNWs	413	230	877	264	1102	228	244	3358
Total	1317	823	1207	629	3176	854	727	8733
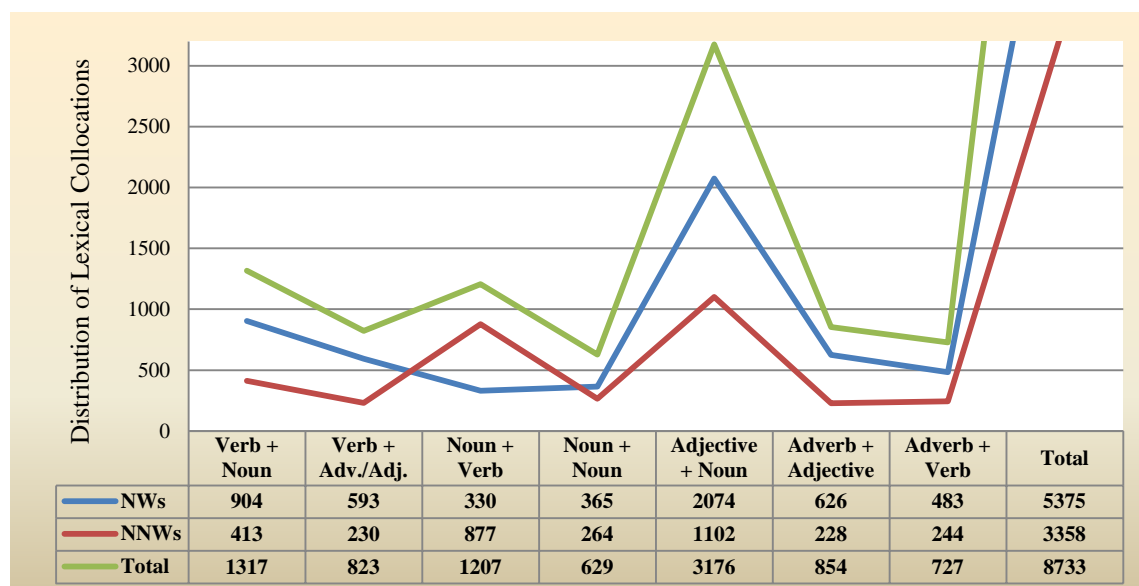
Figure 4.1. Overall and Categorical Number of Collocations in Sample Data.

The Figure 4.1. shows the categorical and overall use of collocations by NWs and NNWs. The Figure displays stark frequency fluctuations between NWs and NNWs. To provide information with respect to overall results, *adjective + verb* is the subcategory of lexical collocation that was used the most frequently in total. As seen, NWs and NNWs used the category of *adjective + noun* 3176 times, which is a Figure that doubled the nearest Figure. The second in the rank is the category of *verb + noun* with a total number of 1317. On the other hand, the least used subcategories are *adverb + verb* and *noun + noun*, 727, 629, respectively. When the Figure is looked at in general, it is apparent that there is a symmetrical up and down in the lines, which may be interpreted that NWs and NNWs increased or lowered their use of collocations on similar rates. Therefore, it is highly possible to mention about a positive correlation between NWs and NNWs. Another striking finding is that NWs used far more collocations than NNWs in total. While NWs used 5375 collocations in their sample data, the Figure stayed much lower for NNWs; 3358.

Both NWs and NNWs preferred to use the category of *adjective + noun* while making word combinations. The Figure apparently unravels that NWs nearly doubled NNWs in number with 2074 to 1102. To say briefly, NWs and NNWs have a high tendency of using *adjective + noun* when compared to other lexical collocations. The Figure signals a change in the second rank regarding the use of collocations from NWs'

and NNWs' perspectives. While NWs preferred to use *verb + noun*, NNWs preferred to use *noun + verb*; 904, 877, respectively. Furthermore, there does not seem a parallelism with other categories either. For example, the third most frequently used collocation category is *adverb + adjective* for NWs whilst it is *verb + noun* for NNWs. The least used collocation category also changes in a significant way: NWs used 330 *noun + verb* collocations while NNWs used 228 *adjective + adverb* collocations, which ranked both subcategories onto the lattermost. To summarize, while *adjective + noun* is the category that both NWs and NNWs used at first ranking, the least used subcategory is *noun + verb* for NWs, and *adjective + adverb* for NNWs.

	Epis. Modal	Epis. Verb	Adjective	Adverb	Deter./ Quan.	Noun	Total
Native authors	1732	1835	222	1159	342	197	5487
Turkish authors	1158	1141	166	621	221	106	3813
Total	2890	2976	388	1780	563	303	9300
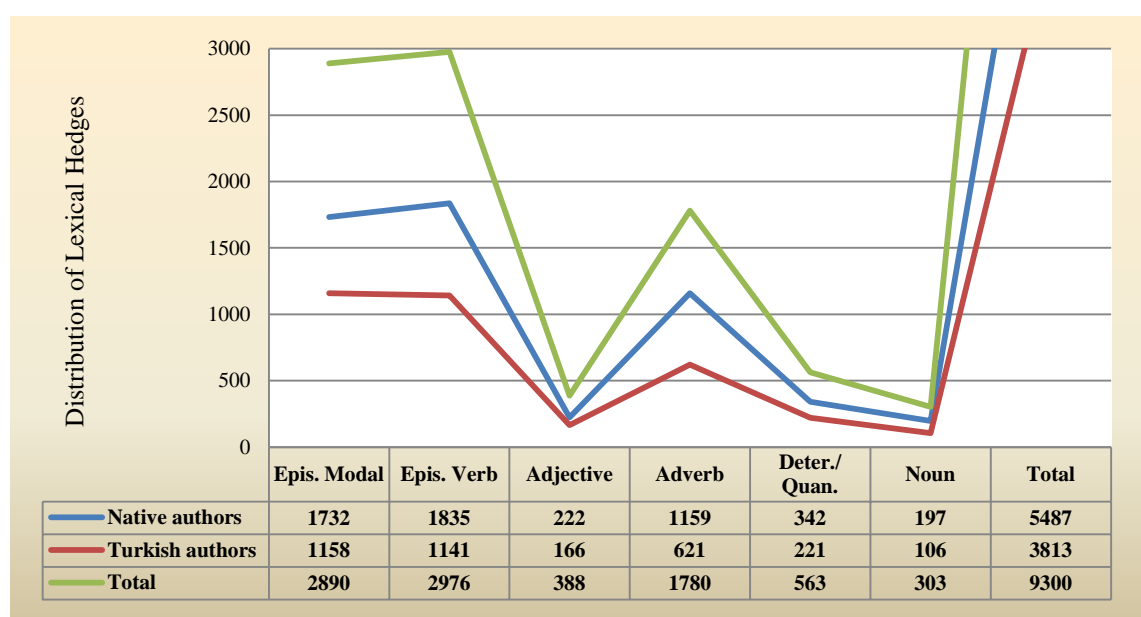
Figure 4.2. Overall and Categorical Number of Hedges in Sample Data.

The second Figure provides information about overall and categorical use of hedges in the sample data. When the Figure was examined, it appears that there is a parallelism between NWs and NNWs as it was in collocations. The positive correlation regarding ups and downs may be considered as a symmetrical use of hedges. In total, *epistemic verbs* is the category that was used more than any other lexical hedge type with a number of 2976. However, there is a slight difference between the category of epistemic verbs and the category of epistemic verbs. The Figure indicates that *epistemic modals* were used 2890 times, which is a neck and neck Figure with epistemic verbs. When we look at the least used hedging type, it is assuredly *nouns*, 303. What is a

similar result regarding total use of hedges is that, as it was in collocations, NWs were at the front lines with a number of 5487 while the Figure was only 3813 for NNWs.

On contrary to collocations, there is a parallelism between NWs and NNWs in terms of hedge frequency. In another saying, there is a positive categorical correlation. For instance, it is stark obvious that *epistemic verbs* is the category both NWs and NNWs included the most; 1835 and 1141, respectively while the second and the third most frequently used hedge types are the same for both groups: *epistemic modal* and *adverbial hedges*, respectively. The same parallelism exists for the least used hedge type: *Nouns* is the category that is the least used hedge category both for NWs and NNWs; 197, 106, respectively.

	Modal	Verb	Adjective	Adverb	Deter./ Quan.	Noun	Total
Native authors	405	128	1427	1331	617	112	4020
Turkish authors	386	104	1186	826	529	69	3100
Total	791	232	2613	2157	1146	181	7120
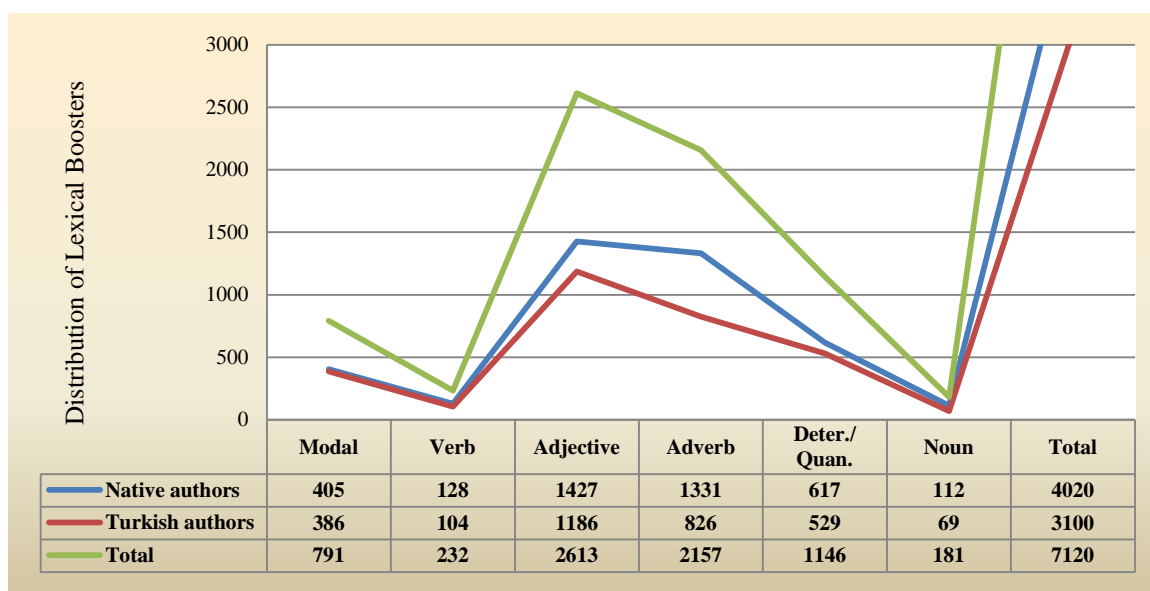
Figure 4.3. Overall and Categorical Number of Boosters in Sample Data.

The Figure 4.3. displays overall and categorical numbers of boosters. According to the Figure, adjectival boosters are the most preferred boosting category with a total number of 2613. Adjectival boosters are followed by adverbial boosters and determiners / Quantifiers; 2157 and 1146, respectively. It appears that adjectival and adverbial boosters doubled the nearest boosting type, which may be regarded as a axiomatic sign regarding NWs' and NNWs' common inclinations on these boosters. To talk about the least used boosting category, *nouns* appear with a total number of 181, which is followed by verb acting as boosters; 232. Regarding the total boosting devices, NWs is far ahead of NNWs; 4020 to 3100.

As it is in collocations and hedging, there seems a symmetrical use of boosters. For example, the lines starts with the category of *modals*, and decrease toward *verbs*, and then reach to the zenith in the category of *adjectives*. Having reached to the peak, a decrease occurs again until noun boosters for both NWs and NNWs. Also, NWs placed adjectival boosters onto the first rank with a Figure of 1427, which is followed by adverbial boosters; 1331. The situation is exactly same with NNWs. First rank in boosting category is composed of adjectival boosters while the second is adverbial boosters; 1186 and 826, respectively. *Nouns* is in the last rank for both NWs and NNWs; 112 and 69, respectively.

Up to this point, the number of lexical collocations, hedges, and boosters were figured. Henceforth, the results provide information on the lexical diversities in total and on categorical bases. The Figure 4.4. displays NWs' and NNWs' collocation diversity distributions.

	Verb + Noun	Verb + Adv./Adj	Noun + Verb	Noun + Noun	Adjective + Noun	Adverb + Adjective	Adverb + Verb	Total
NWs	853	593	330	299	2074	626	483	5258
NNWs	327	230	877	186	1102	228	244	3194
Total	1180	823	1207	485	3176	854	727	8452
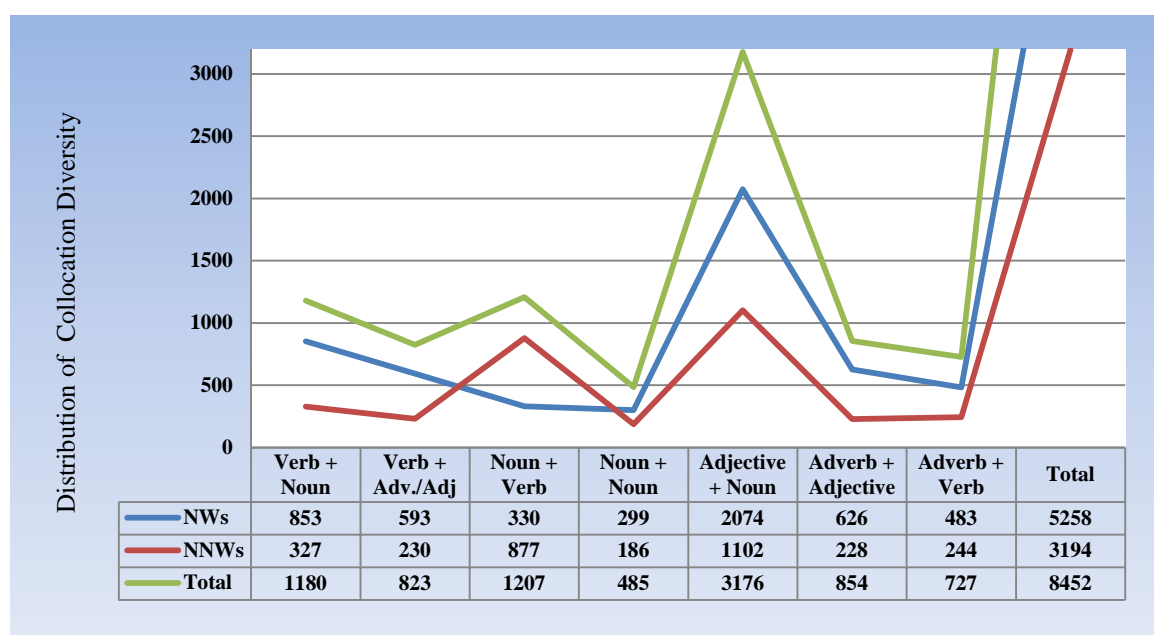
Figure 4.4. *Overall and Categorical Number of Collocation Diversity in Sample Data.*

As readily seen from the Figure 4.4., in total, NWs were far ahead of NNWs. Further to say, NWs' lexical diversity reached to 5258 while NNWs' stayed at 3194. Meanwhile, *adjective + noun* was the collocation category that evidenced its numerical superiority among all others. Following it, *noun + verb* tags behind with 1027, and then

verb + noun; 1180. With respect to the least used collocation category in total, *noun + noun* comes forward with 485. Similar to other figures, the distribution is partly symmetrical except for the category of *noun + verb*, in which a surprisingly marked increase meets us.

On the other hand, NWs included the highest number of collocations in the category of *adjective + noun*, as did NNWs, 2074 and 1102, respectively. While *verb + noun* followed *adjective + noun;* 853, it was *noun + verb* that succeeded *adjective + noun* in NNW sample data; 877. When parallelism between NWs and NNWs was taken into account, unsurprisingly both writer groups placed the category of *noun + noun* onto the lowest bottom in the ranking; 299 in NW corpus and 186 in NNW corpus.

Having quantitatively analyzed NWs and NNWs' collocation diversity frequencies, hedge diversity was examined through the statistical program. The results were shown in the Figure 4.5. Thanks to the Figure, a clear understanding regarding the striking differences between NWs and NNWs is gained.

	Epis. Modal	Epis. Verb	Adjective	Adverb	Deter./ Quan.	Noun	Total
Native authors	368	856	151	693	203	153	2424
Turkish authors	308	557	101	358	106	59	1489
Total	676	1413	252	1051	309	212	3913
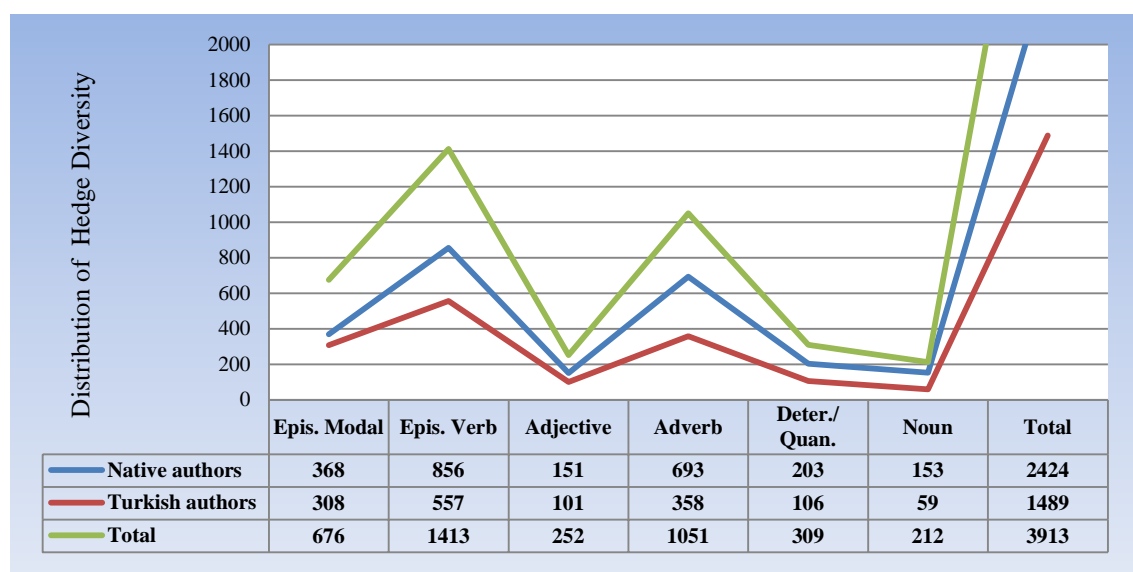
*Figure 4.5.*Overall and Categorical Number of Hedge Diversity in Sample Data.

According to the results shown in the Figure 4.5., NWs used 2424 lexical hedges while NNWs used 1489. The Figure provided that NNWs tagged far behind. Verbs acting as hedges made up the biggest rate in total with a Figure of 1413, which was succeeded by adverbial hedges. On the other hand, *nouns* got the smallest rate in total with a number of 212. Shortly to indicate, while *verbs* have the highest diversity rate,

nouns have the lowest rate. In other words, writers used many different kinds of verbs in order to hedge their statements while *nouns* were not such an attractive option.

Verbal hedges were the most preferred hedging type in NWs and NNWs' academic writings; 856 and 557, respectively. Subsequently adverbial hedges and epistemic modal followed behind for both writer groups. But, the finding did not give a similar outcome regarding the least lexical diversity. Nouns acting as hedges had the lowest lexical diversity rate for NNWs while it was adjective for NWs; 59 to 151, respectively. Briefly, the amount of hedging lexical diversity was the highest in epistemic verbs for both NWs and NNWs while the amount was the lowest in nouns for NNWs and in adjectives for NWs.

Boosters were analyzed and the results regarding lexical variety were stated in the Figure 4.6. As it was in the distributions of collocations and hedges, a symmetrical distribution is apparently obvious in the Figure.

	Modal	Verb	Adjective	Adverb	Deter./ Quan.	Noun	Total
Native authors	165	94	889	931	360	55	2494
Turkish authors	169	65	688	553	276	48	1799
Total	334	159	1577	1484	636	103	4293
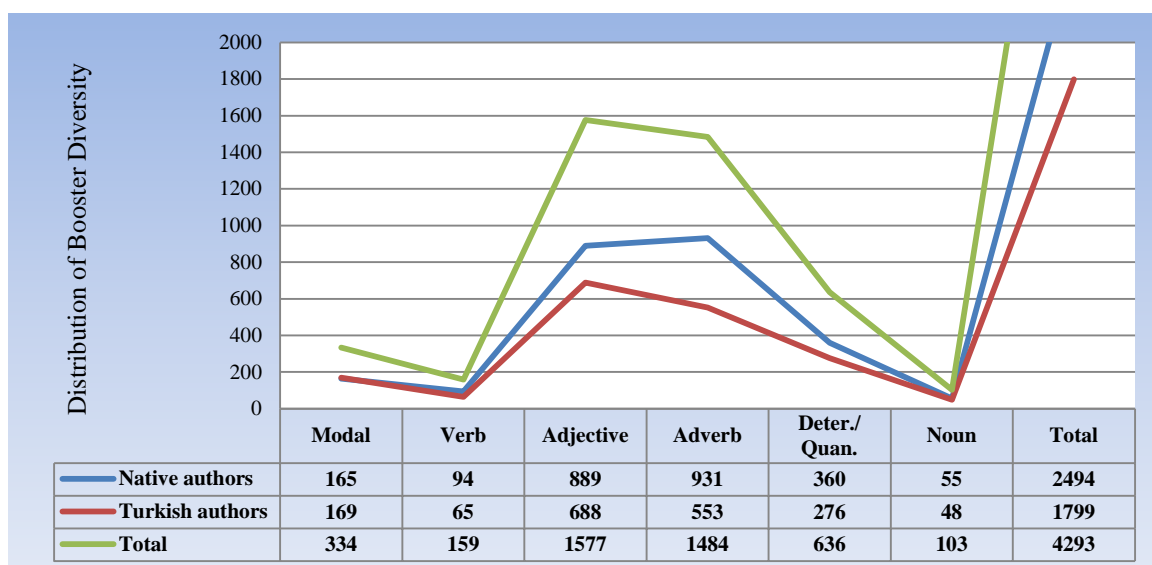
Figure 4.6. Overall and Categorical Number of Booster Diversity in Sample Data.

By examining the Figure 4.6., it can be stated that NWs were again superior in boosting lexical variety in total with a Figure of 2494. The total Figure for NNWs was 1799. Germane to total categorical lexical variety, it is easily seen that adjectives had the highest lexical variety with a number of 1577, which is slightly over than adverbs; 1484. As earlier, nouns take the lowest rank with 103 lexical variety in total.

When the results were closely examined from Anglophonic writers' perspectives, adverbs lexically had a high variety when compared to all other categories of boosters. It was succeeded by respectively adjectives, determiners/quantifiers, modals, verbs, and nouns. it is clear from the Figure that results are not much different for Turkish writers. Adjective got the leadership in lexical diversity, which was followed by respectively adverbs, determiners/ quantifiers, modals, verbs, and again as last nouns. Nouns had the least lexical variety in both NW and NNW corpora.

4.2. Descriptive Statistic Results

In the title 4.1., the overall distributions of collocations, hedges, and boosters were yielded in the figures. Different from the overall distributions, the present title gave the quantitative findings in a specific was through tables. The tables were furnished with the columns providing information of each subcategories. The columns are composed of the minimum and the maximum numbers that both NWs and NNWs included in their scientific writing. The column of minimum represents for the number that the category was used at its lowest amount by one or more than one writers. Accordingly, the column of maximum represents for the number that the category was used at its highest amount by one or more than one writers. Furthermore, the tables included the means in order to see the average of total distributions, and included the range in order to see the difference between the minimum and the maximum numbers. One note regarding the means is that they represent for per writer/per article.

The Table 4.1. displays categorical distributions of collocations across corpus.

Table 4.1.

Collocation Number of Instances in Sample Data

Variables	Native Writers				Turkish Writers			
	Min.	Max.	Mean	Range	Min.	Max.	Mean	Range
Verb + Noun	1	18	9.04	17	0	11	4.13	11
Verb + Adj./Adv.	0	13	5.93	13	0	7	2.30	7
Noun + Verb	0	11	3.30	11	0	17	8.77	17
Noun + Noun	0	16	3.65	16	0	9	2.64	9
Adj. + Noun	3	76	20.74	73	0	35	11.02	35
Adverb + Adj.	1	17	6.26	16	0	6	2.28	6
Adverb + Verb	1	12	4.83	11	0	9	2.44	9
Total			**53.75**				**33.58**	

According to the Table, there is/are native writer(s) who had a zero use in the categories of *verb + adj./adv., noun + verb*, and *noun + noun*. The other collocation types like *verb + noun, adverb + adjective*, and *adverb + verb* were used only one time by some native writers. On the other hand, all collocation categories have a decimal numeric character at their maximum levels, except for *adjective + noun* which had a maximum level of 76. Similarly, the highest range again belongs to *adjective + noun*; 73 while all others are at their decimal amounts. Regarding the means, it can be said that the highest mean is of *adjective + noun* while the lowest is of *noun + verb*. In other words, if the total use was equalized, every native writer had used 20.74 *adjective + noun* word combinations whilst only 3.30 *noun + verb* collocations.

To talk about NNWs' collocation distributions, it is obvious that NNWs had a minimum level of zero in all subcategories of collocation, which means that in all subcategories there is/are writer(s) who did not use of the collocation type. Regarding the maximum used, *adjective + noun* is the category with a number of 35, which is a Figure half than the use of NWs'. The second maximum amount is of *noun + verb*; 17. Again, *adjective + noun* is the category with the highest range level; 35. With a mean of 11.02, *adjective + noun* has the highest average level while *adverb + adjective* has the lowest mean level; 2.28.

When the total mean was considered, it is blatantly obvious that NWs have a higher mean than NNWs; 53.75 and 33.58, respectively.

The Table 4.2. provided categorical distributions of hedges across NW and NNW corpora.

Table 4.2.

Hedge Number of Instances in Sample Data

Variables	Native Writers				Turkish Writers			
	Min.	Max.	Mean	Range	Min.	Max.	Mean	Range
Modal	3	48	17.32	45	0	43	15.58	43
Verb	3	43	18.35	40	0	37	11.41	37
Adjective	0	10	2.22	10	0	7	1.66	7
Adverb	3	22	11.59	19	0	21	6.21	21
Quan./Deter	0	13	3.42	13	0	12	2.21	12
Noun	0	6	1.97	6	0	10	1.06	10
Total			**54.87**				**38.13**	

The Table shows that hedges in the category of adjectives, quantifiers/determiners, and nouns had a minimum level of zero, which indicates that there is at least one writer who did not use these hedge categories. Meanwhile, modals and verbs acting as hedges had the maximum number; 48 and 43, respectively. With respect to the category with the lowest maximum level, nouns welcome us; 6. In other words, the maximum level which a NW used nouns acting as hedges is six. Again modals and verbs have high means but this time verbs overcome modals with a mean of 18.35. The lowest mean belongs to nouns; 1.97. 45 for modals and 40 for verbs emerge as the highest ranges.

NNWs, as it was in the distribution of collocations, had a minimum level of zero at all subcategories of hedging. Regarding the maximum, the category of modals and then the category of verbs are demonstrated in the Table. The lowest maximum level belonged to adjective category with a Figure of 7. As obviously seen from the Table, the highest mean is of modals while the lowest is of nouns with 1.06. On the other hand, the category of modals has the highest range with 43 while the lowest range is with the category of adjectives; 7. Two highest amount of mean belong to modals and verbs; 15.58 and 11.41, respectively.

With respect to total mean, it is seen that NWs have a significantly higher mean than NNWs, as it was with total collocation mean. NWs have a total mean of 54.87 while NNWs have 38.13.

Table 4.3.

Booster Number of Instances in Sample Data

Variables	Native Writers				Turkish Writers			
	Min.	Max.	Mean	Range	Min.	Max.	Mean	Range
Modal	0	20	4.05	20	0	23	3.86	23
Verb	0	7	1.28	7	0	5	1.04	5
Adjective	1	34	14.27	33	1	37	11.86	36
Adverb	4	39	13.31	35	0	21	8.26	21
Quan./Deter	0	31	6.17	31	0	19	5.29	19
Noun	0	7	1.12	7	0	5	0.69	5
Total			**40.20**				**31**	

The Table 4.3. presents booster numbers in each category. As easily seen from the Table, in NW corpus, four categories had a minimum level of zero, which are modals, verbs, quantifiers/determiners, and nouns. Meanwhile the category of adverbs had the maximum amount of use with 39, which means that one or more than one writer used 39 adverbial boosters while composing their writing. Adverbs are succeeded by the category of adjectives and then quantifiers/determiners; 39 and 31, respectively. The lowest maximum use was shared by two categories; verbs and nouns. The Table also provides the ranges. While the category of adverbs has a range of 35, verbs and nouns have a range of seven. The highest mean belonged to adjectives with 14.27, which can be interpreted that each writer used 14.27 adjectival boosters when the total amount of adjectival boosters were averaged. Meanwhile, the lowest mean belonged to nouns with an average of 1.12.

On the other hand, the findings regarding NNW quantitative analyses inform us that NNWs had a level of zero at almost all categories except for adjectives. Similar to NWs', adjectives was the category with maximum hedges. In other words, one or more than one writer used as many as 37 adjectival hedges, which was followed by modals and adverbs. As it was in NW sample, nouns and verbs became the categories with the lowest maximum level; 5. Again similar to NWs', with 11.86 mean adjectives became

the category with highest mean while nouns had the lowest mean with 0.69. Furthermore, the category of adjectives had a range of 36, which is the supreme numerical gap between the minimum and the maximum amounts.

When the Table is examined in order to investigate the total means, a superiority by NWs may be seen easily. NWs have a mean of 40.20 while NNWs have 31. What is noteworthy is that the total mean difference between NWs and NNWs is not as significantly high as it was in collocations and hedges.

In the tables henceforth, the findings provide information about minimum, maximum, mean, and range of categories that were investigated in the present study. But, different from the tables which provided total number of use in each category, the tables henceforth inform us about NWs' and NNWs' lexical diversity variations. The first Table that aimed to display categorical lexical diversities was noted in the Table 4.4.

Table 4.4.

Breakdown of Collocation Diversity Number in Sample Data

Variables	Native Writers				Turkish Writers			
	Min.	Max.	Mean	Range	Min.	Max.	Mean	Range
Verb + Noun	1	18	8.53	17	0	10	3.27	10
Verb + Adj./Adv.	0	13	5.93	13	0	7	2.30	7
Noun + Verb	0	11	3.30	11	0	17	8.77	17
Noun + Noun	0	15	2.99	15	0	8	1.86	8
Adj. + Noun	3	76	20.74	73	0	35	11.02	35
Adverb + Adj.	1	17	6.26	16	0	6	2.28	6
Adverb + Verb	1	12	4.83	11	0	9	2.44	9
Total			**52.58**				**31.94**	

As seen from the Table, the maximum collocation lexical diversity by NWs is with *adjective + noun*, which is followed by *verb + noun* and then *adverb + adjective*. The categories *verb + adjective/adverb*, *noun + verb*, and *noun + noun* were used none by one or more than one writers. As can be guessed, the ultimate mean is of *adjective + noun* with 20.74 while the lowest belongs to *noun + noun*, which means that NWs are more prone to using *adjective + noun* collocation combination than *noun + noun*. To talk about the ranges, the biggest difference between minimum and maximum is of *adjective + noun* while the lowest is of *noun + verb* and *adverb + verb*.

It is stark clear in from the Table that NNWs have much less collocation diversity than NWs. When the total mean is examined, it becomes apparent that NWs have a lexicon superiority in using lexical collocations much more than NNWs; 52.58 and 31.94, respectively. On the other hand, it considerably apparent from the Table that, as it was in NWs' results, NNWs have a lexical variety mostly in the category of *adjective + noun*, then follows *noun + verb* and *verb + noun*. What is interesting is that NNWs had a zero level in all lexical collocation diversity categories, which means that in each lexical collocation category there is one or more than one writer who employed no collocations in these categories. Regarding the highest and lowest mean of lexical diversity collocations, *adjective + noun* and *verb + adjective/adverb* come forward respectively 11.02 and 2.28.

The following Table allows us to gain insight of hedge diversity number that was obtained after a descriptive quantitative analyses.

Table 4.5.

Breakdown of Hedge Diversity Number in Sample Data

	Native Writers				Turkish Writers			
Variables	**Min.**	**Max.**	**Mean**	**Range**	**Min.**	**Max.**	**Mean**	**Range**
Modal	1	5	3.68	4	0	5	3.08	5
Verb	3	15	8.56	12	0	12	5.57	12
Adjective	0	5	1.51	5	0	6	1.01	6
Adverb	2	13	6.93	11	0	9	3.58	9
Quan./Deter	0	6	2.03	6	0	4	1.06	4
Noun	0	6	1.53	6	0	3	0.59	3
Total			**24.24**				**14.89**	

According to the results presented in the Table, a minimum level of zero was detected in the categories of adjective, quantifier /determiner, and noun in NW sample corpus. Meanwhile, the maximum level of diversity was found to be in the category of verb, which tagged behind adverb; 15 and 13, respectively. When compared to collocation diversity means, hedge diversity means appear to be lower. The highest mean belongs to the category of verb with an average of 8.56 while the lowest is of adjectives with 1.51 average. Further to say about lexical hedge diversity, the biggest numerical difference is of verbs while the smallest is of modals.

As it was with collocation diversity, one or more than one writer emerged with zero use of all hedge categories in NNW corpus. Similar to NWs' results, the findings in the Table evidence that the maximum hedge diversity is in the category of verb, then follows adverbs;12 and 6, respectively. In NNW findings, low means exist in almost all categories. Yet, the category of verb has a moderate mean with 5.57. Though, the lowest mean of hedge diversity appears to be rather low when compared to NWs' lowest mean; 0.59 in the category of noun.

If to provide information about the total mean of all categories by NWs and NNWs, the results reveal that both NWs and NNWs have a relatively lower mean scores when compared to the scores of collocation diversity. Unsurprisingly, NWs have a high level of mean while NNWs have much more lower; 24.24, 14.89, respectively.

Table 4.6.

Breakdown of Booster Diversity in Sample Data

Variables	**Native Writers**				**Turkish Writers**			
	Min.	**Max.**	**Mean**	**Range**	**Min.**	**Max.**	**Mean**	**Range**
Modal	0	4	1.65	4	0	5	1.69	5
Verb	0	4	0.94	4	0	3	0.65	3
Adjective	2	21	8.89	19	1	13	6.88	12
Adverb	4	21	9.31	17	0	12	5.53	12
Quan./Deter	0	9	3.60	9	0	8	2.76	8
Noun	0	2	0.55	2	0	3	0.48	3
Total			**24.94**				**17.99**	

Findings germane to boosters diversity were given in the Table 4.6. The Table displays that there are a few significant similarities between hedges and boosters diversities. NWs' total diversity average did not show a significant change while NNWs' boosters diversities partially increased. In spite of that, NWs are still superior than NNWs in total booster diversity with an average of 24.94 to 17.99. The worthy thing is that it is the first time NNWs neared to NWs at a such close level.

The results reveal that the categories of adjective and adverbs have the maximum number of booster diversity while the categories of modals, verbs, quantifiers/determiners, and nouns have a minimum number of booster diversity at the amount of zero. As well as having the maximum booster diversity, adjectives and adverbs both have the highest ranges; 19 and 17, respectively, and have the highest mean; 9.31 and 8.89, respectively. On the other hand, nouns emerge as the category with the smallest mean of diversity with an average of 0.55.

When the Table is looked at closely, it is seen that one or more than one writers did use none of each category except for adjectives. Meanwhile, the highest booster diversity belongs to adjectives and then adverbs as they were in NW corpus. Again, similar to NWs results, the findings in the Table show a parallelism between NW and NNW result in terms of mean scores. Adjective and adverbs have the highest mean scores; 6.88 and 5.53, respectively. Nouns, as it was in NW corpus, constructed the category with the lowest mean score with an average of 0.48, which is a similar score to NWs' (0.55).

To summarize, the present title provided us information in order to have better insight on NWs' and NNWs' overall and categorical scores.

