REPUBLIC OF TURKEY ERCIYES UNIVERSITY INSTITUTE OF SOCIAL SCIENCES DEPARTMENT OF ENGLISH LANGUAGE AND LITERATURE

THE PRAGMATIC ROLE OF INTERACTIONAL METADISCOURSE MARKERS IN THE CONSTRUAL OF AUTHOR STANCE: A CROSS-LINGUISTIC STUDY OF PhD DISSERTATIONS

By Fatma YUVAYAPAN

Supervisor Assoc. Prof. Dr. Cem CAN

PhD Dissertation

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ETKİLEŞİMSEL ÜSTSÖYLEM ÖGELERİNİN YAZAR DURUŞUNU SAĞLAMADAKİ PRAGMATİK ROLÜ: DOKTORA TEZLERİNDEN OLUŞAN DİLLER ARASI BİR ÇALIŞMA

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ÖZET

Disiplin ve kültürel açıdan farklı yazın kurallarına dayanan akademik yazım, akademik yazarların eserlerinin organizasyonunu sağlamak, okuyucularıyla iletişimde bulunmak ve en önemlisi disiplinlerinde kalıcı bir yer edinmek amacıyla oluşturdukları yazar duruşlarını sağlamak için kullandıkları yöntemleri yansıtır. Duruş "bir konuşmacının belirli bilgilerle ilgili tutumlarını, bu tutumların gerçekliğinden ne kadar emin olduklarını, bu bilgilere nasıl ulaştıklarını ve hangi bakış açısını benimsediklerini içeren farklı türdeki, kişisel duygu ve değerlendirmelerdir (Biber, 2006, s. 99). Yazar duruşu aralarında üstsöylem öğelerinin de bulunduğu disiplinlerin dilsel yazın kurallarının uygun kullanımı ile aktarılır. Hyland (1998b) in tanımına göre üstsöylem "net bir şekilde söylemin organizasyonuyla ve yazarın içeriğe ya da okuyucularına karşı duruşuyla ilgili metin öğeleridir (s. 438). Bu çalışmanın temel amacı etkileşimsel üstsöylem öğelerinin İngiliz dilinde yazılan doktora tezlerinde yazar durusunu sağlamak amacıyla anadili İngilizce anadili olan ve Türkce olan akademik yazarlar tarafından kullanımının karşılaştırılmasıdır. Bu amaçla 2010 ve 2015 yılları arasında yazılan 120 doktora tezinden olusan bir derlem olusturulmustur. Etkilesimsel üstsöylem öğeleri Hyland'in (2005b) üstsöylem öğeleri sınıflandırmasına göre Wordsmith 6.0 kullanılarak analiz edilmiştir. Bu iki grup arasında etkileşimsel üstsöylem öğelerinin sıklık, çeşitlilik ve sözdizimsel sınıflandırma açısından istatiksel olarak anlamlı bir farkın olup olmadığını bulmak amacıyla Log-likelihood analizi yapılmıştır. Etkileşimsel üstsöylem öğelerinin sınıflandırmanın beş alt kategorisinin kullanımına göre ana dili Türkçe olan akademik yazarlar tarafından anlamlı bir şekilde az kullanıldığı görülmüştür. Detaylı analizler bu beş kategorinin sözdizimsel sınıflandırma açısından da farklı kullanımını ortaya çıkarmıştır. Her iki grup da temel olarak duruşlarını kaçınmalar ve vurgulayıcılar kullanarak sağlamıştır. Aynı zamanda ilişki belirleyiciler kullanarak okuyucuları ile uzlasma sağlama eğiliminde olmuşlardır. Tutum belirleyiciler konusunda her iki grup da kişisel görüşlerini yansıtmaktan kaçınmışlardır. Bu iki grup arasındaki en belirgin fark kendini anma sözcüklerinin kullanımından kaynaklanmıştır. Ana dili İngilizce olan yazarlar söylemsel benliklerini açık bir şekilde kendini anma sözcükleri kullanarak göstermelerine rağmen, anadili Türkçe olan yazarlar kişisel olmayan bir akademik yazma tarzı takip etmişlerdir ve doktora tezlerinde kendini anma sözcüklerinin kullanımını kısıtlayarak duruşlarını oluşturmuşlardır. Türk akademik yazarların etkileşimsel üstsöylem öğelerini daha az sıklıkla kullanmaları onların İngilizceyi yabancı dil olarak kullanmasından kaynaklanabilir. Buna ek olarak, disiplinlerinin kültürel yazın kurallarını benimsemeleri ve bu öğelerin pragmatik fonksiyonlarını yeterince bilmemeleri de diğer sebepler arasında gösterilebilir. Bu bağlamda, lisansüstü programlarda verilen akademik yazım derslerinde üstsöylem öğelerinin pragmatik fonksiyonlarının da vurgulanması gereklidir.

Anahtar Sözcükler: Akademik Yazma, Doktora Tezleri, Yazar Duruşu, Etkileşimsel Üstsöylem Öğeleri

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Erciyes University, Institute of Social Sciences PhD Dissertation, January 2018 Supervisor: Assoc. Prof. Dr. Cem CAN

ABSTRACT

Rested on disciplinary and cultural conventions, academic writing reflects the ways that academic authors utilize to organize their texts, to negotiate with their readers and most prominently to construct their authorial stance in order to gain a credible place in their discipline. Stance refers to "many different kinds of personal feelings and assessments, including attitudes that a speaker has about certain information, how certain they are about its veracity, how they obtained access to information, and what perspective they are taking" (Biber, 2006b, p. 99) The authorial stance is conveyed with the use of appropriate linguistic conventions of disciplines, one of which is metadiscourse. As Hyland (1998b) defines, metadiscourse is "aspects of the text which explicitly refer to organization of the discourse or the writer's stance towards either its content or the reader" (p. 438). The ultimate aim of this study was to compare the use of interactional metadiscourse markers (IMDMs) by native academic authors of English (NAAEs) and Turkish-speaking academic authors of English (TAAEs) for the construal of their stance in the genre of Ph.D. dissertations. With this purpose, a corpus consisted of 120 doctoral dissertations written between 2010 and 2015 was compiled. Interactional metadiscourse markers were analyzed according to Hyland's (2005b) taxonomy of IMDMs by using Wordsmith Tools 6.0. Log likelihood statistics was conducted to see whether there was a statistically significant difference between these two groups in their use of IMDMs in terms of frequency, variety and syntactic frames of IMDMs. A statistically significant underuse of IMDMs by Turkish-speaking academic authors of English regarding the overall use of 5 subcategories of IMDMs was found. Further analysis revealed different uses of these five subcategories in terms of their syntactic frames. Both groups of academic authors predominantly signaled their stance through the use of hedges and boosters. They also had the tendency of establishing a negotiation with their readers through the use of engagement markers. As for attitude markers, both groups avoided

expressing their personal attitudes. The most striking difference between these two groups of academic authors emerged from the use of self-mentions. Although native speakers of English stamped their discoursal self explicitly with the frequent use of self-mentions, Turkish-speaking academic authors of English followed an impersonal form of academic writing and built their stance by delimiting the use of self-mentions in their doctoral dissertations. It is probable that the underuse of IMDMs by TAAEs may be due to their nonnative status in English. In addition to following cultural conventions of their discipline, they may not be aware of the pragmatic functions of IMDMs. In this regard, the pragmatic functions of IMDMs need to be implemented to the curriculum of academic writing courses in postgraduate programs.

Key Words: Academic Writing, PhD Dissertations, Author Stance, Interactional Metadiscourse Markers

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ABBREVIATIONS

CNAE	- The Corpus of Native Academic Authors of English
CTAE	- The Corpus of Turkish-speaking Academic Authors of English
DDL	– Data-driven Learning
EAL	– English as an Additional Language
EAP	– English for Academic Purposes
EFL	– English as a Foreign Language
ELT	– English Language Teaching
ESL	– English for Specific Purposes
IMDMs	– Interactional Metadiscourse Markers
L2	– Second Language
MD	– Metadiscourse
NAAEs	– Native Academic Authors of English
TAAEs	- Turkish-speaking Academic Authors of English

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CHAPTER 1

INTRODUCTION

1.1. Background to the study

Academic writing possesses its own sets of norms and conventions which academic authors utilize to organize their texts, to negotiate their ideas, to persuade their readers, and to represent themselves. In the globalized academic world, academic authors also communicate within the intellectual boundaries of their discipline. Without any doubt, English is the medium through all of this communication is achieved and writing is recognized as one of the most ambitious communication tools in this academic world. Hyland (2009) defines the term academic discourse to refer to "ways of thinking and using language which exist in the academy" (p. 1). Burke (2010) labels academic writing as "what academics do most, through publishing, communicating, and contributing to their knowledge" (p. 40).

More commonly, academic writing has been treated as a formal and impersonal form of writing. Lafuente-Millán (2010) explains the reason underlying beneath this traditional view. Science is based on empirical results that are not related to personal feelings or subjective opinions of individuals. Hence, academic writing is generally recognized as impersonal and objective. However, there has been a shift from this faceless and impersonal form of writing to a more personal writing in which authors try to persuade their readers rather than merely to report the findings of studies. Hyland (2005a) claims that academic writing does not refer to an objective and impersonal form of writing. Contrarily, it is seen as "a persuasive endeavour involving interaction between writers and readers" (p. 173). Similarly, Jiang and Hyland (2015) suggest that academic writing is "a persuasive endeavour" shaped by the perceptions of writers. Hyland (2011a) states that "demonstration of absolute truth, empirical evidence, and flawless logic" is

seen as the core of academic persuasion (p. 194). This form of persuasion conveys reliable knowledge reflecting cultural norms. In fact, this persuasion depends on the writers' assumptions about the reality. So, no theories can be tested on observational base. Instead, writers tend to persuade their readers by guiding them to particular interpretations. In order to comprehend how this persuasion is achieved in academic texts, corpus studies play a key role in understanding the importance of rhetoric in academic persuasion.

Seemingly, academic authors seek to maintain a privileged position in their academic discipline by presenting their claims to convince their readers and by constructing their presence in their texts. In this sense, academic writing is also a social engagement to the academic community. Hyland (2001a) explains this matter from a social-constructivist view. There is always the possibility of readers' refusing writers' claims. In order to lessen the probability of this assumption, authors present their arguments, results, and interpretations in a way to persuade their readers and to engage them in their texts. This negotiation between the author and readers is at the heart of academic writing. Therefore, a successful academic text shows the evidence of author's awareness of both his its readers and its consequences.

Hyland (2005a) draws our attention to another issue. Academic authors do not simply produce a text to convey external reality but they also find ways to signal themselves in this text. The term author stance is widely used to refer to writers' self-representations in their texts. It has been defined as "many different kinds of personal feelings and assessments, including attitudes that a speaker has about certain information, how certain they are about its veracity, how they obtained access to information, and what perspective they are taking" (Biber, 2006b, p. 99). Hyland (1999) calls stance as "the ways that writers project themselves into their texts to communicate their integrity, credibility, involvement, and a relationship to their subject matter and their readers" (p. 101). For Jiang and Hyland (2015), stance "is not simply a personal take on something, a position towards a claim or finding, but simultaneously taps into and represents a community's system of knowledge" (p. 530).

Collectively, all academic authors aim to exist in their academic world and success in an academic world depends on how writers represent their self in their texts as well as establishing a social negotiation with readers across academic texts. At this point, a question comes to our minds: How do authors build their stance in their texts? Apparently, academic writing embodies a form of writing rested on culturally approved conventions of disciplines. For the accomplishment of their individual position in their academic world, academic authors make choices from a variety of culturally approved linguistic devices of their disciplines.

One of the major linguistic features that academic authors use to communicate with their readers in various academic registers is metadiscourse (MD). Sanderson (2008) describes MD as "the rhetorical strategy authors use when they talk about their own text. It is a way of organizing discourse and explaining this organization to readers and helps structure and guide author-reader interaction with the text" (p. 165). Hyland (2004) calls MD as "self-reflective linguistic expressions referring to the evolving text, to the writer and to the imagined readers of that text" (p. 133). He further explains that writing is a social engagement and MD devices enable authors to reflect themselves in their discourse. Adel (2006) defines it as "text about text. Metadiscourse is an element of the discourse about the evolving discourse, or the writers' explicit commentary on her own ongoing text" (p. 2).

MD has long been a question of interest in the literature (Abdi, 2009; Burneikaite, 2008; Cao and Hu, 2014; Çapar, 2014; Gillaerts & Van de Velde, 2010; Hyland, 1998b; Hyland, 1999; Hyland, 2004; Hyland and Tse, 2004a; Hyland, 2005b; Hyland, 2010b; Mur-Duenas, 2011; Özdemir & Longo, 2014; Rezaei Zadeh, Baharlooei, & Simin, 2015; Ünsal, 2008). Academic discourse seems one of the main focuses of these studies. It is clear that in academic contexts, academic authors use different genres to share the findings of their studies and to convince academic audience. Each genre in this context has its own language choices to organize the text, to guide readers, to understand the text and to build their authorial stance. Metadiscourse is one of the main means by which these goals are achieved. Simply put, communication in academic texts is influenced by the genre in a particular context and the use of MD devices helps academic authors to involve themselves in their texts and to construct the relationship between the readers and the texts. Metadiscourse is also employed on the basis of the universal norms of particular academic genres.

In sum, various kinds of genres such as research articles, MA and Ph.D. theses, and postgraduate students' writings have been investigated in terms of the patterns of MD and the results revealed considerable variations in the use of MD. There seems to be many factors leading to these variations such as genres, disciplines, language and cultures (Burneikaite, 2008). Additionally, Dahl (2004) states that "academic writers leave traces of themselves in their writing which may be linked to national as well as disciplinary culture" (p. 1807). Apparently, metadiscourse is also a means of building stance in academic registers.

1.2. Statement of the problem

In the globalized world, English, as a lingua franca, becomes a versatile tool to achieve global communication in different contexts, one of which is academic contexts. In this context, as Swales (1990) emphasizes "English is the world's language for the communication of research findings" (p. vii). It is used by academics to publish their work or studies based on expected organizational norms and language features which may vary from different academic genres. Among these language features, metadiscourse is an effective means of fostering comprehension of texts. Hyland (2005b) explains that since writing is a community-situated activity, the use of metadiscourse devices depends on writer's observation of interpersonal and intertextual relationships. In order to publish influential studies and gain acceptance in their field, writers need to have an understanding of these relationships. At this point, discourse community is responsible for yielding shared presuppositions and MD strategies. Thus, genres and communities that give meaning to MD is a central issue in understanding the pragmatics of MD. Hyland (1998b) explains the pragmatic functions of MD. A successful academic prose displays two functions. A writer aims to convey a message (an illocutionary effect) and hopes that readers accept it (perlocutionary effect). However, readers may reject the message conveyed by the writer owing to different interpretation. In this regard, MD provides the writer with a means of taking precautions against the possibility of readers' refusal of his/her claims. So, MD cannot be considered as solely a linguistic phenomenon but must be recognized as "a rhetorical and pragmatic one" (Hyland, 2005b, p. 25).

As it seems clear, writing in English is vital in today's' academic world. Besides, academics must not only be aware of the textual features of different academic genres but also understand the pragmatics of these textual features. Hyland (2011a) claims that so as to achieve academic persuasion writers must have the knowledge of rhetorical options of their field and make choices among them to appeal to their readers. However, Mauranen (1993) claims that nonnative speakers of a language are usually unaware of features of

universal science language. Thus, they mostly use foreign linguistic features at the discourse level which brings about misconception. In the same vein, Biber and Conrad (2009) point out that the task of learning the expected norms of genres is a challenging issue for non-native speakers of language. Therefore, they need to recognize these features to be able to write effectively in a second language, mainly in English in academic world.

Al Fadda (2012) alleges that ESL learners have to master both the organizational issues such as using appropriate grammar and vocabulary and the rhetorical forms in particular genres. They have difficulty in learning to write in academic English owing to different styles in spoken and written academic genres. Likewise, Çapar (2014) claims that teaching writing in a second language refers to teaching accurate grammar and organizational issues. Thus, second language writers lack the knowledge of using linguistic devices to interact with readers. In order to follow the recent publications, to write effectively in English and to share the findings of their studies Turkish academic authors must be aware of the native-like use of metadiscourse devices. In a different study, Chang (2015) examines the conceptions of doctoral students with respect to author stance in academic research. Generally, these students tend to avoid taking a stronger stance and making tentative claims. In a way, they adopt a reductive and polarized conception of stance. Besides, they approach this concept from an epistemic and attitudinal view rather than a dialogic angle.

Within the broad realm of academic language, metadiscourse represents a range of various linguistic devices which explicitly organize texts, establish writer-reader communication and offer a credible and effective representation of author. In the literature on MD, the analysis of academic genres such as research articles, postgraduate students' writings, MA and Ph.D. theses has been subject to considerable attention to examine these specific roles of MD. One major issue in MD research in academic context is concerned with cross-cultural variations in particular genres (Abdi, 2009; Blagojevic, 2004; Burneikaite, 2008; Mur-Duenas; 2011; Özdemir & Longo, 2014; Çapar, 2014). MD features have also been studied among various disciplines (Cao & Hu, 2014; Dahl, 2004; Hyland, 1998b; Hyland, 1999; Hyland, 2004; Hyland, 2010b; Rezaei et al., 2015; Salas, 2015). The issue of gender has also been paid attention in the literature (Yavari & Kashani, 2013; Zareifard & Alinezhad, 2014). A considerable amount of literature has

also grown up around the analysis of particular genres or particular features of MD (Adel, 2010; Abdi, 2009; 2010; Bondi, 2010; Bunton, 1999; Gillaerts & Van de Velde, 2010; Hyland & Tse, 2004a; Ifantidou, 2005; Halabisaz, Pazhakh, Shakibafar, 2014; Kondowe, 2014).

Yet while MD has generated considerable interest, its relative importance on the construal of the author stance both towards the text and the readers has not received much attention (Akbaş, 2012b; Hyland, 1999; Hyland, 2004; Lafuente-Millán, 2010). Namely, how writers build their stance by using MD devices in an academic genre has often been left vague in the literature. Bearing the importance of MD in managing writer – reader negotiation in texts and in building author stance, the aims of the present study are manifolds: a- to explore the use of interactional metadiscourse features (IMDMs) by native academic authors of English (NAAEs) and Turkish-speaking academic authors of English (TAAEs) for the construal of their stance in the genre of Ph.D. dissertations; b- to figure out whether TAAEs significantly differ from NAAEs in their use of IMDMs; c- to explore the syntactic frames of IMDMs that NAAEs and TAAEs employ to build their stance in their Ph.D. dissertations; d- to figure out whether there is a statistically significant difference between NAAEs and TAAEs in their use of IMDMs regarding their syntactic frames.

1.3. Research questions

In the light of the literature, the following research questions constituted the essence of this study:

1. What types of interactional metadiscourse markers do native academic authors of English and Turkish-speaking academic authors of English employ to build their stance in their Ph.D. dissertations?

2. Do native academic authors of English and Turkish-speaking academic authors of English significantly differ in the use of interactional metadiscourse markers in terms of frequency and variety?

3. What kinds of syntactic frames of interactional metadiscourse markers do native academic authors of English and Turkish-speaking academic authors of English employ to build their stance in their Ph.D. dissertations?

4. Do native academic authors of English and Turkish-speaking academic authors of English significantly differ with respect to syntactic frames of interactional metadiscourse markers they employ in their Ph.D. dissertations?

1.4. Significance of the study

Despite the importance of MD for the construal of the author stance in an academic genre, there remains paucity on exploring how authors represent their stance. It is anticipated that the cross-linguistic analysis of IMDMs in Ph.D. dissertations may contribute to the literature on MD with regard to construal of author stance. Added to this, the corpus of this study was compiled from Ph.D. dissertations in some disciplines associated with English language such as English Language Teaching, English Language and Literature and Linguistics. Previous studies have mostly dealt with the comparison of disciplines such as economics, medicine, social sciences, applied linguistics... However, such studies may not necessarily contribute to the field of English language. As Hyland (2005b) states "MD facilitates the social interactions which contribute to knowledge production within disciplines and because disciplines are different, its use and meaning varies between disciplines" (p. 143). Thus, the findings of this study may be particularly valuable to the curricula of academic writing courses offered in MA and Ph.D. programs in these disciplines. Biber and Conrad (2009) explain that many universities offer writing courses to raise awareness of register differences because a writing curriculum rested on the linguistic description of written registers in a particular academic discipline may enhance students' professional competence in that area. Notably, in the area of English for Academic Purposes (EAP), careful register descriptions are the core of improving teaching materials.

1.5. Limitations of the study

This study was based on the analysis of Ph.D. dissertations across the disciplines of English language such as English Language Teaching, English Language and Literature and Linguistics. It was assumed that the findings might give us promising insights about the construction of author stance in the field of English language. In addition, the results were limited to Ph.D. dissertations used in this study. Therefore; they might not necessarily be generalized to all native and Turkish-speaking academic authors of English in this genre. Another point to be mentioned is, although the use of MD markers is culture-specific, individual background of doctoral students might have an impact on this issue. Finally, two researchers might have analyzed the instances of each item in order to achieve inter-rater reliability.

1.6. Operational definitions

Academic Writing (AW): As defined by Burke (2010), academic writing refers to "what academics do most, through publishing, communicating, and contributing to their knowledge" (p. 40).

Author Stance: "Stance involves the writer's expression of personal attitudes and assessments of the status of knowledge in a text (Hyland, 2012b, p.134).

Contrastive Analysis (CA): Granger (2003a) explains that CA "consisted in charting areas of similarity and difference between languages and basing the teaching syllabus on the contrastive findings" (p.17).

Corpus: "A machine-readable collection of (spoken or written) texts that were produced in natural communicative setting and the collection of texts is complied with the intention (1) to be representative and balanced with respect to a particular linguistic variety or register or genre and (2) to be analyzed linguistically" (Gries, 2009, p. 7).

Corpus-based Approach: The analysis focusing on the use and the distribution of a particular word or a set of words in a corpus (Andersen, 2016).

Corpus Linguistics: "The study of machine readable spoken and written language samples that have been assembled in a principled way for the purpose of linguistics research" (Adolphs and Lin, 2011, p. 597).

Interactional metadiscourse markers (IMDMs): Hyland's taxonomy (2005b) includes mainly two types of metadiscourse: interactive and interactional. Interactive resources are employed for the organization of a text in a way that is convincing and coherent for readers. Contrarily, interactional resources assist readers to get involved in the text and comprehend the writer's attitude towards the content and readers.

Log likelihood statistics: It as a test to calculate statistical significance that is commonly applied in corpus analysis (Baker, Hardie, & McEnery, 2006). It is a practical test used to calculate statistical significance. The analysis is performed through a simple calculator which is available online.

Metadiscourse (MD): Hyland (1998b) calls metadiscourse as "aspects of a text which explicitly organize the discourse, engage the audience and signal the writer's attitude" (p. 437).

Native academic authors of English (NAAEs): American academic authors of English whose doctoral dissertations constituted the corpus of native academic authors of English in this study.

Pragmatics of Metadiscourse: This study lies on the pragmatic characterization of metadiscourse. Hyland (1998b) explains that academic authors tend to convey messages for their readers (an illocutionary effect) and hope their readers to accept them (a hoped for perlocutionary effect). However, there is always the risk of readers' rejecting these messages. Thus, authors use metadiscourse markers to negotiate their academic claims based on the rhetorical conventions of their disciplinary culture.

Syntactic frames (categories) of IMDMs: In this study, each sub-category of IMDMs was divided into more detailed categories with respect to their syntactic roles. To categorize these syntactic roles the taxonomy of Biber, Johanston, Leech, Conrad, and Finegan (1999) was utilized. This taxonomy includes various categorization but we used the one related to grammatical devices used to express stance. Based on this taxonomy, 7 syntactic frames of IMDMs were established: stance adverbials, stance adjectives, stance verbs, stance nouns, modals, prepositions and pronouns and possessive adjectives.

The corpus of native academic authors of English (CNAE): It includes 60 Ph.D. dissertations of native academic authors of English across disciplines related to English Language.

The corpus of Turkish-speaking academic authors of English (CTAE): It consists of 60 Ph.D. dissertations of Turkish-speaking academic authors of English across three disciplines (English Language Teaching, English Language and Literature and Linguistics).

Turkish-speaking academic authors of English (TAAEs): Turkish-speaking academic authors of English whose doctoral dissertations constituted the corpus of Turkish-speaking academic authors of English in this study.

Wordsmith (WS): "Word Smith Tools provides almost instantaneous display of word frequency lists; concordances, which allow all the uses of a given word in its contexts; and lists of keywords, words that appear more often in a corpus than chance alone would dictate" (Ghadessy, Henry, and Roseberry, 2001, p. xix).

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

Having painted a broad outline of the present study, it would be beneficial to look a little more closely at the concepts which provided the background of this study: corpus linguistics, academic writing, author stance and metadiscourse. In a way, this chapter spells out the relationships among these concepts to propose a clear understanding of MD in academic writing.

2.2. Corpus linguistics

More recently, corpus linguistics has received popularity with its integrated use in different disciplines. It has been driven by a major mission: to capture language use in real contexts. Like many other terms in linguistics, it has been defined by many researchers. The broad definition of it has been provided by Adolphs and Lin (2011). They call it as "the study of machine readable spoken and written language samples that have been assembled in a principled way for the purpose of linguistics research" (p. 597). Stubbs (2004) defines the aims of corpus linguistics as "to improve language description and theory, and the task for applied linguistics is to assess the relevance of this work to practical applications" (p. 106). In this sense, corpus data are sources of evidence of the connection among lexis, grammar and semantics. Moreover, they might be available sources for researches from other fields. To, illustrate, a sociolinguist might discover the relations between social class and accent by studying a corpus. In the same way, a psychologist may focus on slips of the tongue.

The concept of corpus is used by Gries (2009) to refer to a machine-readable collection of (spoken or written) texts that were produced in natural communicative setting and the collection of texts is complied with the intention (1) to be representative and balanced with respect to a particular linguistic variety or register or genre and (2) to be analyzed linguistically (p. 7). He further explains some terms in this definition. "Machine readable" is generally understood to mean detailed analysis of syntactic and lexical patterns rather than raw text files. The term "produced in natural communicative setting" has been applied to situations where texts (spoken or written) are compiled in natural settings with authentic communicative purposes. "Representative" encompasses particular linguistic features of a variety that are manifested in a corpus. "Balanced with respect to a particular linguistic variety" highlights that all parts of variety that form the corpus should be sampled in the corpus and the proportion of particular parts should represent how that proportion contribute to that variety. The importance of that part should also be identified.

Adolphs and Lin (2011) use the term corpora as a representation of particular language variety and describe six types of corpora. They mainly distinguish *specialized corpora* from *general corpora*. The former is concerned with a particular type while the latter consists of many different types of texts brought together to be reference sources for linguistic researches. *Historical corpora* can be used to identify the language change by comparing different corpora from different periods. *Monitor corpora* are specifically associated with current changes in the language. *Parallel corpora* are the study of two texts that have been produced for the same purpose. *Learner corpora* which include a range of texts produced by learners of a language help researchers identify particular patterns of language use of language learners and compare them with other learners of another language.

Gries (2009) also suggests 10 types of corpora. Corpora can be classified into 2 groups: *General corpora* reflect a representation of a particular language and *specific corpora* are limited to a specific variety, register or genre. It has also become a commonplace to distinguish *raw corpora* from *annotated corpora*. Whereas *raw corpora* only include the files that compose the corpus, *annotated corpora* contain additional information. *Diachronic corpora* show how a language / variety changes over time while *synchronic corpora* give brief information about a language / variety at a particular point of time. *Monolingual corpora* contain information about one particular language / variety and *parallel corpora* include the same texts in different languages. *Static corpora* are developed in a fixed size but new texts can be added to *dynamic / monitor* corpora.

What may be special about corpora is that they provide information about (a) frequencies of occurrence (how often morphemes, words, or grammatical patterns occur

in a corpus, (b) frequencies of co-occurrence of the same kinds of patterns (how often are morphemes used with particular words). The analysis of frequencies makes it possible to interpret functional regularities or differences (Gries, 2009). Additionally, Adolphs and Lin (2011) coin the importance of metadata which means additional information about the collected data in a corpus. Metadata can be kept in a separate database or placed as a header at the beginning of each document. It enables a better understanding of a corpus when it is shared and reused by others.

Gries (2009) explains that frequency information of a corpus can be represented in three different ways: frequency lists, lexical co-occurrence lists or collocations, and concordances. Frequency lists indicate the occurrence of words in a text. It is usually represented in a two-column table. In one column, all the words occurring in the corpus are shown and in the other one the frequencies of their occurrence are listed. They play a pivotal role in the analysis of a corpus. Words with a significantly higher frequency or with a significantly low frequency can be generated by comparing a particular corpus with a reference corpus. Another important concept is the co-occurrence of collocations which show how a word occurs with other words in different positions and how frequently. Finally, lists of concordances are one of the most widely-used tools in the analysis of a corpus. Collocation lists provide information in terms of lexical cooccurrence. Such lists are also beneficial to identify the occurrence of grammatical features. In order to cope with this problem, we can specify a concordance list which shows the use of a particular word in larger contexts.

Inevitably, corpus linguistics occupies a central role in the enhancement of applications in English Language Teaching (ELT). Adolphs and Lin (2011) claim that corpus data are becoming an influential tool to improve language teaching and learning. They not only help to improve language syllabuses, teaching materials and dictionaries but also encourage teachers and learners to utilize language patterns in a corpus of an independent learning activity. Similarly, Granger (2003b) contends that corpus linguistics has a great influence on ELT in terms of materials design, syllabus design, language testing, and classroom methodology. Corpus linguistics is mostly used in ELT lexicography. All monolingual dictionaries are based on corpus findings.

Specifically, Conrad (2000) is concerned with the impacts of corpus linguistics on grammar teaching. She mentions three changes supported by the corpus data with respect to teaching grammar in the 21st century.

- Monolithic descriptions of English grammar will be replaced by register –specific descriptions.
- The teaching of grammar will become more integrated with the teaching of vocabulary.
- Emphasis will shift from structural accuracy to the appropriate conditions of use for alternative grammatical constructions (p. 549).

She further explains that grammatical patterns are significantly influenced by varieties in English. Corpus research has shown that varieties are closely linked to particular register in terms of their purposes and situations. Thus, register variation will constitute the basis of grammar tasks and materials. Secondly, corpus data advertise the fact that grammar and lexical items are integrated. Owing to this lexico-grammatical connection, grammar teaching should be reinforced by lexical items. Finally, the findings of corpus data enable teachers to explain the appropriate use of alternative grammatical structures in a specific situation.

By the same token, Meunier (2002) explains how corpus research has contributed to the identification of patterned norms of English language in terms of grammatical and lexical patterns. Corpus studies which focus on grammatical patterns in various text types in language have revealed grammatical description of different types of communication in various contexts. Thus, English grammar cannot be regarded as a monolithic entity which means that it is the grammar of several text types. Although many grammatical features are included in almost all types of text, the main difference among them is the frequency of occurrence of these features. This new description of English grammar has also affected EFL grammar teaching. The impact of native and learner corpus research can be seen in three areas of this field: curriculum design, the production of reference tools and classroom EFL grammar teaching. Apparently, the study of native corpora identifies common grammatical and syntactic patterns, which can be integrated into curriculum design. Reference tools such as dictionaries and grammar books have also been designed depending on the findings of corpus studies. It also has an influential effect on classroom methodology with the use of concordancing which requires an inductive
approach. One of the most striking approaches is data driven learning (DDL). In this approach, students figure out lexis and lexico-grammatical patterns in the target language by focusing on computer-generated concordances.

Mukherjee (2006) categorizes the findings of corpus research for pedagogical purposes under three headings: (a) using corpora for ELT, (b) using corpora in the ELT classroom and (c) using learner corpora. Attention to the importance of corpus analysis in ELT increased with the publications of corpus-based dictionaries. Collins Birmingham University of International Language Database (COBUILD), published in 1980s, emphasizes the first influence of corpus research on lexicography. In corpus-based dictionaries, the information about each entry depends on the general frequency of the word in English language. They also include relevant grammatical information on the use of each entry. Similarly, corpus-based grammars provide lists of words that can be used in a particular structure. Although learner dictionaries and learner grammars are closely associated with the findings of corpus research, it is virtually impossible to contend that the language of ELT textbooks is relevant with these findings. The language of many textbooks needs to be afforded by more naturally occurring language. Another issue is that, language teachers are not aware of the findings of corpus studies and their impacts on the area of language teaching. Hence, in-service teacher training programs need to be organized to explain the basic issues in corpus linguistics. The second issue is using the corpora in ELT classrooms, which requires inductive and learner-centered approaches. To create autonomy, data driven learning (DDL) activities may be integrated in language classrooms. These kinds of activities can get students to figure out the common patterns in the target language by focusing on concordances. Using learner corpora in ELT classrooms has also received attention in recent years. It has the potential of identification of frequent mistakes of learners at different stages of their learning a language. Besides, the comparison of reference learner corpora with native learner corpora may enable students to acquire the native norms of English language.

Despite its growing impacts on ELT, the pedagogical applications of corpus linguistics have been under debate. Widdowson (1991) claims that corpus data are rested on "what is actualized as behavior". That is, they do not represent real language. It is a misconception that what is not performed may not be possible in the real language. Another point is that, real patterns of a language may not be decided by their occurrence.

Undoubtedly, they are great collections of how people use the language but they do not give us any information about what they know, which is contrary to Chomksy's view of language competence. Does it really mean that what is not included in corpus data is not a part of competence? Evidently, how people use the language is quite different from what they actually know.

Likewise, Flowerdew (2009) labels four debates on the pedagogical implications of corpus linguistics. The analysis of corpus data is based on a bottom-up processing in which concordance lines are examined in detail. Secondly, corpus data cannot be transferred students' own writing context due to its decontextualized nature. Another point is that corpus-based learning follows an inductive approach which may be challenging for some students. Finally, since there are various types of corpora and different types of online sources, students may not find the right sources for them.

All in all, owing to its nature of dealing with real language use, corpus linguistics serves as a firm basis in the field of ELT. Studying the frequency and concordances of lexical or grammatical patterns in large corpora consisting of various types of texts makes it possible to exploit common norms of the target language. New trends in the specific areas such as curriculum and textbook design, classroom methodology, language testing in the field of ELT seem to be converging on the description of these common norms. Despite criticisms, it would be naive to neglect the effects of corpus studies on ELT.

2.3. Academic writing

Writing is a way of communication which has many forms. One of the most prominent forms of it is academic writing. Hyland (2009) uses the term academic discourse to refer to "ways of thinking and using language which exist in the academy" (p. 1). Irvin (2010) identifies academic writing as "the form of evaluation that asks you to demonstrate knowledge and show proficiency with certain disciplinary skills of thinking, interpreting and presenting" (p. 8). It is defined by Burke (2010) as "what academics do most, through publishing, communicating, and contributing to their knowledge" (p. 40).

Wright, Macarthur and Taylor (2000) provide us a full understanding of academic writing with their concept of academic language proficiency which "allows for communication in decontextualized settings that require manipulation of abstract forms of the language" (p. 66). Academic writers define and manipulate abstract forms, reflect

on their thoughts even if the context offers little choice. Murray and Moore (2006) point out that academic writing is a process which requires different orientations from the beginning to the end. It involves listening to the voices of others as well as sharing your own voice, perspectives and interpretations. It is the process of putting a specific piece of work into a broader theoretical context by making connections and comparisons. From the definitions, it is apparent that academic writing goes beyond using conventional linguistic forms. It includes communicating with readers and showing the presence of the writer.

Murray and Moore (2006) state that our career development as an academic writer depends on what we write. It is this realization which puts academic writing at the core of academic performance and success. It is not only a way of communicating ideas but also it is a socially-constructed process that requires writer to follow expected conventions in a shared academic context. In the same vein, Burke (2010) contends that academic writing is a social process. Writers convey meaning, marshal arguments and reach agreements with their readers. To achieve this, they use strategies at the interpersonal level. They also make institutionally motivated rhetorical choices in a particular discipline. Hyland (2009) holds the view that academic discourse possesses some social roles: creating academics and the knowledge itself as well as supporting universities and disciplines.

It is a common belief academic writing must be objective, informative, and impersonal. Recently, it is widely accepted that academic texts must interact between the writer and the reader. Besides, academic genres are both socially situated and structured to maintain rhetorical objectives. Thus, the basis of effective academic writing is to establish interactional elements which both reflect the propositional context and writer's opinion (Hyland, 1994). Additionally, academic writers utilize language to communicate their knowledge, ideas, attitudes and claims but making the knowledge appealing for the audience is challenging. To put it in another way, they not only need to marshal their arguments in persuasive ways and make a clear distinction between the fact and their opinions but also give the audience the chance to judge the opinions in their writings (Pazhakh et al.,2014).

As Oshima and Hague (1994) state, academic writing is different from other kinds of writing owing to its special audience, tone and purpose. While writing we first consider our audience who are primarily our professors because knowing the audience allows for clear and effective communication. Tone which can be shown by the choice of linguistic features is the style and the manner of academic writers. Undoubtedly, academic writing has a formal tone. The purpose of the writing shapes the rhetorical forms of academic writing. It is the target audience rather than the subject matter that characterizes the tone of writing. Irvin (2010) shares the same view; the success of an academic writer depends on his / her awareness of the writing and his / her approach to the writing task. Research has shown that our cognitive approach to shape the task affects our writing. That is, we need to make our ideas clear, then, to consider the components of academic writing. She asserts that novice academic writers are not usually aware of their audience. In speaking, we have the chance of using body language to convey meaning but in writing, we are left with a white page. We do not know whom we are talking to. Thus, the use of punctuation and the word choice reflect our tone.

Some authors deal with particular features of academic writing. Murray and Moore (2006) outline two features of academic writing: continuous and iterative. They state that writing does not have a single and homogeneous ends that one can reach in one day. It is a continuous process consisting of "reflection, improvement, development, progress and fulfillment of various types and in varying measures (p. 5). Following the steps helps us to arrive at a final written product. We also learn from this process. In addition, writing is an iterative process with its phases of progression and phases of regression, which creates opportunities for writers to explore the challenges of their writing. Writers also develop individual strategies that work for them to overcome problems by reflecting on other researchers, which is another dimension of this iterative process.

Similarly, Elbow (1981) points that attitude is crucially important in writing. As writers, we may choose wrong words. Indeed, this is a means to find better words. Namely, we must not be discouraged by this sense of wrongness. Writing requires two skills conflicting with each other: creating and criticizing. We need to be creative to convey our ideas with words on a page and to criticize them to determine which ideas to use. These two abilities can go together at the same time but they usually work separately. We first engage in the process of free-writing and come up with more ideas, then, we revise our ideas critically to decide what is good. Additionally, Irvin (2010) contends that

the secret of success in academic writing is related to our awareness of what we write and our approach to the writing task. The findings of some studies prove that cognitive state of the writers for identifying their writing task makes a huge difference on the success of college writers. So, it would not be wrong to conclude that awareness of what we write and how we write is a primary feature of academic writing.

Hyland (2009) identifies the difficulties of academic writing. Firstly, this kind of writing depends on conventions which writers must use to represent themselves. The problem for second language students is to comprehend these conventions, which force them to be more cautious. Another point is that, academic writers are busy with establishing reader -writer interaction and maintaining coherence in the text, which interferes with their perceptions of the world. In the same vein, Cameron, Nairn and Higgins (2009) maintain that especially for novice writers, academic writing is troublesome due to the lack of experience. The main reason underlying it is that they do not have the ability to tackle with emotional handicaps of writing. That is, they are not familiar with undergraduate model of writing in which writers communicate with readers. Experienced academic writers reckon language as a tool for reporting the findings of their studies. However, beginner academic writers are so concerned with the words and phrases that they may sometimes lose the meaning. When this happens, they believe that they do not have enough knowledge about the topic. They may be filled with self-doubt and consider their writing as a messy draft. Conversely, experienced writers are aware of the recursiveness of academic writing. A piece of writing is gone through numerous iterations to reach its most finished form. This view is supported by Al Fadda's (2011) study on the difficulties of academic writing. ESL students at King Saud University cope with many difficulties in their academic writing such as choosing the correct forms between spoken and written English, making an outline before writing a draft, defining the skills needed for successful writing, avoiding some words and phrases.

Biber (2006a) summarizes the research on academic language: It has been an object of research in applied linguistics over the past two decades. Inevitably, there is a growing body of literature that recognizes the impact of register on academic language. Written academic genres have been a special resource for these studies to identify the linguistics features at different levels. Atkinson (1992) investigates the changes in language and rhetoric of medical research from 1735 to 1985 by focusing on the broad

genre characteristics of articles and linguistic features using Biber's system of text analysis. Changes in epistemological norms of medical knowledge, the growth of a professional medical community and the periodic redefinition of medicine have led to the linguistic and rhetorical evaluation of medical research writing.

Evaluation and stance have been among other concerns of the research. Charles (2003) attempts to explain how stance is constructed through nouns (which are preceded by sentence initial deictic *This*) in two corpora of theses in 2 disciplines: politics and international relations. The findings display that such nouns help to organize the text and show the reader to comprehend the information. They also have an important role in stance-taking for the writer. Disciplinary differences are also observed in the choice of nouns. In another study conducted by Crompton (1997), a broader understanding of "hedging" is provided. Though the politeness strategy can be accounted for the use of the use of hedging, it can be extended to the politeness-related features of academic writing such as impersonal constructions, the use of the passives, and lexis-projecting emotions.

A number of researchers have focused on special classes of verbs to examine evaluation and stance. Hyland (2002a) highlights the prominence of citation in academic writing and the difficulties that nonnative academic writers face. From the corpus of 80 research articles, he analyzes reporting verbs and finds various kinds of stance meanings expressed by those verbs in different disciplines. In addition, several studies have focused on specific linguistic features that are used for information packaging functions, signaling topic, maintaining the overall discourse organization. Salager-Meyer (1999) carries out a diachronic study on the evaluation of referential behavior in medical articles published in British and American journal between 1810 and 1995. Different kinds of referential patterns typical to 19th century and early 20th century are found due to the web of contextual factors (e.g. social, cultural historical). In a different study, Marco (1999) investigates the functions of items of procedural vocabulary as indicators of conceptual relations in scientific discourse. The analysis reveals that awareness of procedural vocabulary is a kind of communicative strategy to negotiate and to understand the concepts in discourse. Flowerdew and Forest (2015) study the basic features of signaling nouns which become specific in their meaning by referring to a linguistic context.

The study of vocabulary is an important area in studies of academic language. The development of wordlists based on corpora of academic texts is a growing trend. Coxhead

(2000) develops an academic word list from 3.5 million running words of academic written text which might be valuable for academic students to learn. Simpson-Vlach and Ellis (2010) propose a list of formulaic sequences for academic speech and writing comparable with the list suggested by Coxhead (2000). They analyze 2.1 million words chosen from academic speech and academic writing. They suggest that such kinds of lists might be useful for developing curriculum and language testing.

Recently, there has been a renewed interest in task-based syllabi and needs-based analysis of communication necessary for students in their college study. The analysis of students' language needs can be the main source of task-based syllabi and the assessment of language proficiency. Durrant (2014) investigates the vocabulary needs of different groups of university students. The findings show that there are disciplinary variations in terms of their use of vocabulary. Besides, vocabulary lists designed for particular students are generic.

Different studies on academic prose exist in the literature on the basis of a rhetorical and social/historical perspective. Hyland (2002b) examines the use of directives in academic writing from a corpus of 2.5 million words composed of published articles, textbooks, and students' writings. He reports that directives possess a more complex rhetorical position which varies across genres and disciplines in academic writing. Some studies have focused on task-based syllabi and needs-based analyses about the communication requirements of students in their college study. For instance, Long and Crookes (1992) evaluate three approaches: the procedural syllabus, the process syllabus and the task-based syllabus. Although these three approaches focus on the analysis of the target language use, they do not present native-like linguistic elements in a meaningful way. However, if the task-based syllabus follows a focus-on-form approach, it may get a special place in SLA research.

There is a large volume of published studies dealing with the literacy demands of students in academic writing. Parkinson (2000) claims that the acquisition of literacy is more important than the acquisition of grammatical features. The study of particular genres in a theme-based approach would be useful in familiarizing students with literacy of science. Braine (2002) questions the concept academic literacy by summarizing the literature. He claims that what is missing in the research is the presence of nonnative graduate students. They cannot reflect their experiences in their research because of the

conventions in academic writing. Cheng (2008) states that a rhetorical and evaluative approach in reading the genre exemplars can be an effective tool to construct academic literacy.

Analyses of textbooks have also received attention. In her Ph.D. dissertation, Carkin (2001) investigates the linguistic variation of textbooks and lectures in two disciplines. Modality and discipline have an impact on academic discourse. Byrd (1997) identifies the use of names in textbooks. Naming practices in the textbooks are at conversational level. They reflect neither the descriptions of the names in academic books nor the comprehension and the use of them by students. Thus, academic naming practices should be integrated into EAP programs.

University classroom discourse is also of interest. Specifically, how linguistic features are used to establish organization and coherence of a lecture have been studied. For example, Decarrico and Nattinger (1988) examine academic lectures and categorize them based on macro marker discourse functions they have. Teaching lexical phrases may be a key for ESL students to understand academic lectures. Predicting what kind of information will come next, organizing and interpreting the information are the three components of teaching lexical items.

The MICASE project (Michigan Corpus of Academic Spoken English) provides us with the features of spoken university registers. Some studies have also focused on academic communication rested on the integration of speaking and writing. Lindemann and Mauranen (2001) identify the roles of "just" which is one of the most frequently used lexical items in the MICASE. It is confirmed that "just" appears with metadiscourse and hedging and displays a mitigating function. Few other studies also deal with specific spoken registers in the university life. By analyzing the casual discourse of six postgraduate students, Cutting (1999) describes how language is developed in a discourse community. There is a close relationship between the knowledge and implicit reference and topic influenced the form of reference.

Some researchers have been mainly interested in academic communication that reflected the integration of speaking and writing. To illustrate, Carrell, Dunkel, and Mollaun (2002) use the results of the tests and questionnaires of 234 ESL students taking TOEFL as evidence of positive effects of note taking on the TOEFL tests. They also show the close relationship among note taking, the length of the lectures and the topic.

Finally, the problems of language learners regarding academic communication have been an important area of research. In a study which is set to examine the factors affecting ESL students' writing, Leki and Carson (1997) argue that writing classes do not meet the expectations of the writing in academic courses. Based on the analysis of interview data of ESL students, they claim that expecting students to write by using their personal knowledge and background might limit their personal and academic growth. Thus, ESL writing classes must engage students in a text-responsible and source-based writing.

2.3.1. Perspectives in the analysis of academic language

Collectively, all of the studies reviewed above show that particular registers (spoken or written) and their particular linguistic features have received considerable attention in the literature of academic discourse. In order to examine these features in particular registers, researchers have mostly used three ways of analyses: register analysis, genre analysis, and multi-dimensional analysis. Thus, it would be beneficial to explain them thoroughly.

Language is used to share different communication purposes in all cultures. Specifically, languages have particular systems of registers in which communication is achieved by culture-specific patterns of interaction maintained by the speakers of that language. Biber and Conrad (2009) explain that register variation is concerned with pervasive linguistic features considering the functional aims. Genre variation is related to conventional ways of structuring different types of texts. Thus, register and genre variations are universal features of human language. What is meant by the conventional aspect of language is that members of a community share the same sound system. Although they speak differently, they understand each other, which is a matter of convention. There exists a contract among the member of a community on the use of the language varieties that "certain expressions will mean certain things when used in certain combinations under certain social conditions" (Ferguson, 1994, p. 15).

Carkin (2001) identifies that "register refers to a language variant which is situationally determined" (p. 10). Biber and Conrad (2009) define a register as "a variety associated with a particular situation of use" (p. 6). Ferguson (1994) explains the assumption behind register studies "a communication situation that recurs regularly in a society (in terms of participants, setting, communicative function and so forth) will tend

over time to develop identifying markers of language structure and language use, different from the language of other communication situations" (p. 20).

Ferguson (1994) calls genres "as conventionalized message forms" and provides the assumption behind the term genre "a message type that recurs regularly in a community (in terms of semantic content, participant, occasions of use and so on) will tend over time to develop an identifying internal structure differentiated from other message types in the repertoire of the community" (p. 21). In attempt to explain the concept of genre, Swales (1990) puts the following definition: "A genre comprises a class of events, the members of which share some set of communicative purposes…" (p. 58).

Biber (2006a) explains the distinction between register and genre, which occurs at different levels of analysis:

- The object of the study
- The characteristics of language and culture that are investigated

Considering the object of the study, the term register refers to "a general kind of language associated with a domain of use, such as legal register scientific register or bureaucratic register". Contrarily, the term genre means "a culturally recognized message type with a conventional internal structure, such as an affidavit, a biology research article or a business memo". However, it is difficult to make a clear distinction at this level. Both refer to "linguistic varieties associated with particular situation of use and particular communicative purpose" (p. 11). Lexico-grammatical features showing the use of particular words or word types depending on the situational use have been the primary concern of register studies at the second level of register analysis. On the other hand, genre studies have heightened "socio-cultural actions" such as ideology and social power.

Defining characteristics	Register	Genre
Textual focus	Sample of text excerpts	Complete texts
Linguistic characteristics	Any lexico-grammatical feature	Specialized expressions,
		rhetorical
		organization, formatting
Distribution of linguistic	Encount and nonvasive in texts	Usually once-occurring in the
Characteristics	from the variety	text, in a particular place in the
		text
Interpretation	Features serve important communicative functions in the register	Features are conventionally
		associated with the genre: the
		expected format, but not often
		functional

Table 1. Characteristics of register analysis and genre analysis

Biber and Conrad (2009, p.16).

Having defined what is meant by register and genre, it is now necessary to discuss the main differences between register analysis and genre analysis. As shown in Table 1, Biber and Conrad (2009) emphasize that a register analysis tackles with the typical linguistic features of a particular register and interpret them depending on their situational context. A sample of text excerpts rather than complete texts can be exposed to analysis since it is based on words and grammatical features that are frequently used. Regarding genre analysis, they point that language characteristics that occur only once in text are usually the main focus of it. These features play an important role in figuring out how texts are built. Thus, genre analysis is centered on analysis of complete texts from a variety so as to figure out the conventional forms of the genre.

Register and genre have been instrumental to many studies in the literature. However, most of them simply use one of these concepts and ignore the other. Some authors adopt the term genre (Bunton, 1999; Bhatia, 2002; Holmes, 1997; Swales, 1990). For example, Bunton (1999) examines students' use of metatext in their Ph.D. theses by using genre analysis. Bhatia (2002) argues two perspectives of genre analysis: pedagogical or professional. On the other hand, many research findings are based on register analysis. Heath and Langman (1994) investigate the linguistic features of the register of coaching and the relations between coaches and players from a sociolinguistic perspective. Bruthiaux (1994) analyzes the linguistic features of simplified ads. The findings demonstrate that such ads lack the rules of elaborated grammar. Reduction follows a top-down process from the fully elaborated grammar.

Biber and Conrad (2009) state that some fields of research have used both these terms but distinguish them. In the framework of Systemic Functional Linguistics developed by Halliday, "genre is viewed as a social process in which participants within a culture use language in predictable sequential structures to fulfill certain communicative purposes". "Register is more concerned with the typical linguistic choices within different genres" (p. 22). Another approach to be addressed is "New Rhetoric" suggested by Hyland, which is associated with "socio-cultural context of different message types and the work that genres do, rather than describing linguistic characteristics of texts".

Now that we briefly distinguished between register and genre analysis, another perspective on the study of genres needs to be clarified. Biber (2006a) explains that many studies of academic language have also focused on multi-dimensional analysis. It provides a means of understanding linguistic descriptions of academic registers by analyzing a wide range of linguistic features in a text. It shows the most common linguistic co-occurrence patterns in a language (the dimensions) and then particular registers are analyzed with respect to these dimensions. Likewise, Biber and Conrad (2009) note that this type of analysis "permits comparisons of multiple registers along a relatively small number of underlying dimensions of variations" (p. 216). Distinguishing common linguistic varieties can be challenging among registers because these varieties work together to form dimensions each of which consist of a group of features that cooccur. Multi-dimensional analysis aims to analyze these linguistic co-occurrence patterns related to register variations. To illustrate, Carkin (2001) uses a multi-dimensional analysis and investigates the linguistic variations in textbooks and lectures from a corpus of 147.000 words in macroeconomics and biology. The results indicate that academic lectures, which are interactive like a conversation, represent variations in terms of modality and discipline. Another finding is introductory textbooks are different from those used for advanced level students in terms of less emphasized information density, abstraction, and non-overt argumentation.

2.4. Author stance

It's a common belief that scientific writing is objective and impersonal. However, whether statements signal writer's attitude has been debated recently (Hyland, 1995).

Hyland (2011a) explains that academic writing is built on the discourse of truth emerging from observable facts in the real world. In this regard, academic writing is persuasive. Academics argue their claims in their writings and attempt to persuade their readers. However, there is always a risk of readers' refusing these claims. So, academics try to diminish the possible negative reactions to their claims with the help of persuasive practices of their disciplines. Additionally, Hyland (1994) emphasizes interaction between the writer and readers and also mentions another concept. Academic writers present their attitude in their statements, which supports the fact that academic texts involve author presence. Likewise, linguistic aspects of language enable writers to express their identity, so any writing represents the self of the writer, which is based on cultural norms. It would be wrong to mention "impersonal writing" since writers convey messages about themselves through their texts (Ivanic and Camps, 2001).

In the literature, we basically come up with three terms regarding author presence: writer identity, writer presence and author stance. Some authors place an emphasis on the concept of writer identity. Hyland (2010a) asserts that writing is a means of the construction of author identity. Admittedly, academic contexts require certain restrictions in the choice of linguistic features. However, these restrictions provide a framework for writers to build their identity actively through their discourse choices. In a way, our use of community discourses defines who we are in a discourse community. It reflects how we, as academics, are similar to and different from others. Needless to say, the success of identities depend on the extent that writers are recognized in that discourse community.

According to Hyland (2012a), identity means "who and what you are" (p. 1). Matsuda (2001, cited in Matsuda 2015) defines identity as "the amalgamative effect of the use of discursive and non-discursive features that language users choose, deliberately or otherwise, from socially available yet ever-changing repertoire" (p. 144). "Academic prose is not completely impersonal but that writers gain credibility by projecting an identity invested with individual authority, displaying confidence in their evaluations and commitment to their readers" (Hyland, 2002a, p. 1081). He further explains that identity is built on discourses in which we communicate by interpreting the world and presenting ourselves through cultural conventions. We do not simply report findings; we use rhetorical features to negotiate our readers in a particular genre and social community. The use of rhetorical features shows the identity of writers. The crucial element of

academic writing for writers is to represent their identity while sharing their claims as an authority. Seemingly, academic identity is constructed through language in social context but writers cannot simply choose an identity; they need to acquire an appropriate identity in their academic community. Their individual values and beliefs also contribute their construction of identity. Jiang and Hyland (2015) contend that academic writing is based on culturally approved resources of a particular community or discipline.

In the same vein, Ivanic (1998) uses the words "identify" and identification" to refer to the process of building an identity in a social community. Although writers are free choose linguistic devices appropriate to their identity to explain a subject matter, there always exist socially determined restrictions on them. She further suggests that identity should not be seen as an isolated part of a discourse. How identity is manifested in a discourse need to be studied in detail. She posits three types of identity in a text: "the autobiographical self, which is shaped by prior social and discoursal history, "the discoursal self" in which the writer constructs in the act of writing and "the self as author" referring to a writer's relative authoritativeness". All of them are socially constructed and a part of "possibilities for self-hood" which take place in the writer's socio-cultural context (p. 24). By the same token, Matsuda (2015) labels two aspects of identity: "empirical reality that can be described and measured (e.g. demographic and textual features), phenomenological reality which exists in people's perceptions (e.g. social constructs) (p. 141). Thus, identity depends on both textual features and perceptions and experiences of writers and readers. He summarizes four main features of identity by referring to literature.

- Identity is not optional; all texts say something about the writer, although some are more marked than others
- Identity is multiple and dynamic
- Identity is constructed through socially shared resources for meaning making
- Identity is both individual and social (p. 146).

Up to now, several studies have attempted to evaluate particular aspects of writer identity. Hyland (2002c) examines the use of first-person pronouns to build identity. The findings reveal that second language students are reluctant to make use of authoritative functions and take the responsibility of their views in their reports due to "recommendations from style manuals, uncertainties about disciplinary conventions, culturally shaped epistemologies, culture specific views of authority, conflicting teacher advice, or personal preferences" (p. 1107). Similarly, Stacey (2009) investigates the writings of English as an additional language (EAL) learner in a literature course. The student is not aware of the impact of linguistic features on her identity. Besides, her 'self' is flexible and changing when she encounters a cultural language problem.

Hyland (2010a) examines how John Swales and Debbie Cameron, who are two leading figures in Applied Linguistics, manage identity in their writings through comparing a corpus compiled from the works of them with another Applied Linguistics in terms of high frequency keywords and clusters. He tries to show how corpus techniques may be beneficial for the analysis of writer identity which can be considered as "independent creativity shaped by accountability to shared practices" (p. 159). In a way, he attempts to identify how academics achieve the balance between the norms and individual traits. The analysis proves that the choices of these two writers regarding rhetorical resources which they utilize to convey their ideas and engage their readers reveal how they built their identity. Hyland (2011b) explains how students and academics represent themselves in three genres: thesis acknowledgments, doctoral prize applications and bio-statements. Contexts play a pivotal role in their construction of identity, and the use of rhetorical and interactional sources. The relationship between the self and community shapes the identity.

In a study Chiu (2016) looks at the writer identity in personal statements in Ph.D. admissions following a genre analysis. It is shown that rhetorical moves and the discoursal construction of writer identity are closely linked to their sense of position as a writer, sensitivity to audience, and the context. McKinley (2015) asserts that a writer's identity is shaped by the social conventions of academic writing. It is a process of building a cultural identity in an academic community with the help of the writing texts which requires intercultural management. He presents an analytical framework for EFL students' academic writing and displays the relationship among cultural conventions, writer identity and critical thinking.

Author (writer) presence is another term used by some authors. Lafuente-Millán (2010) states that there has been a shift from impersonal academic writing to a more individualistic writing which reflects the presence of the writer in a text. Personal pronouns and self-mention resources enable writers to build their identity and to present

themselves in texts. He explores the use of first person markers in research articles from four disciplines so as to signal writer presence. The findings offer that writer presence is constructed on the basis of epistemological and social norms of particular disciplines. Hyland (2001b) asserts that in order to secure their places as competent and well-informed writers in their academic community, writers have to represent an appropriate degree of writer presence in texts. Hyland (2002b) investigates the use of directives in a corpus of published articles, textbooks, and L2 student essays. He notes that directives are interpersonal features utilized not only to establish reader relationships in different context but also signal the presence of writers. In an analysis of author comment verbs (ACVs) in 100 biomedical research articles Marco (1999) finds that these verbs have limited rhetorical functions but occur at crucial positions to signal author presence.

The term "author stance" is widely used to express author presence in academic texts. It is worth noting that we will refer to this concept as author stance in this study. "Stance involves the writer's expression of personal attitudes and assessments of the status of knowledge in a text (Hyland, 2012b, p.134). Hyland (1999) calls stance as "the ways that writers project themselves into their texts to communicate their integrity, credibility, involvement, and a relationship to their subject matter and their readers" (p. 101). Biber (2006b) defines stance as the expression of "many different kinds of personal feelings and assessments, including attitudes that a speaker has about certain information, how certain they are about its veracity, how they obtained access to information, and what perspective they are taking" (p. 99).

According to Gray and Biber (2012), stance encompasses "the ways in which speakers and writers encode opinions and assessments in the language they produce" (p. 15). Hyland (2005a) calls stance as "an attitudinal dimension including features which refer to the ways writers present themselves and convey judgments, opinions, and commitments" (p. 176). "Stance-taking is the means by which academics take ownership of their work: making epistemic and evaluative judgment regarding entities, attributes and the relations between material to persuade readers of their right to speak with authority and to establish their reputations" (Jiang and Hyland, 2015, p. 548).

In the Longman Grammar of Spoken and Written English, Biber et al. (1999) state that there are many ways of expressing stance including grammatical devices, word choice, and paralinguistic devices. In writing paralinguistic devices such as loudness, pitch and duration or non-linguistic devices such as body position and gestures cannot be used for the expression of stance. Hence, writers express their stance overtly through grammatical or lexical means. Adverbials and complement clauses with verbs and adjectives are two common grammatical devices used to express stance.

e.g: Obviously, your parents don't care what you do.

I really doubt (that the check is there).

It is also possible to convey stance meanings through lexical choice.

e.g: I hate my job and I hate the BS that I go through.

They're very nice, cats are. (p. 967).

They also provide a semantic distinction of stance markers consisting of three categories: epistemic, attitudinal, style of speaking.

• Epistemic stance markers express speaker's attitudes towards the propositional content. They can label certainty, (or doubt), actuality, precision, or limitation. They can also show the source of knowledge or the perspective from which the information is conveyed.

e.g. He has probably been with his company for 13 years and in his present job for four.

- Attitudinal stance markers indicate personal attitudes or feelings. While some stance markers clearly express attitude (e.g. ironically, fortunately), others emphasize personal feelings or emotions (e.g. verbs: love, fear; adjectives: happy and angry)
- Style of speaking is concerned with the speaker's comments on the communication itself.

Likewise, in their analysis of three collections of texts, Conrad and Biber (2000) examine the use of adverbials to signal author stance. They identify three types of meaning:

- Epistemic stance represents the certainty of the speaker / writer and the origin of the information.
- Attitudinal stance shows feelings or judgments towards the message.
- Style stance expresses how something is said or written.

They observe register variations in the use of stance adverbials. Adverbials showing epistemic stance are the most frequently used meaning.

In an analysis of a corpus of 56 research articles in eight disciplines, Hyland (1999) proposes taxonomy of stance features including 5 categories: hedges, emphatics, attitude markers, relational markers and person markers:

- Hedges indicate the writer's decision to withhold complete commitment to an accompanying proposition, allowing information to be presented as an opinion rather than as a fact.
- Emphatics mark the expression of certainty and emphasize the force of proposition.
- Attitude markers express the writer's effective attitude to propositions in more varied ways than evidential items.
- Relational markers explicitly address readers.
- Person markers refer to the use of first person pronouns and possessive adjectives to present propositional, affective and interpersonal features (p. 104).

All in all, as Gray and Biber (2012) explain, categorization of stance devices rest on the basis of two parameters:

- 1. meaning of the assessment: personal feeling / attitude \leftrightarrow status of knowledge
- 2. linguistic level used for the assessment: lexical \leftrightarrow grammatical

There has been a wide-ranging research on author stance. Hyland has contributed to the literature on author stance with his many studies. Much of his work has been devoted to hedging and its role in building author stance. Hyland (1994) emphasizes the importance of using epistemic devices which supplement propositional information in a text. In this regard, hedges create a relation between a writer and readers but also support the writer's position. However, the correct use of them is ignored in many textbooks, which leads to pragmatic failure in the writing of second language science students. In another study in 1995, he investigates the use of hedges in the genre of research article. Hedges allow writers to predict possible rejection of their readers and to convey their claims precisely but cautiously. Another important finding of this study is that second language students find it difficult, since they have to deal with an unfamiliar cultural and linguistic environment.

In 1998a, Hyland examines the functions and distributions of hedges and boosters. The results show that they have complex linguistic features having many functions in the texts of different disciplines. They are the most common resources used to manage author stance. He explains that academic writing can be understood by its socially-situated acts. Individual factors have an impact on the choice of linguistic features but meanings are created by the interaction between the writer and readers in a particular context. Through the analysis of 240 research articles and interviews with academics, Hyland (2005a) tends to explore stance and engagement practices of academics. He draws a distinction between stance and engagement and uses taxonomy having four sub-categories of stance markers (hedges, attitude markers, boosters and self-mention) and 5 sub-categories of engagement markers (reader pronouns, directives, questions, shared knowledge, and personal asides). The use of stance markers is more common than the use of engagement markers. Hedges are the most frequent categories in the corpus. It is evident from the disciplinary distribution that each discipline has its own use of these features.

Studies on author stance primarily concern the use of epistemic stance strategies. Biber (2006b) investigates grammatical devices that express stance. The analysis of three kinds of grammatical structure (modal verbs, stance adverbs and stance complement clauses) reveals that stance is prominent for all university registers. There also exist register differences in the use of grammatical devices in particular registers. The frequent use of grammatical devices is reported in university speech rather than writing. Epistemic stance expressions are utilized more commonly in speech than writing. McNamara (2013) identifies the role of writer's epistemic stance in text cohesion leading to the comprehension and production of text. In order to create an epistemic relation with readers, authors need to comprehend the characteristics of readers. They apply compensatory patterns to reduce the difficulty of the texts. However, novice writers are usually unable to show their epistemic stance owing to lack of awareness towards readers.

Arrese (2015) is concerned with the use of epistemic stance strategies in three journalistic genres in English and Spanish. The analysis of a comparable corpus reveals some similarities and differences in the pattern of distribution of epistemic stance expressions in three genres in two languages due to cultural differences. Similar genrerelated features in both languages are also observed. In a different study, Mayes (2015) compares the use of epistemic stance features in 'teacher-student' discourse during writing conferences in a US university. Although teachers have a tendency to a more knowledgeable stance related to writing and institutional practices, students' stance taking is limited to their own papers. This jointly-stance taking strategies reflect the construction of authority and autonomy, which is a key feature in the teaching of writing.

Thus far, a number of studies have begun to examine the use of linguistic features to build stance in different sections of academic texts. Adams and Quintana-Toledo (2013) attempt to explore the use of adverbial stance markers in the introduction and conclusion sections of research articles in the field of Law between 1998 and 2008 by following the framework of Biber et al. (1999). Epistemic stance markers are the most common category in both the introductions and conclusions of research articles. Epistemic markers showing doubt and certainty are the most frequent sub-categories. They are specifically favoured in the conclusions to comment on future researches. Attitudinal markers are utilized to make comment on the information from the author's perspective. Stylistic adverbials also exist to refer to author's prior assumptions about the readers' knowledge on a particular subject. Pho (2008) focuses on 30 abstracts from three journals in applied linguistics and educational technology to explore the rhetorical moves of abstracts and how authorial stance is represented in different abstracts moves. The findings reveal three moves of abstracts in 2 fields: presenting the research, describing the methodology, and summarizing the results. The position and the type of grammatical subject allow us to distinguish the moves.

Some authors are specifically concerned with the particular linguistic features used for stance-taking. Charles, (2003) demonstrates the construction of stance via nouns in two corpora of theses from two disciplines. Specifically, she analyzes nouns which are preceded by sentence initial deictic *"This"*. The findings show that the use of nouns has a considerable impact on the construction of stance. They help the reader to comprehend the text and create opportunities for writers' stance taking. In the same vein, Jiang and Hyland (2015) analyze the distributions and functions of a noun complement structure *'The fact that'* in a corpus of 160 research articles from 8 disciplines. The findings show that stance is a lexical feature of discourse as well as being a grammatical phenomenon. Noun complement as a stance feature enables writers to express their comment and evaluation in a powerful way to influence readers to comprehend the text. In another study, Charles (2006) analyzes the construction of stance in finite reporting clauses with

that-clause complementation in two corpora of theses compiled from two disciplines: politics and material science. She explores a prominent function of reporting clauses in academic writing: reporting the writer's own work. The findings reveal how writers build their stance by emphasizing or hiding their claims. The writers emphasize their claims more clearly in politics than in material science.

Silver (2003) questions the methodological issues regarding the common categories of stance adverbials. He analyzes the adverbial "evidently" in a corpus compiled from American academic journal articles in two disciplines: history and economics following a metadiscoursal analysis: It is found that the role of the adverbial of "evidently" as hedge or booster depends on a number of pragmatic factors. Thus, a precise definition and classification of them may not be possible within the conventions of a particular discipline. In another study, Aull and Lancaster (2014) identify linguistic expressions of stance by comparing argumentative essays written by incoming first-year university students with the writing of upper-level undergraduate students and published academics. The findings reveal a huge distinction in the use of linguistic expressions of stance between the first year students and academic writers. Four categories - hedges, boosters, code glosses, and adversative / contrast connectors – are improved as the students go upper levels regarding the frequency.

The perceptions of academic writers are also received attention in the literature. By way of example, Chang (2015) contends that what lacks in the academic writing of English as foreign language (EFL) writers is the presentation of an effective authorial stance. Student writers are unwilling to take a strong stance. He investigates the conceptions of EFL doctoral students regarding the presentation of their stance. The results are associated with three dimensions: stance as linguistic construct, as cognitive or behavioral entity and as an institutional norm. Their conceptions are at surface level. They tend to make assertive claims rather than tentative claims. In a case study, Morton, Storch, and Thomson (2015) focus on the perceptions of three multilingual students towards academic writing in their first year of university. The results suggest that the norms of disciplines and cultural factors affect the perceptions of students. Variations are observed regarding how they view academic writing: a skill development, establishing interpersonal relations and building identity. However, how multilingual practices contribute to their academic writing needs to be examined in detail. Collectively, academics are expected to use a different style of writing consisting of particular linguistic conventions depending on specific genres. There has been a shift from impersonal academic writing to a more personal academic writing attempting to communicate with readers to persuade them about the ideas presented in academic texts. Lafuente-Millán (2010) suggests that there has been a shift from traditional image of distance (impersonality) to explicit presence of the writer in a text. This view is supported by Dontcheva-Navratilova (2013) who emphasizes that traditional paradigm advising objectivity has undergone changes in the last three decades. A more subjective mode of academic writing has been observed in recent years. In another way, academic writing is not just about presenting impersonal and objective truths. It also concerns individualistic features rested on the norms of the academy. These individualistic features signal the presence of writers which are socially-constructed. The success of academics is closely associated with how they constitute their identity in their texts.

2.4. Metadiscourse

Seemingly, academic writing requires particular use of language features which is characterized by cultural conventions and norms in terms of different genres and disciplines. It also signals the presence of writers in a text and their attitudes towards their audience. One of the major linguistic features that academic writers use to communicate with their readers in various genres is metadiscourse (MD). It is a linguistic aspect of discourse that is utilized by writers not only to organize the text but also to construct their stance and to communicate with their readers. As Hyland (1998b) refers, metadiscourse is "aspects of the text which explicitly refer to organization of the discourse or the writer's stance towards either its content or the reader" (p. 438). He also emphasizes that MD is based on "norms and expectations of particular cultural and professional communities" (p. 439). Hence, it represents the interactions between the writer and readers.

2.4.1. Definition of metadiscourse

The concept of metadiscourse has been defined by many scholars. It was first coined by Zellig Harris in 1959 to refer to "a writer's or speaker's attempts to guide a receiver's perception of a text" (Hyland, 2005b, p. 3). Broadly speaking, it is described as "expressing the writer's acknowledgment of the reader" (Dahl, 2004, p. 1811). He contends that it is a multifunctional concept having many different linguistic features that fulfill many pragmatic functions in a text. Hence, it would be wrong to suggest a precise

definition of MD. Additionally, Adel and Mauranen (2010) mention two different traditions regarding the definition of metadiscourse: broad definition puts textual interaction in the core of MD while narrow definition focuses on the reflexivity as a basis of MD.

Adopting a narrow definition of MD, Adel (2006) defines it as "text about text. Metadiscourse is an element of the discourse about the evolving discourse, or the writers' explicit commentary on her own ongoing text" (p. 2). It consists of linguistic features which reflect the writer's and the reader's presence in a text. Any morphemes, single word forms, phrases, clauses, string of sentences can represent a feature of metadiscourse. Likewise, for Bunton (1999), metadiscourse means metatexts which refer to writer's self-awareness of organizing the text and guiding readers to figure out the intended organization. In this regard, it is a broad concept including interpersonal or textual elements.

Vande Kopple (2012) states that researchers use the concept of metadiscourse to refer to "metatalk or metacommunication" which means "the language that people employ to talk about language" (p. 37). What he means by metadiscourse is the components of texts that convey different meanings from referential meanings which is closely associated with the content of the language and how it functions to signal the writer's personality, attitudes, and experiences. Following Hallidayan distinction, he identifies 3 meanings: Ideational meaning refers to the content of language and how it is used to reflect our experience. Interpersonal meaning gives the writers the opportunity to convey their personalities and attitudes. It also indicates writers' intention about how readers respond to the texts. Textual meaning embodies the ways of making the text meaningful. In the process of writing, we move from one level to another. On one level we express ideational meaning and on metadiscourse level we share, interpret and develop attitudes towards ideational material. He calls Halliday's ideational meaning as referential meaning which has two dimensions: interpersonal or textual meanings. The former is employed to indicate the writer's personality, experiences and attitudes. The latter is concerned with how the writer includes ideational material into the text.

Hyland (2005b) considers MD as an umbrella term used to refer to organize the interactions between writers and the readers. It is also a dynamic process in which we plan the effects of our talk on readers or listeners. MD devices also make a text more

personal and easier to follow. Contrary to Vande Kopple (2012), he claims that we do not proceed from one level to another. We can see the traces of MD in every utterance. That is, texts have communicative intentions which depend on the integration of their level and MD devices are one of the basic features of texts. They are not just stylistic devices which writers utilize. Adopting a functional approach which emphasizes meanings in context, he emphasizes that MD devices have both rhetoric and pragmatic functions. Owing to this multi-functionality, it is difficult to identify strategies used to produce MD devices. Thus, there is a general tendency of using functions to develop taxonomies to categorize MD devices in a text. Similarly, Hyland and Tse (2004a) contend that MD is a functional category because it achieves cohesion in a text, supports writer's stance and conveys messages to readers. They further explain the relation between propositional content and MD. Academic texts are concerned with persuading readers and improving the writer's claims and credentials in academic world as well as presenting the truth of content. Hence, both propositional content and metadiscoursal elements may appear in the same text. Propositional content is associated with the world and metadiscourse features are related to texts and their receptions.

2.4.2. Metadiscourse taxonomy

Different taxonomies exist in the literature regarding the categorization of metadiscourse devices. Vande Kopple's (1985) taxonomy is a leading work from which much other taxonomy has emerged.

Textual metadiscourse

Text connectives - used to help show how parts of a text are connected to one another.

Includes sequencers (*first, next, in the second place*), reminders (as / *mentioned in Chapter 2*), and topicalizers, which focus attention on the topic of a text segment (*with regard to, in connection with*).

Code glosses - used to help readers to grasp the writer's intended meaning. Based on the writer's assessment of the reader's knowledge, these devices reword, explain, define or clarify the sense of a usage, sometimes putting the reformulation in parentheses or marking it as an example, etc.

Validity markers - used to express the writer's commitment to the probability or truth of a statement. These include hedges (*perhaps, might, may*), emphatics (*clearly, undoubtedly*), and attributors which enhance a position by claiming the support of a credible other (*according to Einstein*).

Narrators - used to inform readers of the source of the information presented - who said or wrote something (according to Smith, the Prime Minister announced that).

Interpersonal metadiscourse

Illocution markers - used to make explicit the discourse act the writer is performing at certain points (to *conclude*, *I hypothesize*, *to sum up*, *we predict*!.

Attitude markers - used to express the writer's attitudes to the prepositional material he or she presents (*unfortunately, interestingly, I wish that, how awful that*).

Commentaries - used to address readers directly, drawing them into an implicit dialogue by commenting on the reader's probable mood or possible reaction to the text (*you will certainly agree that, you might want to read the third chapter first*).

Vande Kopple (1985).

His first taxonomy was consisted of seven subcategories of MD as shown in Table 2. Owing to criticisms regarding the vagueness and fuzziness of the earliest category, Vande Kopple (2012) renewed the taxonomy and suggested 6 main categories: 1. *Text connectives* show readers how the parts of the text are connected to one another and how texts are organized. They include sequences: a- first, second, b- temporal relationship: consequently, at the same time, c- reminders: as we saw in chapter 1. 2. *Code glosses* help readers grasp the appropriate meaning of elements in texts. e.g. so called, strictly speaking, technically, sort of.... 3. *Illocution markers* explain readers what speech or discourse act writers are performing at some points: I promise to, I hypothesize, for example, most sincerely 4. *Epistemology markers* indicate writers' stance on epistemological status of the ideational material they convey. 5. *Attitude markers* express

writers' attitude toward ideational material. e.g. I regret, I am grateful. 6. *Commentary* is the last subcategory of the taxonomy in which writers address readers (p. 40).

As mentioned earlier, Adel (2006) proposes two approaches in the analysis of metadiscourse. The broad approach is concerned with the explicit presence of writers and their ways of showing their attitudes towards or commenting on the text. It also tends to focus on reader's perspective which refers to allowing readers to organize, interpret and evaluate the information in a text. There is a large volume of published studies on MD, which takes a broad approach (Vande Kopple, 2012; Hyland, 2005b, Hyland and Tse, 2004a). A great deal of research has also followed the narrow approach which is largely based upon aspects of text organization (Mauranen, 1993; Bunton, 1999; Dahl, 2004). The distinguishing feature between two approaches is the inclusion of "stance". The broad approach differs from the narrow approach which excludes stance in the analysis of MD markers in a specific genre.

META	DICCO	IDCE
MEIA	DISCO	UKSE



Figure 1. Adel's metadiscourse taxonomy

Adel (2006, p. 38).

Adel develops a taxonomy rested on the text, the writer and the reader triangle as displayed in Figure 1. Following Jacobson's reflexive model of metadiscourse, she basically labels two categories: *meta-text* and *writer-reader interaction*. Metatext is related to writers' comments on their own writing, whereas writer-reader interaction means linguistic features used to engage readers into the text.

Influenced by Mauranen (1993), Bunton (1999) develops a taxonomy including *text reference, nonlinear text references, inter-text references, text act markers, text connectors and text glosses*. Ifantidou (2005) questions all the existing taxonomies of metadiscourse and suggests a new model based on 2 grounds: *inter-textual* and *intra-textual*. She claims that metadiscourse devices contribute to the propositional content of utterances at the semantic level; they are seen as a key component of effective interpretation of academic discourse.

Hyland (2005b) who adopts a broad approach suggests a new model for MD. He starts with a comprehensive definition of MD: "Metadiscourse is the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community" (p. 37). His new model rests on three basic principles. First, he distinguishes MD from the propositional content and focuses on interpersonal communicative features. That is, writers use MD to communicate with readers through texts and to make their texts more convincing for their readers. The second principle is that MD shapes the interactions for successful communication. Therefore; all MD features are interpersonal since they are rhetorical features that writers use by taking readers' background knowledge into consideration. Finally, MD is a means of distinguishing internal and external relations. MD features may be used to organize the discourse in the discourse (internal) or to create connections between the text and the world (external). His new model for the categorization of MD features covers these three principles. Suffice us to add here that this model was first developed by Hyland and Tse (2004a). It is also worth to mention that this study takes the taxonomy of Hyland (2005b) as a basis.

Category	Function	Examples
Interactive	Help to guide the reader	Resources
	through the text	
Transitions	express relations between main	but; thus; and
	clauses in addition	
Frame markers	refer to discourse acts,	finally; to conclude; my purpose
	sequences or stages	is
Endophoric markers	refer to information in other	see Fig; in section 2
	parts of the text noted above	
Evidential	refer to information from other	according to X; Z states
	texts	
Code glosses	elaborate prepositional	namely; e.g.; such as; in other
	meanings	words
Interactional	Involve the reader in the text	Resources
Hedges	withhold commitment and open	might; perhaps; possible; about
	dialogue	
Boosters	emphasize certainty or close	in fact; definitely; it is clear that
	dialogue	
Attitude markers	express writer's attitude to	unfortunately; I agree;
	proposition	surprisingly
Self-mentions	explicit reference to author(s)	I; we; my; me; our
Engagement markers	explicitly build relationship	consider; note; you can see that
	with reader	
$U_{v_1} = d(2005h = 10)$		

Table 3. An interpersonal model of metadiscourse

As indicated in Table 3, Hyland's taxonomy (2005b) has basically two categories. Interactive resources are employed for the organization of a text in a way that is convincing and coherent for readers. Writers choose MD features depending on their readers so they are not just simple linguistic elements to establish text organization. In addition to showing writer – reader relationships they signal how the writer assesses his/her readers. On the other hand, interactional resources enable readers to get involved in the text and comprehend the writer's attitude towards the content and readers. Beyond that, they emphasize the writer's position in a social community (Hyland, 2005b).

2.4.3. Studies on metadiscourse

A large and growing body of literature has investigated metadiscourse in academic texts regarding different variables. Cross-cultural and cross-disciplinary studies on MD have received much attention. Hyland is a leading figure in the literature of metadiscourse (Hyland, 1998b; Hyland, 1999; Hyland, 2004; Hyland and Tse, 2004b; Hyland, 2005b; Hyland, 2010b). A significant analysis of metadiscoursal devices is presented by Hyland (1998b). He suggests that metadiscourse plays a pivotal role in persuasive writing by maintaining contact between writer and the reader. It is also a pragmatic feature which is

used by the writers to express themselves and their research in a disciplinary context. The analysis of 28 research articles in 4 disciplines shows that disciplinary context might affect the choice of metadicourse. In the same vein, Hyland (2010b) identifies the role and distribution of metadiscourse features in a corpus of 240 dissertations by L2 postgraduate students who attend five different Hong Kong universities. The dissertations are chosen from 6 disciplines. The analysis reveals three questions that affect the choice of master and doctoral students regarding metadiscourse features: a- what kind of assistance their readers need in making connections between ideas, b- what reactions their readers may give to the arguments and claims, c- how they can reflect themselves as academic writers.