4.3. Quantitative Analysis Results

The present title was further divided into four so that the results be better presented. The first subtitle *Results of lexical diversity* gives us insights about whether NWs and NNWs have differed in terms of their lexical diversity, i.e. productivity. The other subtitles respectively *Results of collocations, Results of hedges,* and *Results of boosters* provide information of whether test analysis outcomes mentioned about a statistically significant difference between NWs and NNWs in terms of total and categorical frequencies.

4.3.1. Results of lexical diversity

In order to investigate the effect of nativeness on collocation diversity, a Chi-squire statistical test was employed. The findings were reported in the Table 4.7.

Table 4.7.

Statistical Findings of Collocation Diversity

Variables	Value	df	Sig. Value
Verb+Noun	85.147	18	.001[**]
Verb+Adj./Adv.	67.657	13	.001[**]
Noun+Verb	133.600	16	.001[**]
Noun+Noun	17.086	11	.105
Adjective+Noun	71.749	40	.002[**]
Adverb+Adjective	79.626	16	.001[**]
Adverb+Verb	51.562	11	.001[**]
Total	104.544	71	.006[**]

** represents for a *p* value at .01

The Table can be summarized as follows:

- A statistically significant difference was found between Native and Non-native writers in terms of *verb + noun* collocation diversity $(X^2(18)=85.147, p<.001)$.

- A statistically significant difference was found between Native and Non-native writers in terms of *verb + adj./adv.* collocation diversity $(X^2(13)=67.657, p<.001)$.

- A statistically significant difference was found between Native and Non-native writers in terms of *noun + verb* collocation diversity $(X^2(16)=133.600, p<.001)$.

- A statistically significant difference was not found between Native and Non-native writers in terms of *noun + noun* collocation diversity $(X^2(11)=17.086, p=.105)$.

- A statistically significant difference was found between Native and Non-native writers in terms of *adjective + noun* collocation diversity $(X^2(40)=71.749, p=.002)$.

- A statistically significant difference was found between Native and Non-native writers in terms of *adverb + adjective* collocation diversity $(X^2(16)=79.626, p<.001)$.

- A statistically significant difference was found between Native and Non-native writers in terms of *adverb + verb* collocation diversity $(X^2(11)=51.562, p<.001)$

- A statistically significant difference was found between Native and Non-native writers in terms of total collocation diversity $(X^2(71)=104.544, p=.006)$

To boil down the statistical findings regarding collocations diversity, it is apparent that a marked difference found between NWs and NNWs in all collocation categories but for *noun + noun*.

The Table 4.8. provides detailed information on statistical findings with regard to hedge diversity between NWs and NNWs.

Table 4.8.

Statistical Findings of Hedge Diversity

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

** represents for a *p* value at .01

According to the Table:

- A statistically significant difference was found between Native and Non-native writers in terms of modal hedges diversity $(X^2(5)=17.910, p=.003)$.
- A statistically significant difference was found between Native and Non-native writers in terms of verbal hedges diversity $(X^2(15)=52.749, p<.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of adjectival hedges diversity $(X^2(6)=17.559, p=.007)$.
- A statistically significant difference was found between Native and Non-native writers in terms of adverbial hedges diversity $(X^2(12)=73.539, p<.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of determiner/quantifier hedges diversity $(X^2(6)=37.035, p<.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of noun hedges diversity $(X^2(6)=47.709, p<.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of total hedges diversity $(X^2(33)=93.518, p<.001)$

Briefly, it is clearly obvious that there are statistically meaningful differences between NWs and NNWs in terms of lexical hedges diversity in all categories without exception.

The following Table gives statistical findings in order to better understand the categorical booster diversities between NWs and NNWs.

Table 4.9.

Statistical Findings of Booster Diversity

Variables	Value	df	Sig. Value
Modal	9.643	5	.086
Verb	11.242	4	.024[*]
Adjective	29.479	18	.043[*]
Adverb	66.011	19	.001[**]
Deter/Quan	23.299	9	.006[**]
Noun	8.141	3	.043[*]
Total	61.881	35	.003[**]

* represents for a *p* value at .05
** represents for a *p* value at .01

The Table can be noted down as follows:

- A statistically significant difference was not found between Native and Non-native writers in terms of modal boosters diversity $(X^2(5)=9.643, p=.086)$.

- A statistically significant difference was found between Native and Non-native writers in terms of verbal boosters diversity $(X^2(4)=11.242, p=.024)$.

- A statistically significant difference was found between Native and Non-native writers in terms of adjectival boosters diversity $(X^2(18)=29.479, p=.043)$.

- A statistically significant difference was found between Native and Non-native writers in terms of adverbial boosters diversity $(X^2(19)=66.011, p<.001)$.

- A statistically significant difference was found between Native and Non-native writers in terms of determiner/quantifier boosters diversity $(X^2(9)=23.299, p=.006)$.

- A statistically significant difference was found between Native and Non-native writers in terms of noun boosters diversity $(X^2(3)=8.141, p=.043)$.

- A statistically significant difference was found between Native and Non-native writers in terms of total boosters diversity $(X^2(35)=61.881, p=.003)$.

As understood from the interpretations, a non-significance was only observed in the category of modal booster diversity. In all other categories a marked difference was found.

4.3.2. Results of collocations

A Chi-squire test was applied to the NW and NNW corpora in order to detect whether there were statistically significant differences between Anglophonic and Turkish writers in terms of lexical collocation frequency. The following Table provides in-depth outcomes of the test.

Table 4.10.

Statistical Findings of lexical collocations

Variables	Value	df	Sig. Value
Verb+Noun	79.324	18	.001**
Verb+Adj./Adv.	67.657	13	.001**
Noun+Verb	133.600	16	.001**
Noun+Noun	22.798	12	.029*
Adjective+Noun	71.749	40	.002**
Adverb+Adjective	79.626	16	.001**
Adverb+Verb	51.562	11	.001**
Total	97.690	69	.013*

* represents for a *p* value at .05
** represents for a *p* value at .01

The Table reveals that:

- A statistically significant difference was found between Native and Non-native writers in terms of *verb + noun* collocation frequency $(X^2(18)=79.324, p<.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of *verb + adj./adv.* collocation frequency $(X^2(13)=67.657, p<.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of *noun + verb* collocation frequency $(X^2(16)=133.600, p<.001)$.

- A statistically significant difference was found between Native and Non-native writers in terms of *noun + noun* collocation frequency ($X^2(12)$=22.798, *p*=.029).

- A statistically significant difference was found between Native and Non-native writers in terms of *adjective + noun* collocation frequency ($X^2(40)$=71.749, *p*=.002).

- A statistically significant difference was found between Native and Non-native writers in terms of *adverb + adjective* collocation frequency ($X^2(16)$=79.626, *p*<.001).

- A statistically significant difference was found between Native and Non-native writers in terms of *adverb + verb* collocation frequency ($X^2(11)$=51.562, *p*<.001).

- A statistically significant difference was found between Native and Non-native writers in terms of total collocation frequency ($X^2(69)$=97.690, *p*=.013).

It is relatively clear that a statistically meaningful differentiation between NWs and NNWs in terms of collocation frequency existed in all categories of collocations that the present study investigated.

4.3.3. Results of hedges

In a similar vein, the results were tested by Chi-squire so that statistical difference were yielded in terms of using lexical hedges by NWs and NNWs. The chi-squire test results were provided in the following Table.

Table 4.11.

Statistical Findings of lexical hedges

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

* represents for a *p* value at .05
** represents for a *p* value at .01

It is easily understood from the Table that

- A statistically significant difference was found between Native and Non-native writers in terms of modal hedges frequency $(X^2(38)=55.033, p=.036)$.
- A statistically significant difference was found between Native and Non-native writers in terms of verbal hedges frequency $(X^2(39)=72.479, p=.001)$.
- A statistically significant difference was not found between Native and Non-native writers in terms of adjectival hedges frequency $(X^2(9)=13.695, p=.134)$.
- A statistically significant difference was found between Native and Non-native writers in terms of adverbial hedges frequency $(X^2(21)=73.506, p<.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of determiner/quantifier hedges frequency $(X^2(13)=36.359, p=.001)$.
- A statistically significant difference was found between Native and Non-native writers in terms of noun hedges frequency $(X^2(8)=42.444, p<.001)$.
- A statistically significant difference was not found between Native and Non-native writers in terms of total hedges frequency $(X^2(73)=85.343, p=.153)$.

Different from other results, we see that there is not a statistically significant difference between NWs and NNWs in terms of total lexical hedges boosters. Besides, the findings regarding adjectival lexical hedges did not provide a meaningful difference. However, in all other categories, statistically significant differences were yielded.

4.3.4. Results of boosters

One of the aims in the present study was to detect whether there were statistically significant differences between NWs and NNWs in terms of the amount of boosters that both writer types included in their scientific texts. To be able to achieve the purpose, as it was with every other categories, Chi-squire test was employed. The results were furnished into the Table 4.12.

Table 4.12.

Statistical Findings of Lexical Boosters

Variables	Value	df	Sig. Value
Modal	19.304	16	.253
Verb	11.782	7	.108
Adjective	32.902	30	.327
Adverb	49.076	30	.015[*]
Deter/Quan	27.901	21	.143
Noun	6.329	7	.502
Total	78.430	60	.055

* represents for a *p* value at .05

As seen from the Table 4.12.:

- A statistically significant difference was not found between Native and Non-native writers in terms of modal boosters frequency $(X^2(16)=19.304, p=.253)$.

- A statistically significant difference was not found between Native and Non-native writers in terms of verbal boosters frequency $(X^2(7)=11.782, p=.108)$.

- A statistically significant difference was not found between Native and Non-native writers in terms of adjectival boosters frequency $(X^2(30)=32.902, p=.327)$.

- A statistically significant difference was found between Native and Non-native writers in terms of adverbial boosters frequency $(X^2(30)=49.076, p=.015)$.

- A statistically significant difference was not found between Native and Non-native writers in terms of determiner/quantifier boosters frequency $(X^2(21)=27.901, p=.143)$.

- A statistically significant difference was not found between Native and Non-native writers in terms of noun boosters frequency $(X^2(7)=6.329, p=.502)$.

- A statistically significant difference was not found between Native and Non-native writers in terms of total boosters frequency $(X^2(60)=78.430, p=.055)$.

Markedly discrepant from other statistical findings, the chi-squire results did not yield a statistically significant difference between NWs and NNWs in all categories but for adverbial boosters frequency, which is easily seen in the explanations.

4.4. Qualitative Analysis Results

The present title encompasses some subtitles not to prompt confusion, but to provide more clear explanations. All the subtitles are divided into two in itself as *native writer findings* and *non-native writer findings*. The extra-divided titles provided qualitative results that the present study aimed to detect.

Besides, the present title lays the ground for presenting the qualitative findings which are composed of authentic sentences from NW and NNW corpora. In addition, the lexical collocations, hedges, and boosters that NWs and NNWs used in the sample corpora were provided under a list in related subtitles. Thanks to these lists, it is expected that reader will find the chance of seeing the collocations, hedges, and boosters both NWs and NNWs used in their scientific articles.

The real examples and the lists that were constructed through NW and NNW corpora are expected to sensitise academic scholars to appropriate use of these lexical components, and also are expected to provide a baseline for prospective academic writing efforts. For a better insight, it was endeavoured to give brief examples than voluminous ones. The sample examples were selected from the pivot words that were collocated with the highest frequency in each category.

As last but not the least, the present title allows us to see NWs' and NNWs' general lexical tendencies while they decide to make a word combination, i.e. collocation; to mitigate their statements, i.e. hedging, and to increase their authorial commitment, i.e. boosting.

4.4.1. Lexical collocation

4.4.1.1. Native writer findings

VERB + NOUN

The appendix 1 provided *verb + noun* word combinations that NWs used in their academic articles. According to the findings, this category included 861 word tokens and 400 word types. If the category is examined closely it is absolute that five pivot words that were mostly used are respectively; "make, provide, give, gain, and attention". Some authentic examples including most frequently used pivot words are like following:

*(1) Ellis (1993) argued for the importance of having a grammatical syllabus to **make provision** for an explicit focus on individual grammatical forms...*

*(2) ...that students were able to **make gains** with a variety of forms...*

*(3) The entire departmental teaching staff (n = 28) was then interviewed to **provide an insight** into the ramifications of context...*

*(4) It **provided evidence** that...*

*(5) ...claims that a life history approach **provides the opportunity** to give voice to women leaders.*

*(6) It was also **given credence** by Nation's...*

*(7) ELT and its affiliated academic units can **gain power** through their ability to make money.*

*(8) ... that they can **gain flexibility** in meeting the language expectations of those contexts.*

*(9) ... in some circles, but still **receives little attention** in EAP discussions of students' academic writing.*

*(10) ... but well grounded solutions, creativity in research and academic writing appears to **deserve attention**.*

As can be seen from the examples, the collocations can be used in simple sentences as well as in more complex sentences including defining clauses or other phrasal clauses.

VERB + ADVERB/ADJECTIVE

The results of concordance program showed that *verb + adj./adv.* has both less word tokens and word types. This collocation category included 673 tokens and 370 types. The most frequently used pivot words are "become, seem, make, feel, and remain". Ten authentic examples derived from the NW corpus were provided and two real examples from each pivot word were made note, which are:

*(11) It has **become almost axiomatic** in language attrition research to assume that...*

*(12) ...and even then the frequency is starting to **become marginal**.*

*(13) This **seems sensible**, but despite this, the topic-based focus of many materials means that...*

*(14) While it **seems intuitive** that English language proficiency contributes to the noted vocabulary achievement gap between ELLs and their non-ELL peers...*

*(15) The study findings **make clear** that...*

*(16) The small size of our datasets **makes it difficult** to discuss or draw conclusions about...*

*(17) Still, they **feel unsure** about how to teach using media and pop culture.*

*(18) ...many teachers may continue to **feel confused** as they struggle...*

*(29) However, the question of exactly which writing tasks are required of graduate level students **remains unanswered**...*

*(20) ...if it **remained ambiguous**, an email was sent to the professor asking for more detail about the assignment.*

A note-worthy thing is that NWs generally preferred to use adjectives or adverb in order to increase or mitigate their voices even in building collocations as seen in the example 11. Also, as apparently stated in the appendix 1, that NWs have a large number of collocate words is another attention catching point. For example, the pivot word *become* has 35 collocate words, which may be a testament to NWs' high eligibility in combining words.

NOUN + VERB

When compared to other collocations, *noun + verb* collocation category is the one with the lowest number of tokens and types. This conclusion can be drawn by the help of the concordance program employed in the present study. The results gave relatively small number of tokens (234) and types (100), which showed that NWs have an inclination of underuse the category *noun + verb* when compared to other collocation categories. The upshot of concordance word frequency analyses provided the most frequently used pivot words to be "study, show, Table, data, and article". The authentic examples regarding the use of these pivot words are as follows:

*(21) ...this **study frequently did not indicate** whether exams required essay writing or not.*

*(22) The present **study did not find** essays and short tasks to occur frequently.*

*(23) The **data in this way shows** that...*

(24) The graphs in __Figure 2 show__ that...

(25) __Table 1 contains__ the first nine idea units from her written story...

(26) These two __tables demonstrate__ that...

(27) ... __data were collected__ was smoothly ascending.

(28) ... __data suggest__ a partial advantage for one subset of chat output that...

(29) This __article examines__ the extent to which different groups of university students have shared vocabulary needs.

(30) This __article aims__ to further our understanding of variation in academic vocabulary by...

When the category of *noun + verb* was examined, it was revealed that the pivot word "study" was collocated 30 times with divergent verbs, which was followed by "Table". This evidenced NWs' tendency in using "study and Table" while making a word combinations in the category of *verb + noun*.

NOUN + NOUN

Referencing to the appendix 1, it is apparent the category of *noun + noun* included 406 word tokens and 220 word types, which is an average number in total when all categories were taken into consideration. The pivot words with the highest frequencies are respectively "lack, learning, knowledge, research, and vocabulary". The examples elicited regarding the pivot words are provided below:

(31) A __lack of fluency__ can have a major impact on the way English can be used...

(32) ...several teachers associate extravagances of style, sometimes attempted in the name of creativity, with a __lack of clarity__ in many students' writing.

(33) Learner variables consist of everything the student brings to the __learning experience__.

(34) ...but also help to explain the variability found in vocabulary __learning outcomes__ through reading...

(35) Research within a lexical inferencing paradigm1 has observed strategies and __knowledge sources__ that...

(36) ...with effects on the creation and __dissemination of knowledge__ and ideology in the global ideoscape...

(37) There is still a relative __paucity of research__ on EL secondary writing development...

(38) ... the interventions in this study were designed to fill the __research gap__ noted by...

(39) Although the outcomes in terms of __vocabulary acquisition__ have not been vocabulary learning measured rigorously...

*(40) There is greater variation in learners' L2 grammar and **vocabulary competence** than...*

The most repeated pivot word *lack* was collocated by myriad word 15 times, as can be followed in the appendix 1. One more point to be importantly noted down is that the preposition *of* is widely used to conjunct to words in order to have a *noun + noun* collocation.

ADJECTIVE + NOUN

Among all categories of collocations that the present study investigated through NW and NNW corpora, the category of *adjective + noun* has the highest frequency in both word tokens and word types. The category included 2425 tokens and 1066 types in total, which placed it to the most top in the rank. "Important, difference, significant, effect, and key" are the pivot words ranked from top to less. The examples for each most frequent pivot words are as follows:

*(41) It also emphasizes originality as an **important criterion** for effective response.*

*(42) Another equally **important concern** is that poor performance on high-stakes tests disproportionately discourages linguistic and...*

*(43) The **fundamental differences** between the two types of presentation are discussed in Section 3.2.*

*(44) The L2-related **individual difference** literature has remained relatively uninfluential within the broader field of SLA.*

*(45) Despite **significant challenges** such as access to limited hardware and infrastructure...*

*(46) Students in the winter class made **significant improvements** in their writing...*

*(47) Findings suggested that grades had **little effect** on student writing...*

*(48) The ways in which linguistic choices can create **different effects** and different meaning-making possibilities might...*

*(49) Our analysis of these prompts focused on identifying and tallying the rhetorical processes signaled by **key words** in the prompts.*

*(50) One of the **key findings** of a recent report by the Royal College of Paediatrics and Child Health (RCPCH) (2008) is...*

As seen in the appendix 1, the word of "important" has 36 collocate words, which is followed by the word "significant". The findings may be assessed in a way that native writers have a high tendency in making *adjective + noun* collocation by using the words "important and significant" during their academic writings.

ADVERB + ADJECTIVE

The category of *adverb + adjective* was heavily used by Anglophonic writers. With a number of 684 word tokens and 349 word types, *adverb + adjective* word combinations took up a particular place in NW academic writings. "Highly, relatively, particularly, quite, and clearly" are the top used pivot words by NWs. The authentic examples that these pivot words are used in are stated below:

*(51) While such a structure appears to be **highly conventional**, the difference between this set of materials...*

*(52) ...students' judgements of effective teaching and learning practices are **highly dependent** on personal motivations...*

*(53) This is a **relatively new** idea in listening pedagogy and...*

*(54) ...the British Academic Written English Corpus (BAWE) suggests that data description assignments are **relatively frequent** in Science and Mathematics courses.*

*(55) ...Koutsantoni (2006) argues that this choice is **particularly complex** in genres where writers are positioned as having a lower status than readers...*

*(56) The textual data itself suggest that within each stance option, some language resources are **particularly popular**.*

*(57) The interaction pattern is **quite different** in bus driver dialogues.*

*(58) Article/book reviews were also **quite common** in this group.*

*(59) While UNT did not show such a varied response, it was **clearly adept** at matching context to candidate...*

*(60) This shift of focus, not to say tension, within the communicative discussion is also **clearly evident** when...*

The data findings apparently showed that NWs prefer to use mostly the pivot words of *highly, relatively, particularly, quite, and clearly* while collocating with others words. As clearly shown in the appendix 1, the word highly has 20 collocates, which represents for a high inclination of NWs into using it.

ADVERB + VERB

Regarding *adverb + verb*, 555 word tokens and 313 words built up the category seen in the appendix 1. Furthermore, it was obviously put forward that the most frequently used collocated pivot words are *use, widely, clearly, explicitly,* and *fully*. The

examples show how the pivot words were used in the authentic sentences by non-native writers.

> *(61) ...e-learning can be used as an umbrella term as it is understood and was **commonly used** by most of the teachers...*

> *(62) Passive structures were **extensively used** in the professional corpus...*

> *(63) It is **widely argued** in EAP that...*

> *(64) ...ELF is **widely seen** as a monolithic English...*

> *(65) ... our findings raise has to do with the need to **clearly define** the construct that...*

> *(66) An example is the student who **clearly expressed** a minority view that...*

> *(67) Various types of metacognitive knowledge are **explicitly introduced** during the implementation of vocabulary notebooks.*

> *(68) ...post-reading tasks **explicitly focusing** on target words led to better vocabulary learning than...*

> *(69) It would presumably take nearer the 8,000 Figure to **fully exploit** this information-rich form of communication.*

> *(70) It is still difficult for us to **fully assess** to what degree the vocabulary...*

Based on the findings indicated in the appendix 1, the last category of collocations paid emphasis on the use of verbs collocated by adverbs.

4.4.1.2. Non-native writer findings

VERB + NOUN

The Table 4.13. provides us information about *verb + noun* collocations that NNWs used in their academic writings.

Table 4.13.

Verb + Noun collocations in NNW sample corpus.

Achieve communication	Develop familiarity	Gain recognition	Make distinction	Provide help
Achieve the aim	Develop tendency	Gain status	Make error	Provide information
Achieve the goal	Discard prejudice	Gain understanding	Make guess	Provide in-depth analysis
Achieve the purpose	Display difference	Get information	Make mistake	Provide insight
Adapt strategy	Distort message	Get the message	Make prediction	Provide opportunity
Arouse interest	Do homework	Get a job	Make research	Provide pathway
Attract attention	Draw attention	Get reaction	Make translation	Provide support
Attract interest	Draw conclusion	Give chance	Obtain knowledge	Put extra burden
Avoid making	Draw distinction	Give example	Offer insight	Reach agreement
Avoid misunderstanding	Draw interest	Give feedback	Offer practice	Receive attention
Be a hindrance	Employ a method	Give harm	Offer solution	Receive feedback
Become a focus	Enrich understanding	Give idea	Offer suggestion	Receive interest
Become aware	Establish association	Give importance	Overcome anxiety	Reconstruct knowledge
Become evident	Examine effect	Give information	Overcome challenge	Remain stable
Become head	Examine effectiveness	Give insight	Overcome difficulty	Seem a rush
Become popular	Express allegiance	Give opportunity	Pass exam	Seem harmless
Build confidence	Express feeling	Give responsibility	Pay attention	Share a code
Build knowledge	Extract a message	Grant autonomy	Play crucial role	Share experience
Build self-confidence	Face difficulty	Have difficulty	Play important role	Share idea
Cause anxiety	Face problem	Have performance	Play key role	Show parallelism
Cause a clash	Facilitate management	Have role	Play significant role	Solve problem
Collect data	Feel incapable	Have tendency	Play role	Spend time
Commit mistake	Find disturbing	Have difficulty	Pose difficulty	Stay alive
Complete task	Find opportunity	Keep contact	Pose a threat	Stress the importance
Conduct a study	Follow rules	Keep in mind	Prevent bias	Take a step
Construct knowledge	Gain advantage	Lead to misunderstanding	Prevent misunderstanding	Take responsibility
Convey message	Gain attention	Learn language	Propose solution	Take time
Create a ground	Gain importance	Maintain order	Provide a prompt	Transmit knowledge
Create a venue	Gain in-depth understanding	Make a profit	Provide access	Used worldwide
Create impact	Gain insight	Make assumption	Provide accuracy	Yield better understanding
Create obscurity	Gain momentum	Make change	Provide contribution	
Create opportunity	Gain opportunity	Make comparison	Provide definition	
Deliver suggestion	Gain popularity	Make connection	Provide fluency	

As seen in the Table 4.13., there are 354 word tokens and 193 word types in total. The most repeated pivot verbs are "provide, make, gain, give, and role". The Table also provide us substantially further understanding of collocations that NNWs wrote up in their academic texts. Authentic examples including most frequently used pivot words are stated:

*(71) Since the primary goal of learning a foreign language is to **provide fluency** and accuracy in written and spoken modes of communication, ...*

*(72) In this case, open observations **provide the opportunity** to experience different context and ...*

*(73) I will also present facts and evidence from Japanese Light Verb Constructions to **make a comparison**.*

*(74) I was able to **make a connection** between the image and the text.*

*(75)The teachers **gain an opportunity** to meet individual students' needs.*

*(76) The study reported in the paper was conducted to **gain an understanding** of the written assessment...*

*(77) The results of the study **give insights** into the question types posed by...*

*(78) Majority of learners (n=72) stated that learning the target culture may **give harm** to the home culture in general.*

*(79) ...they **have a role** in informal spoken communications...*

*(80) In every learning environment, human psychology **plays a role**.*

As seen in the Table, the most repeated pivot provide has 13 collocate words, which means that NNWs have a tendency in collocating the word *provide* in other words while making a *verb + noun* collocation.

VERB + ADVERB/ADJECTIVE

The Table 4.14. provides the collocations of *verb + adv/adj.* that NNWs employed in their academic texts. The concordance program gave a result of 244 tokens and 154 type word in total regarding *verb + adv/adj.* collocation category. The most repeated pivot word are *become, feel, use, make,* and *seem*, as can be seen in the Table 4.14.

Table 4.14.

Verb + Adv./Adj. collocations in NNW sample corpus.

Adapt quickly	Choose randomly	Function successfully	Seem indispensible
Affect directly	Code independently	Go smoothly	Seem reasonable
Affect negatively	Communicate fluently	Group randomly	Seem reluctant
Affect positively	Communicate successfully	Grow noticeable	Seem surprising
Answer sincerely	Communicate verbally	Handle carefully	Seem willing
Be aware	Comprehend correctly	Help urgently	Select appropriately
Become better	Consider carefully	Improve significantly	Select randomly
Become clear	Considered important	Interpret cautiously	Show clearly
Become clearer	Designed well	Involve systematically	Sound strong
Become comprehensible	Differ significantly	Join together	Take serious
Become distinctive	Do poorly	Judge correctly	Teach effectively
Become easy	Engage actively	Learn incidentally	Teach intensively
Become effective	Engage eagerly	Learn precisely	Think critically
Become engaged	Explain directly	Make available	Understand correctly
Become essential	Express freely	Make clear	Use carefully
Become fashionable	Fall short	Make enjoyable	Use economically
Become important	Feel anxious	Make meaningful	Use effectively
Become inevitable	Feel comfortable	Make indispensible	Use efficiently
Become interested	Feel confident	Make pair	Use fluently
Become necessary	Feel flexible	Make sure	Use inaccurately
Become obligatory	Feel insecure	Mention previously	Use interactively
Become obvious	Feel intimidate	Occur unconsciously	Use systematically
Become overwhelmed	Feel nervous	Perform successfully	Use widely
Become perfect	Feel obliged	Perceive positively	Used frequently
Become popular	Feel proud	Prove useful	Used interchangeably
Become proficient	Feel restricted	Reach beyond	Vary significantly
Become prominent	Feel secure	React positively	Watch carefully
Become sensitive	Feel tense	Read carefully	Work effectively
Become similar	Find challenging	Relate strongly	Work well
Become trendy	Find difficult	Rise significantly	
Chance quickly	Find interesting	Seem contradictory	

Obvious from the Table that the pivot word *become* has 24 disparate collocate words. The authentic sample sentences are:

(81) *...the influence of foreign language anxiety **becomes more important** as learners' instructional level increases.*

(82) *Many good readers have been reported to automatically **become engaged** in this interactive process.*

(83) *They also felt that they needed time and more practice in order to **feel more confident**.*

(84) *Creative drama environment in which such activities take place provides an atmosphere in which students will **feel comfortable**...*

(85) *Semantic word mapping is one of the non-mnemonic vocabulary teaching techniques which has been **used widely** in language teaching classes.*

(86) *...they **used frequently** in their daily lives.*

(87) *In order to **make clear** distinctions among the levels over B1,...*

(88) *... to **make meaningful** decisions, they can have ownership in their learning, and ...*

(89) *This does not **seem surprising**, considering the students" educational background and ...*

(90) *Although these results **seemed contradictory** with...*

NOUN + VERB

The Table 4.15. provides *noun + verb* collocations that NNWs used in their academic writing. As seen in the Table

Table 4.15.

Noun + Verb collocations in NNW sample corpus.

Analyses include	Interviews elicit	Studies prove	Study give
Change to practise	Literature propose	Table demonstrate	Study include
Data demonstrate	Literature reveal	Table display	Study intend
Data include	Literature show	Table manifest	Study investigate
Data provide	Outcomes reveal	Table show	Study point out
Data reveal	Policy maker	Table present	Study provide
Data were analyzed	Program design	Purpose is to reveal	Study put forward
Data were collected	Research show	Study adopt	Study report
Data were compiled	Results give	Study aim	Study seek
Data were examined	Results imply	Study attempt	Study set out
Desire to interact	Results indicate	Study call for	Study show
Difference were found	Results present	Study compare	Study suggest
Figure display	Results provide	Study conclude	Study try
Figure illustrate	Results reveal	Study confirm	Study verify
Figure show	Results show	Study contribute	Study was conducted
Findings show	Results were given	Study demonstrate	Survey reveal
Findings suggest	Results yield	Study examine	Survey show
Goal is to achieve	Statistics show	Study find	

159 tokens and 76 word types carried the category to the very back in the frequency rank. In other word, the present category included the least amount of collocations in NNW corpus. Furthermore, the Table shows that the most repeated pivot words are respectively "study, results, show, data, and reveal". The most frequently used pivot word study has 26 collocate words, which is relatively high when compared to collocates of the other pivot words. In order to understand the real uses of collocations, the authentic examples were provided:

*(91) The results of the **<u>study showed</u>** that there...*

*(92) The results of **<u>the study indicated</u>** that families...*

*(93) The statistical **<u>results presented</u>** in Table 1 and 2 reveal that the students...*

*(94) ...the **<u>results showed</u>** that instructors...*

*(95) Both qualitative and quantitative **<u>data revealed</u>** that their instrumental orientation...*

*(96) **<u>Data were collected</u>** from 266 high school students in Turkey during the Spring semester of 2011-2012.*

NOUN + NOUN

It is apparently understood from the Table 4.16. that the most frequently used pivot words in frequency order are "lack, language, skill, anxiety, and learning". The total token amount is composed of 246 words while the word types are composed of 147 words. The most repeated pivot word has eight collocate words as seen in the Table 4.16. You can find real examples collected from the NNW corpus as follows:

*(96) ...all the students pointed to their **<u>lack of competence</u>** in vocabulary knowledge...*

*(97) There is a **<u>lack of research</u>** comparing the effectiveness of...*

*(98) ... new trends in **<u>language learning</u>** and teaching have started to emerge.*

*(99) ... studies investigating the nature of foreign **<u>language anxiety</u>** and ways of overcoming...*

*(100) ... poor **<u>listening skills</u>**, ambiguous use of verbal and nonverbal language...*

*(101) It is possible that they have some presuppositions about communication and **<u>communication skills</u>** which...*

*(102) **<u>Language anxiety</u>**, as Horwitz, Horwitz and Cope (1986) suggest, is a distinct complex of self-perceptions...*

Table 4.16.

Noun + Noun collocations in NNW sample corpus.

Acquisition process	Fear of failure	Learning goal	Sign system
Added variables	Feedback process	Listening skill	Solution to problem
Answer key	Feeling of detracting	Literature review	Source of information
Body language	Field of investigation	Material development	Speaking anxiety
Career purposes	First step	Matter of debate	Speaking skill
Class participation	Gender difference	Mother tongue	Speech anxiety
Collection of work	Gender equity	Need for success	Spring term
Communication skill	Gender inequality	Need for secure	Step forward
Comprehension process	Global peace	Participants of the study	Student feedback
Course material	Good excuse	Peer feedback	Subject matter
Creative thinking	Hierarchy of difficulty	Peer review	Success level
Cultural competence	Human learning	Preparation program	Target group
Curriculum development	Lack of competence	Primary goal	Target language
Data collection	Lack of confidence	Proficiency level	Teacher development
Data set	Lack of credibility	Pronunciation error	Tool of participation
Decision-making process	Lack of knowledge	Pronunciation problem	Transfer of knowledge
Degree of attention	Lack of information	Public order	Transmission period
Depth of understanding	Lack of material	Punctuation mark	Vocabulary acquisition
Diary writing	Lack of opportunity	Reading comprehension	Vocabulary instruction
Disarmament treaty	Lack of research	Reading skill	Vocabulary knowledge
Discussion group	Language acquisition	Research question	White lie
Education programme	Language anxiety	Review of literature	Window of opportunity
English proficiency	Language improvement	Role play	Word association
Error correction	Language learning	Sampling method	Work load
Eye contact	Language performance	Sense of burden	Writing anxiety
Fall term	Learner autonomy	Shift of focus	Writing competency
Fear of failing	Learning environment	Shortage of research	Writing skill

ADJECTIVE + NOUN

As the Table 4.17 indicated, the category of *adjective + noun* is the collocation type with the highest number of tokens and word types. According to the findings obtained from the concordance program, there are 1144 word tokens and 551 word types in total, which is the highest amount belonging to only one category when compared to other categories of collocations. The most frequently used pivot words are "effect, significant, important, role, and positive". Further to say, the pivot word *effect* was 20 collocate words, which is followed by *significant*. The pivot words appear to prove that NNWs mostly tend to use these words while making *adjective + noun* collocations.

The authentic examples regarding the use of *adjective + noun* collocation were provided below:

> (103) *...writing activities will have **beneficial effects** on their communicative skills and future professional lives.*

> (104) *...grammar teaching has a **delayed effect** and an indirect role in converting explicit knowledge into...*

> (105) *...submitting a manuscript to a first-tier journal also has a **significant advantage** since such journals generally...*

> (106) *... fear of making mistakes is a **significant factor** that causes EFL speaking anxiety on learners.*

> (107) *... personal opportunities take **important place** in this category.*

> (108) *Another **important point** is that as a result of the spread of English worldwide...*

> (109) *... in that part, each student plays an **active role**.*

> (110) *... a great deal of research reports the **critical role** of washback in educative practices*

> (111) *... specific tests have been amended so as to exert a **positive influence** on teaching and learning.*

> (112) *...relaxation exercises can help learners to benefit from a **positive effect** on both anxiety and success.*

As can be seen from the authentic examples, NNWs generally used strong collocations like positive effect, active role, etc. The Table given in the next pages displays the collocations that NNWs used in their academic writing.

Table 4.17.

Adjective + Noun collocations in NNW sample corpus.