Rezaei Zadeh et al. (2015) investigate the frequency and types of interactive and interactional metadiscourse markers in conclusion sections of English master theses of 30 MA students of Isfahan University, Azad University of Arak, and Azad University of Najaf using Hyland's taxonomy. The theses are selected from three disciplines: English Language Teaching, English Translation and English Language and Literature. They conclude that interactional markers are used more than interactive ones in three disciplines. But, interactional markers are employed more frequently in English Translation comparing English Literature and English teaching. In a corpus of 120 research articles, Cao and Hu (2014) conduct an analysis of interactive MD features across 3 disciplines (applied linguistics, education and psychology). They are concerned with disciplinary and paradigmatic (quantitative and qualitative) effects on the use of interactive MD features. The results prove the existence of discipline-specific and paradigm-specific impacts of the use of interactive MD features. As can be noted above, such studies focus on cross-disciplinary analysis of MD features.

Some authors have specifically been concerned with cross-cultural variations. Özdemir and Longo (2014) compare the use of metadiscourse between Turkish and USA postgraduate students' in abstracts in MA thesis written in English by using the taxonomy of Hyland. The corpora are comprised of 52 thesis abstracts written in English from the department of English Language Teaching. The analysis confirms that there are some cultural differences in the amounts and types of metadiscourse. The incidence of evidential, endophorics, code glosses, boosters, attitude markers, self-mentions are fewer in Turkish students' master thesis abstracts. However, Turkish students utilize metadiscourse transitions, frame markers and hedges more than USA students. In the same vein, Çapar (2014) compares the use of interactional MD devices in research articles written by Turkish and American academic writers. The analysis of 150 research articles in the field of teaching a foreign language demonstrate that interactional metadiscourse markers are used more frequently by American academic writers than by Turkish academic writers. They have a tendency to build a relationship with readers in a more implied way.

One study by Burneikaite (2008) compares metadiscourse strategies in English master's theses by L1 and L2 writer. The corpus used in this study includes 40 master's theses in linguistics. The analysis of this genre reveals a new taxonomy: text-organizing, participant-oriented and evaluative markers. Both in L1 and L2 English texts, the overall frequency of metadiscourse are similar. Regarding the specific metadiscourse categories, the overuse and underuse of metadiscourse in L2 texts are observed. Blagojevic (2004) investigates the use of MD markers in research articles written by English and Norwegian academic writers in 3 disciplines. He specifically focuses on cultural rhetoric habits of academic writers and pointed that Psychology writers used more standard forms in writing while Philosophy writers organize their writing in a more diversed way. Sociology writers take a position in the middle.

There have also been studies which emphasize the effect of gender in the use of MD among different disciplines (Zareifard & Alinezhad, 2014; Yavari & Kashani, 2013). For instance, Yavari and Kashani (2013) investigate the effect on gender on the use of interpersonal resources in English. They analyze 32 applied linguistics research articles but find no significant link between gender and interpersonal resources. However, the use of metadiscourse devices is discipline-specific. That is, writers are aware of the necessities of their disciplines and use appropriate metadiscourse devices in different rhetorical sections of their research articles.

In recent years, a few authors have attempted to explain the maintenance of interpersonality in the use of MD features. The study by Mur-Duenas (2011) emphasizes the use of MD devices in research articles in a single discipline (Business Management) and how different contexts affect it. It is evident that particular linguistic / cultural contexts have an impact on the choices of MD devices. Academics use different MD devices to marshal their arguments, to mitigate their presence and their readers in

international American and national Spanish contexts. Additionally, Gillaerts and Van de Velde (2010) try to identify how interpersonality is achieved in research article abstracts. They trace historical changes in the use of 3 interactional MD markers: hedges, boosters and attitude markers in research article abstracts in the field of applied linguistics. The findings show that an abstract can be considered as a different genre dependent from its research article regarding the distribution of 3 interactional MD markers. Secondly, the use of boosters and attitude markers in abstracts has dropped while the use of hedges has increased in the last 3 decades. This might be explained by the fact that writers attempt to make scientific claims rather than taking a stance of omniscient academic.

It has also been demonstrated that metadiscoursal features are a means of mitigating writer identity. Hyland (1999) examines the ways of writers to represent themselves and their readers regarding writer stance in a corpus of research articles in 8 disciplines. He develops taxonomy of stance features consisting of 5 categories: hedges, emphatics, attitude markers, relational markers and person markers. He reports that the social practices of academic disciplines that a writer belongs to have an influence on his/her stance. Thus, MD reflects rhetorical knowledge in different discipline and the expression of stance is an important aspect of academic writing. Lafuente-Millán (2010) provides an analysis of self-mention markers in a corpus of 96 journal articles across 4 disciplines. He alleges that self-mention markers can be regarded as one of the major sources of MD features for writers to construct their presence in academic writing.

In a well-known study, Hyland and Tse (2004a) analyze 240 L2 postgraduate dissertations and offers a new taxonomy of MD which is based on the fact that MD includes a range of interpersonal resources that writers utilize to present propositional material and to promote social engagement in a specific disciplinary community. Besides, it is a means of building identity for writers and showing attitudes towards the propositional content and readers. Likewise, Abdi (2009) emphasizes cultural identity in his cross-cultural study. He tends to figure out whether Persian writers adopt the norms of academic discourse community or preserve their own native norms to take an identity. He analyzes 72 research articles from 6 disciplines and finds out that national culture has an impact on the use of interactive MD in writing in English. In both groups, the use of MD to organize the text are quite similar but the employment of interactional MD features

show that Persian writers keeps a specific cultural identity affected by their native culture while writing in English.

Considering studies conducted by Turkish researchers, Ünsal (2008) attempts to explore the types of MD functions in science and social science articles selected from 6 disciplines. She analyzes 18 research articles by using Hyland's taxonomy of MD: textual and interpersonal. The findings reveal that writers use different MD devices to build their stance across disciplines. The use of interpersonal devices is more frequent in science articles than in social science articles. Similarly, in her Ph.D. dissertation, Çapar (2014) compares the use of interactional metadiscourse markers by American academic writers and Turkish academic writers in the genre of research articles. Based on the MD taxonomy of Hyland and Tse (2004a), she analyzes 100 research articles. The findings display that the use of interactional MD markers is more frequent by American academic writers writers than by Turkish academic writers.

Akbaş (2012b) investigates the use of MD devices in dissertation abstracts written by native speakers of Turkish (NST), Turkish speakers of English (TSE), native speakers of English (NSE) He also attempts to figure out whether Turkish writers preserve MD features of their mother tongue or adopt MD features of English in their dissertation abstracts. Apparently, the use of MD features depends on community-based strategies for three groups. Interactive MD resources are more frequently used in abstracts but TSE utilize MD devices of both Turkish and English to achieve interaction and guidance.

A number of authors have also followed a narrow approach (Adel, 2010; Adel & Mauranen, 2010; Bunton, 1999; Dahl, 2004; Perez-Llantada, 2010; Salas, 2015; Toumi, 2009). In her comprehensive analysis of textual metadiscourse in research articles in 3 languages and 3 disciplines, Dahl (2004) finds that both language and disciplines are prominent factors that shape the use of metatext in academic discourse. In medical texts, the use of metatext is pertinent to academic discipline while in economics and linguistic texts, language and national writing are more influential. Regarding the languages studies in this research, it would be possible to form 2 groups in terms of the use of metatext. While English and Norwegian economics and linguistics articles represent a similar amount of metatext, in French it is less frequent. The use of metatext is identical in all 3 languages in medicine. In a different study, Adel (2010) compares 30 spoken university lectures to 130 highly proficient essays written by postgraduate writers with respect to

the use of personal MD. She aims to create new taxonomy for both spoken and written discourse. Based on the analysis of two genres, she suggests the new taxonomy having 4 categories: *metalinguistic comment, discourse organisation, speech act label,* and *references to the audience.* Most of the categories appear in both genres but spoken discourse employs more discourse actions than written discourse.

Bunton (1999) searches the use of metatext in order to guide readers in a corpus consisting of 13 Ph.D. theses. He identifies scope and distance as the major factors that determine the level of metatextual references. So as to achieve cohesion and coherence, higher level metatextual references seem more effective than lower level ones. Additionally, the use of metatext occurs more consistently at thesis level than at chapter level. Perez-Llantada (2010) sets out a cross-cultural and cross-linguistic analysis of MD features in introduction and discussion section of research articles written in English and Spanish. She offers that academic writing is not purely information-oriented but also dialogic and interactive. While text-oriented features are more frequent in introductions, there seems a balance between text and participant-oriented MD in discussion sections.

By all appearances, metadiscoursal features have received much attention in the literature. These studies which focus on different variables outline a critical role of MD for academic writers in order to communicate effectively in academic genres. It helps them to share their findings in ways that are meaningful and appropriate in particular genres. It creates a link not only between writers and readers through texts but also between genres and disciplines. Therefore, the mastery of these patterns both for native and nonnative speakers of English increases the possibility of taking a prominent place in the academic world where English is the ultimate lingua franca. To this end, they also need to create an influential presence in their academic texts.

2.4.4. Teaching metadiscourse features

Hyland (2005b) believes that metadiscourse is a prominent linguistic feature of academic writing. It can be incorporated into teaching and learning models by developing students' understanding of how language works so as to communicate effectively. Academic writing has been considered as a limited attempt consisting of imitating the writing processes of experts or concentrating on grammatical patterns. Learning the grammatical rules of academic writing is only a minor part of learning to write. What is more important is to be aware of rhetorical options to make the text more influential in

the lens of readers in a specific academic context. However, ESL writers tend to use MD markers very differently from the native writers of English. Their attempts to interact with readers often fail because they often simply utilize conversational features at the surface level which makes their writing seem awkward and unsuitable. Another point is that many textbooks do not present appropriate resources for novice writers to engage them into disciplinary use of rhetorical resources. Specifically, MD is a neglected rhetorical feature in textbooks.

Admittedly, every writer communicates with their audience in their texts. If a writer has an awareness of his/her audience, he /she may easily develop the text for the audience by building an appropriate voice. Metadiscourse is an effective means for writers to reach their audience. In the case of second language (L2) writing, L2 writers have difficulty in understanding the conventions of L2 discourse community as well as the rules of surface structures such as grammar rules. Good writers make use of a wide range of MD markers when compared with poor writers (Intaraprawat & Steffensen, 1995)

Similarly, Hyland (2005b) claims that an awareness of MD resources may facilitate teaching and learning environment in many ways:

- It provides a context in which to place propositional information.
- It injects a human presence into a written text and so makes students more attentive and engaged with a text.
- It increases the persuasiveness of a text.
- It aids comprehension and recall of text content.
- It assists coherence and relates issues clearly to each other.
- It helps to mediate the real world and the school world through a real writer.
- It highlights writer uncertainties and makes readers aware of the subjective interpretation of truth.
- It helps to show the author's position on the propositional information in a text.
- It indicates the writer's attitude to the reader of the text, including intimacy, relative power, status, etc.
- It relieves the reader's processing load by highlighting important points, indicating direction, anticipating structure, linking sections and ideas, etc.

- It shows readers that the writer recognizes their needs and is seeking to engage them in a dialogue.
- It reveals the writer's awareness of the interactional conventions of a community (p. 178-179).

He also suggests some teaching principles for the teaching and learning of MD markers. Developing a sense of audience and organizing ways to engage audience with the texts rest on the teaching MD markers, and this can be achieved by explicit instruction. The method for the development of this awareness is "Rhetorical Consciousness Raising". During this process, students work with the rhetorical features of particular genres. It aims to create better writers rather than to produce better texts. And has four steps: analyzing texts, manipulating texts, understanding audiences, creating texts in a particular genre. MD instruction highlights some key elements:

- the writers' target needs
- the writers' prior writing and learning experiences
- the role of language in expressing functions
- the importance of social interactions
- the use of authentic texts
- the role of audience and community practices (p. 181).

In the literature, we also come up with other studies concentrating on different methods. Tavakoli, Bahrami and Amirian (2012) tend to explore whether intermediate EFL learners use IMDM appropriately during a process-based writing course. 30 EFL students participate in this study and write argumentative essays during a semester. The results of experts' appropricacy judgment reveal that this process helps learners to improve their use of interactive MD markers. Students also reported that this process helped that this process helped them to feel more confident. Likewise, Cheng and Steffensen (1996) investigate how metadiscourse use can improve writers' awareness towards their readers' needs and whether the quality of texts is pertinent to the use of MD features. In a quasi-experimental study in which process method is used, they explore that the use of MD markers in the essays of experimental group are more frequent.

CHAPTER 3

METHODOLOGY

3.1. Introduction

This chapter deals with the design and the data analysis procedure of the present study. Initially, some brief information about the approaches that shape the design of study is given. Subsequently, the selection of native and nonnative corpora is presented in detail. Finally, the statistical tools utilized in this study and the procedures for data analysis are clarified.

3.2. Contrastive analysis

The methodological basis for the present study is a widely used method in corpus studies called contrastive analysis (CA). Granger (2003a) explains that CA "consisted in charting areas of similarity and difference between languages and basing the teaching syllabus on the contrastive findings" (p. 17). Additionally, Johansson (2003) explains that CA proves to be an important means of identifying possible difficulties of second language learners of a target language, which provide useful insights in language teaching. The ultimate aim of this study is to figure out how Turkish-speaking academic authors of English (TAAEs) and native academic authors of English (NAAEs) use IMDMs to signal their stance in their doctoral dissertations. In this regard, CA seems to be an efficient method for analysis to examine the use of IMDMs by TAAEs and NAAEs in this study. It would enable us to compare the similarities and differences between two groups regarding the construal of their stance.

Andersen (2016) distinguishes between corpus-based and corpus-driven approach. Researchers examine the use and the distribution of a particular word or a set of words in a corpus in corpus-based approach. On the other hand, following a more inductive approach, the corpus-driven approach do not focus on a priori assumption of a specific word or set of words and analyzes the occurrences of individual words to figure
out linguistic features that have not been investigated. These two approaches have been recently applied in cases which examine the discourse-pragmatic variations and change. Apparently, this study also requires a corpus-based approach. Our aim is not to discover new linguistic features but to examine the use of IMDMs based on a recognized linguistic category. Specifically, we took Hyland's taxonomy of IMDMs (2005b) as a framework for analysis in this study.

To this end, the study followed a five-stage analysis of the corpus:

- The analysis of CTAE: The corpus consisting of doctoral dissertations of TAAEs was exposed to analysis by using Wordsmith 6.0 regarding the use of 5 categories of Hyland's IMDMs taxonomy (2005b).
- 2. The analysis of CNAE: The corpus consisting of doctoral dissertations of NAAEs was exposed to analysis by using Wordsmith 6.0 regarding the use of 5 categories of Hyland's IMDMs taxonomy (2005b). The first two stages of the analysis enabled us to find answers for the Research Question 1.
- 3. The analysis of CTAE and CNAE: To find out whether TAAEs and NAAEs significantly differ with respect to the use of IMDMs, log likelihood statistics was conducted. This analysis provided answers for the Research Question 2.
- 4. The analysis of CTAE and CNAE: The findings gathered from Wordsmith analysis were rearranged to examine what types of syntactic frames of IMDMs were utilized by each group of academic authors. This stage of the analysis supplied the answers for the Research Question 3.
- 5. The analysis of CTAE and CNAE: Findings gathered from Wordsmith analysis were compared to find out whether TAAEs and NAAEs significantly differ with respect to the use of syntactic frames of each category of IMDMs by using log likelihood statistics. The last stage of the analysis helped us find answers for the Research Question 4.

3.3. Data collection

The present study basically aimed to compare the use of IMDMs in doctoral dissertations of Turkish-speaking academic authors of English (TAAEs) and native academic authors of English (NAAEs). The main focus of the study was to examine the pragmatic role of interactional metadiscourse markers on the construal of author stance in the doctoral dissertations in concern. The reason why academic writing was chosen is

rested on the fact that English is the medium of communication around the world in different contexts. Academic contexts possess particular conventions about the organizational issues and linguistic features. Thus, the analysis of an academic genre may assist us to figure out some of these conventions. Seemingly, rather than maintaining the organizational issues about the presentation of their findings, academic authors are expected to signal their stance and to get a credible place in their discipline by achieving academic persuasion. Hyland (2005b) points out that academic writing is a communitysituated activity and the use of metadiscourse features is pertinent to the writer's observation of interpersonal and intertextual relationships. In order to publish influential studies and gain acceptance in their field, writers need to have an understanding of these relationships. Specifically, we preferred to focus on the genre of doctoral dissertation because doctoral students are highly proficient in using English in their academic studies. However, they, as novice academic authors, may have some problems in using the linguistic norms of their discipline to signal their stance and to persuade their readers. Understanding of these problems may contribute to the field of second language teaching; more specifically to the teaching academic writing for nonnative academic authors.

For this study, we compiled an electronic corpus consisting of with 120 doctoral dissertations written between 2010 and 2015. All the dissertations were included in the corpus after getting the consents of the authors via e-mail. We mainly had two corpora: CTAE (The corpus of Turkish- speaking academic authors of English) included 60 dissertations totaling 1.330.093 words across 3 disciplines (English Language Teaching, English Language and Literature and Linguistics). CTAE was compiled from doctoral dissertations selected randomly from Thesis Center of Council of Higher Education (see Appendix A). Similarly, CNAE (The corpus of native academic authors of English) consisted of 60 dissertations totaling 1.202.456 words (see Appendix B). The dissertations in this corpus were selected randomly from many disciplines regarding English language such as Education, English literature, Linguistics, Comparative Literature and Cognitive Science. The reason underlying beneath this change was there are various departments regarding English language in the USA. CNAE was constructed with dissertations selected randomly from Proquest database.

Two coding tables for the two sets of corpora were created. Each dissertation in the corpora was identified with a particular code including the name of the author, the year of the publication and the name of the dissertation. The analysis was performed through the sections "introductions, findings and discussion, conclusion and suggestions for further studies". It is assumed that authors mostly reflect their authorial stance in these sections. The excluded sections (abstracts, literature review and the methodology sections) mainly consist of citations from other studies in the literature and they are less likely to signal an authorial stance. Additionally, all titles, tables, figures, quotations and paraphrases were excluded. It is worth noting that some dissertations were organized as chapters. In such cases, chapters pertinent to our aims were copied. After the corpus was built, the dissertations were converted into word-format and relevant sections of each dissertation were copied to another word file. Subsequently, they were converted into a text file format. Namely, the whole corpus was rearranged as text file documents.

Interactional	Involve the reader in the text	Resources
Hedges	withhold commitment and open	might; perhaps; possible;
	dialogue	about
Boosters	emphasize certainty or close	in fact; definitely; it is clear
	dialogue	that
Attitude	express writer's attitude to	unfortunately; I agree;
markers	proposition	surprisingly
Self-mentions	explicit reference to author(s)	I; we; my; me; our
Engagement	explicitly build relationship with	consider; note; you can see
markers	reader	that

Table 4. Hyland's taxonomy of interactional metadiscourse markers

Hyland (2005b, p. 49)

The present study adopted Hyland's taxonomy (2005b) as an instrument to analyze IMDMs in the corpus. The taxonomy suggests two types of MD markers interactive and interactional resources. In this study, only interactional metadiscourse markers (IMDMs) were exposed to analysis since they reflect author stance in a text (see Appendix C). As displayed in Table 4, IMDMs have 5 sub-categories: hedges, boosters, attitude markers, self-mentions and engagement markers.

In this study, each sub-category was also divided into more detailed categories with respect to their syntactic roles. The taxonomy of Biber et al. (1999) was utilized in categorizing these syntactic roles. This taxonomy includes various categorization but we used the one related to grammatical devices used to express stance. Accordingly, 7 syntactic frames of IMDMs were established: stance adverbials, stance adjectives, stance verbs, stance nouns, modals, prepositions and pronouns (see Appendix D).

3.4. Instruments

In order to examine what types of IMDMs were used by TAAEs and NAAEs and the syntactic frames of IMDMs used by both groups in concern, Wordsmith Tools 6.0 was utilized. This tool showed us the occurrences of IMDMs in the corpus and identify the most frequent items of IMDMs in each corpus. "Word Smith Tools provide almost instantaneous display of word frequency lists; concordances, which allow all the uses of a given word in its contexts; and lists of keywords, words that appear more often in a corpus than chance alone would dictate" (Ghadessy et al. 2001, p. xix).

Mike Scott		
		save all se
	Kev	Nords WordList
Previous results	On startup	Updates
Main settings	remember screen position	
		monthly - check now
Print settings	restore last work saved	Version 6.0.0.100 (26/01/2012)
Colour settings	show toolbar in Tools	latest version =
Folder settings		
Language settings	✓ show statusbar in Tools	
F		
Concord		
KeyWords		one can tell a word by the company it keep:
-	Advanced Settings	
WordList		
WSConcgram	System	
	detaile	
Utilities		Associate/clear file extensi
About		
Characters		

Figure 2. A screenshot of wordsmith main page

In Figure 2, the screenshot of Wordsmith main page which is available at http://lexically.net/wordsmith/step_by_step_English6/index.html?introduction.htm is illustrated. As can be seen, at the top of the screenshot, this program has mainly three tools: concord, keyword and wordlist. Scott (2001) explains that Wordsmith is a software

that provides a variety of tools to examine different issues but three of them are commonly used. The first tool is called *Concord* "which locates all references to any given word or phrase in our corpus, showing them in standard concordance lines with the search word centered and a variable amount of context at either side" (p. 47). This tool facilitates the analysis by showing the collocates of the search word. It also provides authentic examples of a word or phrase used in a particular context. The second tool is *Wordlist* which presents wordlist not only in an alphabetical order but also considering the frequency. This tool is useful in distinguishing the characteristics of a text or a genre. It shows us the common words in a corpus, which might be useful in designing the teaching materials. This said, it would be easy to decide which words to emphasize or to ignore. The third one is called *Keywords* which is used for the comparison of wordlists. If a word is used at higher frequencies, it is likely to be a key word. In addition, it illustrates different ways of using a keyword.

Anderson and Corbett (2009) state that characterizing expressions that occur at high or low frequencies, keywords indicate what a text is about. Thus, they would give us a clear-cut understanding of the participants' language attitude. Additionally, Biber et al. (2007) state that "a keyword analysis shows the relative frequency of words' usages in a specific group texts, in this case an appeal type, compared to relative frequency of those words' usages in a much larger group of text" (p. 138).

Log likelihood (LL) statistics was applied as the second tool for analysis in this study. Baker et al. (2006) define it as a test to calculate statistical significance that is commonly applied in corpus analysis. Chi-square statistics is also widely used to compare two word lists and to compete keywords. Similarly, Biber, Connor and Upton (2007) suggest that the value of log likelihood or chi-square statistics display the keyness of a keyword. Log likelihood statistics is a practical test used to calculate statistical significance. The analysis is performed through a simple calculator available online at http://ucrel.lancs.ac.uk/llwizard.html. It was developed by Paul Rayson from Lancaster University and allows the researchers to compare the two corpora in terms of keyness of particular words. It is suggested that in order to compute LL statistics we need the information below:

- 1. frequency in corpus 1
- 2. frequency in corpus 2

- 3. total number of words in corpus 1
- 4. total number of words in corpus 2

(https://www.lancaster.ac.uk/fss/courses/ling/corpus/blue/l08_4.htm)

This website also gives necessary explanations to interpret the results of LL statistics. It is explained that

If the log likelihood for your result is greater than 6.63, the probability of the results happening by chance is less than 1%. So, we can be 99% certain that the result actually means something. If the log likelihood is 3.84 or more, the probability of it happening by chance is less than 5%. So, we are 95% certain of the result. This is expressed as p < 0.05.

	Corpus 1	Corpus 2
Frequency of word		
Corpus size		
	Calculate	

Figure 3. A screenshot of log likelihood calculator

Figure 3 displays a screenshot of log-likelihood calculator which can be found at http://ucrel.lancs.ac.uk/llwizard.html. When the frequencies of a specific item for each corpus and the corpus sizes are entered and pressed the calculate button, LL statistics give us the relative frequencies of the item in each corpora, and display whether they are statistically significant. The symbol (+) shows overuse and (-) displays underuse in the first corpus relative to the second corpus. Overall, LL statistics were extensively used in our analysis to figure out whether TAAEs significantly differed from NAAEs in the use of IMDM to build their stance and whether there was overuse or underuse between two corpora regarding their employment of IMDMs. Let us now explain how the analysis was carried out.

3.5. Data analysis

As mentioned in the data collection section, CTAE included 60 dissertations totaling 1.330.093 words and CNAE consisted of 60 dissertations totaling 1.202.456 words. Initially, each set of corpus was uploaded to Wordsmith program, and a total of 318 items of IMDMs were individually searched across each corpus. Each instance was also manually checked because some usages of certain items might not have a metadiscoursive function. To illustrate, the use of "*may*" to express a date would not reflect a specific use of MD. Besides, some items such as *must, show, we...* were included

in two sub-categories of IMDMs. Thus, they were manually checked and put in the correct category of IMDMs. For instance, "*we*" can be both used as an engagement marker and self- mention. Thus, its uses were paid special attention during the analysis. In addition, some words with different spellings across language forms (e.g. analyse in BrE and analyze in AmE) were also taken into consideration.

The raw frequencies were also normalized per 10.000 words to compare the corpora. To calculate the normalized frequency of an item, raw frequency of the item was multiplied by 10.000 and then, the outcome was divided by the size of the corpora. The normalized frequencies enabled us to figure out how often we could came up with a particular item per 10.000 words. In order to find out whether there was a statistically significant difference between the two corpora regarding the use of each item of IMDMs, log likelihood statistics was conducted to the findings.

CHAPTER 4

FINDINGS AND DISCUSSION

4.1. Findings

The preceding chapter gave a detailed account of the methodology of this dissertation. A total number of 318 items of interactional metadiscourse markers (IMDMs) were investigated across the two corpora complied from Ph.D. dissertations of native academic authors of English (NAAEs) and Turkish academic authors of English (TAAEs) in particular fields related to English language. This chapter basically details the findings related to these research questions:

1. What types of interactional metadiscourse markers do native academic authors of English and Turkish-speaking academic authors of English employ to build their stance in their Ph.D. dissertations?

2. Do native academic authors of English and Turkish-speaking academic authors of English significantly differ in the use of interactional metadiscourse markers in terms of frequency and variety?

3. What kinds of syntactic frames of interactional metadiscourse markers do native academic authors of English and Turkish-speaking academic authors of English employ to build their stance in their Ph.D. dissertations?

4. Do native academic authors of English and Turkish-speaking academic authors of English significantly differ with respect to syntactic frames of interactional metadiscourse markers they employ in their Ph.D. dissertations?

Wordsmith 6.0 was used to compose a frequency list of IMDMs in concern. Log likelihood analysis was also performed for the following purposes: (i)- to figure out whether native and Turkish-speaking academic authors of English significantly differed in the use of IMDMs to mitigate their stance in their Ph.D. dissertations, and (ii)- to

examine whether there was a statistically significant difference in the use of syntactic frames of IMDMs. Overall, this chapter basically builds an analysis of IMDMs across the two corpora showing its use by TAAEs and NAAEs to build their stance in their Ph.D. dissertations.

4.1.1. Interactional metadiscourse markers in two corpora

The first research question investigated what types of IMDMs were employed by NAAEs and TAAEs to build their stance in their Ph.D. dissertations. The second research question examined whether NAAEs and TAAEs significantly differed in the use of IMDMs in terms of frequency and variety.

In order to answer these research questions, we analyzed IMDMs occurring in the two corpora: CTAE (The corpus of Turkish-speaking academic authors of English) and CNAE (The corpus of native academic authors of English). The analysis was based on Hyland's taxonomy of IMDMs (2005b) which included five categories. Before moving on the findings of these research questions, it would be useful to recall this taxonomy of IMDMs once more. Hedges allow authors to express their opinions as an opinion rather than a fact. Contrarily, boosters reflect certainty about the truth of the proposition. Attitude markers indicate authors' own ideas about the content such as surprise, obligation, interest, and etc. Engagement markers are utilized to establish reader-writer relationship in the text. Self-mention is concerned with explicit reference of authors through personal pronouns and possessive adjectives (Hyland, 2005b).

	CTAE	CNAE
Corpus size in words	1.330.093	1.202.456
Number of IMDMs used(n)	34192	50396
n /10.000	257.0	419.1
Number of IMDMs used	281	294
Number of IMDMs not used	37	24

Table 5. Overall distribution of IMDMs in two corpora

n: raw frequency of IMDMs

n /10.000: frequency of IMDMs per 10.000 words

As viewed in Table 5, CTAE included 1.330.093 words while CNAE consisted of 1.202.456 words. Totally, 318 IMDMs were analyzed and their frequencies were calculated across Wordsmith 6.0 tool. The analysis revealed that 24 IMDMs were not

used by NAAEs while 37 IMDMs were not displayed in the doctoral dissertations of TAAEs. Thus, 294 IMDMs were observed in CNAE whereas 281 IMDMs were found in CTAE. Clearly, NAAEs utilized more IMDMs (f= 50396) to build their stance in their Ph.D. dissertations. However, they appeared in CTAE less with a frequency of 34192. As regards to normalized frequencies per 10.000 words, we found that IMDMs had 419.1 frequency of occurrence in CNAE but it was 257.0 in CTAE. They appeared almost twice more common in CNAE than in CTAE. Overall, NAAEs and TAAEs differed in terms of frequency of IMDMs. As we will see below, this finding was confirmed by the results of Log likelihood analysis.

The general picture that arises from Table 5 which shows the overall frequency distribution of IMDMs in the two corpora is that there is an underuse of IMDMs by TAAEs. Hyland (2004) states that metadiscourse is closely related to authors' awareness of self, text and audience. Besides, it plays a key role for authors to announce themselves as competent academics in their discipline. One possible indication of this result is that TAAEs have some difficulty in building their stance in their doctoral dissertations.

				-		
	CTAE		CNAE		LL Ratio	ELL
	(01)	%1	(O2)	%2	(p < 0.05)	
	~ /				ч ́	
IMDMs	34192	2.57	50396	4 19	- 4973 21	0.00019
	51172	2.01	20270		1773.21	0.00017

Table 6. LL ratio of IMDMs in two corpora

O1 is observed frequency in Corpus 1

O2 is observed frequency in Corpus 2

%1 and %2 values show relative frequencies in the texts.

+ indicates overuse in O1 relative to O2

- indicates underuse in O1 relative to O2

Log likelihood analysis was calculated to see whether NAAEs and TAAEs significantly differed in the use of IMDMs in terms of frequency. As regards to the findings of log likelihood (LL) statistics about the overall use of IMDMs in two sets of corpora, we observed an underuse of IMDMs by TAAEs as shown in Table 6. Rayson and Garside (2000) note that the higher the LL value is, the more significant the relative frequency difference is between the two corpora. O1 and O2 display the overall frequency counts of IMDMs in two sets of corpora in CTAE and CNAE, respectively. 1 % refers to relative frequency of IMDMs in CTAE. It displays that 2.57 IMDMs were employed in CTAE per 100 words while 4.19 IMDMs were used per 100 words in CNAE, as 2 %

shows. LL Ratio was - 4973.21 (p< 0.05) which means that there was a statistically significant difference between the two corpora with respect to the overall frequency of occurrences of IMDMs. This finding was also supported with the value of 0.00019 ELL which shows the effect size value. This said, a statistically significant difference between TAAEs and NAAEs in terms of frequency counts of IMDMs was found.

4.1.2. Categorical use of interactional metadiscourse markers in two corpora

Turning to the categorical use of IMDMs in two corpora, we saw that NAAEs and TAAEs also differed with respect to the frequency of occurrence of IMDMs and variety of IMDMs, as shown in Figure 4.



Figure 4. Distribution of IMDMs in two corpora

To put it more directly, they had different tendencies about the use of IMDMs categories on the construction of their stance. Obviously, hedges were mostly frequented in both corpora. Boosters and engagement markers appeared to be frequently occurring categories of IMDMs in the corpus. We observed a striking difference between the two corpora regarding their use of self-mentions. NAAEs applied more self-mentions than TAAEs. The use of attitude markers was slightly higher in CNAE than in CTAE but they were among the least frequented categories in both corpora.

СТАЕ					Cl	NAE	
IMDMs	n	n/10.000	%	IMDMs	n	n/10.000	%
Hedges	14215	106.8	42	Hedges	17865	148.5	35
Boosters	9354	70.3	27	Boosters	10143	84.3	20
Engagement	5755	43.2	17	Self-	9344	77.7	19
markers				mentions			
Attitude	3031	22.7	9	Engagement	8871	73.7	18
markers				markers			
Self- mentions	1837	13.8	5	Attitude	4173	34.7	8
				markers			

Table 7. Frequency distribution of IMDMs categories in two corpora

n: raw frequency of each category of IMDMs

n /10.000: frequency of each category of IMDMs per 10.000 words

Table 7 provides a detailed frequency analysis of IMDMs in terms of categorical use in the two corpora. CNAE and CTAE included 106.8 items and 148.5 items of hedges per 10.000 words, respectively. Hedges comprised 35 % of all IMDMs in CNAE and 42 % of all IMDMs in CTAE. Boosters had the second highest frequency in both corpora constituting 20 % and 27 % of all IMDMs in CNAE and CTAE, respectively. Although 70.3 boosters per 10.000 words were found in CTAE, they appeared 84.3 times per 10.000 words in CNAE. 73.7 engagement markers per 10.000 words were observed in CNAE whereas 43.2 items per 10.000 words were examined in CTAE. They almost appeared twice more common in CNAE than in CTAE. With respect to their percentage in the corpus, 18 % of IMDMs in CNAE and 17 % of IMDMs in CTAE were comprised of engagement markers. As for attitude markers, 34.7 per 10.000 words items were utilized by NAAEs while 22.7 items per 10.000 words were employed by TAAEs. They represented 8 % of IMDMs in CNAE and 9 % of IMDMs in CTAE. The most influential finding of the analysis was the huge gap between CNAE and CTAE concerning the frequencies of self-mention markers. The frequency of self-mention markers was 77.7 per 10.000 words in CNAE. Surprisingly, they were ranked as the least frequently used IMDMs (f = 13.8 per 10.000 words) in CTAE. Among all the categories of IMDMs in the corpus, they took a share of 19 % of IMDMs in CNAE but 5 % of IMDMs in CTAE. Seemingly, there was an underuse of each category of IMDMs by TAAEs and the most prominent difference was related to self-mention.

Of note is the fact that both NAAEs and TAAEs mainly employed hedges and boosters to build their stance despite frequency differences. Although in CTAE, engagement markers stood as the third category, in CNAE self-mention took place as the third category. The fourth category in CTAE was attitude markers though it was engagement markers in CNAE. Apparently, the most striking finding of this analysis was the use of self-mention by TAAEs and NAAEs. Self- mention was the least frequent category of IMDMs in CTAE but in CNAE it was attitude markers. NAAEs tended to use more self-mentions to express their discoursal self in their doctoral dissertations while TAAEs preferred a limited use of self-mentions to build their stance.

Log likelihood analysis of categorical IMDMs was conducted to two sets of corpora in order to examine whether there was a statistically significant difference between CTAE and CNAE regarding categories of IMDMs.

IMDMs	CTAE	CNAE	LL Ratio	ELL
	n	n	(p<0.05)	
Self- mentions	1837	9344	- 6296.23	0.00029
Engagement markers	5755	8871	-1020.51	0.00005
Hedges	14215	17865	-866.00	0.00004
Attitude markers	3031	4173	-315.33	0.00002
Boosters	9354	10143	-161.12	0.00001

Table 8. LL ratio of categorical IMDMs in two corpora

n: raw frequency of each category of IMDMs

+ indicates overuse in O1 relative to O2

- indicates underuse in O1 relative to O2

Table 8 illustrates the categories of IMDMs and their LL value. The most important information extracted from the table is that all categories of IMDMs seemed to differ statistically significant with respect to their frequency in two corpora. Having the highest LL value of -6296.23, self-mentions placed at the top of the table. The LL value for engagement markers was -1020.51, whereas it was calculated -866.00 for hedges. The differences between two sets of corpora in terms of attitude markers and boosters were also considered as statistically significant. The LL values for the categories in concern were -315.33 and -161.12, respectively. The ELL values for each category of IMDMs which varies between 0 and 1 also supported these statistically significant differences.

Up to now, we have figured out what types of IMDMs used by TAAEs and NAAEs to build their stance in their Ph.D. dissertations and whether it was statistically significant in terms of frequency and variety. We concluded that frequency and types of IMDMs showed variation in the corpus, which triggered significant differences between CNAE and CTAE. Recall that hedges and boosters were the most frequently occurring categories of IMDMs in two sets of corpora, which demonstrates that both TAAEs and NAAEs attempted to establish a balance between taking a strong or weak stance with the help of hedges and boosters. While the former allowed them to provide a room for their readers to interpret what they claimed and the latter enabled them to make assertive claims based on their data. As you might remember, engagement markers were seen twice more common in CNAE than in CTAE but they represented relatively similar percentages in both corpora. This might reveal that both group of authors paid attention to communicate with their readers in their doctoral dissertations. Besides, it might be possible that lower frequencies of attitude markers in both corpora can be attributed to the assumption that both TAAEs and NAAEs avoided making personal comments about the propositional content. What is striking was the big difference in frequency counts of self-mentions between CNAE and CTAE. This definitely explains that NAAEs tended to project an explicit impression of themselves with the use of self-mentions while TAAEs did not emphasize their discoursal self explicitly. This said the main difference between NAAEs and TAAEs with respect to their construction of stance lies beneath their use of selfmentions.

Now that we have examined the overall and the categorical occurrences of IMDMs in the corpora and figured out NAAEs and TAAEs significantly differed in the use of IMDMs in terms of frequency and variety, we can present the detailed findings for each category of IMDMs.

4.1.2.1. Hedges

Having the highest frequency of occurrence among five categories analyzed in this study, hedges were the first category to be investigated in detail. Hyland (2005b) points that hedges "indicate the writer's decision to recognize alternative voices and viewpoints and so withhold complete commitment to a proposition. Hedges emphasize the subjectivity of a position by allowing information to be presented as an opinion rather than a fact and therefore open that position to negotiation" (p. 52). Table 9 shows the overall distribution of hedges in two corpora.

	CTAE	CNAE
Frequency of hedges (n)	14215	17865
Percentage of hedges	42	35
n / 10.000	106.8	148.5
Number of hedges used	90	93
Number of hedges not used	11	8
Total number of hedges	101	101

Table 9. Distribution of hedges in two corpora

n: raw frequency of hedges

n /10.000: frequency of hedges per 10.000 words

Apparently, NAAEs preferred to use more hedges (f=17865) than TAAEs (f =14215). The normalized frequency of hedges per 10.000 words was 148.5 in CNAE whereas it was 106.8 in CTAE. However, with respect to their percentage in the whole corpora, it is clear that they got a lion's share of 42 % of CTAE, which means that TAAEs employed hedges more frequently than other IMDMs to build their stance. 8 items of hedges were not used in CNAE while 10 items of hedges were not found in CTAE.

Table 10. Items	of hedges	not found	in two	corpora
-----------------	-----------	-----------	--------	---------

CTAE	CNAE
from my perspective	from my perspective
from our perspective	from our perspective
in my view	in most instances
in our opinion	in our opinion
in our view	in our view
uncertainly	uncertainly
unclearly	unclearly
presumable	presumable
in most instances	
in this view	

As Table 10 presents, some items of hedges were not used in the two corpora. It seems that most of the items that were not seen in the corpus reflect personal judgment. To illustrate, the item *in our view* suggests a personal view about the proposition and leaves no room for audience to comment on it, which increases the risk of their rejection towards the truth of a particular proposition. It might be that the authors did not benefit from these items.