Absolute correctness	Big difference	Common sense	Critical question	Distinct advantage
Abstract concept	Biological differences	Compelling evidence	Critical review	Divergent effect
Academic life	Broad term	Compelling results	Critical process	Dominant language
Academic performance	Casual speech	Complementary principle	Critical role	Dominant role
Academic success	Central concern	Complete picture	Critical thinking	Dominant use
Academic writing	Central principle	Complicated process	Crucial impact	Driving force
Acceptable limits	Challenging problem	Comprehensible input	Crucial point	Early experience
Active agent	Classical assumption	Comprehensive definition	Crucial role	Easy task
Active role	Clear consensus	Conceptual framework	Crystal clear	Educational practice
Adequate knowledge	Clear-cut distinction	Concluding remark	Current debate	Effective communication
Administrative support	Clear distinction	Conclusive results	Current situation	Effective factor
Alarming increase	Clear expectation	Considerable development	Daily activity	Effective learning
Alternative way	Clear fact	Consistent contrast	Daily contexts	Effective management
Ambivalent attitudes	Clear idea	Constant access	Daily conversation	Effective means
Appropriate strategy	Clear instructions	Contemporary	Daily life	Effective measure
Authentic communication	Clear picture	phenomenon	Daily task	Effective result
Authentic material	Clear purpose	Continuing need	Daunting task	Effective role
Authentic nature	Clear understanding	Continuous research	Deep understanding	Effective teaching
Available knowledge	Clear view	Contradictory results	Delayed effect	Effective use
Background information	Close association	Controversial issue	Demanding task	Effective writing
Background knowledge	Close look	Controversial matter	Demographic factor	Enjoyable process
Basic conventions	Close relation	Controversial status	Demographic information	Emotional appeal
Basic element	Close scrutiny	Controversial topic	Descriptive study	Emotional atmosphere
Basic factor	Challenging skill	Conventional associations	Detailed account	Empirical data
Basic knowledge	Challenging task	Convincing evidence	Detailed description	Empirical study
Basic idea	Cognitive development	Core element	Detailed examination	Enhanced understanding
Beneficial effects	Cognitive process	Creative activity	Detrimental effect	Equal importance
Beneficial impact	Collaborative enterprise	Critical factor	Difficult process	Equal right
Better condition	Common core	Critical feedback	Digital literacy	Essential element
Better equipped	Common examples	Critical modification	Diligent work	Essential knowledge
Better idea	Common fixture	Critical period	Direct relationship	Essential part
Better insight	Common knowledge	Critical perspective	Distinct advantage	Essential problem
Better job	Common language	Critical point	Distracting emotions	

Table 4.17. continuing

Everyday decision	Further research	Holistic view	Inefficient use	Limited progress
Exchange information	Further studies	Hot debate	Inevitable part	Limited knowledge
Exciting experience	Further work	Hot topic	Inevitable rise	Linguistic awareness
Existing literature	General agreement	Ill formed	Influential factor	Linear combination
Existing knowledge	General idea	Immediate effect	Influential role	Linear data
Existing problem	General knowledge	Important component	Innovative use	Linguistic achievement
Expected result	General statement	Important consideration	Instant decision	Linguistic competence
Experiential knowledge	General tendency	Important contribution	Instrumental value	Linguistic imperialism
Extensive use	Globalising world	Important drawback	Integral part	Little contradictory
Extensive work	Good communication	Important effects	Interesting data	Little control
External factors	Good idea	Important element	Interesting fact	Little difference
Facial expression	Good indicator	Important factor	Interesting finding	Little research
Facilitating effect	Good model	Important finding	Internal consistency	Laboured effort
Faulty articulation	Good step	Important role	International language	Macro effect
Faulty pronunciation	Grammatical competence	Important part	Interpersonal relationship	Main concern
Faulty use	Grave defect	Important place	Intriguing debate	Main effect
Feasible ways	Great effect	Important point	Intrinsic motivation	Main factor
Financial problem	Great enthusiasm	Important predictor	Invaluable insight	Main focus
Fixed set of	Great help	Important principle	Key component	Main idea
Financial opportunity	Great idea	Important source	Key factor	Main implication
Finite number	Great importance	Important thread	Key feature	Main indicator
Flexible access	Great influence	Inadequate knowledge	Key implication	Main objection
Foreign language	Great problem	Inappropriate content	Key point	Main problem
Formal assessment	Great use	Incorrect answer	Key provision	Main referent
Fruitful process	Growing interest	Incorrect usage	Key role	Major aim
Frustrating experience	Growing need	Increasing advocacy	Key term	Major role
Full agreement	Harmful effect	Increasing interest	Key word	Major motive
Full impact	Heavy burden	Increasing popularity	Known fact	Major source
Functional difference	High consistency	Increasing power	Large body	Mandatory step
Fundamental aspect	High impact	In-depth data	Large scale	Meaningful difference
Fundamental factors	High rate	Independent learning	Leading role	Meaningful way
Fundamental problem	Higher salary	Independent researcher	Limited access	Meticulous review
Further attempt	Holistic meaning	Indispensible component	Limited capacity	Micro effect
Further example	Holistic perspective	Individual difference	Limited interest	Minor change

Table 4.17. continuing

Minor difference	Oral competence	Positive feeling	Real challenge	Significant issue
Missing answer	Oral presentation	Positive influence	Real context	Significant place
Mixed feeling	Oral proficiency	Positive relationship	Real effort	Significant predictor
Multiple intelligence	Overall picture	Positive result	Real purpose	Significant problem
Mutual interesting	Overall understanding	Positive role	Realistic solution	Significant relationship
Mutual relationship	Outside world	Positive statement	Reasonable level	Significant result
Mutual understanding	Particular aim	Positive transfer	Reasonable solution	Significant role
Native-like fashion	Particular action	Positive view	Recent studies	Significant variable
Native speaker	Past experience	Possible rejection	Representative sample	Similar manner
Natural appetite	Patriotic feeling	Potential danger	Rising popularity	Similar point
Natural forces	Pedagogical implications	Potential threat	Rough idea	Similar problem
Natural part	Pedagogical purpose	Powerful predictor	Routine activity	Similar problem
Natural phenomenon	Pedagogical	Practical suggestion	Qualitative analysis	Similar results
Negative attitude	recommendation	Practical value	Quantitative analysis	Simple process
Negative correlation	Perfect candidate	Pragmatic question	Qualitative data	Slight difference
Negative effect	Perfect harmony	Precise meaning	Quantitative data	Small scale
Negative expectation	Personal belief	Preparatory program	Qualitative study	Social adaptation
Negative feeling	Personal connection	Pressing need	Quantitative study	Social environment
Negative impact	Personal development	Previous experience	Serious critique	Social inequality
Negative relationship	Personal effect	Primary impetus	Serious delay	Social interaction
Negative thought	Personal opinion	Principal tool	Serious need	Social life
Negative transfer	Pioneer work	Prior knowledge	Side effect	Social norms
Negative view	Political reason	Problematic area	Significant advantage	Social setting
Neutral process	Poor study	Problematic issue	Significant change	Social status
New idea	Positive attitude	Problematic point	Significant contribution	Special assessment
New pursuit	Pivotal role	Productive skill	Significant determinant	Special care
New trend	Poor development	Professional training	Significant difference	Special role
Notable effort	Popular field	Profound effect	Significant effect	Specific meaning
Notable outcome	Popular topic	Prominent factor	Significant factor	Striking difference
Noticeable impact	Positive contribution	Prominent role	Significant feature	Striking point
Obvious need	Positive correlation	Prominent shift	Significant finding	Strong influence
Ongoing process	Positive development	Promising finding	Significant impact	Strong link
Open to discussion	Positive disposition	Rapid development	Significant implications	Starting point
Optimistic attitude	Positive effect	Rapid growth	Significant improvement	Stressful process

Table 4.17. continuing

Strong impression	Survival need	Underlying factor	Vague understanding	Vital effect
Strong impact	Teaching strategy	Underlying reason	Valid idea	Vital role
Strong relation	Technical incapability	Undesirable effect	Valuable information	Well-established fact
Static concept	Technological development	Unfamiliar sound	Valuable insight	Well-known fact
Statistical analysis	Theoretical background	Unfamiliar word	Valuable knowledge	Wide variability
Strict adherence	Theoretical disagreement	Unknown vocabulary	Valued member	Widening horizon
Strong factor	Tight schedule	Unknown word	Various challenge	Widening scale
Strong foundation	Tiresome process	Urgent need	Various experiences	Widespread acceptable
Strong ties	Traditional method	Utmost importance	Varying effect	Worldwide use
Strong uncertainty	Tremendous effect	Useful innovation	Vicarious experience	Worthwhile difference
Substantial change	Ultimate aim	Useful insight	Vicious circle	Wrong guess
Successful interaction	Ultimate control	Useful material	Visual aid	Wrong inference
Successful outcome	Ultimate product	Utmost need	Visual cue	Young people
Survival issue	Underdeveloped country	Utilitarian benefit	Visual stimulus	

ADVERB + ADJECTIVE

The Table 4.18 shows the collocations that NNWs used in the combination of *adverb + adjective*. As it can be easily seen, there are 222 word tokens and 120 word types. The most frequently used pivot words are "quite, highly, relatively, high, and important". It seems that the most repeated pivot word *quite* has 14 different collocate words.

Table 4.18.

Adverb + Adjective collocations in NNW sample corpus.

Always available	Highly developed	Relatively new
Clearly important	Highly diverse	Relatively recent
Closely high	Highly individualistic	Relatively scarce
Closely linked	Highly interested	Relatively small
Closely related	Highly motivated	Relatively weak
Commonly negative	Highly positive	Quite clear
Completely different	Highly problematic	Quite close
Completely new	Highly reliable	Quite common
Completely unsuccessful	Highly significant	Quite daunting
Considerably higher	Highly successful	Quite different
Directly related	Highly useful	Quite easy
Disturbingly high	Increasingly effective	Quite extensive
Easily accessible	Interestingly enough	Quite frequent
Easily available	Increasingly important	Quite high
Educationally significant	Internationally acknowledged	Quite important
Emotionally frustrating	Mainly related	Quite necessary
Equally important	Mildly positive	Quite obvious
Equally responsible	Minimally distinguishable	Quite possible
Equally successful	Mostly negative	Quite rapidly
Especially noteworthy	Mutually exclusive	Quite successful
Extremely complex	Naturally occurring	Slightly different
Extremely demanding	Mutually understandable	Slightly difficult
Extremely difficult	Newly born	Significantly better
Extremely useful	Nothing wrong	Significantly high
Fairly complex	Partially proficient	Socially acceptable
Fairly high	Particularly helpful	Socially responsible
Fairly new	Particularly important	Statistically significant
Fairly well	Particularly impressive	Substantially different
Fully avoidable	Particularly significant	Totally new
Fully aware	Pedagogically correct	Usually understandable
Functionally confusing	Pedagogically useful	Very useful
Generally sufficient	Rapidly increasing	Well developed
Grammatically accurate	Really interested	Well known
Grammatically well	Really interesting	Well recognized
Highly cooperative	Relatively close	Widely adopted
Highly critical	Relatively hard	Widely available
Highly demanding	Relatively little	Widely popular

Authentic examples regarding the use of *adverb + adjective* that NNWs used in their academic composing are:

(113) ...*the preparatory school curriculum and examination system were **quite different** from that of today.*

(114) *... it is **quite necessary** for the participants to try to develop their reading skills...*

(115) *Students also indicated a **highly positive** attitude on their use of...*

(116) *In terms of evaluation of the portfolio tasks, some of the students (35%) were **highly critical**.*

(117) *... activation of these 1000 muscles in the adults is **relatively hard** after puberty.*

(118) *... researchers possess **relatively little** amount of classroom teaching experience.*

(119) *... the students had a **fairly high** regard for their English language skills*

(120) *... the intensity of it is not **disturbingly high**.*

(121) *Item 5 was **particularly important** on account of the fact that...*

(122) *The notions of autonomy and independence possess an **increasingly important** role in language pedagogy...*

ADVERB + VERB

When compared to other categories, the category of *adverb + verb* has a moderate number of tokens and word types, 274 and 187, respectively. The most repeated pivot words in that category are "use, affect, widely, actively, and mostly". Below presented a few of the authentic examples from NNW corpus, and then the Table 4.19. shows the collocations in NNW corpus:

(123) *... teachers can **effectively use** pictures, real objects, stick figures,...*

(124) *... they **frequently used** listening skill in their professions.*

(125) *... focal children **negatively affected** by "cultural disconnections, disagreements,...*

(126) *These ideas seem to be **widely accepted** by language teaching practitioners.*

(127) *... the use of decontextualized tasks as well as contextualized tasks has been **widely discussed***

(128) *Turkish universities **actively take part** in student mobility programs in Europe.*

(129) *... language learners **mostly complain** that...*

(130) *The control group was instructed in line with what has been mostly accepted as the proper way of teaching vocabulary.*

Table 4.19.

Adverb + Verb collocations in NNW sample corpus.

Absolutely be	Directly affect	Indirectly affect	Potentially affect	Socially constructed
Actively construct	Directly expose	Indirectly learn	Previously stated	Socially shared
Actively engaged	Dramatically increase	Intentionally select	Primarily concerned	Specially arranged
Actively involved	Easily get	Intricately interwoven	Primarily focus	Specially designed
Actively take part	Easily observed	Jointly construct	Primarily used	Specially trained
Actively used	Easily prevail	Largely focus	Primarily influenced	Spontaneously interact
Accurately pronounced	Easily understand	Likely to occur	Primarily seek,	Statistically analyzed
Adequately provide	Effectively use	Mainly aim	Qualitatively analyzed	Strictly follow
Adversely affect	Explicitly concerned	Mainly intend	Quite different	Strongly advise
Apparently need	Explicitly state	Mainly require	Randomly assign	Strongly agree
Better understand	Extensively studied	Mainly used	Randomly choose	Strongly disagree
Briefly inform	Financially support	Meaningfully engage	Randomly selected	Systematically coded
Briefly stated	Fluently speak	Merely focus	Rapidly gain	Traditionally held
Carefully listen	Frankly speak	Mostly accepted	Rapidly increase	Universally used
Coherently explain	Frequently used	Mostly allocated	Really want	Usually expected
Clearly reveal	Fully function	Mostly complain	Recently recognized	Usually intend
Clearly seen	Further argue	Mostly disagree	Regularly update	Well used
Clearly show	Further highlight	Mostly used	Regularly work	Widely accepted
Clearly state	Generally focus	Naturally believed	Repeatedly point	Widely acknowledge
Closely associate	Gradually become	Naturally occur	Repeatedly comment	Widely agreed
Chronologically presented	Gradually develop	Necessarily mean	Seriously high	Widely discussed
Commonly accepted	Gradually transform	Negatively affect	Severely criticize	Widely studied
Commonly known	Greatly developed	Noticeably grow	Significantly change	Widely used
Considerably influence	Harshly criticize	Obviously affect	Significantly correlate	Willingly participate
Consistently occur	Highly developed	Originally administer	Significantly outnumber	
Correctly spelled	Highly value	Poorly applied	Simply defined	
Deliberately adapt	Increasingly become	Poorly equipped	Simply note	
Digitally recorded	Increasingly embedded	Positively affect	Simply put	

Up to now, the number of tokens and types, and the most repeated pivot words that NWs and NNWs used were mentioned under different subtitles. The Table 4.20. provides a summary of what has been given so far.

Table 4.20

The categorical comparisons of pivot words that NWs and NNWs used.

	Native Writers			Non-native Writers			
Variables	*Types*	*Tokens*	*Pivot Words*	*Types*	*Tokens*	*Pivot Words*	*Common pivot words*
Verb+Noun	400	861	Make Provide Give Gain Attention	193	354	Provide Make Gain Give Role	Provide Make Gain Give
Verb+Adj./Adv.	370	673	Become Seem Make Feel Remain	154	244	Become Feel Use Make Seem	Become Seem Make Feel
Noun+Verb	100	234	Study Show Table Data Article	76	159	Study Results Show Data Reveal	Study Show Data
Noun+Noun	220	406	Lack Learning Knowledge Research Vocabulary	147	246	Lack Language Skill Anxiety Learning	Lack Learning
Adjective+Noun	1066	2452	Important Difference Significant Effect Key	551	1144	Effect Significant Important Role Positive	Important Significant Effect
Adverb+Adjective	349	684	Highly Relatively Particularly Quite Clearly	120	222	Quite Highly Relatively High Important	Highly Relatively Quite
Adverb+Verb	313	555	Use Widely Clearly Explicitly Fully	187	274	Use Affect Widely Actively Mostly	Use Widely

4.4.2. Lexical hedging

By being further divided into two as Native writer findings and Non-native writer findings, the present title provided information on the most frequent lexical hedges that NWs and NNWs included in their scientific texts. Furthermore, NWs' and NNWs' general lexical hedge tendencies were evidenced through authentic examples collected from the corpora.

4.4.1.1. Native writer findings

EPISTEMIC MODALS

The qualitative investigation of NW corpus indicates that NWs are more prone to using *may* than any other epistemic modals while downtoning their statements. Below you see the authentic examples collected from NW corpus.

*(131) ... speakers of more distant languages **can** be expected to encounter fewer difficulties...*

*(132) ... Future work that explores these qualitative differences **could** substantially further our understanding of ...*

*(133) ... dominant norms for expert writers **may** not be a dominant norm for second language student writers...*

*(134) ... local languages **might** work together as languages of education...*

*(135) The target **should** be the acquisition of a multilingual model.*

*(135) 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 an indirectness situation in their statements. The Figure 4.7. shows the epistemic modals acting as hedges in frequency order. As seen, while the least frequent modal hedge is *would* by NWs, the most frequently used *is may*.

May Can Might Could Should Would

Figure 4.7. Epistemic Modals acting as Hedges Used in NW Sample Data (Top-down Order).

VERBAL HEDGES

Point of view distancing is an important rhetorical hedging style done generally by verbs acting as hedges. In a similar vein, the qualitative analyses reveal that it is widely used by NWs. The evidential verbs (look, seem) appear to be rather common in the NW sample data. The Table 4.21. provides verbal hedges that were found in NW sample data.

Table 4.21.

Verbs acting as Hedges Used in NW Sample 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	35. Tend to
9. Claim	18. Hope	27. Presume	

Apparent from the Table that NWs used 35 verbal hedges in order to make the language more tentative for a number of reasons. It seems that point of view distancing is generally realised by combination of a pronoun and a verbal hedge. The authentic examples from NW data prove the strong correlation between pronouns and verbal hedges.

> *(136) In this light, we **advise** literacy educators and assessment designers to consider...*

> *(137) ... they may **assume** that AAL patterns are representative of poor English grammar.*

> *(138) ... post hoc analysis did **reveal** the intriguing case of...*

> *(139) We **hope** that the concept of mid-frequency vocabulary will lead...*

> *(140) we **attempt** to illustrate some of the benefits of researching 'with' children.*

Another momentousness that the qualitative analyses detected is the frequency of verbal hedges. The verbs "suggest, tend to, reveal, appear, and show" are among those which are used more frequently than other verbs in NW corpus. In other words, NWs

have a tendency of using these verbs while creating a point of view distancing in the claims they make.

ADJECTIVAL HEDGES

Adjectives acting as hedging devices appear not to be as common as verbal hedges in NW corpus (see Table 4.22.). Yet, they take up a considerable place in NWs' academic writings. The Table 4.22. shows the adjectival hedges that NWs included in their scientific production.

Table 4.22.

Adjectives acting as Hedges Used in NW Sample 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		

As seen from the Table 4.22., 11 different adjectives functioning as hedges were included in the NW sample data. On the other hand, the qualitative analyses showed that NWs are prone to using adjectives such as possible, potential, partial more than others as seen in the authentic examples:

*(141) One **possible** source of the problem is the underdeveloped area of...*

*(142) It then discusses the **potential** exploitation of the learner corpus for pedagogic purposes.*

*(143) The present data suggest a **partial** advantage for...*

*(144) ... some more **subtle** distinctions might be useful for some applications.*

*(145) Although there was a **slight** increase in the use of...*

As seen from the authentic examples, NWs prefer to use a tentative language by using adjective in front of word that may represent the writer's assertiveness. For example, instead to say *one source*, they prefer to use the adjective *possible* so as not to be seen too certain. Shortly, adjectival hedges are preferred, though mildly usage.

ADVERBIAL HEDGES

Qualitative analyses showed that discourse understatements (fairly, rather, slightly) are commonly used as adverbial hedges. You may find adverbs functioning as hedges obtained from NW corpus particularly built up for the present study in the Table 4.23.

Table 4.23.

Adverbs acting as Hedges Used in NW Sample 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

As seen from the Table, 36 different adverbial hedges were used by NWs. In the previous titles, NWs' superiority over NNWs in terms of lexical diversity was made clear. Similarly, it seems that NWs widely used the adverbial hedges in order to balance their stance between commitment and detachment. The manually conducted scanning revealed that NWs have more inclination to using some adverbs than other adverbs. For example, adverbs like a*bout, generally, seemingly, mostly, largely,* and *usually* were more common across NW sample data. Some authentic examples regarding the use of these adverbs were provided in the following:

*(146) It was **generally** easy for them to check concordance structures...*

*(147) Given the **seemingly** infrequent transfer here, these are pertinent questions*

*(148)... obtained in previous research, which **mostly** found moderate relationships.*

*(149) Southern White English is a localized dialect of American English which is **largely** constrained to...*

*(150) ... 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:

*(151) Ellipsis is a central feature of all trades talk, **partly** because of...*

*(152) Much of the **hardly** voluminous research in this area has centred on...*

*(153) he sample contained an **almost** equal balance of...*

QUANTIFIERS / DETERMINERS

It seems that while quantifiers function in a way of vagueness and ambiguity (several, much, more, etc), determiners function as diminutives (little, few etc.). In other words, beside diminutive words, vague and ambiguous words acting as hedges are collected in the NW sample data. And it was observed thanks to the quantitative analyses that they are used on a wide scale. The Table 4.24. shows the quantifiers and the determiners that were included in NW corpus.

Table 4.24.

Quantifiers and Determiners acting as Hedges Used in NW Sample 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 use by NWs in order to create a vagueness or ambiguity in the statement for some reasons. Below you may find some examples including vague, and ambiguous quantifiers /determiners.

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

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

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

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

(157) **_A few_** studies controlled for background knowledge.

(158) Since weaker learners experience difficulty and **_little_** success in lexical inferencing.

NOUNS

Qualitatively analyzed findings indicate that hedging the statements through nouns is not common in NW academic writing when compared other lexical indirectness structures. Yet, as observed in the Table 4.25., there are a number of nouns which were used as hedging devices in NWs' scientific writings.

Table 4.25.

Nouns acting as Hedges Used in NW Sample Data.

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

12 nouns acting as hedging device were noted down. Among all these nouns, some of them such as "majority, assumption, suggestion, and tendency" were preferred more frequently in comparison to other nouns shown in the Table. A few real examples extracted from NW corpus are shown below:

(159) ...it currently represents the 'marked' case for the **_majority_** of US schools.

(160) An **_assumption_** could be made that candidates with a Bachelors degree would...

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

(162)... students had a **_tendency_** to engage in self-assessment...

(163) One **_attempt_** to answer this question is provided in...

4.4.2.2. Non-native writer findings

EPISTEMIC MODALS

The qualitative analyses proved that NNWs are more prone to using *can* instead of *may*, which is in contrast to NWs who preferred *may* to *can*. As seen in the Figure 4.8., five modals were employed by NNWs in the process of academic writing. The findings also proved that NNWs did not use *would* with a purpose of indirectness device as NWs did.

Figure 4.8. Epistemic Modals acting as Hedges Used in NNW Sample Data (Top-down Order).

Some authentic examples were picked up in NNW corpus, which are shown below:

*(164) The strong influence of gender norms on our behaviour **can** be explained by...*

*(165) ...but they **may** cause serious unhealthy gender stereotypes.*

*(166) ...the reasons for this **might** stem from (a) Turkey being geographically far away from...*

*(167) These simple steps **could** promise a lot to EFL learners...*

*(168) Preparing a child for the future life **should** mean to give him command of himself...*

Another point learnt by qualitative analyses is that modals, *can* and *may,* built up the total epistemic modal usage almost three out of four, which may be seen as a determination in using *can* and *may* by NNWs on an outperforming scale over other epistemic modals.

VERBAL HEDGES

As aforementioned, verbs acting as hedges function as a point of view distancing generally together with pronouns. As it was in NW sample data, NNW corpus analyses showed a similar result. NNWs usually used verbal hedges with a purpose of view distancing. Another observed point is the extensive use of evidential verbs. The Table 4.26. shows the verbs that NNWs included in their scientific writings.

Table 4.26.

Verbs acting as Hedges Used in NNW Sample Data.

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

The Table obviously shows that 38 different verbal hedges were used by NNWs. Despite numerical closeness, there are some marginal differences in terms of verb using. For example, the qualitative findings showed that 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 are *allege, hypothesize, imply,* and *recommend*. Some authentic examples including these specific verbs were stated below:

*(169) They **hypothesize** that in acquiring an L2, the learner adopts...*

*(170)... performance differences in this study **imply** the basic language skills...*

*(171) Definitions and description of types of misbehaviours provided by the participants **appear** to be similar to...*

*(172) A great number of the teachers **believe** that...*

*(173) The results **indicate** that the purpose of examinations is...*

*(174) The same result was **found** by Chacon*

More, the qualitative findings proved that NNWs have a marginal tendency toward using some verbal hedges more than others, which are *appear, believe, find, indicate, offer, reveal, seem,* and *show*. Frequency difference among verbs is not unique to NNWs, which is a situation observed also in NW corpus.

ADJECTIVAL HEDGES

The qualitative analyses show that NNWs do 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, it seems that the word of *possible* is the most preferred adjectival hedges by NNWs. Some authentic examples collected from NNW corpus are given below:

(175) There appears to be three **possible** reasons for...

(176)... it is **possible** for teachers to face with...

(177) In order to minimise the **potential** threat of an FTA, participants mitigate...

(178)... it is quiet **probable** to mispronounce a vocabulary item.

(179)...language exchange communities increased the level of English exposure, which is **in tune with** Krashen's comprehensible input.

ADVERBIAL HEDGES

The qualitative findings revealed that adverbial hedges, which are used as downtoners, take up a significant place in NNW academic writing. Also, the findings put forward that 37 different adverbs were included in NNW data, which is a robust number when the numbers of all other categories were taken into consideration. It was also observed that NNWs have a tendency of using discourse understatements in their scientific writings. You may see the Table 4.27. that includes adverbial hedges that NNWs used. In pursuit of the Table, authentic examples follow.

Table 4.27.

Adverbs acting as Hedges Used in NNW Sample Data.

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

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

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

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

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

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

Finding also indicated that some adverbs are much more used than other adverbs. To provide information more specifically, it appears that discourse understatements slightly outperform downtoners in adverbial hedge category.

QUANTIFIERS / DETERMINERS

Whether for vagueness and ambiguity or for a diminutive function, quantifiers and determiners are important factors in hedging the authorial involvement. In spite of the fact that there are not many quantifiers or determiners functioning as hedging devices, the existed ones are extensively used in academic writing. The list in the Table 4.28. shows quantifiers and determiners acting as hedging devices in NNW corpus.

Table 4.28.

List of Quantifiers/ Determiners in NNW corpus.

1. (a) few	4. Many	7. To some extent
2. Fewer	5. Most	8. Several
3. (a) Little	6. Much	9. Some

As seen in the list, NNWs have nine quantifiers/determiners functioning as hedges. Another finding is NNWs' high tendency in using *many, most,* and *some* more than any other quantifiers/determiners. Below, you may find some real examples picked up in NNW data.

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

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

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

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

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

The qualitative findings also showed that NNWs tend to use diminutives and vague or ambiguous lexical quantifiers/determiners.

NOUNS

NNW sample data were qualitatively analysed and based on the findings, ten nouns acting as hedges were discovered. Chronologically ordered, they are *assumption, belief, inclination, majority, possibility, predictable, presupposition, recommendation, suggestion,* and *tendency*. But, it is hard to talk about a plethora of noun hedges in NNW corpus. Some authentic examples regarding the use of nouns are stated below:

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

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

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

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

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

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

Furthermore, the findings revealed that NNWs are prone to robustly using the nouns as *suggestion, majority,* and *tendency* when compared to other nouns, which the epitomes were shown.

4.4.3. Lexical boosting

As it was with the previous title, the present title was further separated into two as *Native writer findings* and *Non-native writer findings* so that the findings could be displayed in a more clear way. Besides, each title was enriched with authentic examples, which enable us a better insight regarding real usages of the lexical boosters in their contexts.

4.4.3.1. Native writer findings

MODALS

Together with directives such as *must* and *need to*, the qualitative analyses showed that five modal boosters (including auxiliary verb *will*) were used throughout the NW corpus, which chronologically are *has/have to, must, need to, cannot,* and *will*. Some authentic examples regarding the use of these modal boosters were given below:

*(196)... individual speakers **have to** use their L1.*

*(197) ... English **must** reflect the cultural norms of its speakers.*

*(198) ...we **need to** consider adopting a more social perspective of SLA.*

*(199) This **will** provide the child with a sense of identity...*

*(200) ... the primary frame of instruction **cannot** thrive or survive without attention...*

Also discovered that NWs are prone to using diminutives more than other auxiliary verbs such as *will* and *has/have to*. Despite small number of modal lexical diversity, modal boosters widely spread across NWs' articles.

VERBAL BOOSTERS

According to the findings, twelve boosting verbs were employed by NWs, which are provided in the Table 4.29.

Table 4.29.

List of Verbal Boosters in NW corpus.

1.	Ascertain	7.	Essentialise
2.	Boost	8.	Evidence
3.	Confirm	9.	Oversimplify
4.	Corroborate	10.	Prove
5.	Demonstrate	11.	Testify
6.	Ensure	12.	Verify

The qualitative examination of NW sample data showed that NWs do not have a marginal tendency in using verbal boosters in their academic writings. Also, it was seen that NWs inclined to use the verbal boosters of *confirm, prove,* and *verify* more than other verbal boosters. The examples demonstrate how NWs committed to their statements through verbal boosters.

*(201) Data from the case studies,....., **confirm** the impression that...*

*(202) ...the approach that served them well in the classroom will **prove** equally effective in the office.*

*(203) From these figures we can **verify** that...*

*(204) English language proficiency assessments are used to **ensure** that...*

*(205) The writers here appear to **confirm**...*

The examples of 203 and 205 revealed an authorial stance of commitment together with detachment. In other words, it was resulted in that NWs use verbal boosters together with a hedging device, though it should be regarded as assertive statements.

ADJECTIVAL BOOSTERS

The analyses indicated that NWs have an inclination to use adjectival boosters on a large scale. As provided in the Table 4.30., 71 adjectival boosters were noted down, which is a testament to high lexical variety.

Table 4.30.

List of Adjectival Boosters in NW corpus.

1. Absolute	19. Evident	37. Interesting	55. Rigorous
2. Apparent	20. Exact	38. Key	56. Robust
3. Axiomatic	21. Excellent	39. Large	57. Salient
4. Clear	22. Exclusive	40. Marginal	58. Serious
5. Comprehensive	23. Exhaustive	41. Notable	59. Significant
6. Considerable	24. Explicit	42. Noteworthy	60. Staggering
7. Consistent	25. Extensive	43. Noticeable	61. Stark
8. Constant	26. Full	44. Obligatory	62. Straightforward
9. Critical	27. Fundamental	45. Obvious	63. Striking
10. Crucial	28. Great	46. Only	64. Strong
11. Distinctive	29. High	47. Overwhelming	65. Substantial
12. Dominant	30. Important	48. Persistent	66. Unbridgeable
13. Dramatic	31. Impressive	49. Pioneering	67. Unclear
14. Effective	32. In depth	50. Powerful	68. Unexpected
15. Eminent	33. Indispensible	51. Prominent	69. Unique
16. Enormous	34. Inevitable	52. Predominant	70. Vast
17. Entire	35. Intense	53. Radical	71. Vital
18. Essential	36. Intensive	54. Remarkable	

Among all adjectives given in the Table, a few were more robustly used. For instance, the adjectives *important, apparent, clear, obvious,* and *significant* are used more frequently when compared to other. You may find authentic usages:

*(206) An error on a page is an **_important_** opportunity in acquisition.*

*(207) It became **_apparent_** that...*

*(208) It is **_clear_** that...*

*(209) There is the **_obvious_** potential here...*

*(210) IELTS preparation courses play a **_significant_** role at...*

ADVERBIAL BOOSTERS

A relatively bigger list was provided in the Table 4.31. As understood from the list, NWs have a large adverbial boosters active lexicon. In other words, the high number of adverbial boosters in NW sample data proves their superiority of lexical diversity in the course of academic writing. 91 lexical boosters in the category of adverbs built up the largest lexical booster list among all other boosting categories.

Table 4.31.

List of Adverbial Boosters in NW corpus.

1. Absolutely	24. Entirely	47. Interestingly	70. Seriously
2. Always	25. Essentially	48. Invariably	71. Severely
3. Apparently	26. Evidently	49. Largely	72. Significantly
4. Astonishingly	27. Exactly	50. Marginally	73. Starkly
5. Broadly	28. Exclusively	51. Markedly	74. Strictly
6. Certainly	29. Explicitly	52. Never	75. Strikingly
7. Clearly	30. Extensively	53. No	76. Strongly
8. Completely	31. Extremely	54. No doubt	77. Substantially
9. Comprehensively	32. Firmly	55. Noticeably	78. Surely
10. Considerably	33. Fully	56. Obviously	79. Surprisingly
11. Consistently	34. Fundamentally	57. Ostensibly	80. Thoroughly
12. Constantly	35. Greatly	58. Outstandingly	81. Totally
13. Critically	36. Grossly	59. Overly	82. Transparently
14. Crucially	37. Ground-breaking	60. Overwhelmingly	83. Ultimately
15. Deeply	38. Heavily	61. Perfectly	84. Undoubtedly
16. Definitely	39. Highly	62. Persistently	85. Unexpectedly
17. Demonstrably	40. Immediately	63. Pertinently	86. Uniquely
18. Directly	41. Importantly	64. Predominantly	87. Vastly
19. Distinctively	42. Impossible	65. Prominently	88. Very
20. Doubtlessly	43. Incredibly	66. Really	89. Vigorously
21. Dramatically	44. Inevitably	67. Remarkably	90. Wholly
22. Easily	45. Intensely	68. Rigidly	91. Widely
23. Effectively	46. Intensively	69. Rigorously	

Similar to other qualitative findings, the use of some adverbs outperformed the use of other adverbs. The mostly preferred adverbs acting as boosters are *always, apparently, explicitly, obviously, strikingly,* and *significantly*. With respect to real uses, a few examples were shown as follow:

*(211) ...the research questions are **always** conceived from adult perspectives...*

*(212) ...teachers **apparently** err on the side of caution.*

*(213) ... it **significantly** differs from that...*

*(214) This contrasts **strikingly** with the European Union...*

*(215) **Obviously**, there are huge differences in the...*

QUANTIFIERS / DETERMINERS

The qualitative examinations revealed that NWs used a large number of quantifiers/determiners in order to show their commitment to their stance. As seen in the following Table, 40 quantifiers/determiners were included in scientific texts by NWs, which is a considerable number in terms of lexical variety.

Table 4.32.

List of Quantifiers/Determiners acting as Boosters in NW corpus.

1. A considerable amount of	15. A very high level of	29. Relatively large
2. A good deal of	16. A very large number of	30. So
3. A great deal of	17. All	31. So many
4. A huge amount of	18. An established body of	32. So much
5. A huge number of	19. Copious amount of	33. To a great extent
6. A large amount of	20. Enormous amount	34. Too
7. A large body of	21. Enormous size	35. Too great
8. A large majority	22. Extensive amount of	36. Too many
9. A large number of	23. Great majority	37. Too much
10. A lot of	24. Greatest number of	38. Unmanageable amount of
11. A sizeable body of	25. Much greater	39. Vast majority
12. A substantial amount of	26. Much more	40. Very much
13. A substantial number of	27. None of	
14. A vast number of	28. Quite	

It was explicitly understood that some quantifiers/determiners were utilized more than others as it was the case in other boosting categories. Mostly used quantifiers /determiners by NWs were shown in the examples collected from the corpus:

*(216) The first three articles in this issue **all** address gender aspects of leadership.*

*(217) I have learnt **a huge amount of** new words.*

*(218)... this would **very much** depend on...*

*(219) The **extensive amount of** testing already used in this study...*

*(220) ... it gives **quite a lot of** room for creativity...*

NOUNS

The qualitative analyses revealed a very small number of noun boosters. *Evidence* and *key* are two nouns that NWs used in their academic writings for the purpose of commitment. In other words, low rate of noun booster usage is common in NW academic writing. It was also understood that the words *key* and *evidence* are used on an equal scale throughout the articles. Some examples obtained in NW sample data are provided below:

*(221) Dictionaries are a **key** lexical resource*

*(222) There is **evidence** that...*

*(223) The **evidence** from the statistics indicated that...*

4.4.3.2. Non-native writer findings

MODALS

Five modals (including auxiliary verb *will*) were detected in NNW corpus, which functioned as strong boosters. These are *cannot, has/have to, must, need to,* and *will*. NNWs used "cannot" with an aim of mentioning the impossibility in the statement. The examples give deeper insight into understanding the authentic uses of modal boosters.

*(224) Without motivation, student achievement **cannot** be ensured.*

*(225) the students **have to** pass an exam in order to be...*

*(226) ... the equality of regression slopes also **must** be tested...*

*(227) Student teachers **need to** be taught that...*

*(228) ... that **will** provide others to give...*

Also, the qualitative finding discovered that the modals --*need to* and *must* were comparatively used more by NNWs.

VERBAL BOOSTERS

The results indicated that eleven verbal boosters were used by NNWs in their academic articles. The results showed that NNWs generally used *confirm, demonstrate,* and *prove* in order to boost their statements and increase their authorial stance over the

claim or on seemingly general utterances. You may find the list of verbal boosters and authentic samples from NNW corpus in the Table 4.33.

Table 4.33.

List of Verbal Boosters in NNW corpus.

1. Affirm	7. Flourish
2. Assure	8. Make sure
3. Attest	9. Prove
4. Confirm	10. Validate
5. Demonstrate	11. Verify
6. Ensure	

*(229) The results, once more, **prove** that there is a...*

*(230) ...the system of rules **ensures** that...*

*(231) ... the researchers **confirmed** this assumption...*

*(232)... which **demonstrated** that there was no significant difference.*

*(233) Many studies **affirm** that...*

It was understood from the qualitative analyses that NNWs largely use verbal boosters in order to persuade the reader to the truthiness of their claims, or to the importance and necessity their articles.

ADJECTIVAL BOOSTERS

As it was in NW corpus, NNWs use a large number of adjectival boosters in order to commit to their statements or to create a persuasiveness in the readers. The analyses proved the high inclinations of NNWs on using adjectives while boosting their statements in the process of writing. Below you may find some authentic examples:

*(234) It is also **apparent** that the rates of...*

*(235) She makes her point very **clear**...*

*(236) ... contexts have a **crucial** impact on...*

(237)... gender may be considered an effective *factor on...*

*(238) Another **important** point is that...*

*(239)... one of the **key** factors in foreign language teaching is...*

As seen from the examples, NNWs used the adjectives *apparent, clear, crucial, effective, important* and, *key* much more than any other adjectives while making assertive or persuasive statements. You may find the adjectival boosters that NNWs included in their academic texts in the Table 4.34.

Table 4.34.

List of Adjectival Boosters in NNW corpus.

1. Apparent	20. Extensive	39. Irreplaceable	58. Strict
2. Attractive	21. Drastic	40. Key	59. Striking
3. Clear	22. Full	41. Mandatory	60. Strong
4. Clear-cut	23. Fundamental	42. Major	61. Substantial
5. Complete	24. Great	43. Necessary	62. Surprising
6. Comprehensive	25. Groundbreaking	44. Notable	63. Thorough
7. Considerable	26. High	45. Noteworthy	64. Tremendous
8. Consistent	27. Huge	46. Noticeable	65. Unavoidable
9. Constant	28. Important	47. Obvious	66. Unclear
10. Convincing	29. Impossible	48. Overwhelming	67. Undeniable
11. Critical	30. In depth	49. Perfect	68. Unique
12. Crucial	31. Indispensible	50. Powerful	69. Unprecedented
13. Dominant	32. Indisputably	51. Prominent	70. Urgent
14. Effective	33. Ineffective	52. Promising	71. Valuable
15. Eminent	34. Inescapable	53. Remarkable	72. Very
16. Essential	35. Inevitable	54. Rigorous	73. Vital
17. Evident	36. Intensive	55. Salient	
18. Excessive	37. Influential	56. Serious	
19. Exigent	38. Invaluable	57. Significant	

According to the Table, 73 different adjectival boosters were found in NNW corpus, which is an expansive Figure when compared to other adjectives in the category.

ADVERBIAL BOOSTERS

The findings proved that adverbial boosters are rather important for NNWs in order to make a boosting statement or commitment to their say. Also detected that NNWs are prone to using some adverbial boosters marginally more than others, which are *all, always, completely, effectively, obviously,* and *significantly*. Regarding the most

frequently used adverbial boosters, some authentic examples were picked up in NNW corpus as shown following the Table that includes NNWs' adverbial boosters.

Table 4.35.

List of Adverbial Boosters in NNW corpus.

1. Absolutely	20. Dramatically	39. Incredibly	58. Radically
2. All	21. Drastically	40. Inevitably	59. Really
3. Always	22. Easily	41. Immediately	60. Rigorously
4. Apparently	23. Effectively	42. Importantly	61. Seriously
5. Certainly	24. Entirely	43. Ineffectively	62. Severely
6. Clearly	25. Essentially	44. Intensely	63. Significantly
7. Completely	26. Excessively	45. Intensively	64. Somewhat
8. Confidently	27. Exclusively	46. Invariably	65. Strictly
9. Considerably	28. Explicitly	47. Marvellously	66. Strongly
10. Consistently	29. Extensively	48. Miraculously	67. Thoroughly
11. Conspicuously	30. Extremely	49. Necessary	68. Totally
12. Constantly	31. Gravely	50. Never	69. Truly
13. Continually	32. Greatly	51. No doubt	70. Undoubtedly
14. Continuously	33. Fairly	52. Noteworthy	71. Unquestionably
15. Critically	34. Fervently	53. Noticeably	72. Urgently
16. Deeply	35. Fully	54. Obviously	73. Very
17. Definitely	36. Fundamentally	55. Ostensibly	74. Widely
18. Directly	37. Heavily	56. Overly	
19. Doubtless	38. Highly	57. Persistently	

As shown in the Table 4.35., 74 different adverbial boosters were included by NNWs in their academic writings. To give further detail, NNWs' high number of adverbial booster diversity evidences their common inclination to use *adverbs*. Some authentic examples were provided:

> *(239) ...**all** learners go through the same learning stages.*
>
> *(240) The ELP was **always** integrated with the daily work of...*
>
> *(241)... what I am **completely** against is...*
>
> *(242) Another step in **effectively** teaching students how to read materials...*
>
> *(243)... such attitudes differed across genders **significantly**.*
>
> *(244) ... school culture **obviously** affect the literacy...*

QUANTIFIERS / DETERMINERS

Findings proved a high tendency of using quantifiers/determiners in NNW academic writing. As seen in the Table 4.36., 28 different quantifiers/determiners were used by NNWs with a purpose of increasing their authorial stance.

Table 4.36.

List of Quantifiers/Determiners acting as boosters in NNW corpus.

1. A good deal	11. A lot of	21. Quite
2. A great body	12. Far more	22. To a great extent
3. A great deal	13. Far too	23. To a large extent
4. A great number	14. Lots of	24. Too
5. A high number	15. Much more	25. Too often
6. A huge amount	16. No	26. Too many
7. A large number	17. None of	27. Too much
8. A vast amount	18. So	28. Vast majority
9. A wide body	19. So many	
10. All	20. So much	

In spite of rich lexical booster diversity shown in the Table, a large numbers of them were used only a few times. However, there are quantifiers/boosters that show a high frequency in NNW corpus, such as *a lot of, quite,* and *all*. For a better insight, you may see the authentic examples below:

*(245) It is **quite** necessary for the participants to...*

*(246) Such clauses occur **quite** frequently in...*

*(247) **All** these studies put forward the remarkable influence of...*

*(248) ... **a lot of** experience has been done.*

NOUNS

The qualitative analyses compiled the noun boosters and the findings were provided in the Table 4.37.:

Table 4.37.

List of Quantifiers/Determiners acting as boosters in NNW corpus.

1. Consistency	6. Impossibility
2. Demonstration	7. Key
3. Evidence	8. Must
4. Fact	9. Necessity
5. Icebreaker	10. Proof

Interestingly, the qualitative findings proved that NNWs used noun boosters more than NWs, if the case is lexical variety. Also, it was seen that noun boosters are used through *–that clause phrases*. Below you see the examples collected in the NNW corpus.

*(249) ...formal in-service training is a **must** for...*

*(250) It is an **icebreaker** of faulty pronunciation.*

*(251) These studies have provided compelling **evidence**.*

CHAPTER V

DISCUSSIONS & CONCLUSIONS

5.1. Introduction

Basically, this study aimed to explore the differences and similarities between native (Anglophonic) and non-native (Turkish) writers of English from three scholarly vital components, which are lexical collocations, lexical hedges, and lexical boosters. Through comparison and contrast, it is expected to provide a deeper insight into understanding how and to what extent native and non-native writers use the three lexical components. The present study also sought to create lists of lexical collocations, hedges, and boosters for non-native writers of English. Seen in this light, the present chapter provides the broad thrust of the arguments that this study investigated. To able to navigate through the details easily, the chapter was broken down into chunks with further sub-headings. This chapter is of utmost importance for a reliable conclusion because this study needs to be fleshed out with previous studies that corroborate or contradict the findings acquired in the present dissertation.

5.2. Discussions of Lexical Collocations

A.1. Both overall and separately, to what extent do NWs and NNWs use lexical collocations in their RAs?

The present study evidenced that Anglophonic writers, who were named as NWs throughout the dissertation, were marginally ahead of non-native writers in overall degree which is a conclusion in line with Sung's (2003) dissertation. In order to provide detailed information for each sub-category, a similar finding was gained; in all categories but *noun+verb*, Anglophonic writers outperformed Turkish writers in terms of collocation frequency. Interestingly, Turkish writers had a meaningfully higher frequency than Anglophonic writers only in this category. Typical instances of *noun+verb* include: "Table shows, the results indicate, the study reveals etc." Alsulayyi (2015) attributed the reason of collocation infrequency in non-native productions to the hardness of collocations and lack of English proficiency. In tune with Alsulayyi, Fan

(2009) accused non-native writers' inadequacy of grammar and lexis competence. The conclusions that Alsulayyi and Fan drew were not surprising because a strong positive correlation between collocation competence and L2 proficiency had been formerly claimed by Quiang (2002). Nevertheless, when looked from a broader view, the reason may not be directly linked with the lack of English proficiency because qualitative analyses do not prove a noteworthy incompetence in non-native writers' English proficiency; in contrast, it demonstrates that rather sophisticated grammar structures are evident in droves in their sample data. This proof contradicts those who attributed the matter of using fewer collocations to incompetent English proficiency. One of the possible reasons is that they studied with ESL students whose English proficiency is expectedly much lower than writers who scientifically write in ELT. More specifically, the data in this study were not collected from ESL students but from ELT writers whose education backgrounds are much equipped.

Durrant and Schmitt's study (2010) conducted on Turkish writers of English indicated that any shortfall in non-native writers' collocational knowledge is mainly due to inadequate input regarding associations between words. This explanation with reference to the proficiency of collocational knowledge appears to be partly sensible. In a similar vein, Martelli (2006) constructed a base regarding why non-native writers use collocations incorrectly and why they generally have written texts with lack of some collocation types. According to Martelli, the reason pertains to the familiarity with collocations. In other words, a non-native writer uses collocations only s/he has encountered them beforehand. Otherwise, s/he is sure to construct miscollocations. As it was in Martelli's conclusion, Kennedy (2003) strongly supports that collocation familiarity must be increased either explicitly or implicitly through readings because consciously or unconsciously meeting a collocation in a source written by a native writer of English should possibly raise the prospect of using the same collocation by a non-native writers, which is the most powerful strength of the present study because a list of collocations by Anglophonic writers was created (see appendix. 1). Therefore, one possible reason about that why non-native writers underuse collocations in their academic writings in both overall and sub-categories when compared to Anglophonic writers may be due to their unfamiliarity with collocations.

Turning back to categorical comparison, the only category that non-native writers had superiority over Anglophonic is *noun+verb*. The question of why all categories robustly displayed NW superiority while the category of *noun+verb* did not can be answered by focussing deeper into the case of writing styles. In other words, a possible reason regarding categorical difference may stem from the degree of difficulty. The literature indicates that some lexical word combinations show variance depending on writer type. While some writers find some word combinations difficult, others may not; and this is a crucial situation in determining whether to use a collocation or not. In that sense, Li (2005) found that EFL / ESL writers experienced difficulty in constructing *adjective+preposition* collocations, which ended up with less collocations by the writer in that category; meanwhile categories like *verb+to infinitive* and *verb+object* were easier, and thus, they were more frequently used. That idea was corroborated by Källkvist (1998) who claimed that high-utility (most frequently used) verbs are easier to make a collocation by Swedish learners of English. Another reason regarding *noun+verb* non-native writers' superiority may be explained with L1 interference. As it is in all language components, L1 influence may greatly affect writers' collocational competence as stated by Sadeghi (2009). Although sentence structure in English and Turkish is different, *noun+verb* syntactical orders seem in agreement with Turkish. The Turkish translations of English sentences such as *the Table shows, the results indicate, the study reveals etc.* can be directly translated into Turkish sentence without making and subject-verb-object change.

If we address to Anglophonic writers' superiority, lack of awareness on the importance of collocations for academic writing may be one of the primary reasons for non-native writers. The study that was conducted by Kim (2009) on non-native writers (Korean) of English revealed that they were not aware of the importance of collocations in scholarly-based writing. Also, this point was emphasized by Sonbul and Schmitt (2013), and even the issue of collocational awareness was taken further by proposing explicit and implicit instructions on how to acquire collocations.

A.2. What are the most frequent pivot words in lexical collocations that NWs and NNWs use in their RAs?

It is expected that the answer to this question may substantially further our understanding and insight of the nature of collocations. The qualitative findings provided both similarities and differences between Anglophonic and Turkish writers. Yet, what a similarity or difference means from the perspective of linguistic? For a better insight, the Table 4.20. already provided the most frequent pivot words by Anglophonic and Turkish writers. Concisely, the results revealed great similarities between Anglophonic and Turkish writers. In the category of *verb+noun*, four out of five most frequent pivot words tallied with one another, which are *provide, make, gain,* and *give*. The fifth word for Anglophonic writers was *attention* while it was *role* for Turkish writers. The interesting finding is that although the word *role* was not a frequently used pivot word for Anglophonic writers, it was majorly used by NNWs. The second category that lexically united Anglophonic and Turkish writers at a broad resemblance was *verb+adj./adv.* In this category, the word *remain* for Anglophonic writers and the word *use* for Turkish writers were their distinctive choices while four words were common: *become, seem, make,* and *feel*.

Not all categories of lexical collocations bore such widely common similarities in terms of the most frequent pivot words. For example, the categories of *noun+noun* and *adverb+verb* had only two common words; *lack* and *learning* for *noun+noun*, and *use* and *widely* for *adverb+verb*. To put differently, both Anglophonic and Turkish writers used mostly the words *lack* and *learning* in *noun+noun* category, and *use* and *widely* in *adverb+verb* category.

On the top of answering the research question A.2., what is to be noted down meticulously is the issue of systematic association between vocabulary choice and individual differences. The qualitative analyses showed that Turkish writers used common words, and thus, they showed similarity while the word choice for Anglophonic writers also bore resemblance in their own sample data. "Whether similar word use by Anglophonic and Turkish writers is no better than chance" seems a question locked in a stab. In this connection, Yarkoni (2010) aimed to show that the similarity in word use has a strong bond with personality. Shortly, apart from moderate similarities between Anglophonic and Turkish writers from the aspect of word use,

Anglophonic and Turkish writers used words only distinctive to their group. For instance, while Turkish writers used the words *effective* and *effectively* more often, Anglophonic writers did not show such an inclination. This is a ramification that was not expected or addressed in the present study.

A.3. *Both overall and separately, is there any statistically significant difference between NWs and NNWs in terms of lexical collocation frequency and collocation diversity?*

The quantitative results apparently proved a meaningfully significant difference between Anglophonic and Turkish writers in terms of all collocation sub-categories as well as in total. As aforementioned, Anglophonic writers used strikingly more collocations than their Turkish equivalents but for *noun+verb*, which is the only category where Turkish writers used more collocations comparatively. The test results evidenced that the frequency differences are statistically significant, and thus must be taken seriously.

That non-native language is in deficiency of collocations is not an unwarranted assert thanks to the present study. The quantitative findings demonstrated that Turkish writers, more often than not, include high frequency collocations; i.e., strong collocations while Anglophonic writers have a large lexicon allowing them to collocate easily even with infrequent words. Therefore, the present study evidenced the claims made by Durrant and Schmitt (2009) that native writers of English tend to use more low-frequency word combinations than non-native writers of English. Seen in this light, it seems that Turkish writers avoid using weak collocations assumingly with a fear of seeming odd or incompetent. In this sense, Durrant and Schmitt (2009) confirmed lack of formulaic expressions and collocation use by non-native speakers of English, and attributed the matter to the failure of using less frequent collocations and relying heavily on frequent collocations. Therefore, the objective of this study is not only to investigate whether Anglophonic and Turkish writers used more collocations, but also to find a practicable solution with respect to what should be done immediately to be able to get around the problem. It is stated by myriad studies that the richer the learner has a collocation lexicon, the higher precision, accuracy, coherence and authenticity is sure in his/her speech (Martyńska, 2004). Instead of simply detecting similarities and differences between Anglophonic and Turkish writers, the present study furthers

understanding of that why collocations are salient for academic writing and what should be done in order to get collocation knowledge which is seen as a show-off to be native-like.

Another crucial outcome of the present study pertains to lexical diversity. The results approved a statistically significant difference in all categories but for *noun+noun*. There is not a statistically meaningful difference between Anglophonic and Turkish writers in terms of *noun+noun* collocations, though Turkish writers were those with higher number of *noun+noun* collocation. The qualitative findings are evident that while Turkish writers generally clustered on similar words, Anglophonic writers had a much wider use of lexicon. That Anglophonic writers have a larger lexicon when compared to Turkish writers is not a surprising result at all. This provides a greater leeway to Anglophonic writers in expressing their claims or advocacies, which is without doubt a privilege in academic writing. Conventional writing style of Turkish writers may also be a non-negligible reason to determine why they have lexically narrow academic texts. Turkish writers usually avoid using an elaborative language with a fear of seeming convoluted. Therefore, they use simply high-level (frequent) words, which occasions repeated vocabularies and lexical infertility. Durrant and Schmitt (2009) mentioned that this is a situation revealing the degree of conservatism in a written production; i.e., writers appear to over-rely on structures or forms which are common in the language. However, lexical diversity has been regarded as an illuminative predictor of writers' language competence and an essential indicator of their writing quality (Guoxing, 2009). Accordingly, it is understood from the linguistic literature that writers award great importance to their lexical diversity which is a robust indicator for sounding native-like. This issue had previously been investigated heavily in psycholinguistics and applied linguistics (Dewaele & Pavlenko, 2003).

This study has found a relation between collocation and lexical diversity. That statistical results put forward statistically marginal differences between Anglophonic writers and Turkish writers in terms of collocation number and collocation lexical diversity is not absolutely a randomly obtained result. On the contrary, a few studies establish a link between collocation knowledge and lexical diversity (cf. Laufer, 2003; Nizonkiza, 2011), and further, they attach a link with effective academic writings (e.g. Hyland , 2008; Durrant, 2009).

Qualitative findings showed that Turkish writers generally construct their sentences in bottom-up direction (creating sentence word by word) instead of using fixed statements, ready-made chunks, or other formulaic expressions such as collocations. Even in phraseological sentence constructions, high-frequency collocations become the primary use. Lorenz (1999) stressed that "attestedly viable, recurrent collocations (p. 181)" wield voluminous influence on non-native writers. Although it would be too assertive to relate this tendency and avoidance to a certain reason, insufficient awareness may be excused for. That being the case, this study asserts that authentic native-like phraseological competence can be achieved only through drawing attention to the significance of collocations in academic productions, which is one of the foremost purposes in the present study.

5.3. Discussions of Lexical Hedges and Boosters

B.1. *Both overall and separately, to what extent do NWs and NNWs use lexical hedges in their RAs?*

C.1. *Both overall and separately, to what extent do NWs and NNWs use lexical boosters in their RAs?*

The results demonstrated that Anglophonic writers used more hedges and boosters than Turkish writers overall although the range was comparatively smaller in boosters. The findings showed similarity regarding the categorical differences. In all hedging and boosting categories, Anglophonic writers were ahead in frequency. Concisely, no superiority was discovered either in overall frequency or separate categorical frequencies in terms of using hedging and boosting devices in Turkish writers' sample data.

In spite of the importance of hedges and boosters for academic writing, their low frequency in Turkish writers' academic texts may stem from a number of reasons. 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 showed that non-native writers used a great many of hedging devices, which is an evidence that difficulties in using hedging may not be the actual matter, if so, the total figures in hedge numbers in non-native writer data would be much lower. On the other hand,

Turkish writers were those from the field of ELT, which eliminates any reasoning with respect to lack of English proficiency.

The other possible reason is about lack of awareness regarding the importance of hedging and boosting. 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 (Hinkel, 2004) when compared to native writers. However, a few studies apparently indicated that writers with discourse knowledge of vocabularies are expected to compose more efficient and persuasive texts than those who lack discoursal use competence of vocabularies (e.g. Benton, Corkill, Sharp, & Khramtsova, 1995; DeGroff, 1987; Langer, 1984; McCutchen, 1986; Olinghouse & Graham, 2009). Shortly the primary reason appears to be a matter of awareness.

Akbaş (2012) found a consistent result with the present study. According to his results, Anglophonic writers have a higher average of hedges and boosters while writing dissertation abstracts when compared to Turkish writers. By changing his data source, the author (Akbas, 2014) compared Anglophonic writers' and Turkish writers' discussion sections but this time he found that Turkish writers have a higher mean frequency of hedges and boosted sentences than Anglophonic writers, which bellied with the present study. The reason for differentiation could be explained by taking the source of data into consideration. He found two contrastive differences when the data source altered; from abstract to discussion, which means that writers' authorial stances may show differences across sections of an academic writing. Keeping that in mind, in her cross-sectional study, Vassileva (2001) compared articles of Bulgarian English and Native English. She found frequency differences across introduction, discussion, and conclusion in terms of using hedging and boosting devices. Unlike Vassileva's research, the present study did not make a distinction between sections or investigate only a section of a whole academic text, but analyzed an academic article fully. That is why, the present results could show variance with other studies that dissected articles. Studies that investigated the whole article without dividing the sections had similar results with the present study. For example, two studies that aimed to detect authorial commitment (Yağız & Demir, 2015b) and detachment (Yağız & Demir, 2014), compared Turkish writers and Anglophonic writers through a small scale data, and revealed findings in

tune with the present study. In a similar vein, in contrast to the findings of the present study, Uysal (2014) 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 conventional writing styles of conference abstract. In a conference abstract the writer may assuredly use a tentative language because the full study has not been conducted yet.

To boil down the answer, Turkish writers of English use less lexical hedges and intensifiers when compared to their Anglophonic counterparts. The reason regarding the differences seemingly arouses from lack of interest or awareness toward the powerful effect of hedges and boosters on readers in academic discourse. That is why the present study underscored the importance of rhetorical devices for scholarly-based discussions, and accordingly suggested implications concerning necessary, meticulous, and balanced use of commitment and detachment devices for a persuasive authorial stance.

B.2. *What is the most frequent lexical hedge category that NWs and NNWs use in their RAs? Are there any differences between the two groups in terms of lexical diversity of hedges?*
C.2. *What is the most frequent lexical booster category that NWs and NNWs use in their RAs? Are there any differences between the two groups in terms of lexical diversity of boosters?*

The quantitative findings proved that 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 (see Figure 4.8.). 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 parlance, qualitative analyses determined that 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 it was substantiated that Anglophonic writers had robustly higher hedge and booster diversities than Turkish writers. Besides, statistical analyses corroborated that the difference between Anglophonic writers and Turkish writers is 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 expectedly means that Anglophonic writers have a larger lexical repertoire. The situation is slightly different in booster variety. Quantitative analyses yielded no statistically significant difference in only one category of boosters: *modal*. Although there seems a great paucity of studies gauging native and non-native speakers' lexical richness in academic discourse, non-native writers' lower lexical variety is not a new occasion. The relationship between lexical richness and oral performance (Lu, 2012); lexical richness and writing proficiency (Azodi, 2014); lexical richness and reading performance (Mehdi & Salahshoor, 2014), and many other related studies have been carried out. However, an outright investigation regarding lexical diversity in using hedges and booster from the aspect of writers' nativeness seems almost non-existent in the literature.

B.3. Both overall and separately, is there any statistically significant difference between NWs and NNWs in terms of using lexical hedges?
C.3. Both overall and separately, is there any statistically significant difference between NWs and NNWs in terms of using lexical boosters?

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, overall, no statistically significant difference was detected. 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. However, the present study bellied with his results when total hedging device frequency was the case. He found that Turkish and Anglophonic writers used almost similar number of hedging devices while the present study showed that there is a large frequency difference even if the difference is not statistically significant. The

contradictive result may stem in that he only used PC-based software programme "WordSmith" and did not check whether the hedging devices that the programme found were in the function of hedging or not. A small scale study (Ozdemir & Longo, 2014) that compared Turkish students' and American students' thesis abstracts also demonstrated statistically non-significant result in terms of total hedge usage.

In terms of boosters, the results did not prove any statistically meaningful difference between Anglophonic and Turkish writers except for the category of adverbs. In other words, the only statistically significant difference was observed in the category of adverbs. The results can be construed that Anglophonic and Turkish writers statistically have a similar inclination towards intensifier use in academic writing. A similar study (Kim & Suh, 2014) measured boosting devices in two corpora, the first of which is Korean speakers of English and the latter is native speakers of English. They found a similar result in that there is no statistically significant difference between two corpora in the category of adverbials. However, not all the results were in agreement with the results of the present study, one of which was Akbas' (2012) results. As aforementioned, he only looked at dissertation abstract, and it is known that there may be discourse differences in cross-sectional studies. Therefore, only examining the abstract does not mean that the results can be generalized to all other sections of data.

5.4. Pedagogical Implications

5.4.1. Suggestions for collocations

A.4. What do the literature and research findings suggest about the use of lexical collocation in academic discourse?

The literature clearly establishes a strong link of collocation knowledge with divergent language skills such as lexical diversity (Laufer, 2003); lexical competence (Nizonkiza, 2011); academic writing proficiency (Hyland , 2008; Durrant, 2009); speaking proficiency (Shin & Nation, 2007); reading proficiency (Tekingül, 2012); and grammar and vocabulary teaching (Kennedy, 1990). It is understood that collocation had a wide sphere of effect, though the present study focussed on the relationship of collocation competence with academic writing.

The direct relation between collocation proficiency and nativeness is almost certain according to the linguistic literature stated in the second Chapter. Seen in this

light, it can assuredly be stated that knowledge of collocation brings invaluable benefits particularly to non-native writers who desperately aspire for nativeness in target language. Additionally, we know that "errors in the use of word collocations surely add to the foreign flavour in the learner's speech and writing and along with his faulty pronunciation they are the strongest markers of 'an accent (Korosadowicz-Struzynska, 1980, p. 115)." That is why a miscollocation may lead an academic paper to end up with misery in academe.

Even if the acquisition of collocation competence is seen as an intuitive process occurring in mind without any special effort to restore memory on purpose, it was proven that conscious acquisition of collocation knowledge is possible even at the very late stages of life (cf. Approach, 1993; Wray, 2002). Below, you may find some pedagogical implications for the acquisition of collocations which gained ascendance in academia in recent years:

1) Lewis (1997) suggested collocation exercises that may contribute to increase learners' awareness of collocations. Particularly two exercises may help substantially: matching and de-lexicalised verbs exercises. Matching exercises, the source of which was borrowed from native sentences, could be of utmost benefit. For de-lexicalised verbs exercises, a list of verbs can be noted down (take, make, have, do etc), and their collocate words can be written (a laugh, a smoke, an experience, a trip etc.).

2) Ready-made collocation lists will be of paramount importance for those who desire for expanding productive collocation skills. This study seems to be the first attempt to construct a list of collocations that native writers of English included in their academic texts. The list presented in the appendix one kindly submitted to the service for novice writers or those who are already in the need of enhancing their native-fluency.

3) To avoid producing inappropriate or odd collocations, some exercises should be done to improve collocational behaviour of synonyms; that is, which synonym associates well with a collocate word. For example two synonyms verbs *join* and *attend* are used with different collocates; *join a club, join the army, attend a class, attend a meeting etc*. Therefore, what should be kept in mind is that even

exact synonyms have different collocate words, and they cannot be used interchangeably (Liu, 2000).

4) Translation is also an effective practice for the acquisition of collocations. However, the point that should be cared painstakingly is to do translations as "collocation to collocation" (Newmark, 1988, p. 69) or "chunk-for-chunk" (Lewis, 1997, p.62) instead of word-for-word translation.

5) Using a collocation dictionary may help improve collocation competence subconsciously. Almost all prominent publishers have collocation dictionaries at different proficiency levels. Also, online-collocation dictionaries may be helpful by way of calling the required information speedier than conventional hardcopy dictionaries.

6) Some on-going computational approaches that are able to detect collocation errors can be of paramount importance for particularly novice-writers. Those who are in such a need should stay tuned in up-to-date literature (cf. Futagi, Deane, Chodorow, & Tetreault, 2008; Chang, Chang, Chen, & Liou, 2008).

7) Collocation attainment can be supported via digital library works (Wu, Franken, & Witten, 2010). A digital library has distinctive advantages when compared to other conventional initiatives. Firstly, it provides a great amount of authentic sources to access free of charge. Secondly, they are fast and accessible all over the world with no or partial restriction. The studies in the linguistic literature proved that collocations are intuitive, yet they can be learned sizeably through extensive reading (Webb, Newton, & Chang, 2013). One thing to mind is that reading types such as skimming or scanning are likely to cause overlooking word combinations, therefore critical reading is required not to miss good collocation epitomes.

8) It is indicated that any failure in non-native writers' competence of collocation is due to inadequate input (Durrant & Schmitt, 2010). Seen in this light, data-driven studies and web-sites (e.g. BNC or COCA) may greatly help non-native writers with endless authentic examples and well-ordered data submission features. Data-driven learning is claimed to be robustly effective in acquisition of native-like collocation knowledge (Koosha & Jafarpour, 2006). When

compared to digital libraries, corpora websites are easier to use and get what you look for. Furthermore, data-driven learning works can be accessed easily on various databases.

9) One challenge for non-native writer of English is L1 interference. In order not to be seen foreign or odd to the audience, the writer should check his/her newly used word combinations. What is understood from the literature is that it is highly possible the writer may associate words similar in his/her native language. Therefore, to get rid of L1 negative transfer, the newly constructed word combinations should be checked through collocation dictionaries or authentic samples in corpora whether they are in agreement with native-use.

10) Different from conventional suggestions, Cowie and Howarth (1999) considered that the collocational competence is not likely to develop through massive exposure to or repeated use of collocations. For them, familiarization with collocations or possible collocational competence is supposed to come about through writers' gradual growing perception of idiosyncratic properties.

5.4.2. Suggestions for hedging and boosting

B.4. What do the literature and research findings suggest about the use of lexical hedges in academic discourse?

C.4. What do the literature and research findings suggest about the use of lexical boosters in academic discourse?

Referring to the literature review mentioned in the present study, we know that discourse devices are lexical conventions that embellish academic texts, and the ability to use discourse devices are commensurate with language proficiency. Among all discourse devices, particularly the two come into prominence: hedges and booster.

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 over the claim (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). Hedging is reported to be critical for academic writings

(Hyland, 1998b), and the question with respect to the criticality of hedging devices for academic texts was investigated by researchers who are in the vanguard in the field. The answer for Hyland (1998b) was the power of "speculative means"; 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 because a complete precision of scientific statements cannot be invariably possible (Grabe & Kaplan, 1997). Besides, it is claimed that readers who were exposed to a written document including hedges developed more positive attitudes than those exposed to texts containing less hedges (cf. Crismore & Vande Kopple, 1997). There appears to be no doubt about the significance of hedging in academic text. In spite of that, Hinkel (2004) reports that non-native writers are not as concerned as native writers in employing hedging devices in their papers. The suggestions under this subheading aimed to gather attention on the importance of hedging devices for a better academic writing.

In addition, it is understood from the literature that non-native writers usually avoid being assertive in their scientific texts, which leads to invisibility of authorial stance over the claims made. The shadowy position of a writer in a scientific text may be deemed as a sign of writer's indeterminacy over the discussed issue, and thus, the lowering credibility may prompt lack of confidence or doubt in readers. This inescapable conclusion is, out of doubt, undesirable by the writer whose primary aim is to persuade the readers on his/her claim. Below you may find a few suggestions on how and why to use hedges and boosters in scholarly writing:

1) What must be kept carefully in mind at the very outset is the necessity of equilibrium between overuse and underuse of boosters in academic writings. Whereas underuse of boosters in a scientific text may cause some credibility problems, too many of them, particularly on *high level claims* may lead to much more trouble for the writer. To speak profoundly, it is a truth that boosters in a text represent for the writer's self-confidence with respect to the plausibility of his/her statements (Holmes, 1982); however, over self-confidence does not raise the prospect of credibility; to the contrary, it creates a suspicion in readers' minds about factuality and trueness of the claim made.

2) As it was with boosters, the correct balanced use of hedging devices throughout the writing is invariably a must for all kinds of academic writers. Beyond the benefits of hedging to the writers, what is mainstream among readers is that excessive use of hedging devices in a text may create an adverse effect on the credibility of the claim, hence, on the writer (Sanjaya, 2013).

3) The hedging modals 'could' or 'can', which are the most frequently occurring types of negative mitigation strategies, can be used together (Yeşilbursa, 2011). 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).

4) ''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).

5) Since they may over-rely on their L1 rhetorical style, 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). It is possible to have such an intercultural effect of L1 rhetorical style on L2 rhetoric, which is called "hybridization phenomenon" --a mixing of local and Anglophone rhetorical practice-- firstly introduced by Perez-LIantada (2010). The writer should fully be aware of that hidden influence in order not to constitute blurring rhetorical practices in academic texts.

6) The present study compiled a list of hedges (appendix 2.) and boosters (appendix 3.) with a purpose of presenting a well-ordered word list that may be used widely in non-native writers' academic productions. The ready-made lists of hedging and boosting devices may be of great importance in order to facilitate writers' effort to find the correct rhetorical word without leaving a stark mark.

7) The writers should be certain about whether they present observed facts or make interpretation, which is a situation that wholly determines the degree of authorial involvement. If it is the matter of presenting the observed facts, some weight through intensifiers listed in *appendix 3* may be delivered in order to create a moderate commitment over the audience, which is expected to call the persuasion power into being.

8) The genre, discipline, text type, and the issue may require different authorial involvement. For instance, while some fields of academy necessarily call for a strong authorial commitment, the same authorial commitment or certainty in other disciplines may be deadly for the writer, who possibly will receive disclaimer responses, counter/response letters, harsh criticism etc. 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 a similar vein, an academic text crammed with intensifiers and amplifiers on an abstract issue or in pure science will not get any kudos from the readers because the concept of truth is rather tangible in soft science (For some exceptions see Peacock, 2006; Behnam & Mirzapour, 2012; Khedri, Ebrahimi, & Heng, 2013). Briefly, your rhetorical style cannot completely be independent from the genre, discipline, text type, and the issue.

9) Apparently, the matter of culture is also a significant factor in determining a writer's rhetorical style. In this connection, Yang (2013) drew a conclusion that Chinese-authored academic texts tend to be more precise with full of participation to their statements. However, the same issue committed by a writer from a different culture background may end itself up with a production highly tentative (cf. Uysal, 2012). Therefore, the culture should not be a determinant

factor of rhetoric in scholarly writing; on the contrary, it should be intuitively known that academe has its own unique and distinctive style of discourse, which is a mutual equilibrium between being assertive and tentative. Therefore, the present study suggests that each writer should adopt stylistic and rhetoric appropriateness by getting rid of his/her own unobtrusive cultural impacts.

10) Indicated in the second Chapter, 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: Hamamcı, 2007: Salek, 2014: Yağız & Demir, 2014: Biook & Mohseni, 2014).

11) The present study suggested some lexical hedges and boosters in the appendices two and three. On the top of hedging and boosting at lexical level, phraseological structures such as embedded clauses, if clauses, or clauses with dummy subject *it* may be helpful.

12) The dictionary that a writer refers to should give profound detail with authentic usage of words, particularly for diminutives and discourse understatements which seem with no clear-cut boundary of usage for non-native writers.