	CTAE			CNAE	
Items	Frequency	n/	Items	Frequency	n/
	(n)	10.000		(n)	10.000
might	1002	7.5	would	1944	16.1
could	931	6.9	may	1602	13.3
should	782	5.8	rather	1009	8.3
would	722	5.4	could	986	8.1
possible	675	5.0	often	864	7.1
may	662	4.9	should	813	6.7
rather	655	4.9	might	792	6.5
seems	507	3.8	possible	720	5.9
frequently	495	3.7	likely	578	4.8

Table 11. Most frequent hedges in two corpora

n: raw frequency of hedges

n /10.000: frequency of hedges per 10.000 words

Table 11 provides the most frequently occurring items of hedges in the two corpora. In order to provide a direct comparison of frequencies, occurrences were normalized to per 10.000 words. Similar to the raw frequencies, the normalized frequencies demonstrated wide differences. The most frequent item in CTAE was *might* with an occurrence of 1002. Appearing at 1944 times, *would* had the highest frequency in CNAE. *May* and *rather* were heavily used in CNAE with the occurrences of 1602 and 1009. On the other hand, *could* and *should* were more frequent in CTAE. They were used at a frequency of 931 and 782. What stands out in the table is the frequency counts of modals like *may*, *would*, *might*, *could*. This finding may be attributed to the important role of modal verbs as hedges on the construal of author stance. As Biber (2006b) claims, modals were the most common stance features in academic registers. Clearly, such items are a means of low commitment. That is, they allow academic authors to tone down their claims and to reduce the possibility of readers' rejection to their claims. Another point is that, CNAE did not contain any stance verbs while *seems* had a quite high frequency count in CTAE.

So as to test the significance of the most frequent hedges in two corpora, log likelihood analysis was administered.

Hedges	CTAE	CNAE	LL Ratio	ELL
	n	n	(p<0.05)	
would	722	1944	-711.66	0.00004
may	662	1602	-502.94	0.00003
often	249	864	-424.53	0.00003
likely	115	578	-386.31	0.00003
frequently	495	186	+116.02	0.00001
rather	655	1009	-115.83	0.00001
could	931	986	-12.00	0.00000
possible	675	720	-9.54	0.00000
should	782	813	-7.79	0.00000
seems	507	394	+5.10	0.00000

Table 12. LL ratio of most frequent hedges in two corpora

n: raw frequency of items of hedges in the corpus

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 12 reveals the underused and overused hedges in CTAE in comparison with CNAE. It allows us to see whether there were statistically significant differences related to the most frequently applied hedges between CTAE and CNAE. As seen in the table above, *would* with -711.66 LL value was on the top of the list. *May, often* and *likely* were some other underused hedges in CTAE when compared to CNAE. The LL values of - 502.94, -424.53, and -386.31, respectively revealed a statistically significant differences between CTAE and CNAE. Besides, ELL values confirmed the importance of differences of these items in the two corpora. It is noteworthy that *frequently* with +116.02 LL value was the only striking overused item in CTAE in comparison with CNAE. *Seems* was the other overused item in CTAE but it was not statistically important.

Focusing on examples from the corpus might give us a clearer picture of the use of hedges by TAAEs and NAAEs. In the following examples which were obtained from the most frequent items in the two corpora, authors sought to weaken their claims and suggested alternative interpretations for their readers. We observed that both TAAEs and NAAEs displayed similar strategies in the use of hedges as seen in the examples below. Seemingly, they were aware of the pragmatic role of hedges on the construal of author stance. By way of illustration, they seemed to employ *likely* to minimize the potential threat of audience's rejection of the claim by reducing the power of the truth of the propositional content. Besides, the use of *rather* suggested alternative claims for the audience. The use of *would* was concerned with a tentative stance. It is very **likely** that the group of mentors with an idea that trainee(s) are to be directed to the academic activities also help them prepare a schedule to hold a program at hand to participate such activities.

Extracted from CTAE 39

Example 2

Since most raters, including new raters, do not review the rubric until rater training, those who miss the meetings or do not prepare for them are less **likely** to be prepared for live ratings.

Extracted from CNAE 7

Example 3

That is to say, the Moor's story does not offer a unifying or totalizing meaning, but **rather** a vessel, where all such multiplicities coexist without blending into one single colour, tone or truth.

Extracted from CTAE 23

Example 4

Such humor is palliative, **rather** than transgressive.

Extracted from CNAE 17

Example 5

When the hierarchy led by the omnipotence of the word and/or the text is subverted, theatricality **would** find its proper place within life.

Extracted from CTAE 37

Example 6

Rather, I **would** argue that the apparent flaws in his philosophical reasoning are actually symptomatic of a much deeper engagement with aesthetic philosophy than is generally recognized.

Extracted from CNAE 59

It seems that two groups of academic authors in concern tended to marshal their findings by making their readers to think about these findings critically. Namely, they avoided presenting their findings as facts but focused on persuading their readers about the truth of the proposition by presenting them as opinions. In this regard, the use of hedges can be a motivated tool for Ph.D. students to build their stance in their Ph.D. dissertations. That is, they took an implicit stance by maneuvering their claims into line with readers' expectations and by minimizing their claims.

Suffice us to summarize the pragmatic role of hedges. The key phrase to explain hedges is "the reflection of uncertainty". Authors communicate with their readers through a variety of genres in academic world. In this world, excessive reflection of certainty about claims or opinions may bring about the objection of readers. Thus, rather than imposing some ideas, academic authors try to persuade their readers about their claims and hedges allow them to achieve it by directing readers to what is said in the text. In this regard, Hyland (1995) claims that the understanding of hedges can facilitate the discussion of nonnative authors in their text and create a chance for them to exist successfully in their academic discipline.

4.1.2.2. Boosters

Hyland (2005b) defines boosters as "words which allow writers to close down alternatives, head off conflicting views and express their certainty in what they say" (p. 52). However, academic authors employ them to construct interpersonal solidarity and to establish an interaction with other colleagues in their discipline (Hyland, 1998a). On the use of boosters, the frequency counts showed that they were the second most frequently used categories of IMDMs in both corpora. Table 13 indicates the distribution of boosters in the two corpora.

	CTAE	CNAE
Frequency of boosters (n)	9354	10143
Percentage of boosters	27	20
n / 10.000	70.3	84.3
Number of boosters used	56	59
Number of boosters not used	8	5
Total number of boosters	64	64

Table 13. Distribution of boosters in two corpora

n: raw frequency of boosters

n /10.000: frequency of boosters per 10.000 words

They occurred 10143 times in CNAE, while they appeared at an occurrence of 9354 in CTAE. The percentage of boosters was 19 % and 26 % in CNAE and CTAE, respectively. The normalized frequencies in CNAE and CTAE were 84.3 and 70.3, respectively. In CNAE, 5 items of boosters were not seen though 59 items were observed. 8 items were not found in CTAE but 56 items were detected.

CTAE	CNAE
beyond doubt	incontestable
conclusively	incontrovertible
incontestably	indisputable
incontrovertibly	undisputedly
undisputedly	incontestably
doubtless	
incontestable	
 incontrovertible	

Table 14. Items of boosters not found in two corpora

As displayed in Table 14, some items of boosting which were mainly adverbs were not employed by TAAEs and NAAEs. It can be inferred that these adverbs may emphasize the force of the propositions and the author's strong commitment to them. Besides, they leave no room for the readers to comment on the proposition. Thus, they might not have been used by the authors in concern.

Hyland (1998a) notes that what stands in the center of rhetorical and interactive character of academic writing is "the expression of doubt and certainty", which he refers as "hedging and boosting" (p. 349). Thus, closer inspection of frequency counts of hedges and boosters highlights the importance of hedges and boosters on the construal of stance for academic authors. What is noteworthy is that hedges were utilized twice as much as boosters, which revealed that both NAAEs and TAAEs were aware of the risks of claimmaking and preferred to make temporary claims.

	CTAE			CNAE	
Items	Frequency (n)	n/10.000	Items	Frequency (n)	n/10.000
find	1654	12.4	show	1883	15.6
show	1654	12.4	find	1065	8.8
think	758	5.6	must	628	5.2
know	559	4.2	think	536	4.4
certain	540	4.0	realize	510	4.2
believe	454	3.4	clear	492	4.0
demonstrate	320	2.4	demonstrate	480	3.9
clear	397	2.9	know	479	3.9
always	290	2.1	believe	425	3.5
clearly	265	1.9	in fact	374	3.1

Table 15. Most frequent boosters in two corpora

n: raw frequency of each item of boosters

n /10.000: frequency of each item of boosters per 10.000 words

With regard to the most frequently used items of boosters, Table 15 gives us a detailed account of it. Apparently, with 12.4 of occurrences per 10.000 words, *find* had the top range in CTAE and *show* was the most frequently employed boosters with 15.6 times per 10.000 words in CNAE. Contrarily, *show* was the second in CTAE and *find* was the third frequented item in CNAE. *Must* had a third place on the list with 628 frequency in CNAE but it was not seen in CTAE. What is interesting is that the lexical frames were restricted in both corpora. Namely, most of the frequent boosters were stance verbs, which showed that TAAEs and NAAEs used a limited variety of lexical frames of boosters. Clearly, the most frequently used boosters in the corpora belonged to different syntactic frames. By way of illustration, *must* is a modal verb, *realize* is a verb while *in fact* is an adverb.

Boosters	CTNAE	CNAE	LL Ratio	ELL
	n	n	(p< 0.05)	
must	178	628	-313.71	0.00003
realize	227	510	-141.93	0.00001
in fact	146	374	-127.77	0.00001
find	1654	1065	+76.10	0.00000
certain	540	291	+52.76	0.00000
demonstrate	320	480	-50.39	0.00000
show	1654	1883	-46.93	0.00000
clear	397	492	-22.02	0.00000
think	758	536	+19.17	0.00000
clearly	265	326	-13.96	0.00000
always	290	345	-11.93	0.00000
know	559	479	+0.74	0.00000

Table 16. LL ratio of the most frequent boosters in two corpora

n: raw frequency of each item of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As displayed in Table 16, LL statistics was administered to test whether these differences were statistically important. The most important finding to emerge from the table was related to *must* which had -313.71 LL value. *Realize* and *in fact* were the other most underused boosters in CTAE with -141.93 and -127.77 LL value, respectively. *Find* and *certain* were the most and the second most overused items of boosters in CTAE in comparison with CNAE with +76.10 and +52.76 LL value, respectively.

A more detailed account of boosters can be provided by the following examples gathered from the two corpora. In the first two examples, the academic authors used *show* as an item of boosting. Here both authors expressed their confidence about their findings, which were supported with their data. That is, they used boosters to take a strong stance.

Example 7

The further breakdown of the responses to this item **shows** how firmly they believe advocacy is part of their role as ESOL teachers.

Extracted from CNAE 9

Example 8

Both experiments **showed** faster comprehension times in conditions in which accent placement was appropriate for the information structure of the sentence.

Extracted from CTAE 8

In the case of *find*, the author of example 10 tended to use it to make an assertive claim based on his/her data. However, in some cases, they preferred to use hedges and boosters together to present their opinions. To illustrate, in Example 9, the use of *might* and *find* in the same sentence clearly expressed the author's intention to balance his/her stance. Since the opinion in this sentence cannot be supported by an empirical finding, it is quite reasonable to use such a strategy.

Example 9

Putting these two ideas together leads us to the expectation that we <u>might</u> find some inflectional heads that contain dependent variables.

Extracted from CNAE 21

Example 10

On the other hand, the analysis did not **find** any statistically significant difference among the instructional groups on the oral production task.

Extracted from CTAE 19

In example 11 and 12, we see the same strategy in the use of *think*. Authors presented their claims in a way which could be safely accepted by the readers. In the light of their data, they tried to persuade their readers about the truth of their claims.

Example 11

In light of the examinations of the Welsh, Turkana and Maltese number systems, it is reasonable to **think** that the inverse number marking pattern is linked to the type of entities the nouns designate.

Extracted from CNAE 49

Example 12

We **think** the perceptual factors such as conceptual accessibility, dominance of the subject perspective and avoidance of perspective shift, may have contributed to the participants' better performance in subject RCs to object RCs.

Extracted from CTAE 57

So far, the results clearly accounted for how NAAEs and TAAEs maintained their stance by using hedges and boosters. Both NAAEs and TAAEs tended to establish a balance between taking a strong or a weak stance with the help of hedges and boosters. While it looks like they built a strong stance with the use of boosters, they tried to minimize the possible risks of readers' rejection of their claims by using hedges. This may not be surprising that Ph.D. students, as novice academic authors, might not heavily rely on their personal judgment while writing their Ph.D. dissertations. On the other hand, they seemed to be confident to build a strong stance as long as their data were based on quantitative findings. Using boosters was also a kind of rhetorical strategy for them to communicate with their readers who are the members of a particular discipline.

4.1.2.3. Attitude markers

"Attitude markers indicate the writer's affective rather than epistemic, attitude to propositions" (Hyland, 2005b, p. 53). He further explains that rather than commenting on the truth of the proposition, they reflect surprise, agreement, obligation, frustration, and etc.

	CTAE	CNAE
Frequency of attitude markers	3031	4173
Percentage of attitude markers	9	8
n / 10.000	22.7	34.7
Number of attitude markers used	53	57
Number of attitude markers not used	12	8
Total number of attitude markers	65	65

Table 17. Distribution of attitude markers in two corpora

n: raw frequency of attitude markers

n /10.000: frequency of attitude markers per 10.000 words

Table 17 illustrates the frequency of occurrences and the percentages of attitude markers in the corpora. The frequency of attitude markers was low in both corpora, 4173 in CNAE and 3031 in CTAE. The normalized frequencies were 34.7 in CNAE and 22.7 in CTAE. With 8 %, they had the least percentage in CNAE while in CTAE they were among the least frequently used IMDMs (9 %). Totally, 65 items of attitude markers were included Hyland's (2005b) taxonomy but 12 items were not seen in CTAE while 8 items were not found in CNAE. Attitude markers seemed to have little impact on achieving academic persuasion and signaling academic stance for both groups. However, since they reflect emotional evaluation of authors, they might have the potential of contributing to the unique quality of Ph.D. dissertations.

CTAE	CNAE
astonishingly	astonishingly
curiously	desirably
desirably	expectedly
disappointingly	hopefully
hopefully	astonished
shockingly	astonishing
unbelievably	hopeful
unusually	unbelievable
unbelievable	
amazingly	
disagree	
prefer	

Table 18. Items of attitude markers not found in two corpora

Table 18 illustrates items of attitude markers that were not found in the two corpora. It is apparent from this table that mainly some adverbs were not preferred by both NAAEs and TAAEs to express their subjective opinions. This finding may suggest that conveying personal attitude towards to the propositional content did not enable authors to achieve the persuasiveness of their texts.

CTAE			С		
Items	Frequency (n)	n/10.000	Items	Frequency (n)	n/10.000
even	770	5.7	even	1314	10.9
important	470	3.5	important	706	5.8
appropriate	304	2.2	expected	338	2.8
expected	293	2.2	appropriate	217	1.8
interesting	171	1.2	interesting	212	1.7
correctly	137	1.0	dramatic	126	1.0
striking	70	0.5	surprising	124	1.0

Table 19. Most frequent attitude markers in two corpora

n: raw frequency of each item of attitude markers

n /10.000: frequency of each item of attitude markers per 10.000 words

Table 19 displays the most frequently occurring items of attitude markers in both corpora. Both the raw frequencies and the normalized frequencies were low when compared to the frequencies of hedges and boosters. Obviously, adjectives and adverbs revealed to be the common syntactic frames of attitude markers in both corpora.

It appears that *even* was the most frequently employed item in the corpus. It occurred 5.7 and 10.9 times per 10.000 words in CTAE and CNAE, respectively. It was used twice higher in CNAE than in CTAE. *Important, expected* and *appropriate* were some other most frequent items. We noticed that *important* was almost twice more common in CNAE than in CTAE. Since most of the items in the table were adjectives, we can propound that both TAAEs and NAAEs built their stance with the use of adjectives in the category of attitude markers. As Hyland (2005a) claims, attitude verbs (*e.g. agree, prefer*) adverbs (*e.g. unfortunately, hopefully*) and adjectives (*e.g. appropriate, logical*) are the most explicit ways of signaling author's attitude towards the proposition.

In order to find out whether there was a statistically significant difference between the two corpora in terms of the most frequent attitude markers, the log likelihood analysis was conducted.

Attitude Markers	CTAE	CNAE	LL Ratio	ELL
	n	n	(p<0.05)	
even	770	1314	-203.84	0.00001
dramatic	126	42	+35.91	0.00000
important	706	470	+26.87	0.00000
surprising	68	124	-22.71	0.00000
expected	293	338	-9.36	0.00000
appropriate	304	217	+7.14	0.00000
interesting	171	121	+4.30	0.00000
correctly	137	101	+2.44	0.00000

Table 20. LL ratio of most frequent attitude markers in two corpora

n: raw frequency of each item of attitude markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 20 indicates the LL ratio of the most frequent attitude markers in the two corpora. *Even* was the most frequently occurring item in two sets of corpora but it had the highest LL ratio of -203, 84, which revealed the underuse of the item by TAAEs. It is interesting to note that some items that were overused by TAAEs such as *important* (+26.87 LL) and *dramatic* (+35.91 LL) existed on the top ranges of the list in concern.

The following examples chosen randomly from the corpus are the illustrations of some items of attitude markers. We revealed that the authors shared their opinions rather than persuading the readers about the accuracy of the truth in these examples. Namely, they just expressed their personal attitudes towards the proposition. To illustrate, the author of the sentence in Example 13 claimed that argument that Edited American English is a racialized standard, an **important** step in understanding and preventing racism, albeit unintentional, in the writing center. However, readers might find this claim unimportant. So, it just reflected the personal opinion of him /her.

Example 13

Such a finding supports the argument that Edited American English is a racialized standard, an **important** step in understanding and preventing racism, albeit unintentional, in the writing center.

Extracted from CNAE 4

Example 14

The sample of the research is an **important** limitation for this research because it only involves a limited number of freshman and senior pre-service English language teachers in the ELT department so of three public universities in Turkey.

Extracted from CTAE 16

In the examples below, the choice of the adjective *appropriate* also reflected the personal judgment of the authors.

Example 15

Speakers comments make this clear, especially when they act out scenarios in which *Ca*' would be **appropriate.**

Extracted from CNAE 15

Example 16

This strategy is mainly appropriate for Complex NP Island violations.

Extracted from CTAE 33

Overall, these findings suggested that attitude markers which imply the author's personal attitude or opinions toward the proposition did not appear to be a major feature of stance-taking for neither NAAEs nor TAAEs. As Hyland (1998b) explains MD facilitates academic communication in a number of ways: to organize the text in a meaningful and comprehensive way, to embody interactions with readers to persuade them, to anticipate possible rejections of readers towards the claims stated in the text, and to gain acceptance in a specific field. In this regard, it is not surprising that attitude markers did not play an important role on the construal of stance in this academic genre. Namely, persuasion of readers in a text and gaining acceptance in the field may not be achieved through the massive expression of personal opinions which are not based on the objective data. However, since they convey a variety of attitude such as surprise, obligation, agreement, and etc. they may be an effective rhetorical strategy for academic authors for the presentation and evaluation of the propositional information.

4.1.2.4. Engagement markers

Engagement markers are used to refer to "devices that explicitly address readers either to focus their attention or include them as discourse participants" (Hyland, 2005b, p. 53). As can be understood from the definition, they are a means of supporting arguments and participating readers in these arguments for authors. Its significance lies in its role of bringing readers into the text as participants. Namely, authors anticipate readers' possible objection about their understandings of the proposition and reduce this possible objection by relating the arguments to readers. It is the most explicit sign of authors' dialogic awareness which can be maintained with treating readers as "the real players of the text rather than merely implied observers of the discussion (Hyland, 2001a, p. 552).

	CTAE	CNAE
Frequency of engagement markers	5755	8871
Percentage of engagement markers	17	18
n / 10.000	43.2	73.7
Number of engagement markers used	69	75
Number of engagement markers not used	6	3
Total number of engagement markers	77	77

Table 21. Distribution of engagement markers in two corpora

n: raw frequency of engagement markers

n /10.000: frequency of engagement markers per 10.000 words

As seen in Table 21, engagement markers were found more frequently in CNAE (f = 8871) than they were found in CTAE (f = 5755). The normalized frequencies were 73.7 in CNAE and 43.2 in CTAE, which revealed that they were almost twice more common in CNAE than in CTAE. As for their percentages, 18 % of IMDMs in CNAE and 17 % of IMDMs in CTAE were used as engagement markers. Although we observed an underuse of engagement markers in CTAE, the percentages which were quite similar in both corpora suggested a willingness of NAAEs and TAAEs to speak to their readers in their texts.

CTAE	CNAE
input	mount
estimate	order
order	(the) reader's key
picture	
(the) reader's key	
your	

Table 22. Items of engagement markers not found in two corpora

Table 22 displays the items of engagement markers that were not employed in both corpora. There are 78 items in the category of engagement markers in Hyland's taxonomy (2005b). Clearly, 3 items were not preferred by NAAEs and 6 items were not employed by TAAEs.

The use of engagement markers was another rhetorical strategy used by the academic authors in concern to balance their stance which was highlighted with the use of hedges and boosters in this corpus. As Hyland (2005b) points, engagement markers appear in texts for two main purposes: to provide readers the opportunity to engage in the texts and to make a room for them at critical points. Recall that one of the pragmatic functions of MD is to lower the possible risks of objection of readers towards the proposition. By involving readers into texts, academic authors of this study might seek to diminish this possible objection of readers. Especially, in the genre of Ph.D. dissertations, they knew who their audience was and they might have had the tendency of disguising their stance while elaborating arguments and explaining their opinions and positioning their readers as important participants of their dissertations. This is another rhetorical strategy to build their stance.

СТ	AE		CN	AE	
Items	Frequency (n)	n/10.000	Items	Frequency(n)	n/10.000
find	514	3.8	see	700	5.8
do not	505	3.7	do not	674	5.6
use	475	3.5	use	544	4.5
we(inclusive)	466	3.5	we(inclusive)	522	4.3
develop	223	1.6	take	440	3.6
see	201	1.5	find	379	3.1
go	192	1.4	consider	346	2.8
follow	154	1.1	our (inclusive)	334	2.7
consider	148	1.1	determine	256	2.1
have to	147	1.1	follow	238	1.9

Table 23. Most frequent engagement markers in two corpora

n: raw frequency of each item of engagement markers

n /10.000: frequency of each item of engagement markers per 10.000 words

As indicated in Table 23, *see* and *find* revealed to be the most frequently employed items in the two corpora with the frequency of 700 and 514 in CNAE and CTAE, respectively. The top four of the list in concern consisted of some stance verbs of engagement markers (e.g. *see, find, do not* and *use*). *See* was four times more common in CNAE than in CTAE. *Use* had the third range in both corpora. It is worth noting that the pronoun *we* was also excessively used by both NAAEs and TAAEs to include their audience into their arguments. However, *our* was not employed in CTAE as frequently as in CNAE. The use of *have to* seemed typical in CTAE although it did not take a range in the list of CNAE. There were some other items which were twice higher in CNAE than in CTAE: *consider* and *follow*.

Engagement	CTAE	CNAE	LL Ratio	ELL Ratio
Markers	n	n	(p< 0.05)	
take	18	440	-526.86	0.00004
see	201	700	-345.21	0.00002
our (inclusive)	96	334	-164.55	0.00001
consider	148	346	-102.87	0.00001
do not	505	674	-44.36	0.00000
determine	134	256	-52.11	0.00000
follow	154	238	-27.61	0.00000
use	475	544	-14.23	0.00000
we(inclusive)	466	522	-11.34	0.00000
find	514	379	+9.14	0.00000
develop	223	180	+1.28	0.00000
go	192	176	- 0.02	0.00000
have to	147	139	- 0.14	0.00000

Table 24. LL ratio of the most frequent engagement markers in two corpora

n: raw frequency of each item of engagement markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

In order to test the significance of frequencies, log likelihood analysis was performed as shown in Table 24. The highest ratio was calculated with *take* with -526.86 LL ratio, which was followed by *see* with -345.21 and *our* with -164.55 LL ratio. The verb *consider* revealed to be underused in CTAE against CNAE with -102.87 LL value. Apparently, only two items of engagement markers (*find* and *develop*) were overused by TAAEs.

Having defined what is meant by the quantitative findings about engagement markers, we will now move on to some examples drawn from the corpus in order to see how academic authors made use of engagement markers to pull their audience in their dissertations and to signal their authorial stance. In example 17 and 18, we came up with the use of the verb *see* in a passive construction or in a bundle (it + an adjective + a verb). Here the authors engaged their readers into their dissertations implicitly.

Example 17

Such a development <u>could be **seen**</u> as positive given the importance of local context in the design and use of instructional materials.

Extracted from CNAE 10

Example 18

The online support is designed for independent study, so <u>it is pleasing to see</u> that the participants feel the same about the online support.

Extracted from CTAE 27

In the examples below, the authors in concern presented an effective means of stance-taking. They stamped their discoursal self with the use of an item of self-mentions (we-exclusive) and engaged their readers as a participant of the text with the use of the verb *find*.

Example 19

This indicates we should not expect to see a great deal of significance for speaker-or wordspecific factors, and where we **find** significance; we should not expect to see a strong interaction with age of the child.

Extracted from CNAE 31

Example 20

When we compare the uses of body parts in terms of their locations within the body, we **find** that beside internal organs like heart, chest, and liver, the observable and changeable parts of the body such as the face, eyes, hands, feet, and the head are also widely exploited in the figurative descriptions of emotions.

Extracted from CTAE 51

In example 21, the author used the pronoun *we* (inclusive) to promote a close relationship with the readers. In this way, he/she might seek to establish an academic solidarity in his/her disciplines and to gain acceptance in the field through this joint solidarity. The next example suggested that the items in concern might lead readers to particular interpretations. Namely, the authors wanted readers to see things in the lens of them.

Example 21

We are earthly beings bound to a specific space of living (whether we consider that space to be the earth, our country, our city, or our house).

Extracted from CNAE 58

Example 22

One certain fact, however, is that corpus linguistics presents us with profound changes in the way that **we** study, teach and learn languages all over the world due to its huge potential to present entirely authentic, genuine, qualitative and quantitative findings related to the nature of language.

Extracted from CTAE 25

Taken together, these results suggested that both NAAEs and TAAEs might perceive engagement markers as an important rhetorical strategy for the construal of their stance in their doctoral dissertations. They sometimes made assertive claims about some findings of their research with the use of boosters and these interpretations were expected to receive support from their readers. Thus, the authors tried to reflect them in a meaningful and convincing way for their readers with the use of engagement markers. In order to convince their readers, they intentionally pulled their readers into their dissertations as discourse participants. We believe that the role of engagement markers for self-expression of authors as proficient academics in their dissertations can be best summarized by Hyland (2004): They are "the mark of self-assured writers in the control of their readers" (p. 144).

4.1.2.5. Self-mentions

Self-mentions embody "the degree of explicit author presence in the text measured by the frequency of first-person pronouns and possessive adjectives" (Hyland, 2005b, p.53). Lafuente-Millán (2010) points out that self-mentions play a key role in building an appropriate authorial identity. Before moving on the findings pertinent to self-mention items in the corpus, let us briefly explain the importance of self-mention on the construal of author stance in an academic discourse. As discussed before, this type of discourse is based on the interpretations of authors about their research. In this sense, they are supposed to have a unique contribution to a specific discipline. Authors employ a variety of rhetorical strategies one of which is self-mention. These items may be the clearest way that authors utilize to stamp their stance in their texts. As Hyland (2001b) suggests, they are an effective means of reflecting writers' contribution. Confirming the findings of their study appropriately is an important aspect of academic writing but the key to gain acceptance in an academic community is the effective demonstration of individual contribution.

One of the most striking findings of the current study is the huge gap in the use of self-mentions by NAAEs and TAAEs, as displayed in Table 25.

	CTAE	CNAE
Frequency of self-mentions	1837	9344
Percentage of self-mentions	5	19
n / 10.000	13.8	77.7
Number of self-mentions used	11	11
Number of self-mentions not used	0	0
Total number of self-mentions	11	11

Table 25. Distribution of self-mentions in two corpora

n: raw frequency of self-mentions

n /10.000: frequency of self-mentions per 10.000 words

While TAAEs avoided the use of self-mention in their doctoral dissertations (f= 1837), it is a key linguistic feature for NAAEs to promote their stance (f =9344). Besides, it constituted 19 % and 5 % of IMDMs in CNAE and CTAE, respectively. The frequency counts were normalized to per 10.000 words, which resulted in 77.7 in CNAE and 13.8 in CTAE. This showed that self-mentions were five times more common in CNAE than in CTAE. This was the most striking difference that we have observed so far between NAAEs and TAAEs on the construal of their stance. All of the items of self-mentions were applied in the two corpora.

Self-mention items had the same percentage with engagement markers in CNAE, which showed how NAAEs balanced their explicit presence with the participation of readers into their dissertations. Obviously, self-mentions were the least frequented items in CTAE. Undoubtedly, TAAEs did not feel comfortable using self-mentions to promote their individual opinions.

CTAE		CNAE			
Items	Frequency	n/10.000	Items	Frequency (n)	n/10.000
	(n)				
we	977	7.3	Ι	4759	39.5
our	271	2.0	we	2173	18.0
Ι	248	1.8	my	1203	10.0
us	88	0.6	our	450	3.7
my	73	0.5	me	310	2.5
the author's	106	0.79	us	239	1.9

Table 26. Most frequent self-mentions in two corpora

n: raw frequency of each item of self-mentions

n /10.000: frequency of each item of self-mentions per 10.000 words

A more detailed account of self-mentions is given in Table 26. This data also demonstrated wide differences between NAAEs and TAAEs regarding the normalized frequencies. The pronoun I (f=4759) was the most frequently employed item in CNAE while *we* (f=977) was the most frequented item in CTAE. The normalized frequencies showed that the item was almost five times more common in CNAE than in CTAE. The pronoun *we* was the second most frequented item in CNAE but it was eight times higher in CNAE than in CTAE.

Turning now to the results of log likelihood statistics, we proved that TAAEs significantly differed from NAAEs in the use of self-mention to signal their stance.

Self-mention	CTAE	CNAE	LL Ratio	ELL Ratio
	n	n	(*p<0.05)	
Ι	248	4759	-5434.92	0.00028
my	73	1203	-1326.70	0.00008
we	977	2173	-594.36	0.00003
me	24	310	-320.10	0.00002
us	88	239	-88.51	0.00001
our	271	450	-64.80	0.00000
the author ('s)	106	126	-4.33	0.00000

Table 27. LL ratio of self-mentions in two corpora

n: raw frequency of each item of self-mentions

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As shown in Table 27, the highest LL ratio was observed with I with -5434.92 LL value, which was also supported by the ELL value (0.00028). This finding was the highest LL value calculated for a single item throughout the analysis. In the case of my, LL ratio was found -1326.70, which was quite high. A significant difference was also observed

between CTAE and CNAE in the case of *we* and *me* with -594.36 and – 320.10 LL value, respectively. The least difference was found between the corpora in *the author ('s)* with -4.33 LL value. Evidently, self-mentions were remarkably underused in CTAE against CNAE.

The examples below were taken from the corpora. Beyond doubt, both NAAEs and TAAEs tried to support their claims or arguments by emphasizing their individual contribution when they used self-mentions. They presented their discoursal self which helped them establish their authority. Hyland (2001b) states that authors use self-mentions for different purposes: self-citation, disciplinary identity, knowledge-making and discourse purposes. Example 23, 25, 26 display how self-mentions were used to inform readers about a certain theme associated the study itself. To put it directly, they tried to explain how they carried out their research. Example 24, 27 and 28 illustrate how authors made explicit claims with the use of self-mention. By this way, they might aimed to compose their disciplinary identities.

Example 23

Based on original field work, **I** show that pluractionals in Kaqchikel derive predicates of at least three different types of plural events, each of which is familiar from the nominal domain, namely count, group, and evaluation pluralities.

Extracted from CNAE 15

Example 24

Thus, for the purpose of this study, **I** propose the definition of myth as: "symbolic narratives that are connected to belief systems or rituals and are undeniably and rocentric in content.

Extracted from CTAE 52

Example 25

We learned that raters believe that the training program was effective.

Extracted from CNAE 7

Example 26

Accordingly, we formulated **our** last main hypothesis as "There are statistically significant differences between males and females in certain fallacies".

Extracted from CTAE 50

Example 27

I feel that the result of such a change and of the others proposed here will be a stronger sense of ownership of English, a keener knowledge of the role of language in the world, and, overall, a generation of better informed, better adjusted, and more successful English language learners and teachers in Taiwan.

Extracted from CNAE 42

Example 28

What **I** argue, on the other hand, is that the idea that the novelistic discourse stands independent from the rest of human activity is problematic.

Extracted from CTAE 9

In sum, self-mention is a rhetorical strategy to construct authorial stance based on the authors' subjective interpretation of the proposition. It is mainly achieved with the use of pronouns and possessive adjectives. The analysis of the data related to self-mention in the present study revealed that NAAEs were more likely to build a stronger stance by taking personal responsibility of their interpretations of the proposition. It is probable that they attempted to persuade their readers with their strong academic identity. As discussed in the literature review chapter, academic writing has been perceived as a formal and impersonal form of writing. However, it has turned out to be a more personal form writing which seeks ways to persuade readers throughout the text (Lafuente-Millán, 2010). Similarly, Jiang and Hyland (2015) consider academic writing as "a persuasive endeavour" shaped by the perceptions of writers. On the other hand, TAAEs eliminated the first person pronouns while building their stance. Thus, it would not be wrong to claim that TAAEs sought to gain acceptance on the basis of objectivity and impersonality rather than expressing their stance explicitly through the use of self-mentions. The belief that academic writing is basically objective and empirical so it can be presented without the contribution of the researcher as a participant in the text is the underlying assumption of
impersonality (Hyland, 2001b). Another reason might be that the eradication of selfmentions in the doctoral dissertations of TAAEs is due to culture-disciplined norms of this genre. Recall that "academic writers leave traces of themselves in their writing which may be linked to national as well as disciplinary culture" (Dahl, 2004, p. 1807).

4.1.3. Syntactic frames of interactional metadiscourse markers

This section deals with the findings related to the third and fourth research questions. The third research question was concerned about what kinds of syntactic frames of IMDMs NAAEs and TAAEs employed to build their stance in their Ph.D. dissertations. The fourth research question investigated whether NAAEs and TAAEs significantly differed with respect to syntactic frames of IMDMs they employed in their Ph.D. dissertations. In order to get a comprehensible picture of syntactic frames of IMDM used by NAAEs and TAAEs to build their stance in their Ph.D. dissertations, we presented the findings pertinent to the third and fourth research question together.

Now that we examined what types of IMDMs were used by NAAEs and TAAEs on the construal of their authorial stance and whether there was a significant difference between these two groups of academic authors, we could investigate the syntactic frames of IMDMs with respect to each category.

Hedges	Boosters	Attitude	Engagement	Self-mentions
		Markers	Markers	
Stance adverbials	Stance adverbials	Stance adverbials	Stance	Pronouns and
			adverbials	possessive adjectives
Stance verbs	Stance verbs	Stance verbs	Stance verbs	Stance Nouns
Stance adjectives	Stance adjectives	Stance adjectives	Stance Nouns	
Modals	Modals		Modals	
Prepositions			Pronouns	

Table 28. Subcategories of IMDMs

We mainly had 5 categories of IMDMs: hedges, boosters, attitude markers, engagement markers and self-mentions. Each category was divided into subcategories as mentioned in the methodology section. Table 28 summarizes the subcategories of the main 5 categories. Each corpus was analyzed to investigate the subcategories of each main category of IMDMs. Log likelihood analysis was also conducted to see whether the difference between each corpus was statistically significant.

4.1.3.1. Syntactic frames of hedges

Hedges were the most frequent category of IMDMs that were preferred by both NAAEs and TAAEs.

			CTAE		CNAE	
IMDMs	n	n/10.000	%	n	n/10.000	%
Hedges	14215	106.8	42	17865	148.5	35

Table 29. Overall distribution of hedges in two corpora

n: raw frequency of hedges in the corpus

n /10.000: frequency of hedges per 10.000 words

%: percentage of hedges to overall frequency of IMDMs

As illustrated in Table 29, the overall frequency counts of hedges were 14215 and 17865 in CTAE and CNAE, respectively. The normalized frequency of hedges in the corpus in concern was 106.8 in CTAE and 148.5 in CNAE. 42 % of IMDMs in CTAE was consisted of hedges while 35 % of IMDMs in CNAE was composed of hedges. It is worth noting here that percentages of hedges were calculated based on the amount of IMDMs seen in each corpus.

			U		1	
	CTAE		CNAE		LL Ratio	ELL
	01	%1	O2	%2	(p< 0.05)	
Hedges	14215	1.07	17865	1.49	- 866.00	0.00004

Table 30. LL ratio of hedges in two corpora

O1 is observed frequency in Corpus 1

O2 is observed frequency in Corpus 2

%1 and %2 values show relative frequencies in the texts.

+ indicates overuse in O1 relative to O2

- indicates underuse in O1 relative to O2

Table 30 displays the results of LL statistics regarding the overall hedges in each corpus. Hedges were underused by TAAEs against NAAEs, which was confirmed by - 866.00 LL value. It was also proved that there was a statistically significant difference between TAAEs and NAAEs in the use of hedges. O1 and O2 display the overall frequency counts of hedges in two sets of corpora in CTAE and CNAE, respectively. 1 % and 2 % refer to relative frequency counts of hedges in CTAE and CNAE per 100 words, respectively. They indicate that 1.07 hedges were applied in CTAE while 1.49 hedges were utilized per 100 words in CNAE.



Figure 5. Syntactic frames of hedges in two corpora

Figure 5 shows the syntactic frames of hedges in two sets of corpora. Apparently, there existed many interesting differences between the two corpora. Modals were the most frequently occurring tokens in CNAE whereas in CTAE they were employed as the second most frequent frame. On the other hand, TAAEs preferred to employ stance verbs more frequently while NAAEs applied them less frequently in the corpus. Stance adverbials were among the most frequently applied tokens in CNAE and CTAE. In both corpora stance adjectives were not among the most frequent syntactic frames of hedges. The least used frame was prepositions.

	CTAE				CNAE		
Subcategories of	n	n	%	Subcategories	n	n	%
Hedges		/10.000		of Hedges		/10.000	
Stance verbs	4758	35.7	31	Modals	6337	52.7	31
Modals	4348	32.6	28	Stance adverbials	5319	44.2	26
Stance adverbials	3957	29.7	25	Stance verbs	4435	36.8	21
Stance adjectives	1081	8.1	7	Stance adjectives	1697	14.0	8
Prepositions	71	0.5	0	Prepositions	77	0.6	0

Table 31. The frequency distribution of the syntactic frames of hedges in two corpora

n: raw frequency of each syntactic category of hedges

n /10.000: normalized frequency of each category of hedges per 10.000 words

%: percentage of each category to overall frequency of hedges

A more detailed analysis of the frequency counts of syntactic frames of hedges were provided in Table 31. The normalized frequencies per 10.000 words were also supplied. In accordance with the previous results, modals had the highest frequency counts in CNAE with 6337 whereas it had the second highest frequency in CTAE with 4348. Stance verbs were the most frequently utilized subcategories of hedges in CTAE with 4758 frequency counts while they took the third range among the most frequent subcategories in CNAE with 4435 frequency counts. As regards to stance adverbials, they were the second most frequent subcategory with 5319 frequency counts in CNAE but they appeared as the third most frequent subcategory in CTAE. Stance adjectives were seen 1081 and 1697 times in CTAE and CNAE. Stance prepositions were the least occurring frame.

Subcategories of	CTAE	CNAE	LL Ratio	ELL
Hedges	n	n	(*p<0.05)	
Modals	4348	6337	-600.25	0.00003
Stance adverbials	3957	5319	-361.70	0.00002
Stance adjectives	1081	1697	-206.94	0.00001
Stance verbs	4758	4435	-2.15	0.00000
Prepositions	71	77	-1.23	0.00000

Table 32. LL ratio of syntactic frames of hedges in two corpora

n: raw frequency of each syntactic category of hedges

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 32 below demonstrates the overall LL value obtained from the log likelihood analysis of syntactic frames of hedges. All of the LL values revealed an underuse of the subcategories in CTAE against CNAE. Seemingly, there was a statistically significant difference between CNAE and CTAE with respect to three subcategories of hedges: modals, stance adverbials and stance adjectives. The highest LL value was observed in the category of modals with -600.25 LL. Stance adverbials revealed to be the second most underused syntactic frame of hedges with -361.70 LL value. With -206.94 LL, stance adjectives had the third range in the list. The LL value of stance verbs (-2.15) and stance prepositions (-1.23) were not found statistically important. This result revealed that like NAAEs, TAAEs seemed to have the mastery of stance verbs and stance prepositions to highlight their stance in their doctoral dissertations.

To sum up, the overall analysis of hedges proved that they were the most frequent category of IMDMs preferred by both NAAEs and TAAEs. It seems that hedges were crucially prominent for academic authors in concern to signal their stance in their doctoral dissertations. As you might remember, they lessen the impact of authors' claims and reduce readers' possible objection to authors' claims. In a way, they express authors' lack of commitment to propositional content, which can be achieved by a variety of syntactic items of hedges. Looking at the overall syntactic frames of hedges, we realized that modals revealed to be the most important syntactic frame of hedges in CNAE whereas the most striking syntactic frame was stance verbs in CTAE. Stance adverbials also played a key role for both NAAEs and TAAEs to build their stance. They were the second frequently occurring frame in CNAE and got the third range in CTAE. Stance adjectives and prepositions did not reveal to be as important as those mentioned above for academic authors on the construal of their stance.

4.1.3.1.1. Modal verbs as hedges

As highlighted above, modals were the most frequently applied syntactic frames of hedges in CNAE.

					A CONTRACT OF A		V	
		(CTAE			C	NAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p < 0.05)	
of Hedges								
Modals	4348	32.6	31	6337	52.7	35	-600.25	0.00003
	Syntactic Frame of Hedges Modals	Syntactic n Frame of Hedges Modals 4348	Syntacticnn/10.000Frameof HedgesModals434832.6	SyntacticnCTAESyntacticnn/10.000%Frameof HedgesModals434832.631	Syntacticnn/10.000%nFrame </th <th>Syntactic n n/10.000 % n n/10.000 Frame 0f Hedges 4348 32.6 31 6337 52.7</th> <th>CTAE <th< th=""><th>CTAE CNAE Syntactic n n/10.000 % n n/10.000 % LL Ratio Frame (*p< 0.05) (*p< 0.05) (*p< 0.05) 0 of Hedges </th></th<></th>	Syntactic n n/10.000 % n n/10.000 Frame 0f Hedges 4348 32.6 31 6337 52.7	CTAE CTAE <th< th=""><th>CTAE CNAE Syntactic n n/10.000 % n n/10.000 % LL Ratio Frame (*p< 0.05) (*p< 0.05) (*p< 0.05) 0 of Hedges </th></th<>	CTAE CNAE Syntactic n n/10.000 % n n/10.000 % LL Ratio Frame (*p< 0.05) (*p< 0.05) (*p< 0.05) 0 of Hedges

Table 33. Overall distribution of modals used as hedges in two corpora

n: raw frequency of modals of hedges

n /10.000: normalized frequency of modals of hedges per 10.000 words

%: percentage of modals to overall frequency of hedges

Table 33 illustrates the overall findings of modals in the corpus. Modals were seen 6337 times and 4348 times in CNAE and CTAE, respectively. In addition, they occurred 52.7 times in every 10.000 words in CNAE but 32.6 times in every 10.000 words in CTAE. In accordance with the frequency results, modals consisted of 35 % of hedges in CNAE whereas in CTAE the percentage was 31%. Beyond doubt, they were among the most underused syntactic frames of hedges in CTAE with -600.25 LL value. The results revealed there was a statistical difference between TAAEs and NAAEs in the use of modals to hedge in their doctoral dissertations.

Before proceeding to examine the pragmatic role of modals on the construal author stance, it is necessary to mention the proportion of modals in all hedges in two sets of corpora in concern.



Figure 6. Modals used as hedges in two corpora

As illustrated in Figure 6, *would* and *may* were the mostly applied modals in CNAE while *might* and *could* constituted a big proportion of modals used as hedges in CTAE. *Ought to, could not* and *would not* were the least employed modals in each corpus. It is worth to add that there were substantial frequency variations in the use of modals to hedge in both corpora.

	CTAE			CNAE	
Modals	n	n/10.000	Modals	n	n/10.000
might	1002	7.5	would	1944	16.1
could	931	6.9	may	1602	13.3
should	782	5.8	could	986	8.1
would	722	5.4	should	813	6.7
may	662	4.9	might	792	6.5
could not	144	1.0	would not	107	0.8
would not	99	0.7	could not	71	0.5
ought	6	0.0	ought	22	0.1
Total	4348	32.6	Total	6337	52.7

Table 34. Frequency distribution of modals used as hedges in two corpora

n: raw frequency of each modal of hedges

n /10.000: normalized frequency of each modal of hedges per 10.000 words.

Table 34 indicates the frequency distribution of modals in all hedges in each corpus. In CTAE, *might* (f=1002) was the most frequented item followed by *could* (f= 931). *Should, would,* and *may* were other most frequent items of modals used as hedges in CTAE. The least found item of modal in the corpus was *ought* (f=6) was. The frequency

distribution of modals in CNAE was higher. With a frequency of 1944, *would* had the highest place in CNAE, which was followed by *may* and *could* with an occurrence of 1602 and 986, respectively. It is apparent that *would* and *may* were three times more common in CNAE than in CTAE. Similar to CTAE, *would not, could not* and *ought* were the least occurring modals in CNAE.

Modals	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
would	722	1944	-711.66	0.00004
may	662	1602	-502.94	0.00003
could not	144	71	+18.47	0.00000
could	931	986	-12.00	0.00000
ought	6	22	-11.41	0.00000
might	1002	792	+8.2	0.00000
should	782	813	-7.79	0.00000
would not	99	107	-1.64	0.00000
Total	4348	6337	-600.25	0.00003

Table 35.	LL	ratio	of	modals	used	as	hedges	in	two	cor	pora

n: raw frequency of each item of modals of hedges

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As displayed in Table 35, the LL ratio of modals used as hedges proved some important differences between CTAE and CNAE. The statistically important differences were observed as an underuse of *would* with -711.66 LL and *may* with -502.94 LL value in CTAE against CNAE, which was confirmed with the ELL values of 0.00004 and 0.00003, respectively. *Could not* with +18.47 and might with +8.2 were the two overused items in CTAE.

Having explained the frequency distribution of modals in the two corpora and whether the differences between CTAE and CNAE were statistically important, let us focus on some examples drawn from the corpus to figure out the pragmatic functions of modals to hedge. The examples illustrated the most frequent modals of hedges. We realized that both NAAEs and TAAEs basically used modals of hedges so as to down tone their claims and to gain acceptance of their readers. Indeed, they tended to make tentative claims with the use of modals.

Example 29

In this case, the CCSI **would** seem to be arguing against a concept of teaching and learning that uses a different vocabulary of motives than it does.

Extracted from CNAE 3

Example 30

Effective use of English, and of any language for that matter, **would** require sociolinguistic/pragmatic competence on the part of foreign language learners.

Extracted from CTAE 16

Example 31

Indic language enthusiasts without formal linguistic training **may** find it of interest as well, and so brief definitions of key linguistic concepts are provided throughout.

Extracted from CNAE 33

Example 32

This dissertation adopts Foucault's and Butler's postmodern/post structural views of gender, and in its analyses of passages, it discloses how the texts **may** show that gender and gender-linked attributes are not natural or essential but culturally, discursively and performatively constructed.

Extracted from CTAE 48

Example 33

In the romances, several of the major questions that structured Morris's political thinking are translated into questions of literary form—and so become invisible if one uses the same strategy of "decoding" the romances for their allegorical political content that one **might** reasonably apply to Morris's explicitly propagandistic fiction.

Extracted from CNAE 59

Example 34

The general tendency of over use of stance lexical bundles by the EFL learners **might** be due to interlanguage properties which tend learners to determine certain ways of using stance lexical bundles.

Extracted from CTAE 40

Example 35

It **could** be that subcategorization frames and repairs coincidentally avoid the same structures, or that similarities between the mare the result of historical change.

Extracted from CNAE 36

Example 36

Therefore, pronunciation programs **could** be improved in order to guarantee more accurate aural comprehension and native-live fluency if more time were dedicated to training the student to "hear" correctly, in addition to implementing the deliberate study of the features of stress, rhythm and intonation as a separate unit.

Extracted from CTAE 8

In sum, we found out that modals were the most salient syntactic frame of hedges used by NAAEs. They also took the second range in the frequency distribution of modals in CTAE. *Would* and *may* were the most frequently employed items of modals in CNAE, whereas in CTAE *might* and *could* took a lion's share. The analysis also revealed a striking underuse of two modals (*would* and *may* with -711.66 and -502.94 LL value) in CTAE against CNAE. There were two overused items by TAAEs: *could not* with +18.47 LL and *might* with +8.2 LL. However, these results were not statistically significant. Looking at some examples taken from the two corpora, we realized that both TAAES and NAAEs seemed to use modals to minimize the force of their claims and reduce the possibility of readers' objection to their claims. This said, they tried leave a room for their claims. Recall that this is one of the most important pragmatic features of metadiscourse on the construal of author stance.

4.1.3.1.2. Stance verbs as hedges

As mentioned before, stance verbs revealed to be the most frequently used syntactic frame in CTAE and the third most frequent frame in CNAE.

Table 36. Overall distribution stance verbs used as hedges in two corpora

		(CTAE			Cì	NAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p < 0.05)	
of Hedges								
Stance verbs	4758	35.7	33	4435	36.8	25	-2.15	0.00000

n: raw frequency of stance verbs of hedges

n /10.000: normalized frequency of stance verbs of hedges per 10.000 words

%: percentage of stance verbs to overall frequency of hedges

As outlined in Table 36, stance verbs constituted 33 % of hedges with 4758 frequency counts in CTAE. They occurred 4435 times and composed 25 % of hedges in CNAE. They appeared 35.7 times per 10.000 words in CTAE and 36.8 times per 10.000 words in CNAE. What stands out from LL value (-2.15) of stance verbs that TAAEs did not differ from NAAEs in the use of stance verbs used as hedges to build their stance.



Figure 7. Stance verbs used as hedges in two corpora

Figure 7 displays the stance verbs used as hedges in two sets of corpora. It is worth noting that the analysis of stance verbs was presented as lemmas. To illustrate, the total frequency counts *indicate, indicated* and *indicates* were presented together throughout

the study. It is apparent from this table that *indicate* and *suggest* were the most frequent stance verbs in CNAE. In CTAE, we mainly observed four stance verbs that occurred frequently: *suggest, indicate, appear, and feel.* There seems to be a clear tendency of using the similar verbs in both corpora despite the frequency varieties.

Stance verbs	n	n/10.000
indicate	1253	9.4
suggest	872	6.5
appear	543	4.0
seems	507	3.8
feel	428	3.2
claim	299	2.2
argue	282	2.1
tend to	237	1.7
assume	207	1.5
suppose	103	0.7
guess	12	0.0
suspect	6	0.0
estimate	4	0.0
postulate	4	0.0
doubt	1	0.0
Total	4758	35.7

Table 37. Frequency distribution of stance verbs used as hedges in CTAE

n: raw frequency of each stance verb of hedges

n /10.000: normalized frequency of each stance verb of hedges per 10.000 words

The frequency analysis of stance verbs in CTAE is presented in Table 37. They appeared 4758 times in the corpus in concern. It can be seen that 5 stance verbs were identical in the corpus. *Indicate* and *suggest* with the frequency counts of 1253 and 872 times were the most frequently observed stance verbs in the corpus. *Appear, seems* and *feel* which occurred 543, 507 and 428 times existed on the top 5 of the list. On the other hand, *guess, suspect, estimate, postulate* and *doubt* were the least applied stance verbs in CTAE.

Stance verbs	n	n/10.000
suggest	903	7.5
indicate	749	6.2
appear	706	5.8
feel	681	5.6
seems	394	3.2
argue	357	2.9
assume	206	1.7
tend to	214	1.2
claim	115	0.9
suppose	38	0.3
suspect	25	0.2
postulate	23	0.1
estimate	12	0.0
doubt	7	0.0
guess	5	0.0
Total	4435	36.8

Table 38. Frequency distribution of stance verbs used as hedges in CNAE

n: raw frequency of each stance verb of hedges

n /10.000: normalized frequency of each stance verb of hedges per 10.000 words

The frequency analysis of stance verbs in CNAE was set out in Table 38. The total frequency of them was 4435. From this data, we can see that *suggest, indicate, appear* and *feel* were the most employed stance verbs with 903, 749, 706 and 681 frequency counts in the corpus at stake. Data from this table can be compared with the data in Table 37. Surely, some verbs such as *indicate, suggest, appear* and *feel* were identical in both corpora. By way of illustration, *indicate* appeared as the most frequent verb with 1253 frequency counts in CTAE and it was the second most frequently applied verb in CNAE with 749. *Suggest* revealed to be the first mostly used verb in CNAE while it had the second range in CTAE. In both corpora, *appear* occupied the third range. *Feel* was the fourth frequent item and appeared 681 times in CNAE and it was the fourth most frequent *guess* and were seen as the least frequent items in CNAE. Finally, the two corpora were relatively similar in the use of stance verbs to hedge.

In order to calculate whether there was a statistical difference between CTAE and CNAE, log likelihood analysis was administered.

Stance verbs	CTAE	CNAE	LL Ratio	ELL
	n	n		
feel	428	681	-86.57	0.00001
indicate	1253	749	+82.50	0.00001
claim	299	115	+67.20	0.00001
appear	543	706	-40.95	0.00000
suppose	103	38	+24.93	0.00000
argue	282	357	-18.01	0.00000
postulate	4	23	-16.76	0.00000
suspect	6	25	-14.51	0.00000
suggest	872	903	-8.18	0.00000
doubt	1	7	-5.69	0.00000
seems	507	394	+5.10	0.00000
estimate	4	12	-5.03	0.00000
guess	12	5	+2.31	0.00000
assume	207	206	0.95	0.00000
tend to	237	214	0.00	0.00000
Total	4758	4435	-2.15	0.00000

Table 39. LL ratio of stance verbs used as hedges in two corpora

n: raw frequency of each stance verb of hedges

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As displayed in Table 39, *feel* was the most salient underused item in CTAE with -86.57 LL value against CNAE. *Indicate* and *claim* were the most significantly overused verbs in CTAE with +82.50 and +67.20 LL value, respectively. *Appear* was the fourth and *suppose* was the fifth item with -40.95 and +24.93 LL. *Assume* and *tend to* were at the lowest bands.

Moving on now to consider the pragmatic role of stance verbs for the academic authors in concern to highlight their stance, it would be beneficial to examine some examples of stance verbs taken from the corpus randomly. Some particular verbs which occurred as the most frequent items like *indicate, suggest, appear, feel,* and *seems* were paid attention while choosing the examples.

The first two examples illustrate how authors used the verb *indicate* which was the first frequently used item in CTAE and the second most frequent one in CNAE. It was also the most overused item in CTAE against CNAE. In the first example, in addition to presenting an assertive claim, the author employed *indicate* to distance himself/herself from the claims stated. In example 38, it is clear that the author tried to explain the claims of other critics. However, we felt that he/she agreed upon this claim. This said, it was a pragmatic role of this stance verb to help authors to gain acceptance of readers by pretending this claim belongs to other figures in the literature.

Example 37

Figures 5.1 and 5.2 show essentially the same spread, and **indicate** that the length of the narrative, in time and word count, is more a measure of individual choice than an indication of fluency or overall proficiency.

Extracted from CNAE 34

Example 38

As **indicated** by many critics, the *findesiècle*, during which aestheticism and decadence were at a rise, was a period of uncertainty and, it was a period of clash of various ideologies and worldviews.

Extracted from CTAE 46

As could be recalled from Table 39, *suggest* was the most frequent item in CNAE and the second most frequently occurred item in CTAE. The examples given below show some possible uses of this item on the construal of stance. In Example 39 and 42, the authors preferred to take an implicit stance and leave a room for the readers to accept their claims. The author of example 40 used the verb to display an explicit stance which was reinforced with the use of self-mention *I*. In example 41, we see the opposite strategy of taking stance: Here the author used a lexical bundle to signal his/her stance. Indeed, we knew that this was a specific claim made by the author but the use of the lexical bundle made the readers to think that it was a generally accepted opinion. Recall that TAAEs avoided making assertive claims.

Example 39

This chapter **suggests** that the practices of hiding, exposure, risk-taking, and voyeurism are all functions of Greene's interest in the secret landscapes of sexuality.

Extracted from CNAE 57

Example 40

I do not mean to **suggest** that selves are fluid whereas identities are static. Both can be influx.

Extracted from CNAE 1

Example 41

<u>It might be **suggested**</u> that SIB use in TICLE might also be attributed to the focus of instruction in the classrooms.

Extracted from CTAE 26

Example 42

As the results of the study **suggests**, the great majority of the participants in all groups completed the wh-question formation task without violating the target island structures.

Extracted from CTAE 33

In our data, *feel* was the most prominent underused verb which had the highest LL ratio with -86.57. We found that it was the most important underused stance verb in CTAE when compared to CNAE. Let us now focus on some examples of this particular verb and investigate its pragmatic functions with respect to signaling of stance. In example 43 and 44 the authors clearly expressed their claims. El Seidi (2000) compared the use of metadiscourse in 160 argumentative essays written in English and in Arabic. He found that items of hedges perform different functions in his corpus. The most commonly applied function was that they allow authors to represent themselves directly in their texts, which was achieved with the use of verbs of cognition and *I* subject (e.g. *I believe, I feel* ...). In our examples the authors appeared directly with the use of the verb *feel* and the pronoun *I* and *me*. Looking at the other side of the coin, we see that this use definitely made it impossible to generalize the results as El-Seidi (2000) claims.

Example 43

The fact that three sources of information show a similar pattern and that this pattern makes some intuitive sense made \underline{me} **feel** like it was important to report these general trends in my dissertation.

Extracted from CNAE 48

Example 44

Here, as the researcher of this study, \underline{I} am not sure about the exact reason for this sample to **feel** the need of using them.

Extracted from CTAE 25

El-Seidi (2000) explains the second sub function of hedges. They provide opportunities for readers to disagree. Modals, epistemic modality (*perhaps, probably*) and some phrases like *it seems, it appears* serve to manage this function. As stated before, *appear* was the third frequently employed item in our corpus. Let us now focus on some examples from the corpus to figure out its use as a hedging item.

Example 45

It **appears** here that caregivers are sensitive to task frequencies and are contracting when a word predictable from task-centric context is the following word.

Extracted from CNAE 31

Example 46

When the age variable is taken into consideration, the overall results of the study suggested that idiom comprehension by the 7-year-old groups **appears** to be strongly literally oriented and thus less formulaic.

Extracted from CTAE 22

Looking at the examples above, we realized that in both examples, the authors took the possibility of disagreement of the readers into consideration and gave a room for them to refuse the truth of the proposition. They avoided making assertive claims about the results of their study. In his study, Kondowe (2014) suggests that Ph.D. students in the field of literature apply phrases like *I suggest, it seems* and *it appears* not only to state their claims about the truth of the proposition but also to negotiate with readers about their claims.

4.1.3.1.3. Stance adverbials as hedges

Recall that stance adverbials were the second and the third most frequented syntactic frame of hedges in CNAE and CTAE, respectively.

		(CTAE			Cl	NAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p < 0.05)	
of Hedges								
Stance	3957	29.7	28	5319	44.2	30	-361.70	0.00002
adverbials								

Table 40. Overall distribution of stance adverbials used as hedges in two corpora

n: raw frequency of stance adverbials of hedges

n /10.000: normalized frequency of stance adverbials of hedges per 10.000 words

%: percentage of stance adverbials to overall frequency of hedges

As seen in Table 40, they occurred 5319 times in CNAE and 3957 times in CTAE. They comprised 30 % of hedges in CNAE and 28 % of hedges in CTAE. The LL ratio for stance adverbials was found -361.70, which was confirmed with 0.00002 ELL value. The LL value showed that there was a statistically significant difference between CTAE and CNAE in the use of stance adverbials to hedge. Some adverbials were not found in the corpora. In CTAE, 9 stance adverbials were not found (*from my perspective, from our perspective, in my view, in our opinion, in our view, uncertainly, unclearly, in most instances, in this view*) though this number was 7 in CNAE (*from my perspective, from our perspective, in my view, in our opinion, in our view, uncertainly, unclearly*).

Stance adverbials	n	n/10.000
rather	655	4.9
frequently	495	3.7
mostly	428	3.2
almost	309	2.3
often	249	1.8
in general	204	1.5
relatively	199	1.3
quite	187	1.4
generally	181	1.3
mainly	170	1.2
sometimes	129	0.9
usually	129	0.9
probably	120	0.9
approximately	87	0.6
perhaps	67	0.5
apparently	65	0.4
possibly	31	0.2
largely	28	0.2
typically	25	0.1
somewhat	24	0.1
in most cases	22	0.1
on the whole	22	0.1
essentially	22	0.1
maybe	20	0.1
fairly	17	0.1
certain extent	15	0.1
in my opinion	12	0.0
certain amount	10	0.0
roughly	7	0.0
broadly	6	0.0
to my knowledge	5	0.0
presumably	4	0.0
certain level	4	0.0
unlikely	4	0.0
from this perspective	4	0.0
plausibly	1	0.0
Total	3957	29.7

Table 41. Frequency	distribution	of stance	adverbials	used as	hedges in	CTAE

n: raw frequency of each stance adverbial of hedges

n /10.000: normalized frequency of each stance adverbial of hedges per 10.000 words

Table 41 shows the frequency distribution of stance adverbials used as hedges in CTAE. Totally 37 stance adverbials appeared in CTAE with a frequency of 3957. *Rather*

was the most common adverbial with a frequency of 655. *Frequently, mostly* and *almost* were the other most frequently applied adverbials with a frequency of 495, 428 and 309, respectively. Some other adverbials such as *in general, relatively, quiet, generally, mainly, sometimes, usually,* and *probably* were also employed at high frequencies. *Plausibly* was at the lowest band.

Now let us move on the pragmatic function of stance adverbials as hedges on the construal of author stance. Below are the examples taken from CTAE, which illustrated the use of the three most frequented items in the corpus in concern. In Example 47, the author compared two options and emphasized one option was more appropriate or true. In the other examples, the adverbials in concern reflected a cautious evaluation of the truth of proposition. This said, TAAEs delimited the universality of their claims by using stance adverbials as hedges. It may be also considered as an attempt to negotiate with readers about the truth of their judgments.

Example 47

However, the PTs concentrated on the need for being assessed a number of times, **rather** than being evaluated according to one teaching performance.

Extracted from CTAE 18

Example 48

Japanese EFL learners use SLBs more **frequently** than the native speakers and Turkish EFL learners.

Extracted from CTAE 40

Example 49

In its literary usage, realism is **mostly** regarded as an aesthetic convention, rather than what philosophy concentrates on by asking epistemological and ontological questions.

Extracted from CTAE 53

Stance adverbials	n	n/10.000
rather	1009	8.3
often	864	7.1
perhaps	434	3.6
quite	294	2.4
generally	222	1.8
relatively	215	1.7
sometimes	197	1.6
frequently	186	1.5
in general	176	1.4
typically	147	1.2
largely	144	1.1
somewhat	140	1.1
fairly	136	1.1
usually	125	1.0
probably	116	0.9
essentially	79	0.6
possibly	76	0.6
mostly	74	0.6
presumably	70	0.5
roughly	57	0.4
unlikely	51	0.4
broadly	50	0.4
maybe	36	0.2
plausibly	21	0.1
mainly	19	0.1
in most cases	17	0.1
on the whole	13	0.1
to my knowledge	13	0.1
certain amount	9	0.0
from this perspective	9	0.0
certain extent	3	0.0
certain level	4	0.0
in this view	3	0.0
in my opinion	2	0.0
in most instances	1	0.0
Total	5319	44.2

Table 42. Frequency distribution of stance adverbials used as hedges in CNAE

n: raw frequency of each stance adverbial of hedges

n /10.000: normalized frequency of each stance adverbial of hedges per 10.000 words

Table 42 displays the frequency distribution of stance adverbials used as hedges in CNAE. A total number of stance adverbials found in CNAE was 36. At a first glance, we realized that the frequency distribution of the items in the list were higher in CNAE than in CTAE. Similar to CTAE, *rather* was the most preferred adverbials in the corpus of CNAE with a frequency of 1009. The normalized frequencies of the item showed that *rather* appeared almost twice higher in CNAE than in CTAE. *Often, perhaps and quite* were also identical in CNAE with the frequency of 864, 434, 294, respectively. These adverbials were found in CTAE less frequently, which revealed that TAAEs and NAAEs had different tendencies in their choice of stance adverbials to hedge.

As you might remember, El Seidi (2000) explains some sub functions of hedges. The first sub function was to present author stance in texts with the use of cognition verbs and the subject *I*, which we discussed in the previous section. The second sub function of hedges is tone down the argument with the use some adverbials such as *perhaps, most probably*. The third sub function let authors emphasize the limitations of their arguments regarding the applicability issues and this is achieved with the use of adverbials such as *usually, sometimes, often, primarily, largely...etc.* Now let us find out whether it is true in CNAE. Similar to TAAEs, NAAEs employed *rather* to emphasize the appropriateness of one particular option. In example 51, we noticed that the authors emphasized implicitly that these particular situations may not be always true.

Example 50

As mentioned above, gender was not included in the omnibus: **rather**, male and female data were tested separately.

Extracted from CNAE 33

Example 51

Language courses with the goal of giving L2 learners speaking skills and conversation practice must prioritize student speaking time; they **often** do this through an increased focus on student-centered, rather than teacher-centered, activities that encourage the greatest number of students to practice speaking the language at once, such as in group-and pair-work exercises.

Extracted from CNAE 55



Figure 8. Identical stance adverbials used as hedges in two corpora

Before discussing the results of LL analysis, it might be useful to summarize the identical stance adverbials used to hedge in the corpus. Figure 8 indicates the most frequent stance adverbials used as hedges in the corpus. *Rather* and *often* played a prominent role for NAAEs to build their stance through stance adverbials to hedge. In CTAE, *rather*, *frequently*, and *mostly* revealed to be significant items of stance adverbials.

Stance adverbials	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
mostly	428	74	+241.62	0.00002
mainly	170	19	+123.94	0.00001
frequently	495	186	+116.02	0.00001
approximately	87	35	+17.95	0.00000
certain extent	15	3	+7.57	0.00000
in my opinion	12	2	+6.95	0.00000
almost	309	225	+6.15	0.00000
on the whole	22	13	+1.52	0.00000
apparently	65	47	+1.37	0.00000
in most cases	22	17	+0.24	0.00000
in general	204	176	+0.21	0.00000
certain amount	10	9	0.00	0.00000
certain level	4	4	0.00	0.00000

Table 43. LL ratio of overused stance adverbials used as hedges in CTAE

n: raw frequency of each stance adverbial of hedges

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

A log likelihood analysis was administered to the corpora to find out whether they significantly differed in the use of stance adverbials to hedge. Table 43 highlights the overused stance adverbials used as hedges in CTAE against CNAE. Totally, 13 out of 37 items were overused in CTAE. There existed mainly 3 verbs which seemed to be statistically significant. *Mostly* had the highest LL value with +241.62. It appeared almost five times more common in CTAE than in CNAE. The other adverbials more frequented in CTAE were *mainly* and *frequently* with +123.94 and +116.02 LL, respectively. *Mainly* was seen 8 times more common in CTAE than in CNAE. *Frequently* was found almost 3 times more common in CTAE than in CNAE.

Stance adverbials	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
often	249	864	-424.53	0.00003
perhaps	67	434	-338.62	0.00002
fairly	17	136	-117.75	0.00001
rather	655	1009	-115.83	0.00001
typically	25	147	-108.58	0.00001
somewhat	24	140	-102.92	0.00001
largely	28	144	-97.75	0.00001
presumably	4	70	-78.31	0.00001
roughly	7	57	-49.74	0.00001
broadly	6	50	-44.08	0.00001
essentially	22	79	-40.15	0.00000
quite	187	294	-36.02	0.00000
plausibly	1	21	-24.44	0.00000
possibly	31	76	-24.34	0.00000
sometimes	129	197	-21.98	0.00000
generally	181	222	-9.34	0.00000
maybe	20	36	-6.39	0.00000
to my knowledge	5	13	-4.54	0.00000
in this view	0	3	-4.47	0.00000
relatively	199	215	-3.29	0.00000
from this perspective	4	9	-2.51	0.00000
in most instances	0	1	-1.49	0.00000
probably	120	116	-0.26	0.00000

Table 44. LL ratio of underused stance adverbials used as hedges CTAE

n: raw frequency of each stance adverbial of hedges

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 44 illustrates LL ratio of underused stance adverbials to hedge. A total number of 24 out of 37 items were underused by TAAEs. *Often* was observed to be employed more in CNAE with -424.53 LL value. It appeared almost 3 times more

common in CNAE than in CTAE. *Perhaps* and *fairly* were the other mostly underused items in CTAE with -386.31 and -117.75 LL value. *Perhaps* was employed almost 8 times more common in CNAE than in CTAE. Although *rather* was the most frequented stance verb in both corpora, it had a high value of LL in the list, which proved that TAAEs significantly differed with NAAEs in the use of *rather* (-115.83). Following are some other adverbials that also had high LL values: *typically* (-108.58), *somewhat* (-102.92) and *largely* (-97.75).

In sum, stance adverbials were among the most frequently employed syntactic frame of hedges in the corpus. They occurred 29.7 times and 44.2 times per 10.000 words in CTAE and CNAE, respectively. We found some identical items in both corpora. *Rather* was the most frequent item in both corpora. *Frequently* and *mostly* had an important frequency counts in CTAE while *often* and *perhaps* were identical in CNAE. The significance of these items is perhaps most clearly understood with the results of LL statistics. Some items such as *rather*, *often*, *perhaps*, *fairly*, *typically*, and *somewhat* were significantly underused in CTAE. On the other hand, *frequently* and *mostly* were the most striking overused LL results in CTAE.

4.1.3.1.4. Stance adjectives as hedges

Recall that stance adjectives were among the least frequently employed syntactic frame of hedges.

			CTAE				CNAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p< 0.05)	
of Hedges								
Stance	1081	8.1	8	1697	14.0	10	-206.94	0.00001
adjectives								

Table 45. Overall distribution of stance adjectives used as hedges in two corpora

n: raw frequency of stance adjectives of hedges

n /10.000: normalized frequency of stance adjectives of hedges per 10.000 words

%: percentage of stance adjectives to overall frequency of hedges

From Table 45, we can see that stance adjectives appeared 8.1 times per 10.000 words in CTAE and 14.0 times per 10.000 words in CNAE. They were almost 2 times more common in CNAE than in CTAE. They constituted 8 % of hedges in CTAE and formed 10 % of hedges in CNAE. With -206.94 LL value, TAAEs differed significantly from NAAEs in the use of stance adjectives.



Figure 9. Stance adjectives used as hedges in two corpora

As seen in Figure 9, they had very low frequencies in both corpora. The most striking adjective appeared in both corpora was *possible*. *Likely* and *apparent* also seems to have a higher percentage than other adjectives in concern. *Presumable* was not found in the corpus and *doubtful* appeared at a very low frequency.

Cl	ΓΑΕ		CNAE			
Stance Adjectives	n	n/10.000	Stance Adjectives	n	n/10.000	
possible	675	5.0	possible	720	5.9	
likely	115	0.8	likely	578	4.8	
apparent	98	0.7	apparent	172	1.4	
typical	79	0.5	typical	86	0.7	
probable	47	0.3	plausible	34	0.2	
plausible	26	0.1	probable	46	0.3	
uncertain	23	0.1	unclear	43	0.3	
unclear	14	0.1	uncertain	16	0.1	
doubtful	4	0.0	doubtful	2	0.0	
Total	1081	8.1	Total	1697	14.0	

Table 46. Frequency distribution of stance adjectives used as hedges in two corpora

n: raw frequency of each stance adjective of hedges

n /10.000: normalized frequency of each stance adjective of hedges per 10.000 words

Table 46 compares the frequency counts of stance adjectives in both corpora. Surprisingly, the top three items in the list were the same. *Possible* was employed 5.0 and 5.9 times per 10.000 words in CTAE and CNAE, respectively. *Likely* and *apparent* were the other most frequented adjectives. The former appeared 0.8 times in CTAE and 4.8 times per 10.000 words in CNAE while the latter employed 0.7 times in CTAE and 1.4 times per 10.000 in CNAE. It was almost twice more common in CNAE than in CTAE. *Typical* was the fourth most frequently occurring item with a relatively similar frequency in both corpora. Totally, they were found 1081 times in CTAE and 1697 times in CNAE.

Before explaining the results of LL statistics, we will focus on some examples of the most frequented adjectives drawn from the two corpora to investigate the pragmatic role of stance adjectives to present author stance. In the example below, the authors operated *likely* to lessen the force of their arguments.

Example 52

In covert rehearsal, private practice out loud while monitoring one's own speech, students are **likely** to struggle to hear their own errors.

Extracted from CNAE 6

Example 53

This restriction is **likely** to be the cause of lexical repetitions and therefore overlaps appear between adjacent and distant sentences.

Extracted from CTAE 10

The next two examples were concerned about the use of *possible* in both corpora. The authors communicated with their readers to find possible alternatives for their arguments. In a way, they gave an opportunity for their readers to reinterpret the claims stated by the author.

Example 54

As mentioned above, the small pool of teacher subjects in this study is certainly a limitation; however, the longitudinal and multi methodological nature of this study, as well as its corroboration by students, give depth to the study that would not have been **possible** had a larger sample size been used.

Extracted from CNAE 19

Example 55

Through extensive repetition of classroom activities, it may be **possible** to develop students' fluency in the target language.

Extracted from CTAE 27

In example 56, we noticed the truth of the proposition was not confirmed with the statistical findings, so the author did not invest his claim with a confidence but relied on the negotiation between him/her and the readers.

Example 56

In fact, a correlation between Welsh in School and Embedded Clauses per Utterance seems **apparent** from figure 5.29 but the significance of this correlation is just below our threshold with a *p*-value of 0.05527.

Extracted from CNAE 34

Example 57

If we assume an independent projection for comparative and post-positional phrases, the acceptability of (50-51) becomes **apparent**.

Extracted from CTAE 60

LL ratio was calculated in order to examine whether there was a statistically significant difference between the two corpora in terms of the frequency counts of stance adjectives used as hedges.

	_		-	-
Stance adjectives	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p < 0.05)	
likely	115	578	-386.31	0.00003
apparent	98	172	-28.70	0.00000
unclear	14	43	-18.54	0.00000
possible	675	720	-9.54	0.00000
plausible	26	34	-2.03	0.00000
typical	79	86	-1.42	0.00000
uncertain	23	16	+0.66	0.00000
doubtful	4	2	+0.49	0.00000
probable	47	46	-0.15	0.00000
Total	966	1119	-31.98	0.00000

Table 47. LL ratio of stance adjectives used as hedges in two corpora

n: raw frequency of each stance adjective of hedges

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 47 displays the LL ratio of stance adjectives used as hedges. As anticipated, LL ratios were quite low, which showed that TAAEs and NAAEs did not differ significantly in the use of stance adjectives in their Ph.D. dissertations. The only significant difference was found about *likely* which was on the top of the list with -386.31 LL. *Apparent* was the second and *unclear* was the third most underused items in CTAE with -28.70 and -18.54 LL values.

Overall, stance adjectives comprised of a small proportion of hedges in the corpus (CNAE 8 %, CTAE 7 %). They occurred 8.1 times and 14.0 times per 10.000 words in CTAE and CNAE, respectively. Not surprisingly, we found a significant statistical difference between the two corpora with -206.94 LL, which showed a significant underuse of them in CTAE against CNAE. *Possible* and *likely* applied frequently in both corpora.

4.1.3.1.5. Prepositions as hedges

In the examination of stance prepositions used as hedges, we found that they were not often used in both corpora.

			CTAE			Cl	NAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p < 0.05)	
of Hedges								
Prepositions	71	0.5	0	77	0.6	0	-1.23	0.00000

Table 48. Overall distribution of prepositions used as hedges in two corpora

n: raw frequency of stance prepositions of hedges

n /10.000: normalized frequency of stance prepositions of hedges per 10.000 words

%: percentage of each stance prepositions to overall frequency of hedges

Table 48 shows the overall distribution of stance prepositions used as hedges. They occurred 0.5 times per 10.000 words in CTAE and 0.6 times per 10.000 words in CNAE. Their occurrences were so low that they did not represent a percentage in both corpora. The LL ratio of -1.23 did not confirm any statistical significance between CTAE and CNAE in terms of stance prepositions used as hedges.

		CTAE		CNAE	
Prepositions	n	n/10.000	Prepositions	n	n/10.000
about	44	0.3	about	60	0.4
around	27	0.0	around	17	0.0

Table 49. Frequency distribution of prepositions used as hedges in two corpora

n: raw frequency of each stance preposition of hedges

n /10.000: normalized frequency of each stance preposition of hedges per 10.000 words

As can be seen in Table 49, *about* occurred 0.3 times per 10.000 words in CTAE. Similarly, it was found 0.4 times per 10.000 words in CNAE. *Around* was preferred 27 times in CTAE and 17 times in CNAE.

Before moving on the results of LL statistics, let us first discover the pragmatic role of these items on the construal of author stance. In both examples, the use of *about* assisted the authors to avoid giving an exact number about the propositional context. Hyland (1998a) states that some items of hedges such as *about, approximately, partially, generally* explain the relationship between the propositional elements. In fact, they did not establish a kind of relationship between a proposition and a writer. In this sense, we may claim that prepositions of hedges do not have much contribution to the construction of author stance.

Example 58

On average, the high readers answered one half of the questions correctly, and the medium and low readers answered **about** a third of the questions correctly.

Extracted from CNAE 5

Example 59

When it comes to the perceived inappropriateness of the forms of address, *My professor, Dear Professor, Teacher, Mister, Missus, Lady,* and *Miss* average **about** 90%.

Extracted from CTAE 25

Stance verbs	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p < 0.05)	
about	44	60	-4.35	0.00000
around	27	17	+1.40	0.00000

Table 50. LL ratio of stance prepositions used as hedges in two corpora

n: raw frequency of each stance preposition of hedges

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Subsequently, LL test conducted to find out whether there was a statistical difference related to items of stance prepositions. Table 50 displays the results of the LL analysis. Obviously, a statistical significance was not found between CTAE and CNAE in their use of *about* and around with -4.35 and +1.40 LL. What follows is a detailed account of syntactic frames of boosters in the corpora.

4.1.3.2. Syntactic frames of boosters

As mentioned before, boosters accounted for the second highest frequency in the two corpora.

			CTAE		CNAE	
IMDMs	n	n/10.000	%	n	n/10.000	%
Boosters	9354	70.3	26	10143	84.3	19

Table 51. Overall distribution of boosters in two corpora

n: raw frequency of boosters

n /10.000: frequency of boosters per 10.000 words

%: percentage of boosters to overall frequency of IMDMs

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 51 displays the overall frequencies and percentages of boosters in the two corpora. They occurred 9354 and 10143 times in CTAE and CNAE, respectively. As the second most frequent category of IMDMs, they constituted 26 % of IMDMs in CTAE and 19 % of IMDM in CNAE. Although the frequency counts of boosters were higher in CNAE, they composed a slightly higher percentage in CTAE than in CNAE. It seems that TAAEs had the tendency of making more assertive claims than NAAEs.

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	CTAE		CNAE		LL Ratio	ELL
	01	%1	O2	%2	(p< 0.05)	
Boosters	9354	0.70	10143	0.84	-161.12	0.00001

O1 is observed frequency in Corpus 1

O2 is observed frequency in Corpus 2

%1 and %2 values show relative frequencies in the texts.

+ indicates overuse in O1 relative to O2

- indicates underuse in O1 relative to O2

As seen in Table 52, log likelihood analysis was performed to find out whether the two corpora significantly differed from each other with respect to the use of boosters. The LL value was found -161.12, which emphasized a significant statistical difference



between the two corpora. It was also confirmed with the ELL value, which was 0.00001. It was seen 0.70 and 0.84 times per 100 words in CTAE and CNAE, respectively.

Figure 10. Syntactic frames of boosters in two corpora

Having explained the overall findings of boosters in the corpus, let us now turn to syntactic frames of boosters. As seen in Figure 10, both TAAEs and NAAEs sought to take a strong stance with the use of stance verbs as boosters. Clearly, they accounted for higher frequencies than any other syntactic frames of boosters. Stance adverbials and stance adjectives appeared to be at parallel frequencies in CTAE but in CNAE stance adverbials were the second most frequented syntactic frame followed by stance adjectives. Modals constituted a small part of boosters in the corpora.

		CTAE				CNAE	
Subcategories of	n	n/10.000	%	Subcategories of	n	n/10.000	%
Boosters				Boosters			
Stance verbs	5831	41.2	62	Stance verbs	5543	46.0	55
Stance adjectives	1676	12.8	18	Stance adverbials	2568	21.3	25
Stance adverbials	1669	12.8	18	Stance adjectives	1404	11.6	14
Modals	178	1.3	2	Modals	628	5.2	6

Table 53. The frequency distribution of syntactic frames of boosters in two corpora

n: raw frequency of each syntactic category of boosters

n /10.000: normalized frequency of each syntactic category of boosters per 10.000 words.