5.5. Strengths and Further Research

The present study specifically investigated three language components -- collocations, hedges, and boosters-- from lexical aspects. However, apart from lexical attributes, these language components have other subcategories crucial for academic writing. For example, Hill (1999) divided collocations into four as unique, strong, medium-strength, and weak. Besides, grammatical collocations also merit to be investigated, which take up a substantial place in academic writing. Similarly, in addition to lexical hedges and boosters, a phraseological investigation of hedges and boosters including *if clauses, embedded clauses,* and *grammatical structures* would be of utmost importance in order to reveal phrase-based differences between Anglophonic and Turkish writers. In short, future research could additionally contribute to the present findings by using a different taxonomy instead of lexical categorization.

The corpus for the present study consisted of a great amount of article compilation, but all from only one discipline: ELT. However, we know that rhetorical devices change depending on the genre they have been used. Therefore, surely, it would be interesting and helpful to retain information on how hedges and boosters are used in other disciplines. Similarly, the collocations, at a large scale, show similarities in usage, which shows that they are not independent from the effect of the discipline. It is almost certain that different genre investigations would provide much more different lexical collocations than those categorized in the present study if the data were composed of a discipline other than ELT.

Another suggestion pertains to the investigation of different discourses other than academic texts. The literature proves that the vast majority of the studies with respect to collocations, hedges, and boosters constructed their corpus from academic writings or student writing practices. However, it may be useful and informative to know about how and to what extent other sources --in which rhetorical devices are indispensible such as media, politics, etc.-- use metadiscourse features.

The present study did not make a distinction in gender while building up its corpus. In fact, gender seems an important factor in determining the use of discourses, therefore it would be somewhat interesting to discover whether there are any differences in utilizing hedges existed between female and male authors; and whether it can be

assuredly claimed that females possibly use more indirect, tentative, and vague language when compared to males or vice-versa.

Another caveat is the probable influence of culture over academic writing. The present study provided some inspiration regarding the relation between metadiscourse and culture, which points to a substantial change depending on culture. Despite the fact that some studies made much of this issue, (e.g. Leyla & Atai, 2008, Yang, 2013, Uysal, 2014), they largely had a data composed of academic writing. However, the issue of culture is not small enough to fit into academic writing; therefore a better insight concerning culture specific details may be investigated through data brought together by way of triangulation.

Some allegations regarding the visibility of metadiscourse devices by audience were questioned (cf. Hyland, 2000b). Whether metadiscouse devices like hedging and boosting have borne any robust significance to the readers is a question waiting to be answered with carefully designed qualitative studies. Although a few researchers (Crismore & Vande Kopple, 1997, 1997b) attempted for a valid answer to whether metadicourse devices were de facto cared or just ignored by readers, cognitive and affective influence of metadiscourse devices on readers in academic reading remain to be investigated.

As last but not the least, the present mixed-method study provided three lists of lexical collocations, hedges, and boosters particularly useful for non-native writers. Further research may enrich the lists by investigating particularly the disciplines other than ELT.

5.6. Conclusion

The present study primarily aimed to reveal the differences and similarities between Anglophonic writers and Turkish writers of English in terms of using lexical collocations, lexical hedges, and lexical boosters. The findings evidenced that Anglophonic writers used much more collocations in their academic texts, and the differences at sub-categorical levels were largely statistically significant. It seems that some odd word combinations in non-native writer sample data detract academic writing from being native-like. Therefore, the present study strongly suggests non-native writers to be more aware of native word combinations since the literature establishes a certain link between collocation competence and native-fluency. In this connection, a crucial

list (appendix 1) compiled from Anglophonic writer corpus was constructed to be a reference point in non-native writers' prospective research.

In addition, the results proved Anglophonic writers' numerical superiority over Turkish writers in terms of two rhetorical devices: hedging and boosting. The less use of hedging and boosting appears to be in connection to insufficient awareness regarding the paramount importance. In that sense, studies aiming to evoke awareness to the importance of rhetorical devices in academic texts are of paramount significance. In a similar vein, the present study aimed at increasing the visibility of rhetorical devices in particular for non-native writers. Accordingly, lists of hedges and boosters compiled from varied dictionaries were provided in the appendices two and three. It is highly expected that non-native writers could get advantage of the lists in the course of composing a scientific text.

Another significant finding which may be a reference point for further research is that Anglophonic writers are prone to writing their academic texts with a higher number of vocabularies when compared to Turkish writers. The results evidenced a statistically significant difference between Anglophonic and Turkish writers in terms of lexical variety.

The final note-worthy events in the present study are the suggestions that were mooted for further research and the pedagogical implications about how to use collocations, hedges, and boosters in academic writings. As they are in other studies, the pedagogical implications are expected to gain favour for particularly non-native writer.

REFERENCES

Abdi, R. (2012). Evidence Marking in Research Articles: An Investigation of its Sources and Relative Reliability through Quality Markers. *The Journal of Teaching Language Skills*, 3(4):1-26.

Aboulalaei, M. H. (2013). Exploring the Differences Between Iranian Women and Men Academic Article Writings According to Mood and Modality. *Middle-East Journal of Scientific Research*, 18(5):668-674, doi:10.5829/idosi.mejsr.2013.18.5.11757.

Adams-Smith, D. E. (1984). Medical discourse: aspects of author's comment. *The ESP Journal*, 3,25-36.

Aghbar, A. A. (1990). *Fixed expressions in written texts: Implications for assessing writing sophistication.* Pennsylvania: English Association of Pennsylvania State System Universities.

Akbas, E. (2012). Exploring Metadiscourse in Master's Dissertation Abstracts: Cultural and Linguistic Variations across Postgraduate Writers. *International Journal of Applied Linguistics & English Literature*, 1(1): 11-26, doi:10.7575/ijalel.v.1n.1p.12.

Akbas, E. (2014). Are They Discussing in the Same Way? Interactional Metadiscourse in Turkish Writers' Texts. In A. Łyda, & K. Warchał, *Occupying Niches: Interculturality, Cross-culturality and Aculturality in Academic Research* (pp. 119-133). Switzerland: Springer International Publishing.

Algı, S. (2012). *Hedges and boosters in L1 and L2 argumentative paragraphs: Implications for teaching L2 academic writing (master's thesis).* Ankara, Turkey: Middle East Technical University.

Al-Harahsheh, A. M. (2014). Language and Gender Differences in Jordanian Spoken Arabic: A Sociolinguistics Perspective. *Theory and Practice in Language Studies*, 4(5):872-882, doi:10.4304/tpls.4.5.872-882.

Allerton, D. J. (1984). Three (or four) levels of word co-occurrence restriction. *Lingua*, 63:17-40.

Allison, D., Cooley, L., Lewkowicz, J., & Nunan, D. (1998). Dissertation writing in action: The development of a dissertation writing support program for ESL graduate research students. *English for Specific Purposes*, 17(2), 199-217.

Alsulayyi, M. N. (2015). The Use of Grammatical Collocations by Advanced Saudi EFL Learners in the UK and KSA. *International Journal of English Linguistics*, 5(1); 32-43, doi:10.5539/ijel.v5n1p32.

Alward, A., Mooi, C., & Bidin, S. (2012). Hedges and Boosters in the Yemeni EFL Undergraduates' Persuasive Essay: An Empirical Study. *The Internet Journal of Language, Culture and Society*, 34:1-12.

Al-Zahrani, M. S. (1998). *Knowledge of English lexical collocations among male.* Pennsylvania: Unpublished doctoral dissertation, Indiana University of Pennsylvania.

Ansarin, A., & Bathaie, M. (2011). Hedging as an Index of Gender Realization in Research Articles in Applied Linguistics. *Iranian Journal of Applied Language Studies*, 3(2): 85-108.

Approach, T. L. (1993). *Lewis, Michael.* Hove: Language Teaching Publications.

Argentina, M. V. (2013). Some Tips For Teaching L2 Academic Writing. *Humanising Language Teaching*, 15.

Atkinson, D. (1999). *Scientific Discourse in Sociohistorical Context.* Mahwah, NJ: Lawrence Erlbaum.

Aull, L., & Lancester, Z. (2014). Linguistic Markers of Stance in Early and Advanced Academic Writing: A Corpus-based Comparison. *Written Communication*, 31(2):151-183, doi: 10.1177/0741088314527055.

Austin, J. (1962). *How to do things with words.* Oxford: Oxford University Press.

Azodi, N. (2014). Measuring the Lexical Richness of Productive Vocabulary in Iranian EFL University Students' Writing Performance. *Theory and practice in language studies*, 4(9): 1837-1849, doi: 10.4304/tpls.4.9.1837-1849.

Bahns, J. (1993). Lexical collocations: a contrastive view. *ELT Journal*, 47(1): 56-63.

Bahns, J., & Eldaw, M. (1993). Should we teach EFL students collocations? *System*, 21(1):104-114.

Bailey, S. (2006). *Academic Writing (2nd edition).* Oxon: Routledge.

Bailey, S. (2011). *Academic Writing (3rd edition).* Oxon: Routledge.

Baratta, A. (2006). *A developmental analysis of features of academic writing.* Manchester: The University of Manshester.

Bardovi-Harlig, K. (2001). Evaluating the empirical evidence: grounds for instruction in pragmatics? In K. Rose, & G. Kasper, *Pragmatics in Language Teaching* (pp. 13–32). Cambridge: Cambridge University Press.

Bayyurt, Y. (2010). Author positioning in academic writing. In S. Zyngier, & V. Viana, *Avaliaçoes e perspectivas: mapeando os estudos empiricos na area deHumanas (Appraisals and perspectives: mapping empirical studies in the Humanities)* (pp. 163-184). Rio de Janeiro: Federal University of Rio de Janeiro.

Becker, J. D. (1975). The Phrasal Lexicon. In B. Nash-Webber, & R. Schank, *Theoretical Issues in Natural Language Processing.* Cambridge: Bolt, Beranek and Newman Inc.

Behnam, B., & Mirzapour, F. (2012). A Comparative Study of Intensity Markers in Engineering and Applied Linguistics. *English Language Teaching*, 5(7): 158-163.

Behnam, B., Naeimi, A., & Darvishzade, A. (2012). A Comparative Genre Analysis of Hedging Expressions in Research Articles: Is Fuzziness Forever Wicked? *English Language and Literature Studies*, 2(2):20-38, http://dx.doi.org/10.5539/ells.v2n2p20.

Benson, M. (1985). Collocations and Idioms. In R. Ilson, *Dictionaries, lexicography, and language learning* (pp. 61-68). Oxford: Pergamon.

Benson, M., Benson, E., & Ilson, R. (1986). *The BBI combinatory dictionary o f English: A guide to word combinations.* Philadelphia, PA: John Benjamins.

Bentivogli, L., & Pianta, E. (2003). Detecting Hidden Multiwords in Bilingual Dictionaries. *the Tenth EURALEX International Congress, EURALEX 2002* (pp. 785-793). Copenhagen, Denmark: August 13-17, 2002 .

Benton, S., Corkill, A., Sharp, J. D., & Khramtsova, I. (1995). Knowledge, interest, and narrative writing. *Journal of Educational Psychology*, 87, 66–79.

Beuchot, A., & Bullen, M. (2007). Interaction and interpersonality in online discussion forums. *Distance Education*, 26(1):67-87, doi: 10.1080/01587910500081285.

Bhatia, V. K. (1993). *Analyzing Genre: Language in professional settings.* London: Longman.

Biook, B., & Mohseni, F. (2014). The Use of Hedginh in Research Articles. *Journal of Current Research in Science*, 2(4):474-477.

Birkbeck, U. o. (2013, 09 11). *Study Skills Support.* Retrieved from www.bbk.ac.uk: http://www.bbk.ac.uk/mybirkbeck/get-ahead-stay-ahead/writing/Hedging-in-AcademicWriting.doc/view

Boers, F., Eyckmans, J., Kappel, J., Stengers, H., & Demecheleer, M. (2006). Formulaic sequences and perceived oral proficiency: putting a Lexical Approach to the test. *Language Teaching Research*, 10(3): 245-261.

Bondi, M. (2008). Emphatics in academic discourse Integrating corpus and discourse tools. *Corpora and discourse: The challenges of different settings*, 31-54.

Bonet, J. (2002). La calidad de la traducción según sus objetivos. In J. Palacios, & M. T. Morán, *Texto, terminología y traducción* (pp. 169–188). Salamanca: Ediciones Almar.

Bonk, W. J. (2000). Testing ESL Learners' Knowledge of Collocations. *ERIC no: 442 309*, 1-69.

Brown, D. F. (1974). Advanced vocabulary teaching: the problem of collocation. *RECL Journal*, 5:1-11.

Brown, P., & Levinson, S. (1978). Universals in language usage: Politeness phenomena. In E. Goody, *Questions and politeness* (pp. 56-310). Cambridge: Cambridge University Press.

Brown, P., & Levinson, S. (1987). *Politeness: Some universals in language usage.* Cambridge: Cambridge University Press.

Brutt-Griffler, J., & Samimy, K. K. (2001). Transcending the nativeness paradigm. *World Englishes*, 99-106.

Buitkienė, J. (2008). Hedging in Newspaper Discourse. *žmogus ir žodis*, 3(10):11-15.

Bunton, D. (1999). The use of higher level metatext in PhD theses. *English for Specific Purposes*, 18, 41-56.

Cambridge, P. S. (2008). *Cambridge Advance Learners' Dictionary (Third Edition).* Cambridge: Cambridge University Press.

Carter, R. (2003). Key concept in ELT. *Language Awareness*, 64-65.

Castro, M. B., Martinez, S. M., & Faber, P. (2014). Verb collocations and phraseology in EcoLexicon. *DE GRUYTER MOUTON*, 5:57-94.

Chang, Y., Chang, J., Chen, H., & Liou, H. (2008). An automatic collocation writing assistant for Taiwanese EFL learners: A case of corpus-based NLP technology. *Computer Assisted Language Learning*, 21(3): 283-299, doi: 10.1080/09588220802090337.

Chen, Z. (2012). Expression of Epistemic Stance in EFL Chinese University Students' Writings. *English Language Teaching*, 5(10):173-179, doi:10.5539/elt.v5n10p173.

Clemen, G. (2002). Hedging in English Journalistic Economics. *Proceedings of the University of Vaasa Reports* (pp. 41-47). Vaasa, Finland: Selvityksiä Ja Raportteja.

Cole, F. (1988). Content analysis: process and application. *Clinical Nurse Specialist*, 2(1):53-57.

Collins, P. S. (2006). *Compact Dictionary Dictionary and Thesarous (fourth edition).* Glasgow: Harper Collins.

Conklin, K., & Schmitt, N. (2008). Formulaic Sequences: Are They Processed More Quickly than Nonformulaic Language by Native and Nonnative Speakers? *Applied Linguistics*, 29(1):72–89, doi:10.1093/applin/amm022.

Connor, U. (2004). Intercultural rhetoric research: Beyond texts. *Journal of English for Academic Purposes*, 3:291-304, doi:10.1016/j.jeap.2004.07.003.

Connor, U. M., & Moreno, A. I. (2005). Tertium comparationis: A vital component in contrastive rhetoric research. In B. P., D. Atkinson, W. G. Eggington, W. Grabe, & V. Ramanthan, *Directions in Applied Linguistics: Essays in Honor of Robert* (pp. 153-164). Clevedon: Multilingual Matters.

Cook, H. M. (1990). An indexical account of the Japanese sentence-final particle no. *Discourse Processes*, 13(4), 401-439.

Cowie, A. (1994). Phraseology. In R. Asher, *The Encyclopedia of Language and Linguistics* (pp. 3168-3171). New York: Pergamon Press.

Cowie, A. P., & Howarth, P. (1999). Phraseological competence and Written Proficiency. In G. M. Blue, & R. Mitchell, *Language and Education: Papers from the Annual Meeting of the British Association for Applied Linguistics* (pp. 80-). Southampton : The University of Southampton.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-238.

Crismore, A. (1989). *Talking with Readers: Metadiscourse as Rhetorical Act.* New York: Peter Lang.

Crismore, A., & Farnsworth, R. (1989). Mr. Darwin and his readers: exploring interpersonal metadiscourse as a dimension of ethos. *Rhetoric Review*, 8(1): 91-112.

Crismore, A., & Farnsworth, R. (1990). Metadiscourse in popular and professional science discourse. In W. Nash, *The Writing Scholar: Studies in Academic Discourse* (pp. 118-36). Newbury Park, CA: Sage.

Crismore, A., & Vande Kopple, W. J. (1997). The effects of hedges and gender on the attitudes of readers in the United States toward material in a science textbook. In A. Duszak, *Culture and Styles of Academic Discourse* (pp. 223-247). Berlin: Mouton de Gruyter.

Crismore, A., & Vande Kopple, W. J. (1997b). Hedges and readers: Effects on attitudes and learning. *Research in Text Theory* , 83-114.

Crompton, P. (1997). Hedging in academic writing: some theoretical problems. *English for Specific Purposes*, 16(4), 271-287.

Cruise, D. A. (1986). *Lexical semantics.* Cambridge: Cambridge University Press.

Cruise, D. A. (1990). Language, meaning and sense: Semantics. In N. E. (Ed.), *An encyclopedia o f language* (pp. 139-172). New York: Routledge.

Dafouz-Milne, E. (2008). The pragmatic role of textual and interpersonal metadiscourse markers in the construction and attainment of persuasion: A cross-linguistic study of newspaper discourse. *Journal of Pragmatics*, 40, 95-113.

Dahl, T. (2008). Contributing to the academic conversation: A study of new knowledge claims in economics and linguistics. *Journal of Pragmatics*, 40:1184-1201.

Darvishi, S. (2011). The Investigation of Collocational Errors in University Students' Writing Majoring in English. *International Conference on Education, Research and Innovation* (pp. 52-56). Singapore: IACSIT Press.

Dechert, H. W., & Lennon, P. (1989). Collocational blends of advanced second language learners: A preliminary analysis. In W. Olesky, *Contrastive pragmatics* (pp. 131-168). Amsterdam: John Benjamins.

DeGroff, L. (1987). The influence of prior knowledge on writing, conferencing, and revising. *Elementary School Journal*, 88, 105–118.

Dewaele, J., & Pavlenko, A. (2003). Productivity and lexical diversity in native and non-native speech: A study of cross-cultural effects. In V. Cook, *Effects of the Second Language on the First* (pp. 120-141). Clevedon: Cromwell Press Ltd.

Dixon, J. A., & Foster, D. H. (1997). Gender and Hedging: From Sex Differences to Situated Practice. *Journal of Psycholinguistics Research*, 26(1): 89-107, doi:10.1023/A:1025064205478.

Dontcheva-Navratilova, O. (2009). "Words Must Be Our Force": Exploring Modality Markers in Political Speeches. *Topics in Linguistics*, 4:16-22.

Doyuran. (2009). Conciliation of Knowledge through Hedging in Turkish Scientific Articles. *Journal of Faculty of Letters*, 26(1):85-99.

Durrant, P. (2009). Investigating the viability of a collocation list for students of English for academic purposes. *English for Specific Purposes*, 28: 157–169.

Durrant, P., & Schmitt, N. (2009). To what extent do native and non-native writers make use of collocations? *IRAL*, 47:157-177, doi: 10.1515/iral.2009.007.

Durrant, P., & Schmitt, N. (2010). Adult learners' retention of collocations from exposure. *Second Language Research*, 26(2):163-188, doi: 10.1177/0267658309349431.

Ehlich, K. (2009). What makes a language foreign? In K. Karlfried, B. Seidlhofer, & H. Widdowson, *Handbook of Foreign Language Communication and Learning* (pp. 21-43). Berlin: Hubert & Co.

Eidian, F., Gorjian, B., & Aghvami, F. (2014). The effect of lexical collocation awareness on Iranian EFL learners' writing skill. *Academia Journal of Educational Research*, 2(1):1-6 doi: http://dx.doi.org/10.15413/ajer.2013.0033.

Ekoç, A. (2010). Analysing Turkish MA Students' Use of Lexical Hedging Strategies in Thesis Abstracts. *Hasan Ali Yücel Eğitim Fakültesi Dergisi*, 13(1):49-62.

Ellis, N. C. (1996). Sequencing in SLA. *Studies in second language acquisition*, 18:91-126.

Ellis, N. C. (2001). Memory for language. In P. Robinson, *Cognition and second language instruction* (pp. 33-68). Cambridge: Cambridge University Press.

Ellis, N. C., Simpson-Vlanch, R., & Maynard, C. (2008). Formulaic Language in Native and Second Language Speakers: Psycholinguistics, Corpus Linguistics, and TESOL. *TESOL QUARTERLY*, 42(3):375-396.

Ellis, R. (1986). *The study of second language acquisition.* Oxford: Oxford University Press.

Elo, S., & Kyngas, H. (2008). The qualitative content analysis process. *JAN Research Methodology*, 62(1):107-115, doi:10.1111/j.1365-2648.2007.04569.x.

Faigley, L. (1986). Competing theories of process: a critique and a proposal. *College Composition and Communication*, 48: 527-542.

Fan, M. (2009). An exploratory study of collocational use by ESL students: A task based approach. *System*, 37:110-123.

Feagans, L., & Applebaum, M. (1986). Validations of language subtype in learning disabled children. *journal of Education Psychology*, 78:358-64.

Figueiredo-Silva, M. I. (2001). Teaching academic reading: some initial findings from a session on hedging. *Proceedings of the Postgraduate Conference* (pp. 1-13). Edinburgh: The University of Edinburgh.

Fillmore, J. C. (1979). On fluency. In C. Fillmore, D. Kempler, & W. Wang, *Individual differences in language ability and behavior* (pp. 85-101). New York: Academic Press.

Firth, J. R. (1957). *Papers in Linguistics 1934-1952.* London: Oxford University Press.

Flowerdew, J. (2000). Discourse community, legitimate pheriperal participation, and the nonnative-English-speaking scholar. *TESOL QUARTERLY*, 34(1), 127-150.

Fontenelle, T. (1998). Lexical functions in dictionary entries. In A. P. Cowie, *Phraseology: theory, analysis, and applications* (pp. 189-207). Oxford: Oxford University Press.

Fox, G. (1998). Using corpus data in the classroom. In B. Tomlison, *Materials Development in Language Teaching* (pp. 25-43). Cambridge: Cambridge University Press.

Fuertes-Olivera, P., Velasco-Sacristan, M., Arribas-Bano, A., & Samaniego Fernandez, E. (2001). Persuasion and advertising English: metadiscourse in slogans and headlines. *Journal of Pragmatics*, 33, 1291-1307.

Fulwiler, T. (2002). *College Writing (3rd Edition).* Portsmouth, NH: Boynton/Cook Publishers, Inc.

Futagi, Y., Deane, P., Chodorow, M., & Tetreault, J. (2008). A computational approach to detecting collocation errors in the writing of non-native speakers of English. *Computer Assisted Language Learning*, 21(4): 353-367, doi: 10.1080/09588220802343561.

Gabyrs-Biskup, D. (1992). L1 influence on learners' renderings of English collocation. A Polish/German empirical study. In P. Arnauld, & H. Benjoint, *Vocabulary and applied linguistics* (pp. 85-93). London: Macmillan.

Geertz, C. (1983). *Local Knowledge: Further Essays in Interpretive Anthropology.* New York: Basic Books.

Gillaerts, P., & Velde, F. V. (2010). Interactional metadiscourse in research article abstracts. *Journal of English for Academic Purposes*, 9:128-139, doi:10.1016/j.jeap.2010.02.004.

Gitsaki, C. (1999). *Second language lexical acquisition: A study o f the development of collocational knowledge.* San Francisco: International Scholars Publications.

Grabe, W., & Kaplan, R. (1996). *Theory and Practice of Writing.* Harlow: Longman.

Grabe, W., & Kaplan, R. B. (1997). On the writing of science and the science of writing: Hedging in science text and elsewhere. In R. Markkanen, & H. Schröder, *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts* (pp. 151-167). Berlin: Walter de Gruyter.

Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading.* Harlow: Pearson Education.

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2):10-112, doi:10.1016/j.nedt.2003.10.001.

Granger, S. (1998). Prefabricated Patterns in Advanced EFL Writing: Collocations and Lexical Phrases. In A. Cowie, *Phraseology: Theory, Analysis and Applications* (pp. 145-160). Oxford: Clarendon Press.

Granger, S., & Paquot, M. (2008). Disentangling the phraseological web. In S. Granger, & F. Meunier, *Phraseology: An interdisciplinary perspective* (pp. 27-50). Amsterdam & Philadelphia: John Benjamins.

Grice, H. P. (1975). Logic and conversation. In P. Cole, & J. Morgan, *Speech Acts* (pp. 45-58). New York: Academic Press.

Guinda, C. S. (2003). Contractual role of modality as convergence strategy in technical research articles. *RESLA*, 16:219-233.

Guoxing, Y. (2009). Lexical Diversity in Writing and Speaking Task Performances. *Applied Linguistics*, 31/2: 236-259.

Halliday, M. A., McIntosh, A., & Strevens, P. (1964). *The linguistic sciences and language teaching.* London: Longman.

Halliday, M., & Hasan, R. (1989). *Language, Context, and Text: Aspects of Language in a Socio-semiotic Perspective.* Oxford: Oxford University Press.

Hamamcı, Z. (2007). *The Use of Hedges in Research Articles by Turkish Interlanguage Speakers of English and Native English Speakers in the Field of Social Sciences (master's thesis).* Adana, Turkey: The University of Çukurova.

Harmer, J. (1991). *The practice of English language teaching.* London: Longman.

Hauser, G. (1986). *Introduction to Rhetorical Theory.* New York: Harper.

Hausmann, F. J. (1989). Le dictionaire de collocations. In F. J. Hausmann, O. Reichmann, H. Wiegand, & Z. Zgusta, *Wörterbücher* (pp. 1010-1019). Berlin: Walter de Gruyter.

Hewings, A., Lillis, T., & Vladimirou, D. (2010). Who's citing whose writings? A corpus based study of citations as interpersonal resource in English medium national and English medium international journals. *Journal of English for Academic Purposes*, 9(2):102-115, doi:10.1016/j.jeap.2010.02.005.

Hill, J. (1999). Collocational competence. *Readings in Methodology*, 162-166.

Hill, J. (2000). Revising priorities: from grammatical failure to collocational success. In M. Lewis, *Teaching Collocations: Further developments in the lexical approach* (pp. 47-69). Hove: Language Teaching Publications.

Hinkel, E. (1997). Indirectness in L1 and L2 academic writing. *Journal of Pragmatics*, 27, 361–386.

Hinkel, E. (2003). Simplicity without elegance: Features of sentences in L1 and L2 academic texts. *TESOL Quarterly*, 37(2), 275-301.

Hinkel, E. (2004). *Teaching Academic ESL Writing*. New York: Routledge.

Hirose, K. (2003). Comparing L1 and L2 organizational patterns in the argumentative writing of Japanese EFL students. *Journal of Second Language Writing*, 12, 181–209.

Holmes, J. (1982). Expressing doubt and certainty in English. *RELC Journal*, 3: 9-28.

Holmes, J. (1984). Modifying illocutionary force. *Journal of Pragmatics*, 8:345-365.

Holmes, J. (1990). Hedges and Boosters in Women's and Men's Speech. *Language & Communication*, 3:185-205, doi:10.1016/0271-5309(90)90002-S.

Holmes, J. (1995). *Women, men and politeness.* London: Longman.

Hornby, A. S. (2011). *Oxford Advanced Learner's Dictionary of Current English.* Oxford: Oxford University Press.

House, J., & Kasper, G. (1981). Politeness markers in English and German. In F. Coulmas, *Conversational routine: Explorations in standartized communication patters and prepatterned speech* (pp. 157-185). New York: Mouton.

Howarth, P. (1998). Phraseology and Second Language Proficiency. *Applied Linguistics*, 19(1):24-44.

Hsu, J.-y. (2007). Lexical Collocations and their Relation to the Online Writing of Taiwanese College English Majors. *Electronic Journal of Foreign Language Teaching*, 4(2):192-209.

Hsu, J.-y., & Chiu, C.-y. (2008). Lexical Collocations and their Relation to Speaking Proficiency of College EFL Learners in Taiwan. *The Asian EFL Journal*, 10(1):181-226.

Hsu, J.-Y., & Hsu, L.-C. (2007). Teaching lexical collocations to enhance listening comprehension of English majors in a technological university of Taiwan. *Soochow Journal of Foreign Languages & Cultures*, 24:1-34.

Hu, C., & Li, X. (2015). Epistemic Modality in the Argumentative Essays of Chinese EFL Learners. *English Language Teaching*, 8(6):20-31.

Hu, G., & Cao, F. A.-a.-m. (2011). Hedging and boosting in abstracts of applied linguistics articles:. *Journal of Pragmatics*, 43:2795-2809, doi:10.1016/j.pragma.2011.04.007.

Huang, L.-S. (2001). Knowledge of English Collocations: An Analysis of Taiwanese EFL Learners. *ERIC NO: ED 465 288*, 1-21.

Hyland, K. (1994). Hedging in Academic Writing and EAP. *English for Specific Purposes*, 3:239-256.

Hyland, K. (1996). Talking to the Academy: Forms of Hedging in Science Research Articles. *Written Communication*, 13(2), 251-281.

Hyland, K. (1998). Exploring corporate rhetoric: Metadiscourse in the CEO's letter. *The Journal of Business Communication*, 35:224-245.

Hyland, K. (1998b). *Hedging in Scientific Research Articles.* Amsterdam/Philadelphia: John Benjamins.

Hyland, K. (1998c). Boosting, hedging, and the negotiation of academic knowledge. *Text*, 18(3), 349-382.

Hyland, K. (1998d). Persuasion and context: the pragmatics of academic metadiscourse. *Journal of Pragmatics*, 30, 437-55.

Hyland, K. (2000). *Disciplinary Discourses: Social Interactions in Academic Writing.* London: Longman.

Hyland, K. (2000b). Hedges, Boosters and lexical invisibility: noticing modifiers in academic texts. *Language Awareness*, 9(4):179-197.

Hyland, K. (2001). Definitely a possible explanation: Epistemic modality in academic argument. In M. Gotti, & M. Dossena, *Modality in Specialized Texts: Selected Papers of the 1st CERLIS Conference* (pp. 291-310). Bergamo: P. Lang.

Hyland, K. (2004). Disciplinary interactions: metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13: 133-51.

Hyland, K. (2005). *Metadiscourse: Exploring Interaction in Writing.* New York: Continuum.

Hyland, K. (2005b). Stance and engagement: a model of interaction in academic discourse. *Discourse Studies*, 7(2), 173–192.

Hyland, K. (2006). Disciplinary differences: Language variation in academic discourses. In K. Hyland, & M. Bondi, *Academic Discourse across Disciplines* (pp. 16-45). Berlin: Peter Lang.

Hyland, K. (2008). Academic clusters: text patterning in published and postgraduate writing. *International Journal of Applied Linguistics*, 18(1): 41-62.

Hyland, K., & Milton, J. (1997). Qualification and certainty in L1 and L2 students' writing. *Journal of Second Language Writing*, 6(2), 183-205.

Hymes, D. (1974). *Foundations in Sociolinguistics: An Ethnographic Approach.* Philadelphia: University of Pennsylvania Press.

Iida, E. (2007). *Hedges in Japanese English and American English Medical Research Articles.* Montreal: McGill University.

Irvin, L. L. (2010). What is academic writing? In C. Lowe, & P. Zemliansky, *Writing Spaces: Readings on Writings* (pp. 3-17). Indiana: Parlor Press.

Itakura, H. (2013). Hedging praise in English and Japanese book reviews. *Journal of Pragmatics*, 45:131-148.

Jalilifar, A., & Alavi-Nia, M. (2013). We are surprised; wasn't Iran disgraced there? A functional analysis of hedges and boosters in televised Iranian and American presidential debates. *Discourse & Communication*, 6(2):135-161, doi:10.1177/1750481311434763.

Jurko, P. (2010). Slovene-Wnglish Contrastive Phraseology: Lexical Collocations. *ELOPE*, 12:57-73.

Källkvist, M. (1998). Lexical Infelicity in English: the Case of Nouns and Verbs. In K. Haastrup, & A. Viberg, *Perspectives on Lexical Acquisition in a Second Language* (pp. 149-174). Lund: Lund Univeristy Press.

Kennedy, G. (2003). Amplifier Collocations in the British National Corpus: Implications for English Language Teaching. *TESOL QUARTERLY*, 37(3); 467-487, doi: 10.2307/3588400.

Kennedy, G. D. (1990). Collocations: Where grammar and vocabulary teaching meet. In S. Anivan, *Language Teaching Methodology for the Nineties* (pp. 215-229). SEAMEO.

Keshavarz, M., & Salimi, H. (2007). Collocational competence and cloze test performance: a study of Iranian EFL learners. *International Journal of Applied Linguistics*, 17(1):81-92 doi: 10.1111/j.1473-4192.2007.00134.x.

Khedri, M., Ebrahimi, J., & Heng, S. (2013). Interactional Metadiscourse Markers in Academic Research Article Result and Discussion Sections. *The Southeast Asian Journal of English Language Studies*, 19(1):65-74.

Khedri, M., Heng, C. S., & Hoon, T. B. (2013). Review Article: Cross-disciplinary and cross-linguistic perspectives on metadiscourse in academic writing. *Southern African Linguistics and Applied Language Studies*, 31(1):129-138, doi.org/10.2989/16073614.2013.793957.

Kim, C. H., & Suh, H. W. (2014). Epistemic Rhetorical Stance: Hedges and Boosters in L1 and L2 Students' English Writings. *The Linguistic Association of Korea Journal*, 22(2):61-93.

Kim, D. H. (2009). *A Study on the Use of Lexical Collocations of Korean Heritage Learners: Identifying the Sources of Errors (MA Thesis)* . California: University of Southern California.

Kjellmer, G. (1987). Aspects of English collocations. In W. Meijis, *Corpus linguistics and beyond* (pp. 133-140). Amsterdam: Rodopi.

Kjellmer, G. (1990). A mint of phrases. In K. Aijmer, & B. Altenberg, *English Corpus Linguistics: Studies in Honour of Jan Svartvik* (pp. 111-127). London: Longman.

Kondowe, W. (2014). Hedging and Boosting as Interactional Metadiscourse in Literature Doctoral Dissertation Abstracts. *International Journal of Language Learning and Applied Linguistics World*, 5(3):214-221.

Koosha, M., & Jafarpour, A. (2006). Data-driven Learning and Teaching Collocation of Prepositions: The Case of Iranian EFL Adult Learners. *Asian EFL Journal*, 8(4):192-209.

Korosadowicz-Struzynska, M. (1980). Word collocations in FL vocabulary instruction. *Studia Anglica Posnaniensia*, 12:109-120.

Koutsantoni, D. (2004). Attitude, certainty and allusions to common knowledge in scientific research articles. *Journal of English for Academic Purposes*, 3:163-182, doi:10.1016/j.jeap.2003.08.001.

Koya, T. (2006). What is the reality of collocation use by native speakers of English? *Dialogue*, 5:1-18.

Krashen, S., & Scarcella, R. (1980). On Routines and Patterns in I,anguage Acquisition and Performance. *Language Learning*, 28(2):283-300.

Lafuente-Millan, E. (2014). Reader engagement across cultures, languages and contexts of publication in business research articles. *International Journal of Applied Linguistics*, 24: 201-233, doi: 10.1111/ijal.12019.

Lakoff, G. (1973). Hedges: A study in meaning criteria and the logic of fuzzy concepts. *Journal of Philosophical Logic*, 2, 458-508.

Lakoff, R. (1973). The logic of politeness: or, minding your p's and q's. In C. C. al., *Papers from the ninth regional meeting of the Chicago Linguistic Society* (pp. 292-305). Chicago: Linguistic Society.

Langer, J. (1984). The effects of available information on responses to school writing tasks. *Research in the Teaching of English*, 18, 27–44.

Laufer, B. (2003). The influence of L2 on L1 collocational knowledge and on L1 lexical diversity in free written expression. In V. Cook, *Effects of the Second Language on the First* (pp. 120-141). Clevedon: Cromwell Press Ltd.

Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 writing production. *Applied Linguistics*, 16(3), 307-322.

Lee, J. J., & Casal, J. E. (2014). Metadiscourse in results and discussion chapters: A cross-linguistic analysis of English and Spanish thesis writers in engineering. *System*, 46; 39-54.

Lee, K. Y. (2013). Hedging expressions used in academic written feedback: a study on the use of modal verbs. *Research in Corpus Linguistics*, 1:33-45, doi:10.4304/ricl.1.33-45.

Leech, G. (2004). *Meaning and the English verb (3rd edition).* Harlow: Pearson Education Ltd.

Lehtinen, E. (2013). Hedging, knowledge and interaction: Doctors' and clients' talk about medical information and client experiences in genetic counseling. *Patient Education and Counseling*, 92:31–37, http://dx.doi.org/10.1016/j.pec.2013.02.005.

Lewin, B. (2005). Hedging: an exploratory study of authors' and readers' identification of 'toning down' in scientific texts. *Journal of English for Academic Purposes*, 4:163-178, doi:10.1016/j.jeap.2004.08.001.

Lewis, M. (1997). *Implementing the lexical approach.* Hove, England: Language Teaching Publications.

Lewis, M. (2001). *Teaching collocation: Further developments in the lexical approach.* Hove, England: Thompson – Heinle Publications.

Leyla, S., & Atai, M. (2008). A Cross-cultural Study of Hedging devices in Discussion section of Applied Linguistics Research Articles. *Teaching English Language and Literature Society of Iran*, 7: 1-22.

Li, C.-C. (2005). *A study of collocational error types in ESL/EFL college learners' writing.* Taoyuan/Taiwan: Ming Chuan University.

Li, Q., & Pramoolsook, I. (2015). Research Article Abstracts in Two Subdisciplines of Business—Move Structure and Hedging between Management and Marketing. *English Language Teaching*, 8(1):52-62, http://dx.doi.org/10.5539/elt.v8n1p52.

Lien, H.-Y. (2003). *The effects of collocation instruction on the reading comprehension of Taiwanese college students.* Pennsylvania: Unpublished doctoral dissertation, Indiana University of Pennsylvania.

Lim, N.-E., & Hong, H. (2012). Intensifiers as Stance-Markers: A Corpus Study on Genre-Variations in Mandarin Chinese. *Chinese Language and Discourse*, 3(2):129-166.

Liu, C. C.-P. (2000). A Study of Strategy Use in Producing Lexical Collocations. *The Ninth International Symposium on English Teaching* (pp. 481-492). Taipei: English Teachers' Association.

Lorenz, G. (1999). *Adjective Intensification – Learners Versus Native Speakers: A Corpus Study of Argumentative Writing.* Amsterdam: Rodopi.

Lorés-Sanz, R., Mur-Deñas, P., & Lafuente-Millán, E. (2010). *Constructing Interpersonality: Multiple Perspectives on Written Academic Genres.* Cambridge: Cambridge Scholars Publishers.

Lu, X. (2012). The Relationship of Lexical Richness to the Quality of ESL Learners' Oral Narratives. *The Modern Language Journal*, 96(2): 190-208, doi: 10.1111/j.1540-4781.2011.01232.x.

Maria, H. (2008). *Boosting Future Prospects or Softening Promises of Success (Pro graduate thesis).* Turku: The University of Turku.

Martelli, A. (2006). A corpus based description of English lexical collocations used by Italian advanced learners. *In Atti del XII Congresso Internazionale di Lessicografia* (pp. 1005-1011). Torino: 6-9 September 2006.

Martinez, I. A. (2005). Native and non-native writers' use of first person pronouns in the different sections of biology research articles in English. *Journal of Second Language Writing*, 14:174-190, doi:10.1016/j.jslw.2005.06.001.

Martyńska, M. (2004). Do English language learners know collocations? *Investigationes Linguisticae*, 11:1-12.

Mauranen, A. (1993). *Cultural Differences in Academic Rhetoric.* Frankfurt: Peter Lang.

Mauranen, A. (2001). Descriptions or explanations? Some methodological issues in Contrastive Rhetoric. In M. Hewings, *Academic Writing in Context: Implications and Applications* (pp. 43-54). Birmingham: University of Birmingham Press.

McArthur, T. (1992). *The Oxford companion to the English language.* Oxford: Oxford University Press.

McCarthy, M. (1990). *Vocabulary.* Oxford: Oxford University Press.

McCormick, D., & Whittington, M. S. (2000). Assessing academıc challenges for their Contribution to cognitive development. *Journal of Agricultural Education*, 41(3):114-122.

McCutchen, D. (1986). Domain knowledge and linguistic knowledge in the development of writing ability. *Journal of Memory and Language*, 25, 431–444.

Medgyes, P. (1992). Native or non-native: who's worth more? *ELT Journal*, 46(4): 340-349 .

Mehdi, K., & Salahshoor, F. (2014). The relative significance of lexical richness and syntactic complexity as predictors of academic reading performance . *International Journal of Research Studies in Language Learning*, 3(2): 17-28, doi: 10.5861/ijrsll.2013.477.

Mertelli, A. (2006). A corpus based description of English lexical collocations used by Italian advanced learners. *Atti del XII Congresso Internazionale di Lessicografia*, (pp. 1005-1011). Torino.

Meyer, P. G. (1997). Hedging strategies in written academic discourse: Strengthening the argument by weakening the claim. In R. Markkanen, & H. Schrôder, *Hedging and discourse: Approaches to the analysis of a pragmatic phenomenon in academic texts* (pp. 21-41). Berlin: Walter de Gruyter.

Meyer-Salager, F. (2008). Scientific Publishing in developing countries: Challenges for the future. *Journal of English for Academic Purposes*, 7(2):121-132.

Mills, K., & Dooley, K. (2014). Teaching persuasive texts: Building a language of evaluation through hedging and moderated intensification. *Literacy Learning: The Middle Years* , 22(3):33-41.

Mohammed, R., & Mustafa, S. (2012). Investigating College Students' Competence in Grammatical Collocations. *Arab World English Journal*, 3(4):134-159.

Mojood, M., & Kuhi, D. (2014). Metadiscourse in Newspaper Genre: a Cross-linguistic Study of English and Persian Editorials. *International Conference on Current Trends in ELT* (pp. 1046-1055, doi: 10.1016/j.sbspro.2014.03.515). Iran: Procedia - Social and Behavioral Sciences 98.

Monippally, M., & Pawar, B. S. (2010). *Academic writing; a guide for management students and researchers.* New Delhi: Response.

Montero, M., Silvia, M. G., & Pedro, A. F. (2002). Terminological Phrasemes in OntoTerm: A new Theoretical and Practical Approach. *Terminology*, 8(2):177-206.

Montero, M., Silvia, P. A., & Mercedes, G. d. (2001). The translator as "Language Planner": Syntactic Calquing in an English-Spanish Translation of Chemical Engineering. *META*, 46:687–698.

Morgan, S. (2008). The Space between 'Yes' and 'No': How Italian Students and Boost Their Statements. In M. Pawlak, *Investigating English Language Learning and Teaching* (pp. 269-280). Poznań: Adam Mickiewicz University.

Munby, J. (1978). *Communicative Syllabus Design.* Cambridge: Cambridge University Press.

Myers, G. (1985). The social construction of two biologists' proposals. *Written Communication*, 2(3), 219-245.

Myers, G. (1985b). Texts as knowledge claims: The social construction of two biology articles. *Social Studies of Science*, 15:593-630.

Nation, I. S. (1990). *Teaching and learning vocabulary.* New York, NY: Newbury House.

Nation, I. S. (2001). *Learning vocabulary in another language.* Cambridge: Cambridge University Press.

Nation, I. S. (2006). Second Language Vocabulary. *Encyclopaedia of Language and Linguistics*, Elsevier.

Nattinger, J. R. (1980). A lexical phrase grammar for ESL. *TESOL Quarterly*, 16(3), 337-344.

Nesselhauf, N. (2003). The Use of Collocations by Advanced Learners of English and Some Implications for Teaching. *Applied Linguistics*, 24(2):223-242.

Neuendorf, K. A. (2002). *The content analysis guidebook.* Thousand Oaks: Sage.

Newmark, P. (1988). *A Textbook of Translation.* New Yok: Prentice Hall.

Nivales, M. (2011). Hedging in College Research Papers: Implications for Language Instruction. *Asian EFL Journal*, 35-45.

Nizonkiza, D. (2011). The relationship between lexical competence, collocational competence, and second language proficiency. *English Text Construction*, 4(1):113-146.

Norrick, N. R. (2001). Discourse markers in oral narratives. *Journal of Pragmatics*, 33, 849-78.

Olinghouse, N. G., & Graham, S. (2009). The relationship between the discourse knowledge and the writing performance of elementary-grade students. *Journal of Educational Psychology*, 101(1), 37-50.

Olinghouse, N., & Wilson, J. (2013). The relationship between vocabulary and writing quality in three genres. *Read Writ*, 26:45–65.

Oliveira, A., Akerson, V., Colak, H., Pongsanon, K., & Genel, A. (2011). The Implicit Communication of Nature of Science and Epistemology During Inquiry Discussion. *Science Education*, 96(4):652-684, doi:10.1002/sce.21005.

Olson, C. B., Scarcella, R., & Matuchniak, T. (2013). Best Practices in Teaching Writing to English Learners. In S. Graham, C. A. MacArthur, & J. Fitzgerald, *Best Practices in Writing Instruction (2nd Edition)* (p. 381). New York: Guilford Press.

Ong, W. (1983). Foreword. In W. B. Homer, *The Present State of Scholarship in Historical and Contemporary Rhetoric* (pp. 1-9). Columbia, MO: University of Missouri Press.

Orta, I. V. (2010). A contrastive analysis of the use of modal verbs in the expression of epistemic stance in Business Management research articles in English and Spanish. *Iberica*, 19:77-96.

Ozdemir, N. O., & Longo, B. (2014). Metadiscourse Use in Thesis Abstracts: A Cross-cultural Study. *WCLTA* (pp. 59-63, doi:10.1016/j.sbspro.2014.05.011). Barcelona: Procedia - Social and Behavioral Sciences 141.

Pahlavannezhad, M. R., & Ebrahimi, S. (2012). Assessing Lexical Collocations in the Masnavi Manavi by Maulana. *Language in India*, 12(10).

Palmer, H. (1933). *Second Interim Report on English Collocations.* Tokyo: Kaitakusha.

Partington, A. (1998). *Patterns and meanings: Using corpora for English language research and teaching.* Amsterdam: John Benjamins Publishing Company.

Pawley, A., & Syder, F. (1983). Two puzzles for linguistic theory: Native-like selection and native-like fluency. In J. Richards, & R. Schmidth, *Language and Communication* (pp. 191-225). London: Longman.

Peacock, M. (2006). A cross-disciplinary comparison of boosting in research articles. *Corpora*, 1(1):61-84.

Pebrianti, A. A. (2013). Women's Language Features Used by Indonesian Female Bloggers. *Passage*, 1(2):109-118.

Pellón, I. A., & Guinda, C. S. (2010). Descriptive Strategies in U.S. Patents. *Online proceedings of the XVII European LSP Symposium* (pp. 1-23). Aarhus, Denmark: Aarhus School of Business.

Perez-Llantada, C. (2010). The discourse functions of metadiscourse in published academic writing: issues of culture and language. *Nordic Journal of English Studies*, 9: 41-68.

Pho, P. D. (2008). Research article abstracts in applied linguistics and educational technology: a study of linguistic realizations of rhetorical structure and authorial stance. *Discourse Studies*, 10(2):231-250, doi:10.1177/1461445607087010.

Prince, E. F., Frader, J., & Bosk, C. (1982). On hedging in physician-physician discourse. R. J. Di Pietro içinde, *Linguistics and the professions* (s. 83-97). Hillsdale, NJ: Ablex.

Prodromou, L. (2003). Idiomaticity and the non-native speaker. *English Today*, 42-48, doi:10.1017/S0266078403002086.

Qiang, h. (2002). *An Empirical Study of Collocation Acquisition by Advanced EFL/ESL Students (MA Thesis).* Henan: PLA Foreign Languages Institute .

Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). *A Comprehensive Grammar of the English Language.* London: Longman.

Rabab'ah, G. (2013). Hedging in nursing and education academic articles. *Education, Business and Society: Contemporary Middle Eastern Issues*, 6:195-215, http://dx.doi.org/10.1108/EBS-03-2013-0006.

Rahimi, m., & Momeni, G. (2012). The effect of teaching collocations on English language proficiency. *WCLTA 2011* (pp. 31:37-42 doi:10.1016/j.sbspro.2011.12.013). Procedia - Social and Behavioral Sciences.

Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly*, 19: 229-258.

Richards, J. C. (1976). The role of vocabulary teaching. *TESOL Quarterly*, 10:77-89.

Richards, J. C., & Miller, S. K. (2005). *Doing Academic Writing in Education.* New Jersey: Taylor & Francis.

Riekkinen, N. (2009, 05 05). *Softening Criticism: The Use of Lexical Hedges in Academic Spoken Interaction.* Retrieved May, 3rd, 2015, from: http://www.helsinki.fi/englanti/elfa/ProGradu_Niina_Riekkinen.pdf.

Robins, R. H. (1967). *A short history o f linguistics.* London: Longman.

Rosch, E. (1973). Natural categories. *Cognitive psychology*, 4(3):328-350.

Rosch, E. (1983). Prototype classification and logical classification: The two systems. *New trends in conceptual representation: Challenges to Piaget's theory*, 73-86.

Rosch, E. (1999). Principles of categorization. *Concepts: core readings*, 189-206.

Rose, S., Spinks, N., & Canhoto, A. I. (2015, 07 30). *Quantitative Content Analysis.* Retrieved from http://documents.routledge-interactive.s3.amazonaws.com/9780415628129/Chapter%206%20-%20Quantitative%20content%20analysis%20final_edited.pdf

Rubin, V. (2010). Epistemic modality: From uncertainty to certainty in the context of information seeking as interactions with texts. *Information Processing and Management*, 46(10) 533-540.

Rubio, M. M. (2011). pragmatic approach to the macro-structure and metadiscoursal features of research article introductions in the field of Agricultural Sciences. *English for Specific Purposes*, 30, 258-271.

Rundell, M. (2010). *Macmillan Collocations Dictionary for Learners of English.* Oxford: Macmillan Publishers Ltd.

Sadeghi, K. (2009). Collocational differences between L1 and L2: Implications for EFL learners and teachers. *TESL Canada Journal*, 26(2):100-124.

Salager-Meyer, F. (1994). Hedges and textual communicative function in medical English written discourse. *English for Specific Purposes*, 13 (2),149-170.

Salek, M. (2014). A Diagram of Interactive and Interactional Markers in Different Parts of English Research Articles. *Journal of Language Sciences & Linguistics*, 2(3):55-66.

Sandova, J. K. (2011). Pragmatic Functions of Speaker-Oriented Boosters in Political Interviews. *Theories and Practices: The Third International Conference on Anglophone Studies* (pp. 169-182). Czech Republic: Tomas Bata University.

Sanjaya, N. S. (2013). *Hedging and Boosting in English and Indonesian Research Articles (PhD Dissertation).* Pennsylvania: The Pennsylvania State University.

Santos, T. (1988). Professors' reactions to the academic writing of nonnative-speaking students. *TESOL Quarterly*, 22(1): 69-90.

Sanz, G. (1999). *Schemes de lexicalisation dans le recit en espagnol et en français langues maternelles et etrangeres.* Phd thesis: University of Paris and Universidad Automana Madrid.

Schiffrin, D. (1980). Metatalk: organisational and evaluative brackets in discourse. *Sociological Inquiry: Language and Social Interaction*, 50:199-236.

Schneider, R. (1999). L'expression de proces dans les recits d'un enfant bilingue. *AILE Special issue: La persone bilingue*, 9: 63-82.

Schreiber, J., & Asner-Self, K. (2011). *Educational Research: The Interrelationship of Questions, Sampling, Design, and Analysis.* Hoboken: John Wiley & Sons.

Schreier, M. (2012). *Qualitative Content Analysis in Practice.* London: Sage.

Searle, J. (1969). *Speech acts. An essay in the philosophy of language.* Cambridge: Cambridge University Press.

Shi, L. (2002). How Western-trained Chinese TESOL professionals publish in their home environment. *TESOL Quarterly*, 36(4), 625-634.

Shin, D., & Nation, P. (2007). Beyond single words: the most frequent collocations in spoken English. *ELT Journal Volume*, 62(4):339-348.

Silver, M. (2003). The stance of stance: A critical look at ways stance is expressed and modeled in academic discourse. *Journal of English for Academic Purposes*, 2:359-374.

Simon-Vandenbergen, A.-M. (2008). Almost certainly and most definitely: Degree modifiers and epistemic stance. *Journal of Pragmatics*, 40:1521-1542, doi:10.1016/j.pragma.2008.04.015.

Siyanova, A., & Schmitt, N. (2008). L2 Learner Production and Processing of Collocation: A Multi-study Perspective. *The Canadian Modern Language Review*, 64(3):429-458.

Skelton, J. (1997). How to tell the truth in The British Medical Journal: Patterns of judgement in the 19th and 20th centuries. In R. Markkanen, & H. Schröder, *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts* (pp. 42-63). Berlin: Walter de Gruyter.

Smadja, F. (1989). Lexical co-occurrence: The missing link. *Literary and Linguistic Computing*, 4(3):163-168.

Smith, J. (2011). *Emotional Intelligence - What You Need to Know: Definitions, Best Practices, Benefits and Practical Solutions.* Printed Online: Dayboro:Emereo Pub.

Smyth, T. R. (1996). *Writing in psychology: A student guide.* New York: Wiley.

Sonbul, S., & Schmitt, N. (2013). Explicit and Implicit Lexical Knowledge: Acquisition of Collocations Under Different Input Conditions. *Language Learning*, 63(1): 121-159.

Stubbs, M. (2001). *Words and Phrases.* Oxford: Blackwell.

Sung, J. (2003). *English Lexical Collocations and Their Relation to Spoken Fluency of Adult Non-native Speakers .* Pennsylvania: Indiana University of Pennsylvania.

Swales, J. (1987). Utilizing the literatures in teaching a research paper. *TESOL Quarterly*, 31(1), 41-68.

Swales, J. (1990). *Genre Analysis: English in Academic and Research Settings.* Cambridge: Cambridge university press.

Taavitsainen, I. (1999). Metadiscursive practices and the evolution of early English medical writing (1375-1550). In J. M. Kirk, *Corpora Galore: Analyses and Techniques in Describing English* (pp. 191-207). Amsterdam: Rodopi.

Tekingül, B. (2012). Collocation teaching effect on reading comprehension in advanced EFL setting. *Akdeniz Language Studies Conference* (pp. 1078-1089 doi: 10.1016/j.sbspro.2013.01.161). Antalya: Procedia - Social and Behavioral Sciences.

Telia, V., Bragina, N., Oparina, E., & Sandomirskaya, I. (1994). Lexical Collocations: Denominative and Cognitive Aspects. *International Congress on Lexicography* (pp. 369-377). Amsterdam: Euralex.

Texas, U. o. (2015, 02 27). *What's a "research article," anyway?* Retrieved from Utexas: https://www.lib.utexas.edu/lsl/help/modules/research.html

Tran, T. Q., & Duong, T. M. (2013). Hedging: A Comparative Study of Research Article Results and Discussions Sections in Applied Linguistics and Chemical Engineering. *English for Specific Purposes World*, 41(14): 1-13.

Turner, J. (2004). Language as academic purpose. *Journal of English for Academic Purposes*, 3:95-109 doi:10.1016/S1475-1585(03)00054-7.

Urbanová, L. (2003). *On Expressing Meaning in English Conversation: Semantic Indeterminacy.* Brno: Masarykova univerzita.

Uysal, H. (2014). A Cross-cultural Study of Indirectness and Hedging in the Conference Proposals of English NS and NNS Scholars. *Occupying Niches: Interculturality, Cross-culturality and Aculturality in Academic Research*, 179-195.

Uysal, H. H. (2012). Argumentation across L1 and L2 Writing: Exploring Cultural Influences and Transfer Issues. *Vigo International Journal of Applied Linguistics*, 9:133-159.

Van, J. C. (2015, 5 18). Retrieved from http://www.public.asu.edu: http://www.public.asu.edu/~jvanasu/rhet-triangle.htm

Vande Kopple, W. (1985). Some exploratory discourse on metadiscourse. *College Composition and Communication*, 36, 82-93.

Varttala, T. (1999). Remarks on the communicative functions of hedging in popular scientific and specialist research articles on medicine. *English for Specific Purposes*, 18(2):177-200.

Vasilieva, I. (2004). Gender-specific Use of Boosting and Hedging Adverbs in English Computer-related Texts- A Corpus-based Study. *International Conference on Language, Politeness and Gender* (pp. 2-5). Helsinki, Finland: University of Helsinki.

Vass, H. (2004). Socio-cognitive aspects of hedging in two legal discourse genres. *IBERICA*, 7:125-141.

Vassileva, I. (2001). Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes*, 20:83-102.

Vázquez, I., & Giner, D. (2008). Beyond mood and modality: Epistemic modality markers as hedges in research articles. A cross-disciplinary study. *Revista Alicantina de Estudios Ingleses*, 21, 171-190.

Vickers, B. (1995). Deconstruction's Designs on Rhetoric. In W. B. Horner, & M. Leff, *Rhetoric and Pedagogy: Its History, Philosophy, and Practice* (pp. 195-315). Routledge.

Viktorova, E. Y. (2014). The Role of Supplementary Communicative Units in Boosting and Hedging of Spoken Discourse. *Modern Research of Social Problems*, 43(11):118-134.

Vold, E. T. (2006). Epistemic modality markers in research articles: a cross-linguistic and crossdisciplinary study. *International Journal of AppliedEp Lisintegmuiisct icms*, 16(1): 61-87.

Webb, S., Newton, J., & Chang, A. (2013). Incidental Learning of Collocation. *Language Learning*, 63(1):91-120.

Wei, Y., & Lei, L. (2011). Lexical Bundles in the Academic Writing of Advanced Chinese EFL Learners. *RECL Journal*, 42(2): 155-166.

Weida, S., & Stolley, K. (2013, 03 11). *Using Rhetorical Strategies for Persuasion*. Retrieved from https://owl.english.purdue.edu/owl/resource/588/04/

Williams, J. (1981). *Style: Ten Lessons in Clarity and Grace.* Boston: Scott Foresman.

Wood, A. (2001). International scientific English: The language of research scientists around the world. In J. Flowerdew, & M. Peacock, *Research perspectives on English for academic purposes* (pp. 71-83,). Cambridge: Cambridge University Press, http://dx.doi.org/10.1017/CBO9781139524766.008.

Wouden, T. V. (1997). *Negative contexts: Collection, polarity, and multiple negation.* New York: Routledge.

Wray, A. (2002). *Formulaic Language and the Lexicon.* Cambridge: Cambridge University Press.

Wu, S., Franken, M., & Witten, I. (2010). Supporting collocation learning with a digital library. *Computer Assisted Language Learning*, 23(1): 87-110, doi: 10.1080/09588220903532971.

Wu, W.-S. (1996). Lexical collocations: One way to make passive vocabulary active. *The Proceedings of the 11th Conference on English Teaching and Learning*, (pp. 461-480). China.

Xiao, R., & Tao, H. (2007). A corpus-based sociolinguistic study of amplifiers in British English. *Sociolinguistic Studies*, 1(2):241-273, doi : 10.1558/sols.v1i2.241.

Yağız, O. (2009). *The Academic Writing of Turkish Graduate Students in Social Sciences: Approaches, Processes, Needs and Challenges (PhD dissertation).* tez.yok.gov.tr: 241779.

Yağız, O., & Demir, C. (2014). Hedging strategies in academic discourse: A comparative analysis of Turkish writers and native writers of English. *14th International Language, Literature and Stylistics Symposium* (pp. 260-268). İzmir: Dokuz Eylul University.

Yağız, O., & Demir, C. (2015). Local responses to global English and perceptions of English in Turkey: With an Academic Perspective. *Frontiers of Language and Teaching*, 6:22-31.

Yağız, O., & Demir, C. (2015b). A comparative study of boosting in academic texts: A contrastive rhetoric. *International Journal of English Linguistics*, 5(4):12-28, doi:10.5539/ijel.v5n4p12.

Yağız, O., & Yiğiter, K. (2012). Academic Writing Difficulties and Challenges in Advanced Academic Literacy. *The Journal of Academic Social Science Studies*, 5 (8) 1261-1272.

Yağız, O., Yiğiter, K., & Genc, G. (2009). Academic Writing in English: Approaches, Processes and Challenges in Higher Education. *1st International Symposium on Sustainable Development* (pp. 80-88). Sarajevo: International Burch International Burch University.

Yang, A., Zheng, S.-y., & Ge, G.-c. (2015). Epistemic modality in English-medium medical research articles: A systemic functional perspective. *English for Specific Purposes*, 38:1-10, http://dx.doi.org/10.1016/j.esp.2014.10.005.

Yang, Y. (2013). Exploring linguistic and cultural variations in the use of hedges in English and Chinese scientific discourse. *Journal of Pragmatics*, 50:23-36.

Yarkoni, T. (2010). Personality in 100,000 Words: A large-scale analysis of personality and word use among bloggers. *Journal of Research in Personality*, 44: 363-373, doi:10.1016/j.jrp.2010.04.001.

Yazdani, S., Sharifi, S., & Elyassi, M. (2014). Interactional Metadiscourse in English and Persian News Articles about 9/11. *Theory and Practice in Language Studies*, 4(2):428-434, doi:10.4304/tpls.4.2.428-434.

Yeganeh, M. T., & Ghoreishi, S. M. (2014). Exploring gender differences in the use of discourse markers in Iranian academic research articles. *Global Journal of Guidance and Counselling*, 4(1):06-12.

Yeşilbursa, A. A. (2011). Mitigation of Suggestions and Advice in Post-Observation Conferences Between 3 English Language Teacher Educators. *Journal of Language and Linguistic Studies*, 7(1): 18-35.

Yuxiu, S., & Le, C. (2014). Comparative Study on Hedges in Chinese and American Courtroom Discourse. *The Fourth International Conference On Law, Language and Discourse* (pp. 206-2012). Xi'an, China: The American Scholars Press.

Zadeh, L. (1965). Fuzzy sets. *Information and Control*, 8:338-353.

Zarei, G. R., & Mansoori, S. (2011). Metadiscourse distinction between Persian and English: An analysis of computer engineering research articles. *Journal of language Teaching and Research*, 2(5):1037-1042.

Zareva, A., Schwanenflugel, P., & Nikolova, Y. (2005). Relationship between lexical competence and language proficiency. *Studies in Second Language Acquisition*, 27(04): 567-595.

Zhang, X. (1993). *English collocations and their effect on the writing of native and nonnative college freshmen.* Unpublished Ph.D. dissertation: Indiana University of Pennsylvania.

VERB + NOUN

1. Achieve aims
2. Achieve goal
3. Achieve purpose
4. Add interest
5. Add weight
6. Adopt a methodology
7. Adopt a stance
8. Affect performance
9. Allocate resource
10. Allow acquisition
11. Appeal for assistance
12. Ask question
13. Ask clarification
14. Assure confidentiality
15. Attend class
16. Attend conference
17. Attend school
18. Attract attention
19. Avoid confusion
20. Avoid loss
21. Avoid overuse
22. Avoid problem
23. Become a focus
24. Become (active) agents
25. Become commonplace
26. Become example
27. Boost confidence
28. Borrow technique
29. Bridge the gap
30. Build a connection
31. Build confidence

32. Build corpus
33. Build up understanding
34. Call attention
35. Capture insight
36. Capture relationship
37. Challenge views
38. Change roles
39. Claim authority
40. Clarify uncertainties
41. Collect information
42. Complete task
43. Complete test
44. Compile a corpus (of)
45. Compose a response
46. Conduct a study
47. Conduct an investigation
48. Construct corpora
49. Convey a message
50. Correct error
51. Create an image
52. Create demand
53. Create interest
54. Create opportunity
55. Create possibility
56. Create tension
57. Cut off conversation
58. Demonstrate a benefit
59. Demonstrate a concern
60. Demonstrate a desire
61. Demonstrate evidence
62. Demonstrate variability

63. Deserve attention
64. Devalue the content
65. Develop a persona
66. Develop awareness
67. Develop idea
68. Develop insight
69. Develop skill
70. Develop strategy
71. Display familiarity
72. Display similarity
73. Draw attention
74. Draw a distinction
75. Draw conclusion
76. Edit message
77. Effect a change
78. Effect an upheaval
79. Enable generalization
80. Encourage compliance
81. Enter the university
82. Ensure consistency
83. Ensure safety
84. Entail a shift
85. Eradicate dissatisfaction
86. Espouse ideas
87. Establish a link
88. Establish authority
89. Establish groundwork
90. Examine correlation
91. Examine problems
92. Exchange farewell
93. Exchange greetings

94. Exchange ideas
95. Exchange information
96. Exhibit a tendency
97. Experience a shift
98. Experience confusion
99. Experience difficulty
100. Exploit benefits
101. Express emotion
102. Express opinion
103. Extend discussion
104. Extract information
105. Face challenge
106. Face difficulty
107. Facilitate acquisition
108. Feel gap
109. Feel guilty
110. Feel need
111. Fill gap
112. Fill out questionnaire
113. Find a benefit
114. Find challenging
115. Find correlation
116. Find opportunity
117. Focus on target
118. Form a basis (for)
119. Foster acquisition
120. Foster learning
121. Furnish information
122. Gain acceptance
123. Gain an overview
124. Gain appreciation

125. Gain ascendance
126. Gain confidence
127. Gain control
128. Gain flexibility
129. Gain ground
130. Gain insight
131. Gain inspiration
132. Gain perspective
133. Gain popularity
134. Gain power
135. Gain recognition
136. Gain resource
137. Gain support
138. Gain understanding
139. Gauge development
140. Generate understanding
141. Get grade
142. Give access
143. Give attention
144. Give confidence
145. Give credence
146. Give credit
147. Give evidence
148. Give experience
149. Give feedback
150. Give freedom
151. Give indication
152. Give insight
153. Give opportunity
154. Give order
155. Give outline
156. Give permission
157. Give security

158. Give thought
159. Give voice
160. Give weight
161. Outline guideline
162. Have a provenance
163. Have a tendency
164. Have an impact
165. Have confidence
166. Have difficulty
167. Have experience
168. Have limitation
169. Have merit
170. Have opportunity
171. Have trouble
172. Heighten awareness
173. Hold belief
174. Identify changes
175. Identify words
176. Illustrate benefits
177. Improve pronunciation
178. Incentivize collaboration
179. Increase confidence
180. Intensify demand
181. Interpret meaning
182. Invest effort
183. Investigate evidence
184. Justify an evaluation
185. Lack access
186. Lack authenticity
187. Lack confidence
188. Lack competence
189. Lack depth
190. Lead to scepticism

191. Lend credence
192. Lend weight
193. Lessen impact
194. Limit progress
195. Load baggage
196. Make a claim
197. Make a comparison
198. Make a difference
199. Make a distinction
200. Make a decision
201. Make agreement
202. Make an effort
203. Make argument
204. Make attempt
205. Make challenging
206. Make change
207. Make choice
208. Make clear
209. Make comment
210. Make comparison
211. Make connection
212. Make contribution
213. Make correction
214. Make decision
215. Make effort
216. Make error
217. Make gains
218. Make generalisation
219. Make gesture
220. Make introduction
221. Make investigation
222. Make judgements
223. Make mistake

224. Make notes
225. Make observation
226. Make progress
227. Make promise
228. Make provision
229. Make recording
230. Make request
231. Make sense
232. Make suggestion
233. Make transition
234. Meet (certain) criteria
235. Meet desiderate
236. Merit a position
237. Merit attention
238. Miss opportunity
239. Motivate learning
240. Narrow the gap
241. Need attention
242. Need support
243. Negotiate meaning
244. Obscure difference
245. Offer evidence
246. Offer insight
247. Offer opportunity
248. Offer solution
249. Offer suggestion
250. Offer support
251. Offer window
252. Obscure information
253. Open up discussion
254. Open up space
255. Overlook errors
256. Pay attention

257. Pilot an activity
258. Play a part
259. Play role
260. Pose a challenge
261. Pose a problem
262. Pose question
263. Present challenges
264. Present challenges
265. Present opportunities
266. Produce evidence
267. Promote a sense (of)
268. Promote development
269. Promote engagement
270. Promote learning
271. Propose a solution
272. Propose desiderata
273. Provide a basis
274. Provide a foundation
275. Provide a framework
276. Provide a snapshot (of)
277. Provide access
278. Provide advantageous
279. Provide advice
280. Provide an alternative
281. Provide an example
282. Provide an impetus (for)
283. Provide an overview
284. Provide assistant
285. Provide base
286. Provide care
287. Provide complete picture
288. Provide data

289. Provide database
290. Provide details
291. Provide definition
292. Provide description
293. Provide disambiguation
294. Provide discussion
295. Provide evidence
296. Provide example
297. Provide feedback
298. Provide information
299. Provide input
300. Provide insight
301. Provide opportunity
302. Prove problematic
303. Provide reason
304. Provide response
305. Provide service
306. Provide support
307. Provide understanding
308. Provide view
309. Put an effort
310. Raise awareness
311. Raise concern
312. Raise doubts
313. Raise interest
314. Raise possibility
315. Raise question
316. Raise standard
317. Reach a point
318. Reach an agreement
319. Receive attention
320. Receive feedback

321. Receive instruction
322. Receive knowledge
323. Reduce pressure
324. Repair errors
325. Report uncertainty
326. Require attention
327. Require (detailed) research
328. Require substantiation
329. Resolve a problem
330. Reveal difference
331. See a growth
332. See emergence
333. Seek permission
334. Serve (as a) backup
335. Serve (as a) baseline
336. Serve (as a) buffer
337. Serve food
338. Set a foundation
339. Set a model
340. Settle issue
341. Share experience
342. Share ideas
343. Share interest
344. Shed light
345. Shift orientation
346. Show awareness
347. Show benefit
348. Show interest
349. Show evidence
350. Show results
351. Show sensitivity
352. Show tendency

353. Solve problem
354. Stimulate knowledge
355. Stimulate learning
356. Spark controversy
357. Stand a chance
358. Support claim
359. Take a stance
360. Take a test
361. Take a view
362. Take advantage
363. Take notes
364. Take position
365. Take responsibility
366. Take risk
367. Take up life
368. Trigger a change
369. Trigger biases
370. Uncover differences
371. Uncover similarities
372. Understand difficulties
373. Unload baggage
374. Unravel complexities
375. Use knowledge
376. View as burden
377. Welcome a possibility
378. Wield influence
379. Worth consideration
380. Worth (the) effort
381. Worth asking
382. Worth noting
383. Yield a result
384. Yield outcome