%: percentage of each category to overall frequency of boosters

As Table 53 suggests, stance verbs were found 46.0 times and 41.2 times per 10.000 words in CNAE and CTAE, respectively. They composed 55 % of boosters in CNAE and 62 % in CTAE. Evidently, this particular syntactic frame had a relatively higher percentage in the corpora when compared to the other syntactic frames. Recall that

authors often prefer to use boosters when they feel confident about the truth of the propositional context. Mostly, such kinds of context may be reported by verbs. Thus, stance verbs might have taken a lion's share in the syntactic frames of booster. In CTAE, there was a minor difference between stance adjectives and stance adverbials. With 21.3 frequency counts per 10.000 words, stance adverbials appeared nearly twice more common in CNAE than in CTAE. Stance adjectives were observed to be the second most frequent frame in CTAE and the third most frequently used frame in CNAE. With respect to modals, they were measured as the least frequented frame in the corpus. However, since there was only one modal verb (*must*) in this category, the frequency counts would not be considered too low.

Subcategories of	CTAE	CNAE	LL Ratio	ELL
Boosters	n	n	(*p<0.05)	
Modals	178	628	-313.71	0.00002
Stance adverbials	1669	2568	-293.68	0.00002
Stance verbs	5831	5543	-7.17	0.00000
Stance adjectives	1676	1404	+4.45	0.00000

Table 54. LL ratio of syntactic frames of boosters in two corpora

n: raw frequency of each syntactic category of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 54 illustrates the findings of log likelihood analysis. Although having the lowest frequency of occurrence in both corpora, modals had the highest LL value with - 313.71. It appears that it played a pivotal role on the construal of authorial stance in CNAE while it was not preferred by TAAEs. With -293.68 LL, stance adverbials also revealed to be a statistically significant syntactic frame of boosters. No statistical difference was seen between CNAE and CTAE in terms of the use of stance adjectives and stance verbs. It seems that both TAAEs and NAAEs had similar tendencies to signal their stance through stance verbs and adjectives. We will explore the identical items of these syntactic frames in the following pages. Let us now each syntactic frame of boosters in detail.

4.1.3.2.1. Stance verbs as boosters

Recall that stance verbs were the most frequently occurring syntactic frame of boosters in the corpus.

			CTAE			Cl	NAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p < 0.05)	
of Boosters								
Stance verbs	5831	41.2	62	5543	46.0	55	-7.17	0.00000

Table 55. Overall distribution of stance verbs used as boosters in two corpora

n: raw frequency of stance verbs of boosters

n /10.000: normalized frequency of stance verbs of boosters per 10.000 words

%: percentage of stance verbs to overall frequency of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As can be seen in Table 55, they were employed 41.2 times per 10.000 words in CTAE. Similarly, they were found 46.0 times per 10.000 words in CNAE. The key role of them as boosters was also emphasized by their percentage in boosters. They composed 62 % of boosters in CTAE and 55 % of boosters in CNAE. The LL value of -7.17 evidently proved that there was not a statistical difference between the two corpora. Since stance verbs as boosters such as *find, show, demonstrate,* and etc. are often used to present the findings of the research, it is not surprising that they were applied as the most frequent syntactic category in both corpora.



Figure 11. Stance verbs used as boosters in two corpora

Figure 11 shows that *find* and *show* had the highest frequency counts in both corpora. The highest frequency in the corpus belonged to *show* in CNAE and *find* was observed as the second most frequent item. On the other hand, these two items seemed to

have similar frequency counts in CTAE. The other verbs were found less frequently in both corpora when compared to *find* and *show*.

	CTAE			CNAE	
Stance Verbs	n	n/10.000	Stance Verbs	n	n/10.000
show	1654	12.6	show	1883	15.6
find	1654	12.6	find	1065	8.8
think	758	5.8	think	536	4.4
know	539	4.1	realize	510	4.2
believe	454	3.4	demonstrate	480	3.9
demonstrate	320	2.4	know	479	3.9
realize	227	1.7	believe	425	3.5
prove	128	0.9	prove	105	0.8
establish	97	0.7	establish	60	0.4

Table 56. Frequency distribution of stance verbs used as boosters in two corpora

n: raw frequency of each stance verb of boosters

n /10.000: normalized frequency of each stance verb of boosters per 10.000 words.

Table 56 illustrates frequencies of each item of stance verbs as boosters in both corpora. The verb *show* was ranked as the most frequent verb in both corpora. It occurred 12.6 and 15.6 times per 10.000 words in CTAE and CNAE, respectively. Although *show* was twice more common than *find* in CNAE, both verbs appeared to be at the same frequency of occurrence with 12.6 per 10.000 words in CTAE. A closer look at the table revealed that other verbs had also high frequencies in both corpora. *Think, know, believe, demonstrate* and *realize* were the other verbs preferred by both groups of academic author. *Prove* and *establish* were the least frequently stance verbs as boosters. As a result, it would be convenient to mention a similarity between CTAE and CNAE as regards to their use of stance verbs as hedges.

So as to mention their pragmatic role in building authorial stance, let us focus on some examples taken from the corpus. As stated above, *show* was the most frequently preferred item by both TAAEs and NAAEs. In these examples we can see different uses of *show* but it is quite clear that in all examples authors reported their findings and made their claims explicitly without leaving a room for uncertainty. This said readers were not given an opportunity to make comment on these claims. In Example 60, the author tried to balance his / her stance with the use of *show* and *should* which is an item of hedges. In example 61, the meaning of *show* was reinforced with an adverb *consistently*. In example 62, *show* was used in a passive phrase, which made us to think that authors of this sentence did not establish an ownership of his / her claim. Namely, he/she commented

impersonally on the truth of the proposition. As Biber et al. (1999) point, passive forms reflect an ambiguous attribution of stance. Contrarily, in the last example, the author made an assertive claim with the use of *clearly* and *show*, both of which are boosters.

Example 60

Using speaker and vowel as random effects will both harden against (and test) the idea that the acoustical correlates of nasality differ across different speakers' productions, and comparison between the English and French results <u>should</u> **show** whether our English and French speakers are performing nasality differently in our different languages.

Extracted from CNAE 18

Example 61

Instead, breath hyphenation in female speech is cued by added noise in the voice source, as indicated by the fact that females — but not males—**show** <u>consistently</u> lower CPP values within breathy sonorants than with in plain sonorants.

Extracted from CNAE 33

Example 62

<u>It will be shown</u> that in the classrooms, a verbal CIK is always initiated as a second pair part of a question-answer adjacency pair, in the form of a non-answer response.

Extracted from CTAE 20

Example 63

Paired samples *t*-test results indicated that the groups mostly improved their scores, while ANCOVA results **showed** that it was the Moodle group that mostly outperformed the other two groups in the posttest.

Extracted from CTAE 45

Example 64

Additionally, comparison of the table 28 and 29 <u>clearly</u> **shows** that many 5-word sequences are incorporated into 6-word sequences.

Extracted from CTAE 55

Find was the second most frequently employed item in both corpora. Based on the findings of their research, the authors of the examples below expressed their stance towards the truth of the proposition explicitly. Example 65 demonstrates the use of *find* with self-mention *I*, while in example 66 the author preferred another item of self-mention, *the researcher*. As you might remember, we found a statistically significant difference between TAAEs and NAAEs in the use of the pronoun *I*. NAAEs utilized *I* more frequently than TAAEs to construct their authorial stance.

Example 65

<u>I</u> find inquiry into acts applicable to other assertions the CCSI makes.

Extracted from CNAE 3

Example 66

Nonetheless, <u>the researcher</u> also tried to **find** some common points in preparation of those questions in order not to diverge too much from one extract to another thus minimizing the effect of these on the participants' success rate.

Extracted from CTAE 15

Stance Verbs	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
realize	227	510	-141.93	0.00001
find	1654	1065	+76.10	0.00000
demonstrate	320	480	-50.39	0.00000
show	1654	1883	-20.59	0.00000
think	758	536	+19.17	0.00000
establish	97	60	+5.47	0.00000
prove	128	105	+0.55	0.00000
believe	454	425	- 0.27	0.00000
know	539	479	+ 0.07	0.00000

Table 57. LL ratio of stance verbs used as boosters in two corpora

n: raw frequency of each stance verb of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

A log likelihood analysis was calculated whether the academic authors in concern differed in the use of stance verbs. As displayed in Table 57, the only statistical difference between TAAEs and NAAEs was found in the use of *realize* with -141.93 LL. *Find* and *think* were the most salient overused verbs by TAAEs with +76.10 and +19.17 LL value, respectively but the statistical significance of them was not confirmed by the ELL values.

The LL value of -50.39 and -20.59 showed that *demonstrate* and *show* were underused by TAAEs. However, these LL values could not be considered as statistically significant. Having explained the use of stance verbs as boosters in the two corpora, we will now move on the use of stance adverbials as boosters.

4.1.3.2.2. Stance Adverbials as Boosters

Biber (2006b) states that stance adverbials are one of the most common grammatical features of stance.

			CTAE			C	NAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p < 0.05)	
of Boosters								
Stance	1669	12.8	18	2568	21.3	25	-293.68	0.00002
adverbials								

Table 58. Overall distribution of stance adverbials used as boosters

n: raw frequency of stance adverbials of boosters

n /10.000: normalized frequency of stance adverbials of boosters per 10.000 words

%: percentage of stance adverbials to overall frequency of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

They were observed as the second highest syntactic frame of boosters in CNAE and the third highest frame in CTAE. As indicated in table 58, they composed 18 % of boosters in CTAE while their percentage was higher in CNAE with 25 %. The normalized frequencies also proved that they were almost twice more common in CNAE than in CTAE. They appeared 12.8 and 21.3 times per 10.000 words in CTAE and CNAE, respectively. The LL value of -293.68 also demonstrated that there was a statistical difference between the two corpora in the use of stance adverbials as boosters, which was supported by 0.00002 ELL.

Totally, 44 stance adverbials were analyzed in the corpus. Among them 5 items were not observed in the corpus. *Incontestably* and *undisputedly* were not found in CNAE while *beyond doubt, conclusively, incontestably, incontrovertibly* and *undisputedly* were not seen in CTAE.




As can be seen in Figure 12, the most common boosters in CNAE were *actually, always, clearly, in fact, never* and *indeed*. Among these adverbials *in fact* was identified as the most frequent item. On the other hand, it had a strikingly lower frequency in CTAE. Similarly, we saw a huge frequency difference in the use of *indeed* in both corpora. It was among the least frequent identical item in CTAE though it was the third mostly used item in CNAE. *Always* revealed to be the most preferred item by TAAEs. *Clearly* and *never* were some other items that were seen frequently in CTAE while *certainly* was the least frequented item.

CT	AE		CNAE			
Stance adverbials	n	n/10.000	Stance adverbials	n	n/10.000	
always	290	2.1	in fact	374	3.1	
clearly	265	1.9	always	345	2.8	
never	249	1.8	clearly	326	2.7	
actually	163	1.2	indeed	322	2.6	
in fact	146	1.0	never	281	2.3	
indeed	123	0.9	actually	274	2.2	
really	98	0.7	certainly	157	1.3	
of course	74	0.5	of course	132	1.0	
obviously	73	0.5	really	117	0.9	
definitely	42	0.3	truly	75	0.6	
certainly	40	0.3	obviously	48	0.3	
undoubtedly	30	0.2	undoubtedly	25	0.2	
truly	24	0.1	no doubt	25	0.2	
surely	17	0.1	definitely	21	0.1	
no doubt	16	0.1	surely	16	0.1	
evidently	11	0.0	decidedly	7	0.0	
without doubt	5	0.0	evidently	7	0.0	
decidedly	1	0.0	conclusively	5	0.0	
undeniably	1	0.0	undeniably	4	0.0	
indisputably	1	0.0	incontrovertibly	2	0.0	
Total	1669	12.5	indisputably	2	0.0	
			beyond doubt	2	0.0	
			without doubt	1	0.0	
			Total	2568	21.3	

Table 59. Frequency distribution of stance adverbials used as boosters in two corpora

n: raw frequency of each stance adverbial of boosters

n /10.000: normalized frequency of each stance adverbial of boosters per 10.000 words

Table 59 illustrates the frequency distribution of stance adverbials as boosters in the two corpora. They were seen 12.5 times per 10.000 words in CTAE while they were found 21.3 times per 10.000 words in CNAE. *Always* was observed as the most frequent item in CTAE and the second mostly used item in CNAE. It was applied 2.1 and 2.8 per 10.000 words in CTAE and CNAE, which indicated that it appeared approximately twice more common in CNAE than in CTAE. With 3.1 times per 10.000 words, *in fact* had the highest frequency in CNAE but it was observed 1.0 times per 10.000 words in CTAE. It was another most frequent item that had the second range in CTAE and the third range in CNAE. It occurred 1.9 and 2.7 times per 10.000 words in CTAE and CNAE and CNAE, respectively. *Never* was the third mostly preferred item with the frequency of 1.8 per 10.000 words in CTAE. However, it had the fifth range in CNAE and was seen 2.6 times per 10.000 words.

appears that there existed some similar uses of stance adverbials of boosters between CTAE and CNAE but a plenty of stance adverbials as boosters were underused by TAAEs. Hence, we could claim that TAAEs did not use stance adverbials of boosters as satisfactorily as NAAEs.

The following examples were extracted from the corpus to see the pragmatic role of stance adverbials in signaling authorial stance. We will specifically emphasize the use of *always, in fact* and *clearly* as they were the most frequent items in the corpus. In all examples below, authors emphasized a high degree of certainty of their claims with the use of *always, in fact* and *clearly*. In addition, all authors assumed that their claims can be easily understood by the readers who are possibly the members of their academic community. By this way, they attempted to establish solidarity with their readers and get a place in their academic community, which is a pragmatic a function of boosters. Hyland (1998a) claims that when using devices such as of course, obviously, authors believe that their claims can be easily understood by the members of their academic community. With the use of *always* they seemed to generalize the truth of their claims. It might be deduced that in fact was used as a transition in these examples but the main idea here was to highlight the truth of the option stated by the author. As Biber (2006b) emphasizes in fact is one of the adverbials that expresses certainty. In the last two examples, the authors surely presented a strong strange towards their claims and sought to persuade their readers about the logic of their claims.

Example 67

Notably, the amount of regular exposure to Welsh language media does not correlate with any improved fluency outcomes in this HS sample set, nor is the entire set of measures which make up the fluency complex **always** affected even by those variables which I found to be significant.

Extracted from CNAE 34

Example 68

It is apparent from Table 24 that the correct options are not **always** the most chosen options; that is, the participants experienced difficulty in following the track of point of view (perspective) in this extract.

Example 69

In fact, in all of the examples of glottal-plosive metathesis in Balangao, the glottal and plosive are taut morphemic, and are brought together by vowel deletion.

Extracted from CNAE 34

Example 70

In such a context, it would not be wrong to say that his authorial position falls short of meeting the expectations he verbally promises and that, **in fact**, he undermines with his novels what he claims in his interview given above.

Extracted from CTAE 38

Example 71

The result is that English reflexive syntax closely resembles the syntax of reflexives in many other languages, in which movement is more **clearly** motivated.

Extracted from CNAE 56

Example 72

On the other hand, the macrostructure of a text **clearly** has a linguistic reality as the complex linguistic forms such as pronouns, discourse connectives, adverbs, etc., are used to signal the macrostructure.

Extracted from CTAE 26

We propounded that a number of stance adverbials of boosters were underused by TAAEs. In order to discover whether the underuse was statistically significant we calculated their LL values.

Stance Verbs	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
in fact	146	374	-127.77	0.00001
indeed	123	322	-113.43	0.00001
certainly	40	157	-86.59	0.00001
actually	163	274	-40.82	0.00000
truly	24	75	-32.98	0.00000
of course	74	132	-22.93	0.00000
clearly	265	326	-13.96	0.00000
always	290	345	-11.93	0.00000
conclusively	0	5	-7.45	0.00000
never	249	281	-6.51	0.00000
decidedly	1	7	-5.69	0.00000
definitely	42	21	+5.18	0.00000
really	98	117	-4.14	0.00000
no doubt	16	25	-3.00	0.00000
beyond doubt	0	2	-2.98	0.00000
incontrovertibly	0	2	-2.98	0.00000
obviously	73	48	+2.99	0.00000
without doubt	5	1	+2.52	0.00000
undeniably	1	4	-2.24	0.00000
evidently	11	7	+0.54	0.00000
indisputably	1	2	-0.45	0.00000
undoubtedly	30	25	+0.09	0.00000
surely	17	16	-0.01	0.00000

Table 60. LL ratio of stance adverbials used as boosters in two corpora

n: raw frequency of each stance adverbial of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As shown in Table 60, the LL values of *in fact* (-127.77), *indeed* (-113.43), and *certainly* (-86.59) were found to be statistically significant and confirmed by the ELL values of 0.00001. We observed five items that were overused by TAAEs but the LL values were too low to be considered as statistically significant (*definitely* (+5.18), *obviously* (+2.99), *without doubt* (+2.52), *evidently* (+0.54) and *undoubtedly* (+0.09).

4.1.3.2.3. Stance adjectives as boosters

Stance adjectives were the second mostly employed syntactic frame of boosters in CTAE and the third frequently used one in CNAE.

			CTAE			CNAE		
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p < 0.05)	
of Boosters								
Stance	1676	12.8	18	1404	11.6	14	+4.45	0.00000
adjectives								

Table 61. Overall distribution of stance adjectives used as boosters

n: raw frequency of stance adjectives of boosters

n /10.000: normalized frequency of stance adjectives of boosters per 10.000 words

%: percentage of stance adjectives to overall frequency of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

The overall distribution of them can be observed from Table 61. They occurred 12.8 and 11.6 times per 10.000 words in CTAE and CNAE, respectively. Seemingly, they slightly differed across the two corpora. They composed 18 % of CTAE and 14 % CNAE. Interestingly, +4.45 LL value showed that they were overused by TAAEs but the statistical importance of this finding was not confirmed by the ELL value.



Figure 13. Stance adjectives used as boosters in two corpora

As can be deduced from Figure 13, *certain, clear* and *true* were the identical stance adjectives in both corpora. *Certain* was the most frequently applied item in CTAE,

which was followed by *clear*. The reverse was observed in CNAE. *Clear* was the most frequent item, which was followed by *certain*. Some adjectives such as *definite*, *doubtless*, *indisputable* and *undeniable* were found at low frequencies. It is worth to add that *incontestable* and *incontrovertible* were not seen in the two corpora. When compared to the other syntactic frames examined before, the occurrences of stance adjectives were quite low in the corpus.

СТ	CAE		CNAE			
Stance adjectives	n	n/10.000	Stance adjectives	n	n/10.000	
certain	540	4.1	clear	492	4.0	
clear	397	2.9	certain	291	2.4	
true	194	1.4	true	267	2.2	
established	188	1.4	established	114	0.9	
obvious	157	1.1	evident	86	0.7	
evident	87	0.6	obvious	94	0.7	
definite	32	0.2	sure	43	0.3	
sure	75	0.5	definite	10	0.0	
undeniable	4	0.0	undeniable	5	0.0	
indisputable	2	0.0	doubtless	2	0.0	
Total	1676	12.6	Total	1404	11.6	

Table 62. Frequency distribution of stance adjectives used as boosters in two corpora

n: raw frequency of each stance adjective of boosters

n /10.000: normalized frequency of each stance adjective of boosters per 10.000 words

Table 62 presents the frequency distribution of stance adjectives as boosters in the two corpora. *Certain* which appeared 4.1 times per 10.000 words was the most frequent adjective in CTAE, which was followed by *clear* that occurred 2.9 times per 10.000 words. The latter was seen 4.0 times per 10.000 words, while the first was found 2.4 times per 10.000 words in CNAE. *True* stood as the third most frequently used item in both corpora with 1.4 and 2.2 times per 10.000 words in CTAE and CNAE, respectively. It was almost twice more common in CNAE than in CTAE. *Established* was observed 1.4 times per 10.000 words in CTAE and 0.9 times per 10.000 words in CNAE. In both corpora, it had the fourth range on the list. *Obvious* and *evident*, which were seen 157 and 87 times, were the fifth and the sixth items in CTAE. On the contrary, *evident* was the fifth and *obvious* was the sixth most frequently employed items in CNAE.

In order to figure out how the authors in concern used stance adjectives to express their stance, we took some examples of the most frequent items from the two corpora. The author of example 73 clearly conveyed a personal attitude towards the propositional context. In example 76, the author explicitly evaluated the implications of his/her data to the field. Biber et al. (1999) explain that some stance markers are implicit but they can be easily recognized by readers. Some of the adjectives as in the examples 74, 75, 77, 78 gave some flavor of this. This particular grammatical structure of stance (It + adjective + extraposed complement clause) is not an overt form and in our study it seems to allow writers to weaken their commitment to the truth of the proposition and appeal to their readers. Besides, it reduces the existence of the author and emphasizes the truth of the proposition itself. It might have been a rhetorical strategy that authors in concern used to establish impersonality and to negotiate available space for their readers to get involved in their doctoral dissertations. As Hyland (1998a) claims the main reason for authors' creating a distance between themselves and their texts is "the suppression of author's voice and the creation of a discourse where the research appears to speak for itself" (p.18).

Example 73

Humanitarian and human rights discourses and practices do share **certain** goals with roots in Enlightenment thought, namely, justice for individuals regardless of place of birth or station and the mitigation of suffering.

Extracted from CNAE 1

Example 74

T2 rarely incorporates a textbook into his classes, but <u>it is **clear** that</u> he is the repository of all information (his age, time teaching, and subject of history doing nothing to convey otherwise).

Extracted from CNAE 19

Example 75

<u>It is **true** that</u> the degree of nasality in nasal vowels will vary, both word-to-word and moment-to-moment, and there will always be aberrant articulations, but it is a very safe bet that nasal vowels, at any given point, will exhibit greater articulatory nasality than oral vowels.

Extracted from CNAE 18

Example 76

Thus, this study offers **certain** implications for pre-service teacher education to bring up future teachers who can meet the challenging needs of their students in the21stcentury.

Extracted from CTAE 41

Example 77

Thus, it is obvious that <u>there is a **clear** need to</u> strive to pay more conscious attention to learning more lexical combinations, multi-word combinations and collocations to make their writing better since they occupy a significant place in vocabulary learning.

Extracted from CTAE 25

Example 78

In terms of a long colonial tradition, <u>it is **true** that</u> in most power equations the land has frequently been feminised.

Extracted from CTAE 21

Stance Adjectives	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
certain	540	291	+52.76	0.00000
clear	397	492	-22.02	0.00000
true	194	267	-20.15	0.00000
established	188	114	+11.62	0.00000
obvious	157	94	+10.27	0.00000
definite	32	10	+10.01	0.00000
sure	75	43	+5.86	0.00000
doubtless	0	2	-2.98	0.00000
indisputable	2	0	+2.58	0.00000
evident	87	86	-0.34	0.00000
undeniable	4	5	-0.24	0.00000
TOTAL	1676	1404	+4.45	0.00000

Table 63. LL ratio of stance adjectives used as boosters in two corpora

n: raw frequency of each stance adjective of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

The results of the log likelihood analysis were presented in Table 63. No statistically significant difference between the two corpora was found. The overall LL value was found to be +4.45 in the corpus. *Certain* was the most striking overused item with +52.76 whereas *clear* and *true* were revealed to be underused with -22.02 and -20.15

LL, respectively. Some other items such as *established*, *obvious* and *definite* with +11.62, +10.27, +10.01 LL values were also overused in CTAE. This finding might indicate that TAAEs and NAAEs had a similar way of using stance adjectives as boosters to mitigate their stance.

In the following section, the distribution of modals as boosters across the two corpora will be discussed.

4.1.3.2.4. Modals verbs as boosters

As seen in Table 64, TAAEs and NAAEs carried a different strategy in the use of modals as boosters. It is important to emphasize that *must* is the only item of modal used as boosters in the IMDMs taxonomy of Hyland (2005b).

Table 64. Overall distribution of modals used as boosters in two corpora

		(CTAE			C	NAE	
Syntactic	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
Frame							(*p< 0.05)	
of Boosters								
Modals	178	1.3	2	628	5.2	6	-313.71	0.00002

n: raw frequency of modals of boosters

n /10.000: normalized frequency of modals of boosters per 10.000 words

%: percentage of modals to overall frequency of boosters

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 64 displays the overall distribution modals as boosters. It appeared 1.3 times per 10.000 words in CTAE whereas it was observed 5.2 times per 10.000 words in CNAE. Obviously, it was almost 4 times more common in CNAE than in CTAE. It composed 2 % and 6 % of boosters in CTAE and CNAE, respectively. The LL value was found - 313.71 and displayed to be statistically important with 0.00002 ELL.

Focusing on some examples from the corpus might give us clear insights about the pragmatic role of *must* to mitigate author stance. In both examples below, authors strongly presented their commitment to their claims with the use of *must* as boosters. It can also be inferred from the examples that the authors were likely to assume that their claims had something in common with the other findings in the literature. This strategy can be an attempt to exist in their discipline.

Example 79

Furthermore, teachers themselves **must** constantly match the vast amount of content to the content of their own classes, making online use unwieldy and inconsistent.

Extracted from CNAE 26

Example 80

While this argument is based on the theoretical framework of the wh-question formation study in Turkish, it **must** inevitably have a reflection on an experimental psycholinguistic analysis of the phenomenon.

Extracted from CTAE 14

Now that we have analyzed the distribution of boosters with respect to their syntactic frames, let us move on the detailed analysis of the syntactic frames of attitude markers.

4.1.3.3. Syntactic frames of attitude markers

Recall that attitude markers were the least frequent category in CNAE and the second least category in CTAE.

		CTA	E		CNA	E
IMDM	n	n/10.000	%	n	n/10.000	%
Attitude Markers	3031	22.7	9	4173	34.7	8

Table 65. Overall distribution of attitude markers in two corpora

n: raw frequency of attitude markers

n /10.000: frequency of attitude markers per 10.000 words

%: percentage of attitude markers to overall frequency of IMDMs

As seen in Table 65, they occurred 22.7 times and composed 9 % of CTAE. CNAE seemed to slightly differ in its distribution of attitude markers. They were observed 34.7 times and constituted 8 % of CNAE.

Table 66. LL ratio of attitude markers in two corpora

					Ĩ.	
	CTAE		CNAE		LL Ratio	ELL
	01	%1	O2	%2	(p<0.05)	
Attitude Markers	3031	0.23	4173	0.35	-315.33	0.00002

O1 is observed frequency in Corpus 1

%1 and %2 values show relative frequencies in the texts.

- indicates underuse in O1 relative to O2

O2 is observed frequency in Corpus 2

⁺ indicates overuse in O1 relative to O2

Table 66 indicates the results of log likelihood analysis. 1% and 2% presents the normalized frequencies of attitude markers per 100 words in CTAE and CNAE, respectively. They were found 0.28 times per 100 words in CTAE and 0.36 times per 100 words in CNAE. We observed a statistically significant difference between CTAE and CNAE in the use of attitude markers with -315.33LL.



Figure 14. Syntactic frames of attitude markers in two corpora

As for the syntactic frames of attitude markers, Figure 14 gives us an overview of them. We found that both TAAEs and NAAEs utilized stance adjectives more frequently than the other syntactic frames to signal their stance. Stance adverbials were the second and stance verbs were the third most frequently applied syntactic frames in both corpora.

Table 67. The frequency distribution of syntactic frames of attitude markers in two

corpora

	CTAE				CNAE		
Subcategories of	n	n	%	Subcategories of	n	n	%
Attitude Markers		/10.000		Attitude Markers		/10.000	
Stance adjectives	1884	14.1	62	Stance adjectives	2261	18.8	54
Stance adverbials	1145	8.6	38	Stance adverbials	1881	15.6	45
Stance verbs	2	0.0	0	Stance verbs	31	0.2	1

n: raw frequency of each syntactic category of attitude markers

n /10.000: normalized frequency of each category of attitude markers per 10.000 words

%: percentage of each syntactic category of attitude markers to overall frequency of attitude markers

As displayed in Table 67, stance adjectives occurred 14.1 times per 10.000 words in CTAE whereas they were seen 18.8 times per 10.000 words in CNAE. They approximately composed half of the items used as attitude markers. Their percentages were 62 % in CTAE and 54 % in CNAE. As the second most frequent syntactic frame, stance adverbials appeared 8.6 and 15.6 times in CTAE and CNAE, respectively. They accounted for 38 % and 45 % of attitude markers in CTAE and CNAE. The least frequent category was stance verbs with 0.0 and 0.2 occurrences per 10.000 words.

Subcategories of Attitude	CTAE	CNAE	LL Ratio	ELL
Markers	n	n	(*p<0.05)	
Stance adverbials	1145	1881	-262.77	0.00001
Stance adjectives	1884	2261	-82.91	0.00000
Stance verbs	2	31	-33.67	0.00000

Table 68. LL ratio of syntactic frames of attitude markers in two corpora

n: raw frequency of each syntactic category of attitude markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 68 presents the LL findings of syntactic frames of boosters. Stance adverbials had the top range in the list with -262.77 LL. Stance adjectives took the second place on the list with -82.91 LL. As for the use of stance verbs, a statistically significant difference was not calculated between the two corpora (-33.67 LL).

The following section will describe stance adjectives as attitude markers, which were the most frequently applied syntactic frame in the two corpora.

4.1. 3.3.1. Stance adjectives as attitude markers

Table 69 presents the overall distribution of stance adjectives as attitude markers.

Table 69. Overall distribution of stance adjectives used as attitude markers in two

corpora								
	CTAE CNAE							
Syntactic Frame	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
of Attitude Markers							(*p < 0.05)	
Stance	1884	14.1	62	2261	18.8	54	-82.91	0.00000
adjectives								

n: raw frequency of stance adjectives of attitude markers

n /10.000: normalized frequency of stance adjectives of attitude markers per 10.000 words

%: percentage of stance adjectives to overall frequency of attitude markers

We found that both TAAEs and NAAEs used stance adjectives as attitude markers in their doctoral dissertations at a frequency of 14.1 and 18.8 per 10.000 words, respectively. As noted above, they were the most frequently applied syntactic frame of boosters. They accounted for 62 % of attitude markers in CTAE and 54 % of boosters in CNAE. The LL value of -82.91 indicates that they were underused by TAAEs but it was not statistically important as shown by the ELL value of 0.00000.



Figure 15. Identical stance adjectives used as attitude markers in two corpora

Figure 15 gives us an overview of the identical stance adjectives of boosters. Obviously, *important* appeared at the highest frequency in both corpora. *Appropriate* and *expected* were some other adjectives that were frequently used by TAAEs and NAAEs. There were 31 stance adjectives of boosters in the taxonomy but one adjective *unbelievable* was not seen in CTAE while 4 adjectives (*astonished, astonishing, hopeful,* and *unbelievable*) were not observed in CNAE. This result clearly showed us that both groups of author signaled their personal attitude to the propositional contexts with a limited range of adjectives. However, NAAEs used less variety of adjectives than TAAEs.

СТ	AE		CNAE			
Stance Adjectives	n	n/10.000	Stance Adjectives	n	n/10.000	
important	470	3.5	important	706	5.8	
appropriate	304	3.5	expected	338	2.8	
expected	293	2.2	appropriate	217	1.8	
interesting	171	1.2	interesting	212	1.7	
essential	111	0.8	dramatic	126	1.0	
inappropriate	72	0.5	surprising	124	1.0	
striking	70	0.5	preferred	102	0.8	
surprising	68	0.5	essential	68	0.5	
remarkable	52	0.3	unexpected	71	0.5	
dramatic	42	0.3	striking	56	0.4	
unexpected	39	0.2	unusual	39	0.3	
preferred	35	0.2	desirable	32	0.2	
understandable	25	0.1	surprised	25	0.2	
desirable	23	0.1	inappropriate	24	0.1	
unusual	20	0.1	curious	22	0.1	
shocking	16	0.1	remarkable	18	0.1	
surprised	15	0.1	usual	16	0.1	
disappointed	9	0.0	shocked	11	0.0	
usual	8	0.0	understandable	9	0.0	
shocked	7	0.0	unfortunate	8	0.0	
curious	7	0.0	fortunate	8	0.0	
preferable	6	0.0	disappointed	8	0.0	
unfortunate	6	0.0	preferable	6	0.0	
disappointing	4	0.0	shocking	5	0.0	
hopeful	4	0.0	amazed	4	0.0	
fortunate	2	0.0	disappointing	3	0.0	
astonished	2	0.0	amazing	3	0.0	
amazing	1	0.0	Total	2261	18.8	
amazed	1	0.0				
astonishing	1	0.0				
Total	1884	14.1				

 Table 70. Frequency distribution of stance adjectives used as attitude markers in two

 corpora

n: raw frequency of each stance adjective of attitude markers

n /10.000: normalized frequency of each stance adjective of attitude markers per 10.000 words.

As displayed in Table 70, this finding was supported by the frequency distribution of adjectives as attitude markers in the two corpora. As the most frequent item in both corpora, *important* had an occurrence of 3.5 and 5.6 times per 10.000 words in CTAE and CNAE, respectively. *Appropriate* was the second and *expected* was the third most frequent adjectives in CTAE. *Expected* was applied as the second most item and *appropriate* was seen as the third most frequent item in CNAE. Compared to other adjectives, *interesting* can be recognized as a common item in both corpora with a frequency of 1.2 and 1.7 in CTAE and CNAE, respectively. Approximately 26 items in CNAE were used at a frequency of lower than 1.0 per 10.000 words. In the same vein, NAAEs used almost 21 adjectives at lower frequencies. They did not even represent a frequency of 1.0 per 10.000 words.

Stance	CTAE	CNAE	LL Ratio	ELL
Adjectives	n	n	(*p<0.05)	
important	470	706	-79.23	0.00000
dramatic	42	126	-52.85	0.00000
preferred	35	102	-41.32	0.00000
surprising	68	124	-22.71	0.00000
inappropriate	72	24	+20.52	0.00000
remarkable	52	18	+13.98	0.00000
unexpected	39	71	-12.95	0.00000
curious	7	22	-9.73	0.00000
interesting	171	212	-9.51	0.00000
expected	293	338	- 9.36	0.00000
shocking	16	5	-9.30	0.00000
unusual	20	39	-8.30	0.00000
appropriate	304	217	+7.14	0.00000
essential	111	68	+6.55	0.00000
understandable	25	9	+6.31	0.00000
hopeful	4	0	+5.15	0.00000
fortunate	2	8	-4.49	0.00000
surprised	15	25	-3.64	0.00000
usual	8	16	-3.59	0.00000
astonished	2	0	+2.58	0.00000
desirable	23	32	-2.53	0.00000
amazed	1	4	-2.24	0.00000
shocked	7	11	-1.35	0.00000
astonishing	1	0	+1.29	0.00000
amazing	1	3	-1.26	0.00000
unfortunate	6	8	-0.52	0.00000
striking	70	56	+0.47	0.00000
disappointing	4	3	+0.06	0.00000
preferable	6	6	- 0.03	0.00000
disappointed	9	8	+0.0	0.00000
Total	1884	2261	-82.91	0.00000

Table 71. LL ratio of stance adjectives used as attitude markers in two corpora

n: raw frequency of each stance adjective of attitude markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 71 provides the LL value of stance adjectives as attitude markers. Apparently, no statistically significant difference was calculated between CTAE and CNAE. *Important* was found to be the most underused item by TAAEs with -79.23 LL, which was followed by *dramatic* (-52.85 LL) and *preferred* (-41.32). Totally, 11 items were found to be slightly overused while 19 items were underused by TAAEs. Since we often came up with underuse values of items by TAAEs, this result was not surprising.

If we now turn to the pragmatic role of stance adjectives of attitude markers, we need to focus on some examples from the corpus. We preferred to emphasize some examples of *important, appropriate* and *expected* as they were the three most frequent items in the corpus. In all the examples below, authors clearly revealed their personal attitude towards the propositional contexts. For instance, *important* was used to highlight some particular information by the authors in the example below. In his study, Biber (2006b) labels *important* as an adjective, which writers use to evaluate the likelihood or possibility of the propositional contexts.

Example 81

<u>Indeed</u>, some students may argue this, but such a request/ demand, rather than being a problem, <u>could</u> helpfully lead to an **important** discussion of literacy and the contextuality of meaning.

Extracted from CNAE 4

Example 82

More specifically, vocabulary acquisition has often been regarded as being probably the most basic and **important** step in FL learning.

Extracted from CTAE 11

Example 83

The qualitative nature of this grounded theory method was **appropriate** because limited information addressing second language acquisition in an online environment was available as discovered from an initial review of literature.

Extracted from CNAE 27

Example 84

The underlying ethnomethodological principles of CA and MCA, having an emic perspective, adopting a data-driven and bottom-up process and the emphasis on fine-details of naturally-occurring interaction, made CA and MCA the most **appropriate** methodologies to use in this study.

Extracted from CTAE 28

Example 85

This onset is consistent with the stimuli of this experiment: the first 65 milliseconds of the standard and both deviants are comparable periods of prevoicing, so the first point of departure between stimuli would be at/after the stop release, leading to an **expected** MMN response onset no sooner than 205-305ms.

Extracted from CNAE 43

Example 86

That was an **expected** result since the level of both groups was accepted as B1 by the school administration.

Extracted from CTAE 29

The following section is intended to examine the frequency distribution of stance adverbials as attitude markers.

4.1.3.3.2. Stance adverbials as attitude markers

Stance adverbials were the second most frequent syntactic frame of attitude markers.

Table 72. Overall distribution of stance adverbials used as attitude markers in two

		CTAE				CNAE		
Syntactic Frame	n	n/10.00	%	n	n/10.000	%	LL Ratio	ELL
of Attitude Markers		0					(*p< 0.05)	
Stance adverbials	1145	8.6	38	1881	15.6	45	-262.77	0.00001

corpora

n: raw frequency of stance adverbials of attitude markers

n /10.000: normalized frequency of stance adverbials of attitude markers per 10.000 words

%: percentage of stance adverbials to overall frequency of attitude markers

Table 72 illustrates the overall distribution of stance adverbials as attitude markers in the two corpora. They were used at a frequency of 8.6 per 10.000 words and represented 38 % of attitude markers in CTAE. It has a frequency of 15.6 per 10.000 words and accounted for 45 % of attitude markers in CNAE. The LL value of -262.77 enabled us to prove that there was a statistically significant difference between CTAE and CNAE as regards to the use of stance adverbials as attitude markers.

There were mainly 27 items in this syntactic category. 10 items (*amazingly*, *astonishingly*, *curiously*, *desirably*, *disappointingly*, *disappointingly*, *hopefully*, *shockingly*, *unbelievably*, and *unusually*) were not seen in CTAE while 4 items

(*astonishingly, desirably, expectedly,* and *hopefully*) were not observed in CNAE. We only came up with 7 items that had relatively higher frequencies in both corpora. It would be plausible to propound that NAAEs used a variety of stance adverbials as attitude markers when compared to TAAEs.



Figure 16. Identical stance adverbials used as attitude markers in two corpora

Figure 16 presents the identical stance adverbials in the corpus. At a first glance, we noticed that *even* was the salient item of stance adverbials in both corpora although there was a huge difference in frequency counts. The other items often appeared at low frequencies in both corpora. *Correctly* was more frequented in CTAE but the other items were applied more frequently by NAAEs than TAAEs.

		1				
СТ	AE		CNAE			
Stance Adverbials	n	n/10.000	Stance Adverbials	n	n/10.000	
even	770	5.7	even	1314	10.9	
correctly	137	1.0	importantly	104	0.8	
interestingly	49	0.3	correctly	101	0.8	
importantly	34	0.2	essentially	79	0.6	
surprisingly	29	0.2	interestingly	71	0.5	
remarkably	24	0.1	unfortunately	47	0.3	
appropriately	22	0.1	surprisingly	42	0.3	
essentially	22	0.1	appropriately	20	0.1	
unfortunately	15	0.1	fortunately	19	0.1	
dramatically	13	0.0	dramatically	18	0.1	
strikingly	6	0.0	remarkably	13	0.1	
unexpectedly	6	0.0	strikingly	12	0.0	
preferably	5	0.0	admittedly	11	0.0	
fortunately	4	0.0	unexpectedly	7	0.0	
admittedly	3	0.0	unusually	5	0.0	
understandably	2	0.0	preferably	4	0.0	
inappropriately	2	0.0	understandably	4	0.0	
expectedly	2	0.0	curiously	3	0.0	
Total	1145	8.6	inappropriately	3	0.0	
			shockingly	1	0.0	
			unbelievably	1	0.0	
			amazingly	1	0.0	
			disappointingly	1	0.0	
			Total	1881	15.5	

Table 73. Frequency distribution of stance adverbials used as attitude markers in two corpora

n: raw frequency of each stance adverbial of attitude markers

n /10.000: normalized frequency of each stance adverbial of attitude markers per 10.000 words

As shown in Table 73, the only striking item was *even* in both corpora. It was used at a frequency of 5.7 and 10.9 per 10.000 words in CTAE and CNAE. It was almost twice more common in CNAE than in CTAE. *Correctly* was the second and *interestingly* was the third item which appeared at a frequency of 137 and 49 in CTAE. In CNAE, *importantly* was seen as the second most frequent item with a frequency of 104. *Correctly* had the third range with in the corpus with an occurrence of 101. The other items were employed at quite lower frequencies, which were below 1.0 per 10.000 words.