VERB + ADVERB / ADJECTIVE

1. Add greatly	32. Become independent	63. Compose quickly	94. Drop precipitously
2. Addressed peripherally	33. Become interested	64. Concentrate strictly	95. Drop substantially
3. Adopt quickly	34. Become interesting	65. Conduct independently	96. Elaborate extensively
4. Affect profoundly	35. Become known	66. Consider briefly	97. Evidence (no) interest (in)
5. Analyze qualitatively	36. Become major	67. Considered appropriate	98. Evolve strongly
6. Appear crucial	37. Become marginal	68. Consult independently	99. Examine carefully
7. Appear frequently	38. Become prevalent	69. Construct meaning	100. Examine closely
8. Appear important	39. Become proficient	70. Contrast strikingly	101. Explore extensively
9. Apply primarily	40. Become sensitized	71. Contribute little	102. Express explicitly
10. Ask directly	41. Become sophisticated	72. Contribute positively	103. Express independently
11. Attend close	42. Become specific	73. Correct consistently	104. Express orally
12. Become adept	43. Become tolerant	74. Correlate significantly	105. Fall short
13. Become apparent	44. Become topical	75. Correlate strongly	106. Fare better
14. Become attuned	45. Calculate separately	76. Deal effectively	107. Fare well
15. Become autonomous	46. Carry out intensively	77. Decrease dramatically	108. Feel challenged
16. Become aware	47. Change fundamentally	78. Deem acceptable	109. Feel comfortable
17. Become boring	48. Change radically	79. Deemed appropriate	110. Feel confident
18. Become clear	49. Check carefully	80. Deemed important	111. Feel confused
19. Become common	50. Check manually	81. Delve deeply	112. Feel encouraged
20. Become complex	51. Choose evenly	82. Depend heavily (on)	113. Feel enormous
21. Become concrete	52. Clearly illustrate	83. Develop naturally	114. Feel inclined
22. Become confident	53. Close improperly	84. Developed unexpectedly	115. Feel isolated
23. Become contested	54. Code separately	85. Differ considerably	116. Feel motivated
24. Become effective	55. Come close	86. Differ markedly	117. Feel overwhelmed
25. Become embedded	56. Comment positively	87. Differ significantly	118. Feel similarly
26. Become essential	57. Communicate effectively	88. Disregard strongly	119. Feel proud
27. Become evident	58. Communicate orally	89. Discuss directly	120. Feel uncomfortable
28. Become familiar	59. Communicate successfully	90. Discuss individually	121. Feel unsure
29. Become fluent	60. Compete globally	91. Discuss intensively	122. Find challenging
30. Become fragmented	61. Complete accurately	92. Do better	123. Find difficult
31. Become important	62. Compose concisely	93. Do well	124. Find easy

125. Find helpful
126. Find necessary
127. Find sparingly
128. Find useful
129. Find valuable
130. Fit neatly
131. Fit well
132. Flow naturally
133. Flow uninterruptedly
134. Focus exclusively
135. Focus explicitly
136. Focus mainly
137. Focus predominantly
138. Focus primarily
139. Found predominantly
140. Function differently
141. Grow rapidly
142. Go awry
143. Go further
144. Guess correctly
145. Hold potential
146. Hold true
147. Impact positively
148. Impact significantly
149. Implement effectively
150. Improve firmly
151. Improve substantially
152. Indicate clearly
153. Indicate verbally
154. Influence inappropriately
155. Keep current
156. Keep occupied

157. Link directly
158. Look carefully (into)
159. Look closely (at)
160. Look deeply (into)
161. Make accessible
162. Make apparent
163. Make arduous
164. Make attainable
165. Make available
166. Make better
167. Make briefly
168. Make certain
169. Make clear
170. Make comfortable
171. Make concise
172. Make covert
173. Make difficult
174. Make explicit
175. Make feasible
176. Make impossible
177. Make overt
178. Make possible
179. Make realistic
180. Make untenable
181. Make visible
182. Measure rigorously
183. Merit additional research
184. Move simultaneously
185. Navigate successfully
186. Negotiate explicitly
187. Negotiate implicitly
188. Occur frequently

189. Occur instantaneously
190. Occur often
191. Occur significantly
192. Occur spontaneously
193. Operate effectively
194. Operate independently
195. Participate effectively
196. Participate voluntarily
197. Pay particular attention
198. Perform better
199. Perform extensively
200. Perform highly
201. Perform poorly
202. Perform well
203. Portray comprehensively
204. Portray transparently
205. Post regularly
206. Predict accurately
207. Present effectively
208. Present orally
209. Present persuasively
210. Pronounced differently
211. Prove (to be) effective
212. Prove (to be) efficient
213. Prove (to be) sure
214. Prove fruitful
215. Prove impossible
216. Prove (to be) useful
217. Provide potential (for)
218. Provide profitable (over)
219. Put differently
220. Rate equally

221. Read silently
222. Record alphabetically
223. Rely exclusively (on)
224. Rely heavily (on)
225. Remain accessible
226. Remain consistently
227. Remain imperfect
228. Remain opaque
229. Remain similar
230. Remain strong
231. Remain unanswered
232. Remain unchanged
233. Remain unclear
234. Remain undecided
235. Remind regularly
236. Report explicitly
237. Respond freely
238. Respond physically
239. Respond verbally
240. Review critically
241. Run counter
242. Seem achievable
243. Score better
244. Seem common
245. Seem competent
246. Seem conclusive
247. Seem desirable
248. Seem feasible
249. Seem intuitive
250. Seem largely
251. Seem likely
252. Seem minor

253. Seem obvious
254. Seem pertinent
255. Seem plausible
256. Seem prudent
257. Seem reasonable
258. Seem relevant
259. Seem sensible
260. Seem sensitive
261. Seem similar
262. Seem undesirable
263. Seem unexpected
264. Seem uninteresting
265. Seem unreasonable
266. Seem unsure
267. Select randomly
268. Set to stepwise
269. Shift dramatically
270. Sit uncomfortably (with)

271. Sound better
272. Sound positive
273. Speak correctly
274. Speak fluently
275. Speak freely
276. Speak openly
277. Speak positively
278. Speak proficiently
279. Spoken informally
280. Stay connected
281. Stem largely (from)
282. Submit electronically
283. Suggest alternative
284. Take further
285. Take part voluntarily
286. Take place incidentally
287. Take seriously
288. Talk enthusiastically

289. Teach explicitly
290. Think consciously
291. Think critically
292. Think deeply
293. Think longitudinally
294. Think nonlinearly
295. Translate quickly
296. Trigger new idea
297. Use correctly
298. Use effectively
299. Use heavily
300. Use inappropriately
301. Use independently
302. Use indiscriminately
303. Use inductively
304. Used frequently
305. Used subsequently
306. Used variably

307. Utilize successfully
308. Vary greatly
309. Vary significantly
310. Vary widely
311. View effectively
312. Viewed differently
313. Wish fervently
314. Work autonomously
315. Work collaboratively
316. Work creatively
317. Work independently
318. Work individually
319. Work together
320. Write accurately
321. Write academically
322. Write extensively
323. Write fluently

NOUN + VERB

1. Analyses indicate
2. Analyses show
3. Article describe
4. Article discuss
5. Article examine
6. Article focus
7. Article present
8. Article report
9. Article seek
10. Article suggest
11. Attempt to achieve
12. Change to practise
13. Concern arise
14. Data consist
15. Data elicit
16. Data indicate
17. Data provide
18. Data reveal
19. Data show
20. Data suggest
21. Data were analyzed
22. Data were collected
23. Desire to interact
24. Difference were found
25. Evidence exist
26. Evidence suggest
27. Evidence support
28. Figure illustrate

29. Figure indicate
30. Figure represent
31. Figure show
32. Findings demonstrate
33. Findings find
34. Findings indicate
35. Findings reveal
36. Findings show
37. Findings suggest
38. Findings support
39. Investigation describe
40. Issues to consider
41. Lack of knowledge
42. Learning environment
43. Literature propose
44. Literature reveal
45. Literature show
46. Literature suggest
47. Misunderstanding occur
48. Need to communicate
49. Need to go
50. Need to help
51. Paper consider
52. Paper examines
53. Paper report
54. Paper summarize
55. Program design
56. Question arise

57. Report claim
58. Report confirm
59. Research show
60. Results demonstrate
61. Results determine
62. Results enable
63. Results give
64. Results indicate
65. Result provide
66. Results reveal
67. Results show
68. Results suggest
69. Story reveal
70. Studies prove
71. Study address
72. Study aim
73. Study analyze
74. Study attempt
75. Study combine
76. Study compare
77. Study contribute
78. Study demonstrate
79. Study employ
80. Study examine
81. Study explore
82. Study find
83. Study focus
84. Study give

85. Study intend
86. Study investigate
87. Study look at
88. Study mark
89. Study provide
90. Study raise
91. Study report
92. Study reveal
93. Study set out
94. Study show
95. Study suggest
96. Study use
97. Study was conducted
98. Survey reveal
99. Survey show
100. Table compare
101. Table contain
102. Table include
103. Table shed light on
104. Table show
105. Table summarize
106. Table present
107. Table provide
108. Table represent
109. Table reveal

NOUN + NOUN

1. Access information
2. Achievement gap
3. Assessment criteria
4. Blanket statement
5. Book review
6. Capstone experience
7. Case of death
8. Case of life
9. Catering staff
10. Chance of success
11. (in) Class use
12. Composing process
13. Conference attendance
14. Consent form
15. Context cue
16. Correction of error
17. Construing meaning
18. Construing reality
19. Curriculum development
20. Data analysis
21. Data collection
22. Data description
23. Decision-making process
24. Developmental opportunities
25. Development study
26. Devoid of originality
27. Discourse community
28. Discussion board
29. Dissemination of knowledge
30. Education reform
31. Effect size
32. Effect value
33. Equipment failure
34. Error correction
35. Error detection
36. Feeling of insecurity
37. Feeling of isolation
38. Feeling of unease
39. Frequency of occurrence
40. Future success
41. Gender difference
42. Hallmark of data
43. Harbinger of change
44. Head start
45. Home discipline
46. Humanist orientation
47. Identity construction
48. Importance of repetition
49. Information retrieval
50. Input flood
51. Intend of study
52. Key to understanding
53. Knowledge source
54. Lack of awareness
55. Lack of clarity
56. Lack of competence
57. Lack of confidence
58. Lack of credibility
59. Lack of evidence
60. Lack of exposure
61. Lack of familiarity
62. Lack of fluency
63. Lack of interactivity
64. Lack of interest
65. Lack of knowledge
66. Lack of outcome
67. Lack of time
68. Lack of understanding
69. Language awareness
70. Language development
71. Language minority
72. Language proficiency
73. Language use
74. Learner autonomy
75. Learning experience
76. Learning opportunity
77. Learning outcome
78. Learning preference
79. Learning style
80. Learning tool
81. Level of proficiency
82. Life expectancy
83. Life experience
84. List of names
85. Matter of perspective
86. Mother tongue
87. Paucity of research
88. Peer feedback
89. Period of fluctuation
90. Policy decision
91. Policy maker
92. Pool of participants
93. Poverty reduction
94. Power relationship
95. Preparation class
96. Priority topic
97. Proficiency level
98. Reading achievement
99. Reading comprehension
100. Reading for pleasure
101. Reference material
102. Repertoire of practice
103. Research gap
104. Research paradigm
105. Research proposal
106. Research question
107. Research study
108. Retention of word
109. Risk factor
110. Risk taker
111. Role model
112. Role play
113. Rote learning
114. Search engine
115. Security guards
116. Sense of dissatisfaction
117. Sense of solidarity
118. Sense of uncertainty
119. Set of values
120. Shortcoming of study
121. Sign of deficiency
122. Significance of difference
123. Socialization process
124. Solidarity activity

125. Source of dissatisfaction
126. Source of frustration
127. Source of information
128. Source of knowledge
129. Speed of access
130. Stereotype threat
131. Student achievement
132. Student failure
133. Student success
134. Subject matter
135. Subject of debate
136. Teacher assessment
137. Teacher correction

138. Teacher education
139. Teacher intervention
140. Teacher involvement
141. Teaching practice
142. Teaching session
143. Technology use
144. Time management
145. Time constraint
146. Topic familiarity
147. Topic of interest
148. Transmission of ideologies
149. Tutor feedback
150. Umbrella term

151. University culture
152. Use of information
153. Use of knowledge
154. Vantage level
155. Vantage point
156. Vocabulary acquisition
157. Vocabulary competence
158. Vocabulary complexity
159. Vocabulary development
160. Vocabulary growth
161. Vocabulary knowledge
162. Waste of time
163. Wealth of data

164. Woking day
165. Woking experience
166. Working hours
167. Workplace communication
168. Worthy of comment
169. Writing ability
170. Writing competence
171. Writing development
172. Writing performance
173. Writing task

ADJECTIVE + NOUN

1. Absolute growth
2. Absolute learning
3. Abstract meaning
4. Academic affairs
5. Academic communication
6. Academic community
7. Academic development
8. Academic literacy
9. Academic prestige
10. Academic rigor
11. Academic setting
12. Academic success
13. Academic text
14. Academic values
15. Academic writing
16. Acceptable errors
17. Acceptable level
18. Accurate assessment
19. Acquisitional benefits
20. Active role
21. Actual role
22. Added value
23. Additional attention
24. Additional benefit
25. Additional factors
26. Additional help
27. Additional information
28. Additional instruction
29. Additional work
30. Additive revision
31. Adequate account

32. Adequate data
33. Administrative efficiency
34. Adult learner
35. Advantageous positions
36. Adversarial aspect
37. Adverse experience
38. Adverse impact
39. Affective factors
40. Agitated passengers
41. Agreed solution
42. Alternative applications
43. Alternative perspective
44. Amalgamated corpora
45. Ambiguous idea
46. Ambiguous notion
47. Ample evidence
48. Ample opportunity
49. Analytic insights
50. Anecdotal evidence
51. Anecdotal observation
52. Annual conference
53. Antagonistic question
54. Apparent discrepancy
55. Apparent growth
56. Apparent reluctance
57. Appealing idea
58. Applied science
59. Ardent support
60. Arduous challenge
61. Attainable goal
62. Attentional span

63. Attentive observation
64. Attractive feature
65. Authentic data
66. Authentic materials
67. Authentic purpose
68. Authoritative stance
69. Autonomous activity
70. Autonomous learning
71. Awkward implication
72. Awkward question
73. Background knowledge
74. Baseline population
75. Basic claim
76. Basic concept
77. Basic design
78. Basic fact
79. Basic feature
80. Basic goal
81. Basic principles
82. Basic skill
83. Basic outline
84. Baseline knowledge
85. Beneficial effect
86. Best solution
87. Better understanding
88. Better indication
89. Better insight
90. Better way
91. Blind rating
92. Bilingual competence
93. Blunt measures

94. Bootstrapping process
95. Bridging strategy
96. Brief comment
97. Brief description
98. Brief discussion
99. Brief glance
100. Brief outline
101. Brief prompt
102. Brief statement
103. Broad base
104. Broad-brush picture
105. Capturing idea
106. Catalytic effect
107. Categorical claim
108. Central aim
109. Central concern
110. Central goal
111. Central position
112. Central purpose
113. Central role
114. Certain knowledge
115. Certain requirement
116. Challenging goal
117. Challenging skill
118. Challenging task
119. Changing market
120. Changing nature
121. Chronicling process
122. Chronological framework
123. Clarification question
124. Clarification request

125. Clear answer
126. Clear assessment
127. Clear conclusion
128. Clear contradiction
129. Clear criticism
130. Clear demarcations
131. Clear difference
132. Clear effect
133. Clear evidence
134. Clear impetus
135. Clear improvement
136. Clear instability
137. Clear orientation
138. Clear purpose
139. Clear sense
140. Clear tendency
141. Clear understanding
142. Clerical work
143. Close attention
144. Close connection
145. Close resemblance
146. Cognitive effort
147. Cognitive load
148. Cognitive overlook
149. Cognitive process
150. Cognitive skill
151. Cognitive strategy
152. Collaborative environment
153. Collaborative task
154. Collective knowledge
155. Common errors
156. Common goal

157. Common language
158. Common purpose
159. Common subject
160. Common thread
161. Communicative purpose
162. Competitive ethos
163. Competitive relationship
164. Complete agreement
165. Complete convergence
166. Complete list
167. Complete picture
168. Complex pattern
169. Complex process
170. Complicated construct
171. Comprehensible input
172. Comprehensive analysis
173. Comprehensive overview
174. Comprehensive review
175. Comprehensive understanding
176. Comprehensive view
177. Concerted effort
178. Conclusive difference
179. Concomitant changes
180. Concrete example
181. Concrete meaning
182. Conflicting nature
183. Conflicting results
184. Conscious attention
185. Conscious effort
186. Considerable attention
187. Considerable variation
188. Considerable controversy

189. Considerable difficulty
190. Considerable evidence
191. Considerable importance
192. Considerable progression
193. Considerable revision
194. Considerable variation
195. Consistent effect
196. Consistent predictor
197. Consistent use
198. Constructive feedback
199. Context-sensitive perspective
200. Contextual information
201. Continued disparities
202. Continuing debate
203. Continuous assessment
204. Continuous development
205. Continuous growth
206. Contradictive topic
207. Contradictory account
208. Contradictory finding
209. Contributory factor
210. Controlled task
211. Conventional look
212. Convergent evidence
213. Convergent goal
214. Core belief
215. Core characteristic
216. Core reason
217. Core subject
218. Correct answer
219. Correct prediction
220. Corrective device

221. Corrective feedback
222. Cost/benefit analysis
223. Covert racism
224. Creative beings
225. Creative use
226. Creative writing
227. Critical analyses
228. Critical awareness
229. Critical component
230. Critical essay
231. Critical influence
232. Critical issue
233. Critical perspective
234. Critical problem
235. Critical thinking
236. Critical viewpoint
237. Cross-sectional study
238. Crucial point
239. Crucial role
240. Culminating experience
241. Cultural background
242. Cultural difference
243. Cultural heterogenization
244. Cultural homogenization
245. Cultural identity
246. Cumulative process
247. Cumulative view
248. Curricular constraints
249. Curricular goals
250. Cursory glance
251. Cut-off point
252. Daily conversation

253.Daily interaction	285.Different assumptions	317.Driving force	349.Empirical data
254.Daily life	286.Different path	318.Dubious quality	350.Empirical evidence
255.Daily lives	287.Different view	319.Durable learning	351.Empirical finding
256.Dampening effect	288.Differential effect	320.Dynamic interplay	352.Empirical investigation
257.Daunting task	289.Differential performance	321.Early descriptions	353.Empirical research
258.Debriefing session	290.Differing opinions	322.Early development	354.Empirical study
259.Decent pronunciation	291.Digital device	323.Early stage	355.Empirical work
260.Declarative knowledge	292.Digital education	324.Early work	356.Enslaved individuals
261.Decreased use	293.Digital technology	325.Ease-of-learning ranking	357.Enthusiastic advocates
262.Deep level	294.Direct instruction	326.Economic opportunities	358.Environmental awareness
263.Deeper insight	295.Direct learning	327.Educational contexts	359.Environmental variables
264.Deeper understanding	296.Discernible biases	328.Educational experience	360.Ephemeral nature
265.Delaying consideration	297.Discernible impact	329.Educational goal	361.Epilinguistic level
266.Demographic characteristics	298.Disciplinary context	330.Educational profile	362.Equal chance
267.Demographic information	299.Disciplinary knowledge	331.Effective communication	363.Equal opportunity
268.Demotivating effect	300.Discontiguous idea	332.Effective description	364.Equal prominence
269.Descriptive data	301.Discrete information	333.Effective means (of)	365.Erroneous assumption
270.Descriptive feedback	302.Discrete phenomenon	334.Effective measure	366.Erroneous correction
271.Desirable outcome	303.Discrete stages	335.Effective reading	367.Essential component
272.Desired goal	304.Disinterested generation	336.Effective strategy	368.Essential criteria
273.Detailed attention	305.Distinct pattern	337.Effective teaching	369.Essential information
274.Detailed research	306.Distinctive feature	338.Effective tool	370.Essential method
275.Detailed scrutiny	307.Divergent view	339.Effective use	371.Ethical obligation
276.Detailed suggestion	308.Diverging ideas	340.Effective voice	372.Even distribution
277.Determining factor	309.Diverging needs	341.Effective ways	373.Evident ground
278.Determining role	310.Diverging patterns	342.Efficient reading	374.Evolutionary advantage
279.Detrimental effect	311.Doctoral student	343.Efficient use	375.Excellent examples
280.Descriptive feedback	312.Dominant focus	344.Electronic submission	376.Excessive control
281.Developed countries	313.Dominant language	345.Eliciting ideas	377.Excessive reliance
282.Developing knowledge	314.Dominant norm	346.Eminent researcher	378.Exhaustive research
283.Developmental milestone	315.Dominant theme	347.Empirical analyses	379.Existing evidence
284.Developmental phenomenon	316.Dramatic change	348.Empirical basis	380.Experienced raters

381. Experienced teacher	413. Flat tone	445. Further reinforcement	477. Hard science
382. Experiential study	414. For-credit work	446. Further research	478. Hard work
383. Explicit attention	415. Foregoing discussion	447. Further studies	479. Heated debate
384. Explicit discussion	416. Foreign accent	448. Further support	480. Heated discussion
385. Explicit learning	417. Formal presentation	449. Future possibilities	481. Heavy demand
386. Explicit instruction	418. Fragmented account	450. Future studies	482. Heavy strain
387. Explicit knowledge	419. Front-line practitioners	451. General acceptance	483. Helpful suggestion
388. Explicit intervention	420. Fruitful area	452. General pattern	484. High-quality instructions
389. Explicit opportunity	421. Fruitful research	453. General rise	485. Historical evidence
390. Explicit teaching	422. Full account	454. General trend	486. Holistic scoring
391. Explicit treatment	423. Full credit	455. Generic term	487. Homogenous group
392. Exploratory study	424. Full participation	456. Genuine opportunity	488. Hushed asides
393. Extensive control	425. Full review	457. Global access	489. Ideological presuppositions
394. Extensive difference	426. Fundamental aim	458. Global connectivity	490. Idiomatic usage
395. Extensive experience	427. Fundamental difference	459. Global importance	491. Ill-served needs
396. Extensive use	428. Fundamental goal	460. Global investment	492. Immediate use
397. External factor	429. Functional purpose	461. Global phenomenon	493. Implicit instruction
398. Extrinsic motive	430. Functional relation	462. Good comprehension	494. Implicit intervention
399. Facile access	431. Fundamental factors	463. Grave concern	495. Implicit knowledge
400. False impression	432. Fundamental issue	464. Great advantage	496. Implicit learning
401. Fair assumption	433. Fundamental role	465. Great appetite	497. Implicit treatment
402. Fair treatment	434. Further analyses	466. Great care	498. Important advantage
403. False start	435. Further challenge	467. Great effect	499. Important bearing (on)
404. Fast-growing countries	436. Further consideration	468. Great effort	500. Important caveats
405. Fata accident	437. Further correction	469. Great gap	501. Important challenges
406. Fertile sites (for)	438. Further drop	470. Great impediment	502. Important changes
407. Final resolution	439. Further evidence	471. Great interest	503. Important characteristics
408. Financial loss	440. Further exploration	472. Ground-breaking investigation	504. Important concern
409. Fine distinction	441. Further information	473. Growing interest	505. Important consideration
410. Fine-grained distinctions	442. Further insight	474. Growing evidence	506. Important contribution
411. Firm grasp	443. Further level	475. Handsome benefits	507. Important criterion
412. Fixed view	444. Further point	476. Hard copy	508. Important development

509. Important disadvantage
510. Important factor
511. Important feature
512. Important finding
513. Important gap
514. Important goal
515. Important implications
516. Important insight
517. Important issue
518. Important limitations
519. Important milestone
520. Important observation
521. Important problem
522. Important question
523. Important ramification
524. Important reason
525. Important resource
526. Important role
527. Important similarities
528. Important source
529. Important stage
530. Important steps
531. Important task
532. Important themes
533. Important values
534. Impressionistic look
535. Inaccurate evidence
536. Inadequate attention
537. Inadequate training
538. Inadvertent oversight
539. Inappropriate response
540. Incidental learning

541. Inconclusive findings
542. Incorrect use
543. Increased practice
544. Increased scrutiny
545. Increasing conformity
546. Increasing interest
547. Increasing prominence
548. Increasing urgency
549. Independent coding
550. Independent evaluation
551. Independent learning
552. Independent measure
553. Indigenous language
554. Indirect effect
555. Individual difference
556. Individual thought
557. Individualistic activity
558. In-depth distinction
559. In-depth examination
560. In-depth understanding
561. Individual variability
562. Individualistic view
563. Informal conversation
564. Inherent property
565. Initial contribution
566. Initial experience
567. Initial study
568. Initial support
569. Innovative knowledge
570. Innovative project
571. Insightful comment
572. Insightful enquiry

573. Insightful overview
574. Instant payback
575. Intangible nature
576. Interesting insight
577. Intrinsic motivation
578. Instant payback
579. Instant messaging
580. Instructional content
581. Instructional practice
582. Instructional support
583. Insufficient training
584. Integrative view
585. Intellectual rigour
586. Intense criticism
587. Intense struggle
588. Intensive writing
589. Intercultural communication
590. Interesting difference
591. Interesting finding
592. Interesting insight
593. Interesting signs
594. International student
595. Intimidate knowledge
596. Intriguing case
597. Intriguing finding
598. Intriguing question
599. Intrinsic motive
600. Irritating errors
601. Iterative process
602. Jarring effect
603. Judicious intervention
604. Key changes

605. Key characteristics
606. Key component
607. Key development
608. Key element
609. Key evidence
610. Key factor
611. Key feature
612. Key Figure
613. Key finding
614. Key issue
615. Key person
616. Key point
617. Key question
618. Key research
619. Key resource
620. Key role
621. Key skill
622. Key subject
623. Key term
624. Key theme
625. Key values
626. Key words
627. Labour-intensive research
628. Language-analytic ability
629. Large corpora
630. Large difference
631. Large effect
632. Large impact
633. Large-scale movement
634. Large-scale studies
635. Lasting impact
636. Legal advice

637. Less-researched discipline
638. Lexical access
639. Lexical accessibility
640. Lexical choice
641. Lexical competence
642. Lexical complexity
643. Lexical deterioration
644. Lexical development
645. Lexical diversity
646. Lexical inference
647. Lexical knowledge
648. Lexical retrieval
649. Lexical sophistication
650. Life-claiming failure
651. Liberating opportunities
652. Limited accessibility
653. Limited contact
654. Limited experience
655. Limited opportunity
656. Limited resource
657. Limitless ways
658. Lingering affection
659. Lingering tendency
660. Linguistic awareness
661. Linguistic development
662. Linguistic gains
663. Little attention
664. Little consensus
665. Little difference
666. Little evidence
667. Little experience
668. Little impact

669. Little interest
670. Little room (space)
671. Little work
672. Lived experiences
673. Lively debate
674. Living creatures
675. Local errors
676. Local adaptations
677. Localized dialect
678. Logical issue
679. Longitudinal study
680. Long-term effect
681. Long-term exponent
682. Long-term memory
683. Main contribution
684. Main development
685. Main difference
686. Main features
687. Main stakeholders
688. Main topic
689. Major changes
690. Major findings
691. Major focus
692. Major goal
693. Major impact
694. Major paradigm
695. Major struggle
696. Major task
697. Mandatory examination
698. Manifold needs
699. Marginally significant
700. Massive collection

701. Meaningful contribution
702. Meaningful way
703. Measurable contribution
704. Mediating factor
705. Mental lexicon
706. Merit-based scholarship
707. Metaphorical use
708. Metalinguistic knowledge
709. Methodological design
710. Methodological rigor
711. Minimal difference
712. Minimum requirements
713. Mobile devices
714. Moderate correlation
715. Modest impact
716. Motivational factor
717. Multiple experience
718. Mutable state
719. Native English
720. Natural phenomenon
721. Naturalistic setting
722. Naturally-occurring interactions
723. Near-native English
724. Negative association
725. Negative comment
726. Negative consequence
727. Negative effect
728. Negative emotion
729. Negative evaluation
730. Negative evidence
731. Negative reaction
732. Negligible effect

733. Negligible impact
734. New word
735. Noisy data
736. Nonlinear relationship
737. Non-native English
738. Notable difference
739. Notable example
740. Notable exceptions
741. Notable features
742. Notable issue
743. Notable success
744. Noteworthy exception
745. Noticeable difference
746. Noticeable growth
747. Noticeable way
748. Novice student
749. Novice user
750. Nuanced view
751. Obedient listeners
752. Obfuscatory works
753. Obligatory features
754. Observable difference
755. Observational experience
756. Observed difference
757. Obvious effect
758. Obvious limitations
759. Obvious potential
760. Obvious similarities
761. Offline use
762. Ongoing debates
763. Ongoing discussion
764. Ongoing emergence

765. Ongoing evaluation
766. Ongoing opportunity
767. Ongoing process
768. Online verification
769. Operating costs
770. Optimal condition
771. Optimal level
772. Optimal performance
773. Oral communication
774. Oral development
775. Oral negotiations
776. Oral performance
777. Oral presentation
778. Out-of-class experience
779. Out-of-class opportunity
780. Overall changes
781. Overall evaluation
782. Overall finding
783. Overall impression
784. Overall picture
785. Overall purpose
786. Overall quality
787. Overall responsibility
788. Overall use
789. Overarching aim
790. Overarching criterion
791. Overarching goal
792. Overarching issue
793. Overarching question
794. Overhead transparency
795. Overt correction
796. Overt evidence

797. Paradoxical relationship
798. Parallel development
799. Parallel work
800. Partial advantage
801. Partial knowledge
802. Particular attention
803. Particular interest
804. Passing score
805. Pedagogical belief
806. Pedagogical challenge
807. Pedagogical implications
808. Pedestrian safety
809. Pedagogic challenges
810. Pedagogic use
811. Pedagogical intervention
812. Perceptible difference
813. Perennial problem
814. Permanent career
815. Permanent imprint
816. Persistent instability
817. Personal biases
818. Personal experience
819. Personal profile
820. Personal thing
821. Persuasive arguments
822. Persuasive research
823. Pertinent questions
824. Physical skill
825. Piecemeal weighing
826. Pilot study
827. Pioneering work
828. Pivot word

829. Pivotal role
830. Planning talk
831. Plausible explanation
832. Plausible idea
833. Plausible option
834. Plurilingual identity
835. Poignant analogy
836. Polarized debate
837. Political realities
838. Political stance
839. Poor performance
840. Populous states
841. Positive affirmation
842. Positive change
843. Positive contribution
844. Positive correlation
845. Positive effect
846. Positive emotion
847. Positive evaluation
848. Positive evidence
849. Positive finding
850. Positive impact
851. Positive interdependence
852. Positive relationship
853. Possible conclusion
854. Possible errors
855. Possible explanation
856. Possible outcome
857. Possible solution
858. Potential benefit
859. Potential consequence
860. Potential efficacy

861. Potential effect
862. Potential implication
863. Potential influence
864. Potential link
865. Potential opportunity
866. Potential pitfall
867. Potential problem
868. Potential shortcoming
869. Potential similarities
870. Potential source
871. Powerful difference
872. Powerful hardware
873. Powerful influence
874. Powerful tool
875. Powerful vehicles
876. Practical application
877. Practical suggestions
878. Practical terms
879. Pragmatic competence
880. Pragmatic knowledge
881. Predictable difference
882. Predictable effect
883. Predictable outcome
884. Predictive accuracy
885. Predictive power
886. Predominant features
887. Preliminary indication
888. Preventative intervention
889. Prevailing orientation
890. Previous research
891. Prior experience
892. Prior knowledge

893. Primary aim
894. Primary concern
895. Primary criterion
896. Principal component
897. Principled manner
898. Private belongings
899. Probable reasons
900. Problem-solving task
901. Procedural knowledge
902. Professional development
903. Professional purposes
904. Profound effect
905. Prominent feature
906. Prominent words
907. Protective effect
908. Provisional answer
909. Publishable article
910. Published work
911. Pure science
912. Purpose-built corpora
913. Push-back scenario
914. Putative contribution
915. Putative stage
916. Puzzling term
917. Qualitative analysis
918. Qualitative evidence
919. Qualitative study
920. Quantitative analysis
921. Quantitative evidence
922. Quantitative study
923. Quick access
924. Radical implication

925. Random selection
926. Rapid expansion
927. Rapid growth
928. Rapid increase
929. Rapid change
930. Rapid development
931. Rare occurrence
932. Rating criteria
933. Raw comment
934. Ready-made corpora
935. Real advantage
936. Real problem
937. Real world
938. Real-world task
939. Reasonable degree
940. Reasoned argument
941. Recent studies
942. Receptive knowledge
943. Recognizable phenomenon
944. Recommended value
945. Reductionist view
946. Recurring question
947. Regular basis
948. Real-life experience
949. Real-life situation
950. Reliable criteria
951. Reliable insight
952. Reliable prediction
953. Residual capacity
954. Restricted true
955. Rigorous manner
956. Rigorous training

957. Robust argument
958. Robust contribution
959. Robust difference
960. Robust effect
961. Robust finding
962. Robust inquiry
963. Robust predictor
964. Robust reason
965. Robust role
966. Rote-learning ability
967. Routine activities
968. Rubric-based decision
969. Rudimentary purpose
970. Running costs
971. Qualitative investigation
972. Quantitative investigation
973. Salient difference
974. Salient features
975. Scaffolding skills
976. Selective process
977. Sensitive dependence
978. Serious problem
979. Scientific knowledge
980. Semantic integrity
981. Semantic knowledge
982. Sensitive intervention
983. Sequential order
984. Severe criticism
985. Sheer number
986. Short-term gains
987. Significant advantage
988. Significant assistant

989. Significant attention
990. Significant bearing
991. Significant benefit
992. Significant challenges
993. Significant contribution
994. Significant correlation
995. Significant difference
996. Significant drop
997. Significant effect
998. Significant exception
999. Significant example
1000. Significant factor
1001. Significant gains
1002. Significant gap
1003. Significant impact
1004. Significant improvement
1005. Significant level
1006. Significant part
1007. Significant predictor
1008. Significant relationship
1009. Significant result
1010. Significant role
1011. Significant stimulus
1012. Similar point
1013. Simple task
1014. Specific context
1015. Similar concern
1016. Similar situations
1017. Similar outcome
1018. Slight difference
1019. Slight effect
1020. Slight increase

1021. Small difference	1053. Striking difference	1085. Substantial mismatch	1117. Theoretical support
1022. Small gains	1054. Striking feature	1086. Substantial shift	1118. Timely feedback
1023. Small-scale study	1055. Striking finding	1087. Subtle difference	1119. Timely movement
1024. Small tendency	1056. Striking similarity	1088. Successful presentation	1120. Top-down initiative
1025. Social interaction	1057. Strong agreement	1089. Succinct idea	1121. Top priority
1026. Social justice	1058. Strong association	1090. Sudden shift	1122. True description
1027. Social opportunities	1059. Strong benefit	1091. Sufficient attention	1123. Ultimate aim
1028. Social relationship	1060. Strong bias	1092. Suggested alternative	1124. Ultimate control
1029. Social underpinning	1061. Strong caution	1093. Suitable stimuli	1125. Ultimate goal
1030. Societal biases	1062. Strong claim	1094. Superior performance	1126. Ultimate hope
1031. Socio-economic status	1063. Strong correlation	1095. Supervised teaching	1127. Ultimate purpose
1032. Soft science	1064. Strong effect	1096. Supplementary material	1128. Unabridged text
1033. Sophisticated idea	1065. Strong emphasis	1097. Supplementary resource	1129. Unbridgeable gulf
1034. Sophisticated information	1066. Strong evidence	1098. Surprising advantages	1130. Unconscious application
1035. Sophisticated use	1067. Strong focus	1099. Surprising results	1131. Unconscious process
1036. Specialized corpora	1068. Strong foundation	1100. Surrounding area	1132. Underlying assumptions
1037. Specialized knowledge	1069. Strong indication	1101. Sustained development	1133. Underlying similarities
1038. Specific context	1070. Strong interest	1102. Systematic analysis	1134. Unelaborated source
1039. Specific purpose	1071. Strong performance	1103. Systematic evidence	1135. Unexpected circumstance
1040. Spontaneous conversation	1072. Strong possibility	1104. Target-centric perspective	1136. Unexpected finding
1041. Spontaneous speech	1073. Strong preference	1105. Technical advantage	1137. Unexpected problem
1042. Stable trait	1074. Strong presence	1106. Technical support	1138. Unexpected question
1043. Static relation	1075. Strong support	1107. Tedious work	1139. Unfamiliar words
1044. Starting point	1076. Strong tendencies	1108. Tentative interest	1140. Unguided speech
1045. State-wide exam	1077. Stylistic difference	1109. Tentative suggestion	1141. Uniform trend
1046. Static view	1078. Subsidiary aim	1110. Thematic content	1142. Unique contribution
1047. Statistically significant	1079. Subsidiary focus	1111. Theoretical commitment	1143. Unique experience
1048. Steady flow	1080. Substantial claim	1112. Theoretical foundation	1144. Unique nature
1049. Steady improvement	1081. Substantial difference	1113. Theoretical framework	1145. Unique opportunity
1050. Straightforward task	1082. Substantial evidence	1114. Theoretical grounding	1146. Unique reason
1051. Straightforward tendency	1083. Substantial goal	1115. Theoretical interest	1147. Universal norms
1052. Stratified sampling	1084. Substantial handicap	1116. Theoretical prediction	1148. Unknown vocabulary