Let us turn to the pragmatic role of stance adverbials on the construal of authorial stance. The following examples were extracted from the corpus. In examples 87 and 88 related to the use of *even*, we realized that it was used to emphasize a particular proposition that seems important for these authors. In the last two examples, authors

clearly conveyed their personal attitudes towards the propositional context. To illustrate, the author in example 89 decided that Structural Distance Hypothesis is a correct pattern but another author may disagree with this idea.

Example 87

Put differently, **even** when measuring vowels known to increase in nasality, current measures will indicate a drop in nasality almost as often as they indicate the expected rise.

Extracted from CNAE 18

Example 88

In a class that has only three hours of face- to-face conduct per week, some students may **even** complete the course without engaging in any spoken interaction in the classroom.

Extracted from CTAE 27

Example 89

Yet, after its utterance, the students' responses indicated not only that all group members had **correctly** interpreted the phrase, but that the student who uttered it also knew, and could have chosen to use , the word 'corn.'

Extracted from CNAE 14

Example 90

It appears that the Structural Distance Hypothesis predicted this pattern correctly.

Extracted from CTAE 57

In the following page, we will present the results of log likelihood analysis regarding each item of stance adverbials used as attitude markers in two corpora

Stance	CTAE	CNAE	LL Ratio	ELL
Adjectives	n	n	(*p<0.05)	
even	770	1314	-203.84	0.00001
importantly	34	104	-44.63	0.00000
essentially	22	79	-40.15	0.00000
unfortunately	15	47	-20.73	0.00000
fortunately	4	19	-12.20	0.00000
unusually	0	5	-7.45	0.00000
interestingly	49	71	-6.58	0.00000
admittedly	3	11	-5.70	0.00000
curiously	0	3	-4.47	0.00000
surprisingly	29	42	-3.89	0.00000
strikingly	6	12	-2.69	0.00000
expectedly	2	0	+2.58	0.00000
correctly	137	101	+2.44	0.00000
remarkably	24	13	+2.30	0.00000
disappointingly	0	1	-1.49	0.00000
unbelievably	0	1	-1.49	0.00000
amazingly	0	1	-1.49	0.00000
shockingly	0	1	-1.49	0.00000
dramatically	13	18	-1.39	0.00000
understandably	2	4	-0.90	0.00000
inappropriately	2	3	-0.31	0.00000
unexpectedly	6	7	-0.21	0.00000
preferably	5	4	+0.03	0.00000
appropriately	22	20	-0.00	0.00000
Total	1145	1881	-262.77	0.00001

Table 74. LL ratio of stance adverbials used as attitude markers in two corpora

n: raw frequency of each stance adverbial of attitude markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Log likelihood analysis was conducted to examine whether the two corpora significantly differed with regards to the use of stance adverbials as attitude markers. As can be seen in Table 74, *even* had the highest LL value with -203.84. All the other LL values of adverbials were not observed as statistically significant. Only three items (*expectedly, remarkably* and *preferably*) out of 24 were slightly overused by TAAEs.

The section 4.1.3.3.3 will cover the analysis of stance verbs as attitude markers across two corpora.

4.1.3.3.3. Stance verbs as attitude markers

Stance verbs appeared as the least frequent syntactic category in the analysis of attitude markers.

	CTAE					CNAE			
Syntactic Frame	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL	
of Attitude Markers							(*p< 0.05)		
Stance verbs	2	0.0	0	31	0.2	1	-33.67	0.00000	

Table 75. Overall distribution of stance verbs used as attitude markers in two corpora

n: raw frequency of stance verbs of attitude markers

n /10.000: normalized frequency of stance verbs of attitude markers per 10.000 words

%: percentage of stance verbs to overall frequency of attitude markers

As shown in Table 75, they only occurred 2 times in CTAE while they were used at a frequency of 31 and represented only 1 % of CNAE. The LL value of -33.67 allowed us to claim that there was not a statistical significance between CTAE and CNAE in terms of the use of stance verbs of attitude markers to express their stance in their doctoral dissertations.

Table 76. Frequency distribution of stance verbs used as attitude markers in two corpora

	CTAE			CNAE	
Stance Verbs	n	n/10.000	Stance Verbs	n	n/10.000
agree	2	0.0	agree	27	0.2
disagree	0	0.0	disagree	1	0.0
prefer	0	0.0	prefer	3	0.0

n: raw frequency of each stance verb of attitude markers

n /10.000: normalized frequency of each stance verb of attitude markers per 10.000 words.

Examining the frequency distribution of stance verbs in Table 76, we found that *agree* had an occurrence of 2 in CTAE and appeared 27 times in CNAE. *Disagree* and *prefer* was not observed in CTAE. They were employed at low frequencies in CNAE. *Disagree* and *prefer* had 1 and 3 occurrences in this corpus.

Let us now turn to some examples taken from the corpus to discover the pragmatic function of stance verbs. In both examples below, we clearly understood that the authors agree with someone in the literature. Simply put, they signaled their personal attitude about the issues that they discussed. What is striking is that, NAAE took an explicit stance with the use of pronoun *I* but TAAE took a distant stance from this particular idea. We can only infer that he /she agreed with these linguists mentioned.

Example 91

I do **agree** with Susan Miller's critique of composition teaching histories that bestow textbooks with transcendental power by implying that textbooks do not change despite their wide range of contexts and uses, though I do not share her response.

Extracted from CNAE 10

Example 92

Many linguists **agree** that speakers who have had instruction emphasizing suprasegmentals can apparently transfer their learning to spontaneous production more effectively than those who have received instruction with only segmental content.

Extracted from CTAE 8

Stance Verbs	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p < 0.05)	
agree	2	27	-28.24	0.00000
prefer	0	3	-4.47	0.00000
disagree	0	1	- 1.49	0.00000
Total	2	31	-33.67	0.00000

Table 77. LL ratio of stance verbs used as attitude markers in two corpora

n: raw frequency of each stance verb of attitude markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As seen in Table 77 none of the items were observed to be statistically significant with -28.24, -4.47 and -1.49 LL. Considering the frequencies and LL values, we can propose that stance verbs constituted a minor part of attitude markers used in our corpus.

The following section will offer the results of the analysis related to the syntactic frames of engagement markers.

4.1.3.4. Syntactic frames of engagement markers

Table 78 presents the findings pertinent to overall distribution of engagement markers in the two corpora.

		CTAE		C	NAE	
IMDM	n	n/10.000	%	n	n/10.000	%
Engagement Markers	5.755	43.2	17	8.871	73.7	18

Table 78. Overall distribution of engagement markers in two corpora

n: raw frequency of engagement markers

n /10.000: frequency of engagement markers per 10.000 words

%: percentage of engagement markers to overall frequency of IMDMs

Recall that this category of IMDMs was the fourth in CNAE and the third in CTAE. It represented 17 % and 18 % of IMDMs in CTAE and CNAE with an occurrence of 43.2 and 73.7 per 10.000 words, respectively. The frequency difference between the two corpora should be examined cautiously. Despite an important difference of occurrence between the two corpora, the percentages of them give us a clear-cut understanding of the fact that both TAAEs and NAAEs attempted to negotiate with their readers in their doctoral dissertations.

We conducted an LL analysis whether the frequency difference between the two corpora was statistically significant, as seen in Table 79.

			8.8.		····P···	
	CTAE		CNAE		LL Ratio	ELL
	01	%1	O2	%2	(p<0.05)	
IMDM	5.755	0.43	8.871	0.74	-1020.51	0.00005

Table 79. LL ratio of engagement markers in two corpora

O1 is observed frequency in Corpus 1

O2 is observed frequency in Corpus 2

%1 and %2 values show relative frequencies in the texts.

+ indicates overuse in O1 relative to O2,

- indicates underuse in O1 relative to O2

Looking at the O1 and O2 results which showed the occurrence of engagement markers in the two corpora, we found that they were employed 0.43 and 0.74 times in CTAE and CNAE per 100 words. With -1020.51 LL value, we can also propose that this difference was statistically significant.



Figure 17. Syntactic frames of engagement markers

Figure 17 displays the overall distribution of syntactic frames of engagement markers in both corpora. Although there were mainly 5 frames in this category, we observed that stance verbs were the salient items that both TAAEs and NAAEs used to communicate with their readers in their doctoral dissertations. Pronouns and modals were the other syntactic frames that were seen in the corpus. Stance adverbials and stance nouns were almost not utilized in either corpus. It may be inferred that both groups of authors tended to build a kind of indirect engagement of their readers to their texts. In a way, they might try to reinforce the dialogic relationships with the use of verbs as engagement markers rather than referring to their readers explicitly through the use of pronouns because equating themselves with their readers who are highly proficient in their disciplines would be a risky rhetorical strategy for novice academic authors. Thus, they guide their readers to some certain tables, examples and understandings with the use of the verbs.

Table 80 demonstrates the frequency distribution of syntactic fames of engagement markers in the two corpora.

	CTAE					CNAE			
Subcategories of	n	n/10.000	%	Subcategories of	n	n/10.000	%		
Engagement Markers				Engagement Markers					
Stance verbs	4743	35.6	82	Stance verbs	7135	59.3	80		
Pronouns	685	5.1	12	Pronouns	1236	10.2	14		
Modals	322	2.4	6	Modals	490	4.0	6		
Stance adverbials	5	0.0	0	Stance adverbials	10	0.0	0		
Stance nouns	0	0.0	0	Stance nouns	0	0.0	0		

Table 80.The frequency distribution of syntactic frames of engagement markers in two

n: raw frequency of each syntactic category of engagement markers

n /10.000: normalized frequency of each category of engagement markers per 10.000 words.

%: percentage of each category to overall frequency of engagement markers

As stated above, stance verbs were the most frequent frame in CTAE and CNAE. They appeared 35.6 and 59.3 times per 10.000 words in CTAE and CNAE. What is more surprising, among 5 frames; they accounted for 82 % and 80 % of the engagement markers in the corpora in concern. Pronouns were the second frequently seen frame in the corpus. They were employed 5.1 and 10.2 times per 10.000 words in CTAE and CNAE. This means that they were twice more common in CNAE than in CTAE. They comprised 12 % and 14 % in CTAE and CNAE, respectively. Modals were observed as the third frequent frame with 2.4 and 4.0 of occurrence per 10.000 words in CTAE and CNAE. They comprised 6 % of the engagement markers in both corpora. Surprisingly, stance adverbials were the least frequent frame in this category because up to now they were often observed among the most frequent syntactic frame of IMDMs. Stance nouns did not exist in the corpus. It is worth noting here that there was only one item in this frame.

Subcategories of	CTAE	CNAE	LL Ratio	ELL
Engagement Markers	n	n	(*p< 0.05)	
Stance verbs	4743	7135	-756.53	0.00003
Pronouns	685	1236	-220.76	0.00001
Modals	322	490	-54.02	0.00000
Stance adverbials	5	10	-2.24	0.00000

Table 81. LL ratio of syntactic frames of engagement markers in two corpora

n: raw frequency of each syntactic category of engagement markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As shown in Table 81, all syntactic frames of engagement markers were underused in CTAE. Another point is that although they were used as the most frequent syntactic frame of engagement markers in both corpora, we revealed that TAAEs significantly differed from NAAEs with respect to their use of stance verbs as engagement markers. The LL value for this frame was -756.53, which was confirmed with 0.00003 ELL. The use of pronouns were also found statistically significant with - 220 .76 LL. We did not find a statistical significance as regards to other frames.

The following section will describe and outline stance verbs as engagement markers, which were the most frequently employed syntactic frame in this category.

4.1.3.4.1. Stance verbs as engagement markers

Table 82 illustrates the frequency distribution of stance verbs used as engagement markers.

Table 82.Overall distribution of stance verbs used as engagement markers in two

				corpora				
CTAE					CNAE			
Syntactic Frame	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL
of Engagement Markers							(*p<0.05)	
Stance verbs	4743	35.6	82	7135	59.3	80	-756.53	0.00003

n: raw frequency of stance verbs of engagement markers

n /10.000: normalized frequency of stance verbs $% \left({n_{\rm s}} \right) = 0.000$ words

%: percentage of stance verbs to overall frequency of engagement markers

The total number of 64 stance verbs as engagement markers was analyzed. 2 items (*mount* and *order*) were not seen in CNAE while in CTAE 4 items (*input, order, picture* and *estimate*) were not observed. They appeared 35.6 times per 10.000 words in CTAE and accounted for 82% of engagement markers in the corpus. We revealed that NAAEs used more stance verbs with an occurrence of 59.3 per 10.000 words. Similarly, they represented 80 % of engagement markers in CNAE. Although their percentages in the two corpora were almost similar, the LL value of -756.53 proved that they significantly differed in terms of the use of stance verbs.



Figure 18. Identical stance verbs used as engagement markers in two corpora

Figure 18 presents the identical stance verbs in the two corpora. Apparently, *see* and *do not* were favored by both TAAEs and NAAEs. *Use* existed as the third frequent stance verb. A closer look at the figure revealed that *take* was used at higher frequencies in CNAE but it was the least frequent item in CTAE. *Find* was the most frequent item in CTAE while it was used at lower frequencies in CNAE. Regarding the other items, we may claim that they were all underused by TAAEs.

Stance Verbs	n	n/10.000
find	514	3.8
do not	505	3.7
use	475	3.5
develop	223	1.6
see	201	1.5
go	192	1.4
follow	154	1.1
consider	148	1.1
determine	134	1.1
analyse	125	0.9
choose	113	0.8
evaluate	112	0.8
compare	100	0.7
prepare	100	0.7
observe	97	0.7
increase	94	0.7
demonstrate	88	0.6
set	88	0.6
refer	87	0.6
assume	86	0.6

Table 83. Frequency distribution of stance verbs used as engagement markers in CTAE

allow	71	0.5
employ	73	0.5
apply	67	0.5
remember	62	0.4
look at	61	0.4
define	60	0.4
select	57	0.4
assess	51	0.3
state	50	0.3
let $x = y$	40	0.3
note	40	0.3
integrate	39	0.2
pay	34	0.2
mark	33	0.2
notice	33	0.2
imagine	32	0.2
add	30	0.2
think of	30	0.2
think about	27	0.2
ensure	23	0.1
measure	21	0.1
recall	20	0.1
review	19	0.1
take (a look/as example)	18	0.1
connect	15	0.1
let us	15	0.0
recover	12	0.0
show	10	0.0
turn	9	0.0
arrange	7	0.0
remove	7	0.0
calculate	6	0.0
consult	6	0.0
let's	6	0.0
regard	5	0.0
suppose	4	0.0
insert	3	0.0
mount	3	0.0
classify	2	0.0
Total	4743	35.6

n /10.000: normalized frequency of each stance verb of engagement markers per 10.000 words

As seen in Table 83, *find, use* and *do not* were the most frequent stance verbs in CTAE with an occurrence of 514, 505 and 475. *Develop, see* and *go* were used at a frequency of 223, 201 and 192, respectively. Some other items such as *go, follow, consider* and *determine* also appeared at a frequency of 1.0 per 10.000 words. 14 items occurred at lowest bands and did not have normalized frequencies.

Stance Verbs	n	n/10.000
see	700	5.8
do not	674	5.6
use	544	4.5
take (a look/as example)	440	3.6
find	379	3.1
consider	346	2.8
determine	256	2.1
follow	238	1.9
allow	226	1.8
note	194	1.6
demonstrate	189	1.5
develop	180	1.4
go	176	1.4
recall	145	1.2
analyse	142	1.1
assume	135	1,1
refer	125	1.1
apply	125	1.1
look at	113	0.9
compare	109	0.9
choose	105	0.8
add	101	0.8
increase	97	0.8
evaluate	95	0.8
ensure	91	0.8
prepare	89	0.7
imagine	86	0.7
turn	11	0.6
remember	69	0.6
let us	66	0.5
notice	66	0.5
set	64	0.5
	01 59	0.5
let $x = y$	38 56	0.4
assess	30 46	0.4
mark think shout	40	0.5
	45	0.5
observe	41	0.3
	40	0.3
select	51 26	0.3
connect	30 22	0.3
	52 20	0.2
pay	29 29	0.2
lessify	28 27	0.2
	27 21	0.2
suppose	21	0.1

Table 84. Frequency distribution of stance verbs used as engagement markers in CNAE

state	21	0.1
remove	18	0.1
estimate	16	0.1
measure	15	0.1
contrast	13	0.1
calculate	12	0.1
show	11	0.0
define	10	0.0
regard	4	0.0
picture	4	0.0
insert	4	0.0
arrange	2	0.0
input	2	0.0
recover	2	0.0
consult	2	0.0
let's	2	0.0
Total	7135	59.3

n /10.000: normalized frequency of each stance verb of engagement markers per 10.000 words

As displayed in Table 84, stance verbs appeared at higher frequencies in CNAE. With a frequency of 700, *see* had the top range in the list. *Do not, use* and *take* were also employed frequently in CNAE. The following 12 items in the list occurred above 1.0 per 10.000 words. 8 items seen in the lowest bands did not have normalized frequencies. It is evident that CNAE included a greater variety and frequency of stance verbs when compared to CTAE.

Table 85. LL ratio of underused stance adverbials used as engagement markers in

Stance Verbs	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
take (a look /as example)	18	440	-526.86	0.00004
see	201	700	-345.21	0.00002
note	40	194	-126.47	0.00001
recall	20	145	-119.89	0.00001
consider	148	346	-102.87	0.00001
turn	9	77	-68.65	0.00001
determine	134	256	-52.11	0.00000
ensure	23	91	-50.54	0.00000
demonstrate	88	189	-48.58	0.00000
do not	505	674	-44.36	0.00000
let us	15	66	-40.02	0.00000
imagine	32	86	-31.40	0.00000
classify	2	27	-28.24	0.00000
follow	154	238	-27.61	0.00000
apply	67	125	-24.14	0.00000
estimate	0	16	-23.84	0.00000

CTAE

assume	86	135	-16.46	0.00000
notice	33	66	-14.79	0.00000
suppose	4	21	-14.45	0.00000
use	475	544	-14.23	0.00000
refer	87	125	-11.22	0.00000
connect	15	36	-11.16	0.00000
think about	27	43	-7.55	0.00000
remove	7	18	-6.18	0.00000
let $x = y$	40	58	-5.39	0.00000
mark	33	46	-3.66	0.00000
analyse	125	142	-3.48	0.00000
contrast	6	13	-3.40	0.00000
think of	30	32	-3.40	0.00000
input	0	2	-2.98	0.00000
review	19	28	-2.76	0.00000
calculate	6	12	-2.69	0.00000
look at	61	113	-2.63	0.00000
compare	100	109	-1.83	0.00000
remember	62	69	-1.41	0.00000
assess	51	56	-1.01	0.00000
increase	94	97	-0.84	0.00000
integrate	39	40	-0.31	0.00000
insert	3	4	-0.26	0.00000
show	10	11	-0.20	0.00000
choose	113	105	-0.04	0.00000
go	192	176	-0.02	0.00000

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

LL statistics was applied in order to ascertain whether the frequency differences between the two corpora were statistically significant. Table 85 shows the findings of the LL analysis with respect to underused items in CTAE. *Take* and *see* had the highest LL value of -526.86 and -345.21. The LL values of the following 4 items (*note*:-126.47; *recall*: -119.89; *consider*:-102.87 and *turn*:-68.65) were also found statistically significant. The rest of the items were not calculated to be statistically significant. Let us now move on the LL values of overused items of stance adverbials as engagement markers.

Stance Verbs	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
define	60	10	+34.76	0.00000
observe	97	41	+18.09	0.00000
state	50	21	+9.45	0.00000
find	514	379	+9.14	0.00000
recover	12	2	+6.95	0.00000
mount	3	0	+3.86	0.00000
select	57	37	+2.51	0.00000
arrange	7	2	+2.46	0.00000
set	88	64	+1.77	0.00000
let's	6	2	+1.71	0.00000
consult	6	2	+1.71	0.00000
develop	223	180	+1.28	0.00000
measure	21	15	+0.49	0.00000
evaluate	112	95	+0.21	0.00000
employ	73	61	+0.21	0.00000
pay	34	29	+0.05	0.00000
picture	0	4	+0.05	0.00000
regard	5	4	+0.03	0.00000
prepare	100	89	+0.01	0.00000

Table 86. LL ratio of overused stance adverbials used as engagement markers in CTAE

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 86 presents the LL findings of 19 overused stance adverbials in CTAE. We found no statistical significance between the two corpora. *Define* had the highest overused LL value with +34.76. *Observe* was the second overused item in CTAE with +18.09. For the rest of items in the list, the LL values were too low to be statistically significant.

Overall, we analyzed 64 stance verbs as engagement markers in the corpus and found many differences of occurrences of these items. The LL statistics provided us the salient items (*take, see, note, recall, consider* and *turn*) that were statistically significant in the two corpora. Let us now move on the pragmatic role of stance verbs on the construal of author stance in two sets of corpora. Looking at the dissertations randomly, we came up with a massive use of passive constructions of the verb *see* (e.g: *as can be seen, as seen...*). Example 93 illustrates this particular use of the verb *see*. Recall that this grammatical form enables authors to seem isolated from their texts and leave a room for their readers to interpret the propositional contexts. The last two examples below illustrate another use of *see* as an engagement marker. Here, *see* appeared with some pronouns of engagement markers. Clearly, we saw the explicit evidence of authors' attempt to build a

direct relationship with their readers. In fact, they engaged their readers into their dissertations by establishing solidarity.

Example 93

The former, dramedy, <u>can usually be **seen**</u> as a release of tension – like a pressure valve that allows the audience or participants to release the build up of anxiety they feel due to the dramatic nature of the scene.

Extracted from CNAE 17

Example 94

The HSs, on the other hand, had trouble recalling a much wider range of vocabulary, including verbs, and far more frequently, <u>as we see</u> in figures 5.5 and 5.6.

Extracted from CNAE 34

Example 95

<u>One can see the big pause between the words *heard* and *although* in the figure.</u>

Extracted from CTAE 54

Find was the most frequently applied stance verb in CTAE. The examples below present some examples about it. Similar to the use of *see*, the author tried to lead his/her readers to a particular interpretation in example 96. We again revealed that the verb was used with *we* which is also an engagement item. In the next example, the author took an implicit stance and used *find* with an adjective item of hedges (*probable*). Here, we, as readers, were fairly directed to a specific claim of the author. Namely, before seeing the findings, we were led through the same kind of reasoning with the author.

Example 96

The fetish, like Dickens's "painted face of a savage," is always a mirror rather than a mask; and in it <u>we</u> may **find** a glimpse into the dynamics of the ecological unconscious, to those implications of our actions which are invisible, our connection to them intangible, and yet irrevocably, even excruciatingly material in their consequences.

Extracted from CNAE 2

Example 97

Of course, it might be less <u>probable</u> to **find** a relativized verb following a sentence initial accusative NP compared to a matrix verb.

Extracted from CTAE 57

In the following section, findings of the analysis related to the pronouns as engagement markers will be discussed.

4.1.3.4.2. Pronouns as engagement markers

Pronouns were the second most frequently used syntactic frames of engagement markers.

Table 87. Overall distribution of pronouns used as engagement markers in two corpora

		СТ	ΓAE			CN	NAE	
Syntactic Frame	n	n/10.00	%	n	n/10.000	%	LL Ratio	ELL
of Engagement Markers		0					(*p<0.05)	
Pronouns	685	5.1	12	1236	10.2	14	-220.76	0.00001

n: raw frequency of pronouns of engagement markers

n /10.000: normalized frequency of pronouns of engagement markers per 10.000 words

%: percentage of pronouns to overall frequency of engagement markers

As Table 87 shows, there was a striking variation in the use of pronouns as engagement markers across the two corpora. They were employed 5.1 and 10.2 per 10.000 words in CTAE and CNAE, which means that they occurred twice more often in CNAE than in CTAE. As regards to their percentage in the whole engagement markers, they comprised of 12 % and 14 % of engagement markers in CTAE and CNAE, respectively. The LL of -220.76 proved the existence of statistically significant difference between the two corpora.
corpora										
	CTAE			CNAE						
Pronouns	n	n/10.000	Pronouns	n	n/10.000					
we (inclusive)	466	3.5	we (inclusive)	522	4.3					
our (inclusive)	96	0.7	our (inclusive)	334	2.7					
us (inclusive)	86	0.6	us (inclusive)	226	1.8					
one's	36	0.2	one's	77	0.6					
you	1	0.0	you	66	0.5					
Total	685	5.1	your	11	0.0					
			Total	1236	10.2					

Table 88. Frequency distribution of pronouns used as engagement markers in two

n: raw frequency of each pronoun of engagement markers

n /10.000: normalized frequency of each pronoun of engagement markers per 10.000 words

Table 88 compares the frequency distribution of each pronoun used as engagement markers in the two corpora. It is worth noting that *your* was not found in CTAE. In each corpus, *we* occurred as the most frequent item with an occurrence of 3.5 and 4.3 per 10.000 words. For the rest of the items, we observed some substantial frequency variations. As the second most frequent item, *our* appeared 0.7 and 2.7 per 10.000 words in CTAE and CNAE. This result revealed that it was 4 times more common in CNAE than in CTAE. Similarly, *us* occurred 4 times more common in CNAE than in CTAE. This huge gap increased when it came to *you* and *your*. *You* was 8 times and *your* was 32 times more frequent in CNAE than in CTAE. Suffice us to add that these pronouns were not frequent either corpora due to the fact that they directly refer to readers.

Pronouns	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
our (inclusive)	96	334	-164.55	0.00001
us (inclusive)	86	226	-80.04	0.00001
you	1	66	-49.33	0.00001
one's	36	77	-19.64	0.00000
your	0	11	-16.39	0.00000
we (inclusive)	466	522	-11.34	0.00000
Total	685	1236	-220.76	0.00001

Table 89. LL ratio of pronouns used as engagement markers in two corpora

n: raw frequency of each pronoun of engagement markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As can be seen in Table 89, the greatest LL difference was in the use of *our* with -164.55 LL. The LL value of *us* (-80.04) and *you* (-49.33) also proved to be statistically significant with the ELL values. Seemingly, all pronouns were underused by TAAEs. It

can be inferred that TAAEs were not inclined to establish an explicit relationship with their readers. As Hyland (2001a) states, the use of personal pronouns allows authors to explicitly bring their readers into their texts.

Now that we have mentioned quantitative findings related to the use of pronouns as engagement markers, let us focus on some examples to find out the pragmatic roles of them in reflecting author stance. In both examples below, authors established solidarity with their readers, which is essentially important for the acceptance of their claims by the readers. Another point is that, rather than explicitly addressing the readers, the authors consider themselves and their readers as a member of a specific community. The benefit of such a rhetorical strategy is two folds. First, it reduces the risk of objection of the claims by the readers and increases the possibility of getting the approval of the readers. Secondly, the ultimate aim of academic writing for authors is to get a place in their discipline. By equalizing them and their readers through the use of some pronouns such as *we, our* and *us*, the author put themselves in a place in their academic world, which doesn't seem awkward in the lens of the readers. This might be the reason for their higher occurrence compared to other pronouns of engagement markers in our corpus.

Example 98

When we think of pointing gestures, we perhaps imagine something very like this tableau.

Extracted from CNAE 23

Example 99

Thus, as non-native writers, if **we** want to be included and to share information in this vast arena of communication, it is vital to learn how to write and express our ideas effectively in English.

Extracted from CTAE 3

Having explained the use of pronouns as engagement markers, we will now move on the use of modal verbs as engagement markers.

4.1.3.4.3. Modal verbs as engagement markers

We summarized the overall distribution of modals of engagement markers in Table 90.

CTAE CNAE n/10.000 Syntactic Frame n/10.000 % % LL Ratio ELL n n (*p<0.05) of Engagement Markers 490 0.00000 Modals 322 2.4 6 4.06 -54.02

Table 90. Overall distribution of modals used as engagement markers in two corpora

n: raw frequency of modals of engagement markers

n /10.000: normalized frequency of modals of engagement markers per 10.000 words

%: percentage of modals to overall frequency of engagement markers

Obviously, they represented a small proportion of engagement markers with the percentage of 6 % in both corpora. Although they were observed 2.4 times per 10.000 words in CTAE, they were seen 4.0 times per 10.000 words in CNAE. The LL ratio for modals of engagement markers was found -54.02, which cannot be considered as statistically significant.

Table 91. Frequency distribution of modals used as engagement markers in CTAE

	CTAE			CNAE	
Modals	n	n/10.000	Modals	n	n/10.000
have to	147	1.1	need to	185	1.5
need to	143	1.0	have to	139	1.1
should	26	0.1	should	79	0.6
must	5	0.0	must	78	0.6
ought	1	0.0	ought	9	0.0
Total	322	2.4	Total	139	1.1

n: raw frequency of each modal of engagement markers

n /10.000: normalized frequency of each modal of engagement markers per 10.000 words

Looking at the frequency distribution of each item, as seen in Table 91, we revealed that have to used at a frequency of 1.1 per 10.000 words in CTAE and got the first range on the list. *Need to*, as the second most frequent item, had a slightly smaller occurrence of 1.0 per 10.000 words. On the contrary, it was the first and have to was the second most frequently applied modals in CNAE. Need to and have to was employed 1.5 and 1.1 times per 10.000 words in CNAE. The others did not seem to be used as frequently as these two modals.

Modals	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p < 0.05)	
ought	1	79	-108.22	0.00001
should	26	185	-87.29	0.00001
need to	143	78	+13.41	0.00000
must	5	9	-1.60	0.00000
have to	147	139	-0.14	0.00000
Total	322	490	-54.02	0.00000

Table 92. LL ratio of modals used as engagement markers in two corpora

n: raw frequency of each modal of engagement markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As shown in Table 92, there were mainly two items that were found to be statistically significant in the corpus. The highest LL value of was calculated for *ought* as -108.22 though it was not an identical modal verb in the corpus. *Should* was also significantly underused in CTAE against CNAE (-87.29 LL). *Need to* was overused by TAAEs with +13.41 LL.

As for the pragmatic functions of modals as engagement markers, the following examples might help us to figure out some of them. In the first example, the author guided his/her readers to a specific claim which seems important for him/her. This said he/she marked his/her personal perspective through a shared attitude with their readers. In the second example, the author did not intend to draw a certain conclusion but to emphasize the inclusion of the readers at that point. He / she also asked a rhetorical question to attract readers' attention and engage them into the dissertation.

Example 100

By openly sharing mis-steps they have made that reinforce the Eurocultural hegemony, administrators reveal to the tutors they supervise that <u>we</u> all **have to** make a concerted effort to see beyond our own biases.

Extracted from CNAE 4

Example 101

After all, what criteria do we have to decide if global capitalism, state, industrial capitalism, feudal society, or village economy is or is not best for humanity?

Extracted from CTAE 9

What follows is an account of the findings of the analysis pertinent to stance adverbials as engagement markers.

4.1.3.4.4. Stance adverbials as engagement markers

As seen in Table 93, the use of stance adverbials as engagement markers was quite limited in the corpus.

Table 93. Overall distribution of stance adverbials used as engagement markers in two

	corpora									
CTAE CNAE										
Syntactic Frame	n	n/10.000	%	n	n/10.000	%	LL Ratio	ELL		
of Engagement							(*p < 0.05)			
Markers										
Stance adverbials	5	0.0	0	10	0.0	0	-2.24	0.00000		

n: raw frequency of stance adverbials of engagement markers

n /10.000: normalized frequency of stance adverbials of engagement markers per 10.000 words %: percentage of stance adverbials to overall frequency of engagement markers

Seemingly, the academic authors in concern did not utilize stance adverbials of engagement markers to express their stance. They appeared 5 and 10 times in CTAE and CNAE. They did not express a particular percentage in the corpus. The LL of -2.24 did not reveal a statistically significant difference between the two corpora.

Table 94. Frequency distribution of stance adverbials used as engagement markers in

Stance Adverbials	CTAE n	n/10.000	Modals	CNAE n	n/10.000
by the way	3	0.0	by the way	5	0.0
incidentally	2	0.0	incidentally	5	0.0
Total	5	0.0	Total	10	0.0

two corpora

n: raw frequency of each stance adverbial of engagement markers

n /10.000: normalized frequency of each stance adverbial of engagement markers per 10.000 words

As displayed in Table 94, there were only two stance adverbials used as engagement markers. They occurred 5 and 10 times in CTAE and CNAE, respectively. Since they were observed as the least frequent syntactic frame, it would not be wrong to propound that they did not play an important role on the construal of author stance.

Stance	CTAE	CNAE	LL Ratio	ELL
Adverbials	n	n	(*p < 0.05)	
by the way	3	5	-0.73	0.00000
incidentally	2	5	-1.65	0.00000
Total	5	10	-2.24	0.00000

Table 95. LL ratio of stance adverbials used as engagement markers in two corpora

n: raw frequency of each stance adverbial of engagement markers

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

Table 95 presents the results of LL statistics. Both of the items were employed less frequently in CTAE. Besides, the LL values indicated an underuse in CTAE. *By the way* and *incidentally* had -0.73 and -1.65 LL values yet these results were not statistically significant.

The use of these stance adverbials in the corpus is illustrated in the following examples. In both examples, the authors attempted to guide their readers to a specific reasoning based on a shared understanding of a discipline. Apparently, these were not a kind of explicit relationship between the author and the readers to assess the truth of the proposition. The author simply intervenes with another claim.

Example 102

Incidentally, these are the same three fluency metrics which are significantly correlated with Conversational Use per Week.

Extracted from CNAE 34

Example 103

Rather, the narrator takes us into the time frame in which events happen, even though in what historical point the narrator locates himself or herself, **by the way**, remains uncertain.

Extracted from CTAE 34

To sum up, stance adverbials as engagement markers did not seem to contribute to the construction of authorial stance in the corpora.

4.1.3.5. Self- mentions

Previously, we examined how authors built their stance by connecting their readers to their dissertations through the use of engagement markers. In this section, we will analyze the items of self- mentions and try to seek for answers to how they contribute to the construal of author stance.

	CTAE			CNAE		
IMDMs	n	n/10.000	%	n	n/10.000	%
Self-mentions	1837	13.8	5	9344	77.7	19

Table 96. Overall distribution of self-mentions in two corpora

n: raw frequency of self-mentions

n /10.000: normalized frequency of self-mentions per 10.000 words %: percentage of self-mentions to overall frequency of IMDMs

As can be seen in Table 96, there were substantial differences of occurrences in both corpora in terms of the use of self- mentions. They appeared 13.8 and 77.7 times per 10.000 words in CTAE and CNAE, which means that they were almost five times more common in CNAE than in CTAE. This finding was supported by their percentage in the overall IMDMs in the corpus. They represented only 5 % of IMDMs in CTAE while they accounted for 19 % of IMDMs in CNAE.

Table 97. LL ratio of self- mentions in two corpora

	CTAE		CNAE		LL Ratio	ELL
	01	%1	O2	%2	(p< 0.05)	
Self-mentions	1837	0.14	9344	0.78	-6296.23	0.00029

O1 is observed frequency in Corpus 1

O2 is observed frequency in Corpus 2

%1 and %2 values show relative frequencies in the texts.

+ indicates overuse in O1 relative to O2,

- indicates underuse in O1 relative to O2

In order to find out whether the frequency difference between the two corpora was statistically significant, we conducted an LL statistics, as displayed in Table 97. The results revealed a statistically significant underuse of self-mentions in CTAE against CNAE with -6296.23LL, which was confirmed by 0.00029 ELL.

	CTAE				CNAE		
Subcategories of	n	n/10.000	%	Subcategories of	n	n/10.000	%
Self-mentions				Self-mentions			
Pronouns and	1682	12.6	92	Pronouns and Possessive	9140	76.0	98
Possessive Adjectives				Adjectives			
Stance nouns	155	1.1	8	Stance nouns	204	1.6	2

Table 98. The frequency distribution of syntactic frames of self-mentions in two corpora

n: raw frequency of each syntactic category of self-mentions

n /10.000: normalized frequency of each syntactic category of self-mentions per 10.000 words

%: percentage of each syntactic category of self-mentions to overall frequency of self-mentions

Self-mentions consisted of two syntactic frames: pronouns and possessive adjectives and stance nouns. As can be shown in Table 98, the first was employed 12.6 and 76.0 times per 10.000 words in CTAE and CNAE, which shows that they occurred almost 5 times more frequent in CNAE than in CTAE. They represented 92 % and 98 % of self-mentions in CTAE and CNAE. The latter was employed 1.1 and 1.6 times per 10.000 words in CTAE and CNAE. They accounted for 8 % of self-mentions in CTAE while they comprised of only 2 % of CNAE. It can be deduced from the table that both TAAEs and NAAEs built their stance mainly through the use of pronouns and possessive adjectives.

Subcategories of Self-	CTAE	CNAE	LL Ratio	ELL
mentions	n	n	(*p< 0.05)	
Pronouns and	1682	9140	-6432.10	0.0003
possessive adjectives				
Stance nouns	155	204	-52.34	0.00000

Table 99. LL ratio of syntactic frames of self-mentions in two corpora

n: raw frequency of each syntactic category of self-mentions

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As shown in Table 99, we observed a statistically significant difference between CTAE and CNAE in terms of the use of pronouns and possessive adjectives as selfmentions with -6432.10 LL. As for stance nouns, the LL was calculated as -52.34, which was not statistically significant.

4.1.3.5.1. Pronouns and possessive adjectives as self-mentions

As stated above, pronouns and possessive adjectives were the most striking syntactic frame of self-mentions.

С	TAE		CNAE			
Pronouns and	n	n/10.000	Pronouns and	n	n/10.000	
possessive adjectives			possessive adjecti	ves		
we	977	7.3	Ι	4759	39.5	
our	271	2.0	we	2173	18.0	
Ι	248	1.8	my	1203	10.0	
us	88	0.6	our	450	3.7	
my	73	0.5	me	310	2.5	
me	24	0.1	us	239	1.9	
mine	1	0.0	mine	6	0.0	
Total	1682	12.6	Total	9140	76.0	

Table 100. Frequency distribution of pronouns and possessive adjectives used as selfmentions in two corpora

n: raw frequency of each pronoun and possessive adjective of self-mentions

n /10.000: normalized frequency of each pronoun and possessive adjective of self-mentions per 10.000 words

As shown in Table 100, *I* had the highest frequency of 39.5 per 10.000 words in CNAE while it was observed as the third frequent item with 1.8 per 10.000 words in CTAE. It occurred 16 times more common in CNAE than in CTAE. *We* was the most frequent item in CTAE and the second mostly used item in CNAE. It was applied 7.3 and 18.0 times per 10.000 words in CTAE and CNAE, which displayed that it was twice more common in CNAE than in CTAE than in CTAE and an occurrence 2.0 and 3.7 in CTAE and CNAE. *Us* was seen 0.6 and 1.9 times per 10.000 words in CTAE and CNAE. It was three times more common in CNAE than in CTAE than in CTAE. With an occurrence of 0.5 in CTAE and 10.0 in CNAE, *my* was 16 times more common in CNAE than in CTAE.

Table 101. LL ratio of pronouns and possessive adjectives used as self-mentions in two

Pronouns	CTAE	CNAE	LL Ratio	ELL
and Possessive Adjectives	n	n	(*p<0.05)	
I	248	4759	-5434.92	0.00028
my	73	1203	-1395.41	0.00009
we	977	2173	-594.36	0.00003
me	24	310	-320.10	0.00002
us	88	239	-88.51	0.00001
our	271	450	-64.80	0.00000
mine	1	6	-4.48	0.00000
Total	1682	9140	-6432.10	0.00003

corpora

n: raw frequency of each pronoun and possessive adjective of self-mentions

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

As outlined in Table 101, all of the items of self-mentions were considerably underused in CTAE against CNAE. *I* was the most underused item with -5434,92 LL. *My* was the second and *we* was the third underused items with -1395.41 and -594.36 LL values. The LL value of *me* was calculated as -320.10. The LL values of these four items proved to be statistically significant. *Us, our* and *mine* had -88.51, -64.80 and -4.48 LL values, respectively.