1149. Unknown word
1150. Unlikely event
1151. Unofficial language
1152. Unpredictable situations
1153. Unrealistic expectation
1154. Unrefined measurement
1155. Unsatisfactory situation
1156. Unsettling experience
1157. Unsurprising finding
1158. Untameable assumption
1159. Untapped area
1160. Unusual challenge
1161. Unusual scenarios
1162. Urgent need
1163. Useful aid

1164. Useful development
1165. Useful surrogate
1166. Useful tips
1167. Vague expectation
1168. Vague term
1169. Valid conclusion
1170. Valid indicator
1171. Valid interpretation
1172. Valuable endeavour
1173. Valuable experience
1174. Valuable information
1175. Valuable input
1176. Valuable insight
1177. Valuable resource
1178. Valuable step forward
1179. Valuable suggestion

1180. Value-laden behaviour
1181. Vanishing point
1182. (at) varying levels
1183. Vast literature
1184. Verbal fluency
1185. Vexing question
1186. Viable alternatives
1187. Viable tool
1188. Violated rule
1189. Virtual environment
1190. Visual cue
1191. Vital assumption
1192. Vital clues
1193. Vital role
1194. Vocabulary knowledge
1195. Weak impact

1196. Welcome outcome
1197. Widespread belief
1198. Widespread popularity
1199. Widespread resistance
1200. Widespread use
1201. Wildly-held beliefs
1202. Wired world
1203. Working memory
1204. World-wide interest
1205. Worrisome feature
1206. Worthwhile experience
1207. Written feedback
1208. Wrong answer
1209. Zero relevance

ADVERB + ADJECTIVE

1. Admittedly problematic	32. Cognitively mature	63. Culturally unfamiliar	94. Especially true
2. Adversely impact	33. Cognitively salient	64. Culturally variable	95. Essentially practical
3. Apparently beneficial	34. Commonly known	65. Daily routine	96. Explicitly present
4. Arguably beneficial	35. Comparatively weaker	66. Descriptively real	97. Extremely attractive
5. Barely adequate	36. Completely appropriate	67. Diametrically opposed	98. Extremely common
6. Barely coherent	37. Completely comfortable	68. Directly related	99. Extremely controversial
7. Barely perceptible	38. Completely discrete	69. Directly relevant	100. Extremely difficult
8. Broadly applicable	39. Completely familiar	70. Directly transferable	101. Extremely frequent
9. Broadly confident	40. Completely free	71. Distantly related	102. Extremely helpful
10. Broadly contrasting	41. Completely irrelevant	72. Doubtlessly important	103. Extremely high
11. Broadly representative	42. Completely negative	73. Dramatically different	104. Extremely small
12. Centrally concerned	43. Completely positive	74. Easily accessible	105. Extremely successful
13. Certainly possible	44. Completely wrong	75. Easily definable	106. Extremely useful
14. Certainly problematic	45. Conceptually plausible	76. Easily forgotten	107. Fairly efficient
15. Clearly adept	46. Conceptually simple	77. Easily replicable	108. Fairly experienced
16. Clearly crucial	47. Concisely written	78. Easily understandable	109. Fairly straightforward
17. Clearly defined	48. Considerably different	79. Economically disadvantaged	110. Freely available
18. Clearly evident	49. Considerable harder	80. Effectively develop	111. Frequently cited
19. Clearly important	50. Considerably weak	81. Entirely new	112. Fully correct
20. Clearly impossible	51. Consistently higher	82. Entirely plausible	113. Fully established
21. Clearly impractical	52. Constantly changing	83. Entirely unexpected	114. Fully realisable
22. Clearly interpretable	53. Contextually clear	84. Equally challenging	115. Fully trained
23. Clearly specify	54. Conventionally construed	85. Equally complex	116. Generally accepted
24. Clearly useful	55. Critically important	86. Equally effective	117. Generally agreed
25. Closely associated	56. Culturally appropriate	87. Equally important	118. Generally easier
26. Closely connected	57. Culturally biased	88. Equally sized	119. Generally high
27. Closely interconnected	58. Culturally bond	89. Equally well	120. Generally positive
28. Closely linked	59. Culturally different	90. Especially helpful	121. Generally reluctant
29. Closely related	60. Culturally distinct	91. Especially important	122. Genuinely interesting
30. Cognitively challenging	61. Culturally familiar	92. Especially interesting	123. Genuinely unexpected
31. Cognitively complex	62. Culturally sensitive	93. Especially notable	124. Globally connected

125. Globally minded	157. Increasingly practical	189. Notably limited	221. Potentially effective
126. Grammatically complex	158. Increasingly topical	190. Notably rare	222. Potentially important
127. Greatly opposed	159. Incredibly rich	191. Noticeably stronger	223. Potentially negative
128. Grossly inadequate	160. Indirectly relevant	192. Notoriously impervious	224. Potentially positive
129. Hardly controversial	161. Inevitably limited	193. Oddly enough	225. Potentially problematic
130. Hardly surprising	162. Inherently easy	194. Ostensibly desirable	226. Potentially useful
131. Highly conventional	163. Inherently problematic	195. Overly modest	227. Potentially valuable
132. Highly dependent	164. Inherently wrong	196. Overly optimistic	228. Precisely written
133. Highly diverse	165. Interestingly ambivalent	197. Painfully aware	229. Predominantly active
134. Highly diversified	166. Internally cohesive	198. Partially attributable	230. Presently underway
135. Highly influential	167. Intricately designed	199. Partially correct	231. Probably insufficient
136. Highly interactive	168. Judiciously selected	200. Particularly challenging	232. Professionally produced
137. Highly motivated	169. Largely invisible	201. Particularly complex	233. Prohibitively expensive
138. Highly problematic	170. Largely similar	202. Particularly crucial	234. Publicly available
139. Highly proficient	171. Largely superficial	203. Particularly important	235. Purely explicit
140. Highly ranked	172. Linearly related	204. Particularly interested	236. Purportedly generic
141. Highly relevant	173. Linguistically distinct	205. Particularly interesting	237. Quite bad
142. Highly reliable	174. Locally educated	206. Particularly motivated	238. Quite common
143. Highly rated	175. Mainly instrumental	207. Particularly popular	239. Quite different
144. Highly sensitive	176. Mainly interested	208. Particularly prominent	240. Quite difficult
145. Highly specialized	177. Marginally better	209. Particularly true	241. Quite easy
146. Highly specific	178. Marginally higher	210. Particularly strong	242. Quite evident
147. Highly trained	179. Marginally significant	211. Particularly useful	243. Quite frequent
148. Highly likely	180. Marginally superior	212. Particularly well	244. Quite helpful
149. Highly unfavourable	181. Mostly significant	213. Partly attributable	245. Quite interesting
150. Highly valued	182. Narrowly distributed	214. Pedagogically oriented	246. Quite seriously
151. Immediately concerned	183. Narrowly focused	215. Pedagogically useful	247. Quite similar
152. Immediately obvious	184. Necessarily available	216. Pedagogically worthless	248. Radically different
153. Immediately striking	185. Necessarily correct	217. Perfectly possible	249. Randomly selected
154. Increasingly important	186. Necessarily valid	218. Polar opposite	250. Rapidly changing
155. Increasingly acceptable	187. Newly prominent	219. Possibly obligatory	251. Rapidly developing
156. Increasingly disengaged	188. Newly qualified	220. Potentially available	252. Rapidly evolving

253. Readily apparent
254. Readily available
255. Readily acceptable
256. Readily accessible
257. Really important
258. Reasonably extensive
259. Reasonably large
260. Reasonably possible
261. Relatively consistent
262. Relatively easy
263. Relatively frequent
264. Relatively high
265. Relatively large
266. Relatively long
267. Relatively little
268. Relatively narrow
269. Relatively new
270. Relatively predictable
271. Relatively reliable
272. Relatively similar
273. Relatively simple
274. Relatively small
275. Relatively straightforward

276. Relatively superficial
277. Remarkably similar
278. Richly multicultural
279. Richly multilingual
280. Richly varied
281. Robustly significant
282. Roughly equivalent
283. Scholarly interesting
284. Seemingly infrequent
285. Seemingly relentless
286. Seemingly unavoidable
287. Seemingly unaware
288. Semantically opaque
289. Semantically related
290. Sharp increase
291. Significantly different
292. Significantly fluent
293. Significantly higher
294. Slightly different
295. Slightly higher
296. Slightly lower
297. Socially constructed
298. Socially constructive

299. Socially mediated
300. Statistically equivalent
301. Statistically significant
302. Staunchly opposed
303. Strictly forbidden
304. Strikingly clear
305. Strikingly different
306. Strikingly diverse
307. Strikingly high
308. Strongly associated
309. Strongly embedded
310. Strongly evident
311. Strongly important
312. Strongly linked
313. Strongly positive
314. Strongly resistant
315. Structurally similar
316. Sufficiently communicative
317. Sufficiently generic
318. Sufficiently high
319. Sufficiently large
320. Sufficiently stringent
321. Surprisingly little

322. Technically adept
323. Technologically assisted
324. Tightly interwoven
325. Totally different
326. Totally wrong
327. Truly inappropriate
328. Truly serious
329. Unambiguously attributable
330. Uncomfortably adversarial
331. Unduly bold
332. Unexpectedly high
333. Uniformly successful
334. Unreservedly negative
335. Virtually unknown
336. Well known
337. Widely accepted
338. Widely applicable
339. Widely discussed
340. Widely marketable
341. Widely spoken
342. Widely used

ADVERB + VERB

1. Actively encourage
2. Actively engage
3. Actively impact
4. Actively involved
5. Actively select
6. Actively transform
7. Actually do
8. Additionally propose
9. Additionally suggest
10. Adversely impact
11. Always change
12. Appropriately apply
13. Apparently err on
14. Arguably apply
15. Better understand
16. Briefly attempt
17. Briefly discuss
18. Briefly examine
19. Briefly review
20. Briefly summarize
21. Broadly speak
22. Broadly think
23. Carefully analyzed
24. Carefully compile
25. Carefully controlled
26. Carefully define
27. Carefully design
28. Carefully edit
29. Certainly worth
30. Chronologically determine

31. Clearly align with
32. Clearly define
33. Clearly express
34. Clearly illustrate
35. Clearly indicate
36. Clearly intend
37. Clearly need
38. Closely aligned with
39. Closely examine
40. Closely follow
41. Cognitively engage
42. Collaboratively work
43. Commonly assume
44. Commonly believed
45. Commonly occur
46. Commonly used
47. Comprehensively integrate
48. Consistently apply
49. Consistently attend
50. Conspicuously dominated
51. Constantly alter
52. Constantly change
53. Constantly evolve
54. Continually change
55. Continually shift
56. Correctly classify
57. Correctly identify
58. Correctly use
59. Critically depend on
60. Critically evaluate

61. Currently occupy
62. Currently represent
63. Deeply steeped
64. Definitely worth
65. Deliberately ignore
66. Deliberately place
67. Deliberately try
68. Depend entirely (on)
69. Directly examine
70. Directly explain
71. Directly impact
72. Directly involved
73. Directly observe
74. Directly reflect
75. Easily describe
76. Easily forget
77. Easily guess
78. Effectively manage
79. Effectively teach
80. Elegantly challenge
81. Erroneously assume
82. Erroneously written
83. Exclusively focus
84. Explicitly address
85. Explicitly describe
86. Explicitly distinguish
87. Explicitly explain
88. Explicitly introduce
89. Explicitly represent
90. Explicitly say

91. Extensively develop
92. Extensively research
93. Extensively use
94. Fiercely resist
95. Frequently cited
96. Frequently imply
97. Frequently mention
98. Frequently occur
99. Frequently use
100. Fully assess
101. Fully comprehend
102. Fully establish
103. Fully exploit
104. Fully focus
105. Fully understand
106. Fully warrant
107. Fundamentally alter
108. Further developed
109. Further discuss
110. Further reveal
111. Generally accepted
112. Generally believed
113. Generally considered
114. Generally illustrate
115. Generally seen
116. Generally view
117. Generally use
118. Gradually build up
119. Gradually decrease
120. Gradually learn

121. Gradually wear (thin)	154. Mistakenly assume	187. Primarily investigate	220. Significantly predict
122. Graphically represented	155. Naturally follow	188. Purposely use	221. Similarly show
123. Greatly affect	156. Narrowly define	189. Quantitatively analyze	222. Simply correct
124. Greatly favor	157. Narrowly focus	190. Quickly grasp	223. Simply repeat
125. Greatly increase	158. Naturally occur	191. Quickly select	224. Simply require
126. Heavily concentrate	159. Naturally transfer	192. Randomly assign	225. Slowly manage
127. Highly correlate	160. Necessarily mean	193. Randomly divide	226. Smoothly ascend
128. Highly focus	161. Necessarily need	194. Randomly selected	227. Socially constructed
129. Historically group	162. Normally distributed	195. Rapidly decline	228. Socially embedded
130. Holistically rate	163. Noticeably increase	196. Rarely fail	229. Specifically apply
131. Immediately follow	164. Originally developed	197. Rarely seen	230. Specifically examine
132. Inevitably call	165. Originally suggest	198. Realistically maintain	231. Strictly apply
133. Inevitably occur	166. Overtly express	199. Reasonably expect	232. Strongly believe
134. Intimately connected	167. Overtly describe	200. Reasonably handle	233. Strongly hope
135. Intimately involved	168. Partially known	201. Regularly attempt	234. Strongly imply
136. Jointly code	169. Partially reveal	202. Regularly repeat	235. Strongly influence
137. Jointly develop	170. Partly attributed	203. Regularly use	236. Strongly resist
138. Knowingly repeat	171. Partly contrast	204. Reliably predict	237. Strongly suggest
139. Knowingly say	172. Passively receive	205. Reliably promote	238. Strongly support
140. Largely determined	173. Periodically check	206. Rigidly hold	239. Subsequently inform
141. Largely dominated	174. Persistently misuse	207. Rigorously critique	240. Substantially further
142. Largely influence	175. Persuasively argue	208. Routinely embrace	241. Successfully become
143. Largely involve	176. Positively impact	209. Seriously confront	242. Successfully deal with
144. Largely overlook	177. Possibly depend on	210. Seriously question	243. Successfully guess
145. Likely to encounter	178. Potentially allow	211. Seriously undermine	244. Successfully incorporate
146. Immediately apply	179. Potentially cause	212. Severely weaken	245. Systematically examine
147. Implicitly favour	180. Potentially impact	213. Slightly alter	246. Systematically use
148. Implicitly indicate	181. Potentially make	214. Slightly wary	247. Tacitly accept
149. Mainly intend	182. Predominantly determined	215. Significantly affect	248. Tentatively support
150. Manually analyze	183. Predominantly focus	216. Significantly alter	249. Thoroughly address
151. Manually choose	184. Primarily achieved	217. Significantly differ	250. Thoroughly discuss
152. Marginally fail	185. Primarily aim	218. Significantly help	251. Thoughtfully design
153. Meaningfully contribute	186. Primarily intend	219. Significantly increase	252. Totally account

253. Typically express
254. Typically use
255. Uncritically cite
256. Understandably wish
257. Unduly constrained

258. Uniquely associate
259. Universally insist
260. Unsurprisingly indicate
261. Usually occur
262. Vastly increase

263. View(something) favourably
264. Vigorously debated
265. Widely argued
266. Widely cited
267. Widely recognized

268. Widely referred
269. Widely seen
270. Widely shared
271. Widely used
272. Widely welcome

Modals

1. Can
2. Could
3. May
4. Might
5. Should
6. Would

Verbs

1. Advise
2. Advocate
3. Agree with
4. Allege
5. Anticipate
6. Appear
7. Argue
8. Assert
9. Assume
10. Attempt
11. Believe
12. Calculate
13. Conjecture
14. Contend
15. Consider
16. Correlate with
17. Demonstrate (show)
18. Display
19. Doubt
20. Estimate
21. Expect
22. Feel
23. Find
24. Guess
25. Hint
26. Hope
27. Hypothesize
28. Implicate
29. Imply
30. Indicate
31. Insinuate
32. Intend
33. Intimate
34. Maintain
35. Mention
36. Observe
37. Offer
38. Opine
39. Postulate
40. Predict
41. Presume
42. Prone to
43. Propose
44. Proposition
45. Reckon
46. Recommend
47. Report
48. Reveal
49. Seem
50. Show
51. Signal
52. Speculate
53. Suggest
54. Support
55. Suppose
56. Surmise
57. Suspect
58. Tend to
59. Think
60. Try to

Adjectives

1. Advisable	7. Liable	13. Probable	19. Subtle
2. Approximate	8. Likely	14. Prone to	20. Suggested
3. Conjunction with	9. Partial	15. Reasonable	21. (in) tune with
4. (in) Consistent with	10. Plausible	16. Reported	22. Uncertain
5. (in) harmony with	11. Possible	17. Rough	23. Unlikely
6. (in) line with	12. Potential	18. Slight	

Adverbs

1. About	14. Likely	27. Perhaps	40. Scarcely
2. Admittedly	15. Mainly	28. Possibly	41. Seemingly
3. All but	16. Mildly	29. Potentially	42. Slightly
4. Almost	17. Moderately	30. Predictably	43. Sometimes
5. Approximately	18. Mostly	31. Presumably	44. Somewhat
6. Arguably	19. Near	32. Primarily	45. Subtly
7. Around	20. Nearly	33. Probably	46. Supposedly
8. Averagely	21. Not always	34. Quite	47. Tolerably
9. Fairly	22. Occasionally	35. Rarely	48. Usually
10. Frequently	23. Often	36. Rather	49. Virtually
11. Generally	24. Partially	37. Reasonably	
12. Hardly	25. Partly	38. Relatively	
13. Largely	26. Passably	39. Roughly	

Quantifiers

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

Noun

1. Agreement with
2. Assertion
3. Assumption
4. Attempt
5. Belief
6. Chance
7. Claim
8. Doubt
9. Estimate
10. Expectation
11. Guidance
12. Hope
13. Implication
14. Intention
15. In accord with
16. Majority
17. Possibility
18. Potential
19. Prediction
20. Presupposition
21. Probability
22. Proposal
23. Proposition
24. Recommendation
25. Suggestion
26. Tendency

Modal Boosters

1. Be to+infinitive
2. Have/has to
3. Must
4. Need to
5. Will

Verbal Boosters

1. Ascertain
2. Assure
3. Attest
4. Authenticate
5. Back up
6. Bear out
7. Boost
8. Conclude
9. Confirm
10. Confute
11. Corroborate
12. Convince
13. Demonstrate (prove)
14. Determine
15. Deserve
16. Disprove
17. Enhance
18. Ensure
19. Entrance
20. Essentialise
21. Evidence
22. Flourish
23. Establish
24. Find
25. Guarantee
26. Invalidate
27. Justify
28. Make sure
29. Oversimplify
30. Perfect
31. Prove
32. Secure
33. Substantiate
34. Testify
35. Transfix
36. Uphold
37. Validate
38. Verify
39. Vindicate
40. Vouch

Adjectival Boosters

1. Absolute	32. Awful	63. Continuous	94. Engaging
2. Absorbing	33. Axiomatic	64. Convincing	95. Engrossing
3. Abundant	34. Barefaced	65. Coruscating	96. Enthralling
4. Accurate	35. Barnstorming	66. Credible	97. Enticing
5. Action-packed	36. Beauteous	67. Critical	98. Entire
6. Acute	37. Bewitching	68. Crucial	99. Entrancing
7. Adamant	38. Blatant	69. Curious	100. Essential
8. Admirable	39. Breathtaking	70. Dazzling	101. Eternal
9. Adorable	40. Burning	71. Decided	102. Everlasting
10. Aesthetic	41. Captivating	72. Decisive	103. Evident
11. All-embracing	42. Categorical	73. Definite	104. Exact
12. All-encompassing	43. Ceaseless	74. Definitive	105. Excellent
13. All-inclusive	44. Certain	75. Demonstrable	106. Exceptional
14. All-out	45. Charming	76. Demonstrative	107. Exhaustive
15. Alluring	46. Chief	77. Determined	108. Exhilarating
16. Amazing	47. (un)clear	78. Direct	109. Exigent
17. Ample	48. Clear cut	79. Distinct	110. Explicit
18. Angelic	49. Climactic	80. Distinctive	111. Express
19. Apodictic	50. Compelling	81. Distinguished	112. Exquisite
20. Apparent	51. Comprehensive	82. Downright	113. Extraordinary
21. Appealing	52. Compulsive	83. Dramatic	114. Extreme
22. Appreciable	53. Compulsory	84. Dreamy	115. Eye-catching
23. Arresting	54. Conclusive	85. Earnest	116. Fantastic
24. Assertive	55. Concrete	86. Effective	117. Faithful
25. Assiduous	56. Confident	87. Effectual	118. Far-reaching
26. Assured	57. Considerable	88. Efficacious	119. Fascinating
27. Astonishing	58. Consistent	89. Electrifying	120. Fated
28. Astounding	59. Conspicuous	90. Eloquent	121. Faultless
29. Attractive	60. Constant	91. Emphatic	122. Fervent
30. Authoritative	61. Consummate	92. Enchanting	123. Fine
31. Awesome	62. Continual	93. Endless	124. Firm

125.Flawless	157.Incredible	189.Mandatory	221.Plain
126.Forceful	158.Indicative	190.Manifest	222.Pioneering
127.Frozen	159.Indispensible	191.Marginal	223.Pivotal
128.Full-scale	160.Indisputable	192.Marked	224.Plentiful
129.Fundamental	161.Indubitable	193.Marvellous	225.Poetic
130.Genuine	162.Ineffective	194.Meaty	226.Poignant
131.Glamorous	163.Inelastic	195.Mega	227.Positive
132.Glaring	164.Inevitable	196.Mesmeric	228.Potent
133.Glittering	165.Infallible	197.Mesmerizing	229.Powerful
134.Glorious	166.Inflexible	198.Mighty	230.Precise
135.Gorgeous	167.Influential	199.Miraculous	231.Predestined
136.Glowing	168.Inimitable	200.Momentous	232.Predominant
137.Grand	169.Inordinate	201.Newsworthy	233.Preeminent
138.Grave	170.Insistent	202.Notable	234.Prepossessing
139.Great	171.Intense	203.Noteworthy	235.Pressing
140.Gripping	172.Intensive	204.Noticeable	236.Prodigious
141.Gross	173.Interminable	205.Obligatory	237.Professed
142.Groundbreaking	174.Intoxicating	206.Obvious	238.Profound
143.Habitual	175.Intriguing	207.Open	239.Profuse
144.Harsh	176.Invariable	208.Ostensible	240.Prominent
145.Immaculate	177.Inviolable	209.Out-and-out	241.Pronounced
146.Immeasurable	178.Ironclad	210.Outright	242.Provocative
147.Immense	179.Irrefutable	211.Outstanding	243.Pulsating
148.Impeccable	180.Irresistible	212.Palpable	244.Radical
149.Imperative	181.Key	213.Paramount	245.Rational
150.Imposing	182.Large	214.Perfect	246.Reasonable
151.Impossible	183.Lavish	215.Persistent	247.Reasoned
152.Impressive	184.Life-claiming	216.Persuasive	248.Regular
153.Incessant	185.Lush	217.Pertinent	249.Reliable
154.In depth	186.Magnificent	218.Picturesque	250.Remarkable
155.Incontestable	187.Majestic	219.Pinpoint	251.Right
156.Inconvertible	188.Major	220.Piquant	252.Rigid

253. Rigorous
254. Riveting
255. Robust
256. Safe
257. Self-evident
258. Salient
259. Sedulous
260. Sensational
261. Serious
262. Set
263. Sharp
264. Significant
265. Shimmering
266. Singular
267. Sizeable
268. Solid
269. Spectacular
270. Spellbinding
271. Splendid
272. Staggering
273. Stark
274. Steely
275. Stiff
276. Stimulating
277. Stony
278. Strict
279. Striking
280. Strong
281. Stunning
282. Sublime
283. Successful
284. Superior
285. Sure
286. Tempting
287. Terrible
288. Terrific
289. Thorough
290. Thoroughgoing
291. Thumping
292. Total
293. Transfixing
294. Transparent
295. Tremendous
296. Ultimate
297. Unadulterated
298. Unalloyed
299. Unambiguous
300. Unanswerable
301. Unarguable
302. Unassailable
303. Unavoidable
304. Unbelievable
305. Unbridgeable
306. Uncanny
307. Unceasing
308. Unconditional
309. Uncontroversial
310. Undeniable
311. Undiluted
312. Undisputed
313. Undoubted
314. Unequivocal
315. Unerring
316. Unexpected
317. Unfaltering
318. Unforgettable
319. Unique
320. Ultra
321. Unmistakable
322. Unprecedented
323. Unqualified
324. Unquestionable
325. Unreserved
326. Untenable
327. Unstinting
328. Unyielding
329. Urgent
330. Vast
331. Vehement
332. Vigorous
333. Vital
334. Voluminous
335. Watertight
336. Weighty
337. Well founded
338. Well grounded
339. Well-know
340. Whirlwind
341. Wholehearted
342. Whopping
343. Wise
344. Wonderful
345. Wondrous
346. Word-perfect

Adverbial Boosters

1. Absolutely	32. Completely	63. Dramatically	94. Finely
2. Accurately	33. Comprehensively	64. Earnestly	95. Firm
3. Adamantly	34. Compulsively	65. Easily	96. Flawlessly
4. Admirably	35. Conclusively	66. Effectively	97. Forcefully
5. Aesthetically	36. Confidently	67. Eloquently	98. Forever
6. Alluringly	37. Considerably	68. Emphatically	99. Fully
7. Always	38. Consistently	69. Endlessly	100. Fundamentally
8. Amazingly	39. Conspicuously	70. Enticingly	101. Genuinely
9. Angelically	40. Constantly	71. Entirely	102. Glamorously
10. Apparently	41. Continually	72. Especially	103. Glaringly
11. Appealingly	42. Continuously	73. Essentially	104. Glorious
12. Appreciably	43. Convincingly	74. Eternally	105. Glowingly
13. Aright	44. Credibly	75. Ever	106. Gorgeously
14. Assertively	45. Critically	76. Everlastingly	107. Gravely
15. Assiduously	46. Crucially	77. Evermore	108. Great
16. Assuredly	47. Curiously	78. Evidently	109. Grossly
17. Astonishingly	48. Dazzlingly	79. Exactly	110. Habitually
18. Astoundingly	49. Decidedly	80. Exceedingly	111. Harshly
19. Attractively	50. Decisively	81. Exceptionally	112. Heavily
20. Authoritatively	51. Definitely	82. Exhaustively	113. Hefty
21. Awfully *	52. Definitively	83. Extensively	114. Highly
22. Axiomatically	53. Demonstrably	84. Extraordinarily	115. Immaculately
23. Badly	54. Demonstratively	85. Extremely	116. Immeasurably
24. Blatantly	55. Deservedly	86. Exceptional	117. Immensely
25. Broadly	56. Determinedly	87. Explicitly	118. Importantly
26. Categorically	57. Devilishly	88. Exquisitely	119. Impeccably
27. Ceaselessly	58. Directly	89. Fantastically	120. Impossibly
28. Certainly	59. Distinctively	90. Fair	121. Impressively
29. (un)clearly	60. Distinctly	91. Faithfully	122. Incessantly
30. Charmingly	61. Doubtless	92. Faultlessly	123. In perpetuity
31. Compellingly	62. Downright	93. Fervently	124. Incontestably

125. Inconvertibly	157. Never	189. Profusely	221. Strongly
126. Incredibly	158. No doubt	190. Profoundly	222. Stunningly
127. Indeed	159. Notably	191. Prominent	223. Sublimely
128. Indispensably	160. Noticeably	192. Provocatively	224. Successfully
129. Indisputably	161. Obviously	193. Quite	225. Surely
130. Indubitably	162. Openly	194. Radically	226. Temptingly
131. Inevitably	163. Ostensibly	195. Really	227. Terribly
132. In fact	164. Outright	196. Reasonably	228. Terrifically
133. Infallibly	165. Outstandingly	197. Regularly	229. Thoroughly
134. Inimitably	166. Overly	198. Reliably	230. Thumping
135. Inordinately	167. Palpably	199. Remarkably	231. Totally
136. Insistently	168. Particularly	200. Repeatedly	232. Transparently
137. Intensely	169. Patently	201. Rightfully	233. Tremendously
138. Intensively	170. Perfectly	202. Rightly	234. Truly
139. Interminably	171. Permanently	203. Rigidly	235. Ultimately
140. Intriguingly	172. Perpetually	204. Rigorously	236. Unambiguously
141. Invariably	173. Persistently	205. Robustly	237. Unarguably
142. Irrefutably	174. Persuasively	206. Safely	238. Unbelievably
143. Irresistibly	175. Pertinently	207. Securely	239. Uncannily
144. Justifiably	176. Picturesquely	208. Sedulously	240. Unceasingly
145. Lavishly	177. Piquantly	209. Seemingly	241. Unconditionally
146. Magnificently	178. Plainly	210. Significantly	242. Undeniably
147. Majestically	179. Poetically	211. Seriously	243. Undoubtedly
148. Majorly	180. Poignantly	212. Solidly	244. Unequivocally
149. Manifestly	181. Point-blank	213. Specifically	245. Unerringly
150. Marginally	182. Pointedly	214. Spectacularly	246. Unexpectedly
151. Markedly	183. Positively	215. Splendidly	247. Unfailingly
152. Marvellously	184. Potently	216. Squarely	248. Uniquely
153. Mightily	185. Precisely	217. Starkly	249. Unlimited
154. Miraculously	186. Predominantly	218. Stiff	250. Unmistakably
155. Momentously	187. Prodigiously	219. Strictly	251. Unquestionably
156. Necessarily	188. Professedly	220. Strikingly	252. Unreservedly

253. Urgently
254. Utterly
255. Unyieldingly

256. Vastly
257. Vehemently
258. Very

259. Vigorously
260. Vitally
261. Wholeheartedly

262. Wholly
263. Wisely

Quantifiers / Determiners

1. A considerable amount of
2. A good deal of
3. A great amount of
4. A great body of
5. A great deal of
6. A great many of
7. A great number of
8. A high number of
9. A huge amount of
10. A huge number of
11. A large amount of
12. A large body of
13. A large majority

14. A large number of
15. A lot of
16. A sizeable body of
17. A substantial amount of
18. A substantial number of
19. A vast number of
20. A very high level of
21. A very large number of
22. A wide body of
23. All
24. An established body of
25. Copious amount of
26. Enormous amount

27. Enormous size
28. Extensive amount of
29. Far more
30. Great majority
31. Greatest number of
32. Lots of
33. Many
34. Much greater
35. Much more
36. None of
37. Quite
38. Relatively large
39. So

40. So many
41. So much
42. To a great extent
43. To a large extent
44. Too
45. Too many
46. Too much
47. Unmanageable amount of
48. Vast majority
49. Very much

Nouns

1. Certitude
2. Confirmation
3. Consistency
4. Corroboration
5. Demonstration
6. Endorsement
7. Eternity
8. Evidence
9. Exquisiteness
10. Fact
11. Guarantee
12. Icebreaker
13. Impossibility
14. Invalidation
15. Inviolability
16. Justification
17. Key
18. Lifeblood
19. Manifestation
20. Must
21. Necessity
22. Perpetuity
23. Plethora
24. Pre-eminence
25. Proof
26. Proof positive
27. Rigidity
28. Sureness
29. Testament
30. Testimony
31. Unexpectedness
32. Vehemence
33. Verification
34. Vindication

Miscellaneous Boosters

1. All the time
2. As a matter of fact
3. At all times
4. Beyond dispute
5. Beyond doubt
6. Beyond question
7. Bound to happen
8. By all accounts
9. Each time
10. Every time
11. For all future time
12. For all time
13. For ever and ever
14. For good
15. For good and all
16. For sure
17. If truth be told
18. In all respects
19. In any case
20. In any event
21. In every respect
22. In every way
23. In reality
24. In the extreme
25. In the point of fact
26. In truth
27. To a fault
28. To a great extent
29. To a marked extent
30. To the fullest extent
31. To the maximum extent
32. To all appearances
33. On all occasions
34. On every occasions
35. One hundred percent
36. Out of ordinary
37. Out of this world
38. To perfection
39. Plain to see
40. Sure to happen
41. The entire time
42. To the hilt
43. Until the end of time
44. Very inch
45. Without doubt
46. Without exception
47. Without fail
48. Without fault
49. Without question
50. Without reservation
51. Worthy of mention
52. Worthy of note

PERSONAL DATA

Name: Cüneyt DEMİR

Contact: ardgelen@hotmail.com

EDUCATION

Ph.D., English Language Teaching 2014-2016
University of Atatürk

Ph.D., English Language Teaching 2012-
University of Anadolu (Transfer to Atatürk University)

M.A., English Language and Literature
University of Kafkas, June 2010 - 2012

B.A., English Language Teaching
University of Anadolu, 2000 – 2005

TEACHING EXPERIENCE

Teacher at

The Ministry of National Education 2004 -2008

Lecturer at

University of Siirt 2008-

SCIENTIFIC MEMBERSHIP

Siirt University /Journal of Social Sciences E-Journal with International Referee / English Redaction

SPOKEN LANGUAGES

English : 96.25 YDS
Italian   : 60 KPDS

Peer Reviewed Publications

1. DEMİR, C. " Frequency Effects in Lexical Acquisition: A Context of Grammar Class", *International Journal of Languages' Education and Teaching (IJLET),* 2014, Volume 2, pp. 40-55

2. DEMİR, C. " The Role of Recast in Correcting Reading Errors; Implicit or Explicit? A Comparative Study ", *International Journal of Languages' Education and Teaching (IJLET),* 2014, Volume 3, pp. 40-52

3. DEMIR, C. "Analyses of Mechanical Errors in the English Written Articles of Turkish Academics; A Case Study", *ROUTE Educational&Social Science Journal (RESS),* 2014, Volume 3, pp. 194-213. dx.doi.org/10.17121/ressjournal.36

4. YAĞIZ, O. & DEMİR, C. " Local Responses to Global English and Perceptions of English in Turkey: With an Academic Perspective*", Frontiers of Language and Teaching,* 2015, Volume 6, pp. 22-31.

5. YAĞIZ, O. & DEMİR, C. "A Comparative Study of Boosting in Academic Texts: A Contrastive Rhetoric", *International Journal of English Linguistics*, 2015, Volume 5 (4), pp.12-28, doi:10.5539/ijel.v5n4p12

International Scientifc Conferences (*Proceedings*)

1. DEMIR, C. 13th International Language Literature and Stylistics Symposium, Kars, 26-28 September 2013 " *Frequency Effects in Lexical Acquisition: A Context of Grammar Class*".

2. DEMIR, C. 59th International Linguistics Conference, Paris, 22-24 May 2014 "T*he Role of Recast in Correcting Reading Errors; Implicit or Explicit? A Comparative Study*".

3. YAĞIZ, O. & DEMIR, C. 14th International Language Literature and Stylistics Symposium, İzmir, 15-17 October 2014 " *Hedging Strategies in Academic Discourse: A Comparative Analysis of Turkish Writers and Native Writers of English*".

4. YAĞIZ, O. & DEMIR, C. 8th International Online Language Conference, Malaysia, 2-3 March 2015 " *Local Responses to Global English and Perceptions of English in Turkey: With an Academic Perspective".*

5. TAKKAÇ, M. & DEMIR, C. 1st International Journal of Arts & Sciences, Vienna, 19-23 April 2015 "*Boosting Tendencies In Academic Discourse: A Comparative Analysis of Native And Non-Native Writers of English*"

6. YAĞIZ, O. & DEMIR, C. 1st The Self in Language Learning (SİLL), Adana, 17-19 September 2015 English "*Lexical Collocations: A Comparative Study of Native and Non-native Scholars of English*"