The analysis of this syntactic frame assisted us to claim that pronouns and possessive adjectives were the salient syntactic frame of IMDMs in the comparison of TAAEs and NAAEs in terms of the strategies of building their stance in their doctoral dissertations. Let us now move on the examination of some examples to figure out the pragmatic roles of self-mentions. I was the most frequented item in CNAE and we was seen as the mostly used item in CTAE. Obviously, TAAEs preferred not to take an explicit stance while NAAEs felt confident to express themselves explicitly. In the first example, the NAAE clearly demarcated his/her role in the study. As Ivanic (1998) states authors develop a discoursal self to distinguish themselves from the other members of their community. In the second example, TAAE seemed to use we consciously to present his/her discoursal self. This is contradictory to what Ivanic (1998) claims. It might be a linguistic convention in the field of English language in Turkish context. The frequency of I and we assisted us to claim that while using these pronouns, TAAEs tended to build their stance on the basis of social negotiation with the members of their discipline. However, NAAEs often highlighted their discoursal self through the use of *I*. Example 104

In "American Callings: Humanitarian Selfhood in American Literature from Reconstruction to the American Century," **I** focus on selfhood explored and crystallized along an axis of obligation: the duty one human being has to another.

Extracted from CNAE 1

Example 105

In other words, it is beyond this study to compare the three universities since **we** do not have enough data about the language teacher training practices in these universities.

Extracted from CTAE 16

The findings of the analysis regarding the distribution of stance nouns as selfmentions will be discussed in the following section.

4.1.3.5.2. Stance nouns as self-mentions

Recall that stance nouns represented 8 % in CTAE and 2 % in CNAE. Beyond doubt, both academic authors preferred to use pronouns and possessive adjectives of self-mentions rather than stance nouns of self-mentions to signal their stance.

Table 102. Frequency distribution of stance nouns used as self-mentions in two corpora

	CTAE			CNAE	
Stance Nouns	n	n/10.000	Stance	n	n/10.000
			Nouns		
the author	73	0.5	the author	71	0.5
the writer	38	0.2	the author's	55	0.4
the author's	33	0.2	the writer	55	0.4
the writer's	11	0.0	the writer's	23	0.1
Total	155	1.1	Total	204	1.6

n: raw frequency of each stance noun of self-mentions

n /10.000: normalized frequency of each stance noun of self-mentions per 10.000 words

As shown in Table 102, as the most frequently applied item, *the author* was employed 0.5 times per 10.000 words in both corpora. *The writer* was the second and *the author*'s was the third frequented items in CTAE with 0.2 occurrences per 10.000 words. They were employed 0.4 times per 10.000 words in CNAE. *The writer*'s was at the lowest band in both corpora with 0.0 and 0.1 times per 10.000 words.

An example of stance nouns is shown below. It is quite clear using stance nouns of self-mentions here disguised the explicit self of the author in concern. Indeed, he/she tended to downplay his/her personal role in the text. It seems that such a rhetorical strategy prevents authors to display an authoritative professional identity. Besides, it seems to strengthen the objectivity of the propositional context.

Example 106

The author hopes to inspire future collaboration between linguists and K-12 educators in order to achieve better educational practices for the benefit of all students.

Extracted from CNAE 19

Example 107

In the analysis chapters, the dissertation analyses the narrative elements exploited by **the author** in order to show what narrative strategies of these elements indicate, and then it will attempt to integrate these findings with established interpretations of the novels.

Extracted from CTAE 34

The two corpora were administered to LL test and the results are exhibited in Table 103.

Stance Nouns	CTAE	CNAE	LL Ratio	ELL
	n	n	(*p<0.05)	
the writer's	11	23	-5.62	0.00000
the writer	38	55	-5.08	0.00000
the author's	33	55	-5.08	0.00000
the author	73	71	-0.19	0.00000
Total	155	204	-12.57	0.00000

Table 103. LL ratio of stance nouns used as self-mentions in two corpora

n: raw frequency of each stance noun of self-mentions

(-): indicates underuse in CTAE relative to CNAE

(+): indicates overuse in CTAE relative to CNAE

We found no statistically significant difference between the two corpora in terms of the use of stance nouns as self-mentions. The LL value of *the writer*'s was calculated as -5.62. *The writer* and *the author*'s had -5.08 LL value. *The author* was the last item with -0.19 LL.

In sum, the results of the analysis regarding the use of self-mentions in both corpora showed that NAAEs used self-mentions in their doctoral dissertations at a frequency of 9344, while TAAEs preferred limited use of them with an occurrence of 1837. The LL value of -6296.23 indicated a significant underuse of self-mentions in CTAE. Pronouns and possessive adjectives were the mostly applied syntactic category of self-mentions with an occurrence of 1682 and 9140 in CTAE and CNAE, respectively. The pronouns *I* and *we* were the key items for NAAEs and TAAEs to mitigate their self, respectively. This might indicate cross-linguistic disciplinary variations between the two corpora regarding the construction of author stance which TAAEs and NAAEs took up. This said, NAAEs tended to position themselves mostly with the use of first-person *I* but TAAEs mitigated their personal stance through the use of *we*.

4.2. Discussion

4.2.1. Interactional metadiscourse markers in two corpora

This study was broadly concerned with the pragmatic roles of interactional metadiscourse markers (IMDMs) for the construal of author stance in Ph.D. dissertations of NAAEs and TAAEs. In this section, we will discuss the particular pragmatic roles of IMDMs on stance-taking. As Zhang and Sabet (2016) claim the differences in the use of

IMDMs between L1 and L2 speakers result from different preferences so they should not be simply labeled as overuse or underuse. A total number of 318 IMDMs based on Hyland's taxonomy (2005b) were analyzed across the two corpora consisting of doctoral dissertations of NAAEs and TAAEs. CTAE included 1.330.093 words and while CNAE consisted of 1.202.456 words. Wordsmith 6.0 tool was used to calculate the frequencies of IMDMs in the corpora. A total number of 294 IMDMs were observed in CNAE whereas 281 IMDMs were found in CTAE. 24 items of IMDMs were not found in CNAE while 37 IMDMs were not displayed in CTAE. It might be possible that these items may not contribute to their stance-taking. To illustrate, *"from my perspective"* as an item of hedges were not employed in neither corpora. It can be inferred that this item did not serve to reduce their commitment to the proposition. On the contrary, it may function to confer personal opinions of the authors.

Broadly speaking, CNAE included more IMDMs with a frequency of 50396 while 34192 IMDMs was seen in CTAE. It is clear that they were underused in CTAE. Log likelihood analysis was conducted to see whether this difference was statistically significant. The LL value of -4973.21 definitely proved that the underuse in CTAE against CNAE was statistically significant. The underuse of IMDMs in CTAE might be explained by nonnative status of TAAEs and the influence of cultural and disciplinary norms of academic writing on this genre.

The findings of the current study are in agreement with those obtained by Turkish academic authors (Çapar, 2014; Akbaş 2012b). Çapar (2014) displayed that American academic writers employed more IMDMs in their research articles than by Turkish academic writers of English. Akbaş (2012b) observed that the use of MD features were more frequent in MA abstracts written by native speakers of English than those written by nonnative-speakers of English.

On the other hand, our results are not in line with previous studies conducted in other contexts (Adel, 2006; Burneikate, 2008; Blagojevic, 2004). Adel (2006) found an overuse of MD in the argumentative essays of Swedish speakers of English compared to those of native speakers of English. A further study was conducted by Burneikaite (2008) who showed that there was no significant overall difference between L1 and L2 writers of English in the use of metadiscourse markers. Similarly, Blagojevic (2004) reported that

IMDMs represented 25 % of MD in academic articles written by native speakers of English and Norwegian speakers of English.

Academic writing is often wrongly considered to be an objective form of formal writing. On the contrary, every text reflects opinions and claims of authors, so it possesses an individual voice. Authors do not simply present the raw findings of their study but also communicate with their readers through their texts by taking up a stance towards the proposition. In a way, it has a social basis rather than the mere interpretation of the data. Hyland (2002c) emphasizes the expression of author identity in academic writing. Academic authors do not simply present a disciplinary content but also construe their identity within the boundaries of socially and culturally approved values. It is possible that the differences between NAAEs and TAAEs with respect to the employment of IMDMs in their doctoral dissertations may be due to the effects of cultural norms of their discipline. To illustrate, taking an implicit stance to maintain a more objective presentation of claims and findings and the avoidance of high certainty are common rhetorical strategies of stance-taking utilized by Turkish academic authors (Akbaş, 2014) while the academic conventions of Anglo-American culture suggest an explicit construction of stance with the involvement of the readers of genres (Hyland, 2002c). Hence, TAAEs may have been reluctant to apply IMDMs as frequently as NAAEs. As claimed by Abdi (2009), national and cultural norms have an impact on the employment of IMDMs. Namely, cultural norms might be more prevailing than the conventions of a universal academic community. Similarly, Akbaş (2012b) claimed that the use of MD features depends on community-based strategies. Özdemir and Longo (2014) revealed that there were cultural differences in the use of MD.

4.2.2. Categorical use of interactional metadiscourse markers in two corpora

It was evident that CTAE significantly differed from CNAE in terms of the categorical use of IMDMs. Let us first examine the overall picture of these differences. Hedges were the most heavily used category in CTAE and CNAE with a frequency of 14215 and 17865, respectively. They comprised 35 % of all IMDMs in CNAE and 42 % of IMDMs in CTAE, which means that TAAEs employed hedges more frequently than the other IMDMs to build their stance. However, -866.00 LL value displayed a significant underuse of hedges by TAAEs.

This finding is in line with many studies in the literature (Akbaş, 2012a; Blagojevic, 2004; Hyland, 1998a; Hyland and Tse, 2004; Hyland, 2010b; Halabisaz et al., 2014; Kondowe, 2014). Blagojevic (2004) found that hedges were the most frequented category of IMDMs. In Hyland's study (2010b), hedges were observed to be the most frequently used subcategory of metadiscourse. Hyland and Tse (2004a) reported hedges as the most frequent sub-category in their corpus. In another study, Halabisaz et al. (2014) showed that hedges were applied more frequently by native academic writers of English than Persian-speaking academic writers of English. Abdi (2009) demonstrated that hedges were the most frequently employed in Persian research articles.

Based on these findings, we can propose that hedges played a pivotal role for TAAEs and NAAEs to manifest their stance in their doctoral dissertations. In addition, TAAEs seemed to have a mastery of hedges in their doctoral dissertations despite the fact that they did not use these devices as sufficiently as NAAEs. Both TAAEs and NAAEs tended to signal themselves in tentative ways, which allowed them to disguise their commitment to the propositional content. This said, they questioned the truth of their claims and presented them as opinions rather than facts. By this way, they sought to persuade their readers by opening a room for them to comment on their claims. We, as academic authors, should keep in mind that claim-making is challenging but we can deal with this challenge by accommodating our claims with our readers' expectations and refuting the possible objection of our readers to our claims. Especially, in the genre of doctoral dissertations, we know who our audience is and try to find appropriate ways to communicate with them in our dissertations.

Boosters were the second most frequent category in both corpora constituting 20 % of IMDMs in CNAE and 27 % of IMDMs in CTAE of all instances. The statistical difference was confirmed with -161.12 LL. This result is in accord with previous studies. Seemingly, a number of studies show that hedges and boosters are used as the most frequented categories of IMDMs. Hyland (1998a) found that academic authors made far more use of hedges with nearly three times the number of boosters, which proved that distinguishing facts and opinions is clearly a key aspect of academic writing. Thus, academic authors seek to propose provisional claims. Kondowe (2014) reported that hedging items were more frequent than boosting items in his corpus. He claimed that

Ph.D. students took the risk of making assertive claims when they believed the certainty of their claims. Besides, a Ph.D. dissertation must be original and have some prominent contributions to its field. At this point, we agree with Kondowe (2014) because Ph.D. students need to take a personal responsibility for their claims when the findings of their study account for it. By this way, they might present a strong stance which helps them find a place in their field.

In the light of the literature and the findings of this study, we can propose that both TAAEs and NAAEs achieved objective presentation of their findings through hedges and boosters. They increased and reduced the force of their claims with the use of hedges and boosters. They weakened their claims through hedges which enabled them to present their claims as opinions rather than facts. However, using this strategy constantly might influence the persuasiveness of the dissertations. Hence, they employed boosters to share their claims with the audience. Epistemic status of the propositional content was probably to have on the level of commitment. When they proved the truth of their proposition, they felt secure to use boosters.

Hyland (1998a) explains that hedges and boosters reflect to what extent authors are confident in the truth of proposition. They are also a means of building a bridge towards the audience. Typically, authors apply boosters to propose a strong claim about a proposition, to engage the readers directly into the text and to get a place in their discipline. On the other hand, the use of hedges allows them to weaken a claim by presenting it as a claim rather than a fact. Hyland (2005a) summarizes the role of hedges and boosters on the construal author stance: Hedges and boosters "balance objective information, subjective evaluation, interpersonal negotiation and this can be a powerful factor in gaining acceptance for their claims (p. 180).

There was a slight difference between the two corpora with regard to the frequency of attitude markers. 4173 items of attitude markers were utilized by NAAEs while 3031 items were employed by TAAEs. They constituted 8 % of IMDMs in CNAE and 9 % of IMDMs in CTAE. The log likelihood value was found -315.53, which was statistically significant. Both TAAEs and NAAEs seemed to be reluctant to express their personal attitude towards the proposition. These results are in line with Çapar's finding (2014) who observed that attitude markers were among the least frequently applied IMDMs in research articles produced by Turkish academic authors. 5755 engagement markers were observed in CNAE whereas 8871 items were examined in CTAE. With respect to their percentage in the corpora, 18 % of IMDMs in CNAE and 17 % of IMDMs in CTAE was comprised of engagement markers. Looking at the percentages, we may conclude that drawing readers into their dissertations was of great importance for both groups in concern. However, the LL value was quite high with -1020.51. It is likely that although TAAEs were aware of what this academic genre requires for the engagement of readers, they may not have had enough knowledge to use engagement markers as appropriately as NAAEs. These findings are not in accord with previous studies. Akbaş (2012b) showed that there was no statistical significance among Turkish L1 writers, Turkish-speakers of English and native speakers of English in the use of engagement markers. By the same token, the use of engagement markers in research articles written in Persian and in English was similar in the study of Abdi (2009).

The biggest difference was in the use of self-mentions. The frequency of selfmention markers was 9344 and 1837 in CNAE and CTAE, respectively. Among all the categories of IMDMs in the corpus, they took a share of 19 % of IMDMs in CNAE and 5 % of IMDMs in CTAE. Log likelihood analysis of self-mentions in two sets of corpora proved that there was a statistically significant difference between CTAE and CNAE with - 6296.23 LL. As pointed out by Akbaş (2014), Turkish academic authors of English followed a more objective and distant ways of stance-taking with the employment of passive structures rather than the use of personal pronouns. Besides, they might have been taught to avoid the use personal pronouns in academic writing. These results seem to be consistent with previous studies. Çapar (2014) revealed that Turkish academic writers used less self-mention than American academic writers. Akbaş (2012a) found that selfmention was the least preferred IMDMs by Turkish speakers of English. In Mur-Duenas' study (2011), the biggest difference with respect to the use of MD was observed in the use of self-mentions.

Having examined the frequencies of each category of IMDMs and the results of LL statistics regarding them, we claim that there was a statistical difference between CTAE and CNAE in the use of IMDMs, which was confirmed by LL findings. Turning now to the pragmatic roles of IMDMs on the construal author stance in doctoral dissertations written by TAAEs and NAAEs, we can propose that NAAEs and TAAEs

had different ways of using IMDMs on the construal of their stance in their doctoral dissertations.

Let us summarize how NAAEs and TAAES mitigated their stance in their doctoral dissertations. Hyland (1998a) explains that hedges and boosters reflect to what extent authors are confident in the truth of proposition. They are also a means of building a bridge towards the audience. Typically, authors employ boosters to propose a strong claim about a proposition by engaging the readers directly into the text. The use of hedges allows them to weaken a claim by presenting it as a claim rather than a fact. Broadly speaking, NAAEs tended to establish a balance between taking a strong and a weak stance by using hedges (f = 17865) and boosters (f= 10143) in our corpus. They often preferred to use boosters to make assertive claims. While it looks like they built a strong stance with the use of boosters, they tried to minimize the possible risks of readers' objection of their claims by using hedges. This is presumably explained by the fact that Ph.D. students as novice academic authors may not heavily rely on their personal judgment while writing their Ph.D. dissertations. Thus, with the help of hedges and boosters, they supported their personal claims more objectively with the findings of their data.

Similarly, TAAEs tended to balance their stance with the help of hedges and boosters. Recall that hedges (f= 14215) and boosters (f= 9354) were the most frequented categories in CTAE. Specifically, they presented the findings of their research and expressed their confidence with the propositional content with the use of boosters rather than building a strong stance like NAAEs. They minimized the possible risks of readers' rejection of their claims by using hedges. In fact, by using hedges, TAAEs presented their stance tentatively and cautiously in their doctoral dissertations.

Self-mention was the third frequented category in CNAE (f= 9344). NAAEs overtly expressed their self in their Ph.D. dissertations to emphasize their contribution to the research and to explain how they carried out it. Displaying confidence about the arguments related to their research might allow them to get a credible position in their discipline. As Hyland (2002c) claims, this ability is the one of the most salient features of pragmatic competence. Additionally, Lafuente-Millán (2010) alleges that self-mention markers can be regarded as one of the major sources of MD features for writers to construct their presence in academic writing.

On the other hand, self-mention occurred as the least frequent IMDMs in CTAE (f=1837). Hyland (2001b) explains a view suggested by many textbooks and style manuals: "Eradication of the self is therefore seen as demonstrating as a grasp scholarly persuasion as it allows the research to speak directly to the reader in an unmediated way" (p. 208). Being nonnative speakers of English, TAAEs might have used of textbooks and manuals which suggest avoiding self-mentions while writing their dissertations. So, based on their academic experiences, they might have had a tendency to build their authorial stance centered on the objective presentation of the findings and impersonality.

Engagement markers (f= 8871) also appeared to be a prominent feature of constructing stance for NAAEs. All academic authors have one ultimate aim: to be socially-recognized in their discipline, which can be achieved by the establishment of reader-writer relationships in the text. When they achieve mutual negotiation of claims and arguments with their readers, they gain acceptance in their field. Thus, NAAEs were apparently willing to address their readers as one of the participant of their dissertations. By the same token, TAAEs perceived engagement markers as an important rhetorical strategy to establish reader- writer relationship in the text (f = 5755). It is widely accepted that readers are also the participants of the texts as well as the writers. So, it is crucially important to bring readers into texts. One of the most salient advantages of this participation is to reduce the convictions of readers against the claims suggested by authors.

Finally, attitude markers were the least frequented IMDMs in CNAE (f= 4173). It seems that meeting the expectation of readers was more appealing than expressing personal attitude for the proposition itself for NAAEs. Similarly, attitude markers that reflect author's emotional attitude towards the proposition occurred 3031 times in CTAE. Since academic writing is socially-constructed, this result would not be surprising. Namely, academic authors communicate within the boundaries of conventions of their particular discipline. Thus, the massive reflection of their personal attitude towards the proposition would not help them maintain a credible place in their discipline.

All in all, we revealed an underuse in five categories of IMDMs by TAAEs in comparison to NAAEs. This might indicate that despite their efforts to adapt to universal disciplinary conventions of IMDMs, they experienced some problems in the appropriate use of IMDMs to express their stance in their doctoral dissertations, which may be associated with cultural conventions of their discipline and the influence of the genre and the readers. In short, we may highlight three main features of cultural conventions of stance-taking employed by TAAEs: impersonality, objectiveness, and tentativeness. This is important to keep in mind as we move forward.

4.2.3. Syntactic frames of interactional metadiscourse markers

In order to figure out what kinds of syntactic frames were utilized by TAAEs and NAAEs with respect to each category of IMDMs, we divided the main five categories of Hyland's (2005b) taxonomy into certain subcategories based on the framework of grammatical devices used to express stance suggested by Biber et al. (1999). Each corpus was examined in detail based on these subcategories, and LL statistics were calculated to see whether the differences were statistically significant.

4.2.3.1. Hedges

Hedges were the most frequently applied category of IMDMs in both corpora. However, NAAEs tended to use more hedges (f = 17865) than TAAEs (f = 14215). Obviously, hedges were underused by TAAEs against NAAEs, which was confirmed by -866.00 LL value. A total of 90 and 93 items of hedges were observed in CTAE and CNAE, respectively.

Let us now move on the syntactic frames of hedges seen across the two corpora. The first subcategory of hedges was modal verbs which occurred 4348 times and 6337 times in CTAE and CNAE, respectively. The LL value of -600.25 displayed that there was a statistical difference between CTAE and CNAE in the use of modals as hedges. *Would* and *may* were the mostly applied modals in CNAE while *might* and *could* constituted a big proportion of modals used as hedges in CTAE.

This finding seems to be consistent with other research on MD. We came up with similar results in some studies of Hyland (1995; 1998b; 2010b). For instance, Hyland (1995) found that *would, may* and *could* were the most frequent items of modal verbs. In another study (1998a), he revealed that modals and epistemic verbs were the most frequently occurring syntactic frames of hedges. *May, would* and *possible* were observed as the most frequent hedges. He (2010b) analyzed that *may, could* and *would* were among the most frequented items of hedges in his corpora. He claimed that L2 students present their arguments cautiously in their dissertations. *May, could* and *would* had a high

frequency of occurrence in the corpus of Hyland and Tse (2004a). In line with our findings, Halabisaz et al. (2014) observed that native academic writers of English preferred to use some specific items of hedging such as *might, could, may* and *should* more frequently than Persian academic authors.

The closer analysis of modals allowed us to figure out the pragmatic role of modals as hedges on stance taking. Seemingly, the use of modals let authors down tone their claims and gain the acceptance of their readers. Indeed, they tended to make tentative claims with the use of modals. The fact that modals as hedges occurred more frequently in CNAE than in CTAE testified a more cautious presentation of claims by NAAEs. However, TAAEs also seemed to dilute the certainty to their propositions through modals. Akbaş (2012a) demonstrated that Turkish speakers of English made use of modals to lessen the force of their claims and to gain acceptance of readers by this way. By the same token, Kondowe (2014) claimed that modals expressed tentative claims of authors based on their personal beliefs and knowledge. In a way, they avoided taking an authoritative stance on the subject matter and left the final word to their readers.

The second most striking syntactic category of hedges was stance verbs. They were the most frequently used syntactic frame in CTAE and the third most frequent frame in CNAE. Besides, they constituted 31 % of hedges with 4758 frequency counts in CTAE. They occurred 4435 times and composed 21 % of hedges in CNAE. What we gained from the percentages they presented in each corpus was that TAAEs built their stance mainly through stance verbs while using hedges. However, the log likelihood analysis proved that TAAEs did not significantly differ from NAAEs in the use of stance verbs with -2.15 LL. The Wordsmith analysis revealed that *suggest, indicate* and *appear* were the most frequent stance verbs in CNAE and CTAE. In sum, there seemed to be a clear tendency of using similar verbs in both corpora. In line with our findings, Hyland (1995) labels four common verbs to hedges: *indicate, suggest, appear* and *propose*. Among them *indicate* and *suggest* are the salient items of hedges in scientific writing. It can be inferred that both groups of authors tended to negotiate with their readers by making tentative claims about the truth of the proposition with the use of stance verbs as hedges.

As regards to the pragmatic role of stance verbs as hedges, based on the sub functions of hedges suggested by El-Seidi (2000), we proposed that academic authors in concern used stance verbs to appear directly in their texts through the use of cognition verbs and the pronoun I (specifically the phrase I *feel* was used in our corpus). Additionally, we revealed that stance verbs were also employed to make tentative claims, to mention the claims of other researchers. Namely, the salient pragmatic role of stance verbs is to help authors gain acceptance of readers. Akbaş (2012a) suggested that verbs as hedges are mainly used to perform three functions: to introduce the claims of other authors, to make tentative claims, to gain acceptance of the readers.

The third syntactic frame of hedges was stance adverbials. They were the second and the third most frequented syntactic frame of hedges in CNAE and CTAE, respectively. They occurred 5319 times in CNAE and 3957 times in CTAE. They comprised 30 % of hedges in CNAE and 28 % of hedges in CTAE. The LL ratio for stance adverbials was found -361.70. *Rather* and *often* seemed important for NAAEs to build their stance while in CTAE, *rather*, *frequently*, and *mostly* revealed to be significant items of stance adverbials. A likely explanation is that these stance adverbials enabled the academic authors to tentatively announce their findings or claims. Recall that making tentative claims is an important feature of the construal of stance for TAAEs. However, the underuse of them in CTAE might reflect a lack of knowledge of the appropriate use of stance adverbials by TAAEs.

El-Seidi (2000) explains some other sub functions of hedges. The second sub function was to tone down the argument with the use of some adverbials such as *perhaps* and *most probably*. The third sub function let authors emphasize the limitations of their arguments regarding the applicability issues and this is achieved with the use of adverbials such as *usually, sometimes, often, primarily* and *largely*. The analysis of some examples related to most frequent stance adverbials in our corpora allowed us to prove that stance adverbials were used to soften the claims to reduce possible readers' rejection and to avoid generalizations by evaluating the truth of the propositional content cautiously.

Stance prepositions and stance adjectives were the least frequented syntactic frames of hedges. Stance prepositions occurred 71 and 77 times in CTAE and CNAE, respectively. The LL results of -1.23 did not reveal a statistically significant difference between CTAE and CNAE. As for stance adjectives, TAAEs employed 1081 items whereas NAAEs applied 1697 items in their doctoral dissertations. The most identical stance adjectives were *possible*, *likely*, and *apparent*. This finding is in line with Hyland (1995) who reported that adjectives such as *likely*, *possible* and *most* occurred as the most

frequently items of hedges. We are of the opinion that the pragmatic roles of stance adjectives are to lessen the force of authors' arguments and to help them communicate with their readers to find possible alternatives for their arguments.

Overall, based on the quantitative findings of our analysis related to hedges, we could claim that NAAEs mostly built their stance by lessening the force of their claims through modals and by limiting their claims with the use of stance adverbials. On the other hand, TAAEs attempted to make tentative claims with the use of stance verbs and to tone down their claims with the use of modals. They did not seem to be as capable as NAAEs in avoiding generalizations with the use of stance adverbials. However, the ultimate aim of both groups of authors were to persuade their readers.

4.2.3.2. Boosters

Boosters revealed to be the second mostly used IMDMs in both corpora. They were employed 70.3 times per 10.000 words in CTAE whereas they were seen 84.3 times per 10.000 words in CNAE. Although the frequency counts of boosters were higher in CNAE, they composed a slightly higher percentage in CTAE (26 %) than in CNAE (19 %). 56 items of boosters were seen in CTAE while 59 items of boosters were observed in CNAE. The LL value of -161.12 proved that there was a statistical difference between NAAEs and TAAEs with respect to the use of boosters to build their stance in their doctoral dissertations.

The results support previous studies related to IMDMs (Hyland, 1998a; Abdi 2009; Akbaş 2012b). To illustrate, Akbaş (2012b) reported that like native speakers of English, Turkish-speakers of English used as half as many hedges as boosters in their master's dissertation abstracts. This finding is also contrary to some previous studies. For instance, Rezaei et al. (2015) observed that boosters had the highest percentage while hedges were among the least frequented items of the MD in their corpus. In another study, Özdemir and Longo (2014) showed that there was a striking difference in the use of boosters in master's theses written by Turkish students and American students.

The syntactic frames of boosters encompassed four sub-categories: The most frequent syntactic category was stance verbs, which were employed 41.2 and 46.0 times per 10.000 words in CTAE and CNAE, respectively. The key role of them as boosters was also emphasized by their percentage in boosters. They composed 62 % of boosters in CTAE and 55 % of boosters in CNAE. The LL value was -7.17 so we did not find a

statistical difference between the two corpora. *Find* and *show* were foregrounded in both corpora in terms of their frequency. This finding is in agreement with Hyland (1998a) who found that *show* was the most frequently applied verb used as boosters.

Examining some examples sentences, we propounded that both TAAEs and NAAEs used stance verbs: (a) to present the findings of their study; (b) to raise or weaken their commitment to the certainty of their claims. While doing this, they heavily relied on the shared academic knowledge related to their field. We also noticed that TAAEs sometimes used the passive forms of boosters, which might be a linguistic strategy to leave the commitment to their readers. It is also probable that this strategy might stem from a kind of culturally-approved linguistic convention in their academic world. As pointed by, Biber et al (1999) points, passive forms reflect an ambiguous attribution of stance. Thus, it would not be wrong to claim that this form is a rhetorical strategy to reflect an impersonal stance and to leave the commitment to the readers. Recall that one of the pragmatic functions of IMDMs was to persuade readers by engaging them to the texts.

Stance adverbials as boosters had the second range as the most frequent syntactic frames in our corpus. They were seen 12.8 and 21.3 per 10.000 words in CTAE and CNAE, respectively. They composed 18 % of boosters in CTAE while their percentage was higher in CNAE with 25 %. We also demonstrated that both groups of academic authors statistically differed from each other in the use of stance adverbials as boosters (-293.68 LL). The underuse of stance adverbials suggested that TAAEs displayed lower commitment to their claims unlike NAAEs. It might also be another linguistic strategy for them to avoid presenting the propositional content with confidence.

The most frequent adverbial in CNAE was *in fact*. The other frequented items were as follows: *actually, always, clearly, never* and *indeed. Always* revealed to be the most frequently applied item in CTAE. *Clearly* and *never* were some other items that were seen frequently in the corpus. These findings are in line with those obtained by Hyland (1998a) who found *clearly, indeed, always* and *of course* as the most frequent items in his corpus. The examination of examples regarding the most frequent items in the data revealed that TAAEs employed some salient items of expressing certainty as frequently as NAAEs, which might be a signal of showing a high commitment to claims made.

These results are consistent with those of Çapar (2014) who reported *clearly* as the most frequent boosters in English research articles written by Turkish speaking academic authors of English. Likewise, in the corpus of Hyland and Milton (1997), adverbials occurred as the second most frequent grammatical category used to express doubt and certainty. More specifically, *always* was seen as the most frequent adverbial used by nonnative speakers of English.

With respect to the pragmatic role of stance adverbials as boosters, we demonstrated that they fulfilled an implicit expression of stance. Namely, authors expressed a high degree of commitment to their claims in an implicit way by using stance adverbials. As Biber (2006b) states, stance adverbials are one of the most common grammatical devices to express stance with "no explicit attribution" (p. 99). By doing so, authors reduce the probability of objection of raised by their readers against their claims.

Stance adjectives appeared as the second mostly employed syntactic frame of boosters in CTAE and the third frequently used one in CNAE. They occurred 12.8 and 11.6 times per 10.000 words in CTAE and CNAE, respectively. In addition, they composed 18 % of boosters in CTAE and 14 % of boosters in CNAE. It is interesting to note that the overuse of them by TAAEs was supported with + 4.45 LL value but the statistical importance of this finding was not confirmed by the ELL value of 0.00000. *Certain, clear* and *true* revealed to be the salient stance adjectives in both corpora. *Certain* was the most frequently applied item in CTAE, which was followed by *clear*. The reverse was seen in CNAE. *Clear* was the most frequent item, which was followed by *certain*. It is probable that these items are disciplinary approved linguistic devices of academic interactions in the fields related to English Language. These findings support Çapar's (2014) study. She claimed that Turkish academic authors used adverbs and adjectives more frequently than modals while writing in English.

We have figured out a particular pragmatic role of stance adjectives as boosters. Looking at some examples from the corpus, we realized that both TAAEs and NAAEs sometimes used an implicit grammatical structure of stance (It + adjective +extraposed complement clause) which is suggested by Biber et al. (1999). In our case, it appears that this form fulfilled the pragmatic function of weakening authors' commitment to the truth of the proposition and appealing to their readers. Besides, it reduced the existence of the author and emphasized the truth of the proposition itself. Adel (2006) labels three

components of texts in her reflexive metadiscourse model: text, writer and reader. Seemingly, Ph.D. students sometimes tend to distance themselves from their texts and leave their readers with their texts alone.

The last syntactic frame we examined was modals as boosters. In this category, only *must* is included in the taxonomy of Hyland (2005b). It was employed 1.3 times per 10.000 words in CTAE whereas it was observed 5.2 times per 10.000 words in CNAE. Obviously, it was almost four times more common in CNAE than in CTAE. It composed 2 % and 6 % of boosters in CTAE and CNAE, respectively. The LL value was found - 313.71 and displayed to be statistically important with 0.00002 ELL. We proposed that NAAEs strongly presented their commitment to their claims with the use of *must* as boosters. They might have aimed to gain a credible membership in their discipline by this way. On the contrary, the underuse of *must* as boosters in CTAE might be due to the fact that TAAEs sought to disguise the strength of their commitment to their claims and to make the claims more transparent for their readers.

In sum, both TAAEs and NAAEs employed stance verbs of boosters to weigh up their commitment to the propositional content. With the frequent use of stance adverbials and modals, NAAEs construed a strong stance by making generalizations and conveying high commitment to their claims. Both groups of authors in concern sometimes disguised their commitment to the proposition and appealed to their readers with a particular form of stance adjectives (It + adj + extraposed complement clause). It is likely that this form is a means by which they utilized to distance themselves from their text and focused on the proposition itself.

4.2.3.3. Attitude markers

A detailed analysis of attitude markers was carried out to figure out how they contributed to the construction of stance in the corpora. Representing 9 % of IMDMs, they occurred as the second least frequent category in CTAE with a frequency of 3031 while they had an occurrence of 4173 in CNAE and accounted for 8 % of IMDMs. They were the least employed IMDMs in CNAE. A statistical significance was found between the two corpora with -315.33 LL value. It can be inferred that as novice academic authors, both NAAEs and TAAEs avoided using attitude markers because they did not chose to metadiscoursally present their personal opinions towards the propositional content.

This finding supports the findings of related studies in the literature. Akbaş (2012a) revealed that Turkish academic authors of English used attitude markers less frequently than American academic authors. Özdemir and Longo (2014) observed that American students used higher frequencies of attitude markers than Turkish students. Contrary to our study, Blagojevic (2004) reported that hedges and attitude markers were applied at higher frequencies in research articles written by English and Norwegian academic authors.

Stance adjectives were the most frequent syntactic category, followed by stance adverbials and stance verbs. Stance adjectives occurred 14.1 times per 10.000 words in CTAE whereas they were calculated 18.8 times per 10.000 words in CNAE. They approximately composed half of the items used as attitude markers. Their percentages were 54 % in CTAE and 62 % in CNAE. The LL value of -82.91 did not reveal a statistical difference between the two corpora. The second most frequent syntactic category was stance adverbials appearing 8.6 and 15.6 times in CTAE and CNAE, respectively. They accounted for 38 % and 45 % of attitude markers in CTAE and CNAE in terms of the use of stance adverbials (-262.77 LL). The least frequent category was stance verbs with 2 and 31 occurrences in CTAE and CNAE. They did not constitute a particular percentage in the corpus and had -33.67 LL value. It is likely that stance verbs (*agree, disagree* and *prefer*) strengthen the persuasiveness of an argument in oral discourse and might not be preferable in academic texts.

Important appeared as the most common stance adjective in both corpora. *Appropriate* and *expected* were the other adjectives that were frequently applied by TAAEs and NAAEs. This finding is in agreement with those of Hyland (1999) and Çapar (2014) who revealed that *important* was the most frequently used item among attitude markers in their corpora. *Even* was the most salient item of stance adverbials. It is interesting that both groups of academic authors used limited variety of stance adjectives and stance adverbials. It could be possible that the most frequented items above convey importance and expectancy and directly guide readers to a certain propositional content. They reflect an evaluative stance of the authors, which only present what the authors consider to be important and appropriate. Another point is that, showing surprise and

frustration to the propositional content might be regarded as an inappropriate linguistic strategy in academic writing since it may reduce the persuasiveness of the text.

IMDMs assist academic authors to signal their stance in different ways: explicit or implicit; assertive or tentative. Attitude markers reveal their personal evaluation of the propositional contexts. Hyland (20005b) states attitude markers build solidarity between the readers and the author and contribute to the persuasiveness of the texts. However, considering the quantitative data in our study, it would not be wrong to claim that both TAAEs and NAAEs used a limited variety of attitude markers to build their stance in their doctoral dissertations. What we can deduce from these results is two folds: As novice academic authors, it is not surprising that they sought to create an implicit and cautious stance because their audience consisted of highly profiled academic authors in their disciplines. Recall that with the use of specific grammatical structures such as passive forms or it + an adjective + that clause, TAAEs disguised themselves in their dissertations. Besides, they might find this strategy risky in conveying reliability and manipulating the force of their claims. Hyland (2005a) states personal judgments can be accepted in a particular discipline provided that they contribute to the knowledge repertoire of that discipline.

4.2.3.4. Engagement markers

The two corpora were investigated with respect to the use of engagement markers on the construal of authorial stance. They were used 43.2 and 73.7 times per 10.000 words in CTAE and CNAE, respectively. They represented 17 % and 18 % of IMDMs in CTAE and CNAE, respectively. The LL value was found -1020.51, which was statistically significant. The percentages of them were nearly the same in both corpora, however the statistically significant difference might indicate that TAAEs did not have a native-like mastery of maintaining writer-reader relationship their texts. It might be resulted from cultural linguistic conventions of their discipline.

This finding contradicts with some previous studies. For instance, Hyland and Tse (2004a) labeled the most frequent IMDMs per 10.000 words in L2 doctoral dissertations as: hedges (95.6), engagement markers (51.9), self-mentions (40.2), boosters (35.3), and attitude markers (18.5). Lee and Casal (2014) revealed significant cross-linguistic differences for the use of MD by English and Spanish-speakers of English. Specifically, engagement markers were seen less frequently in English than in Spanish corpora.

Stance verbs were the most striking syntactic frames of engagement markers in both corpora. They accounted for 82 % with 4743 frequency counts in CTAE and 80 % of CNAE with an occurrence of 7135. The LL value was calculated - 756.53, which was statistically significant. Apparently, guiding readers to make reasoning through stance verbs was a prominent metadiscoursal strategy in both corpora. The second most frequented syntactic frame was pronouns with an occurrence of 5.1 and 10.2 per 10.000 words in CTAE and CNAE. They appeared twice more common in CNAE than in CTAE. The LL value was calculated -756.53, which was statistically significant. It seems that NAAEs tended to equate themselves with their readers. However, the underuse of them in CTAE implied a lack of involvement between the author and the readers in doctoral dissertations produced by TAAEs. The pronoun we as engagement markers had the highest frequency in both corpora. In line with the findings of Hyland's study (1999), we was the sixth most frequented item of MD in his corpus consisting of 56 research articles. Hyland (2005a) claims that we is the most frequently used item of engagement markers as it emphasizes a shared understanding between the author and the readers. However, this result does not overlap with Herrando-Rodrigo's study (2010) who found only one instance of we in her corpus.

Representing 6 % in both corpora, modals were the third syntactic category across the two corpora. They had an occurrence of 2.4 and 4.0 per 10.000 words in CTAE and CNAE, respectively. The LL value was found to be -54.02, which was not confirmed by the ELL value (0.0000). Since modals reflect a commanding form of interaction, it would not have been preferred to construct solidarity with readers by the academic authors in concern. Similarly in Çapar's study (2014), they were observed as the least occurring subcategory of engagement markers. Stance adverbials were seen 5 times in CTAE and 10 times in CNAE and the LL value was very low (-2.24). Since this subcategory only include two items, the frequency distribution of them would not be surprising. Stance nouns were not employed in the two corpora.

Hyland (2005a) labels two purposes of engagement markers: a-"acknowledgement of the need to adequately meet readers' expectations of inclusion and disciplinary solidarity" b- "to rhetorically position the audience" (p.182). We revealed that both TAAEs and NAAEs employed various means of linguistic devices to mitigate their stance, one of which was engagement markers. Considering their percentages in both corpora, it would be plausible to propose that both group of authors tended to set out their claims based on the shared understandings with their readers so, they tried to invoke the participation of their readers. On the other hand, the statistically significant underuse of engagement markers in CTAE indicated that NAAEs produced their dissertations through more interactions with their readers compared to TAAEs. It is likely that TAAEs did not have enough knowledge of pragmatic functions of engagement markers, which led to insufficient use of this category in CTAE.

4.2.3.5. Self- mentions

Analysis of the self-mentions indicated an uneven distribution in the two corpora. It has been observed that self-mentions occurred with the lowest frequency in CTAE but they were the third most frequented category of IMDMs in CNAE. With a frequency of 13.8 per 10.000 words, they accounted for 5 % of IMDMs in CTAE. However, they were employed 77.7 times per 10.000 words and constituted 19 % of IMDMs in CNAE. Interestingly, they were seen five times more common in CNAE than in CTAE. The syntactic frames in this category were: pronouns and possessive adjectives and stance nouns. The first appeared at 12. 6 and 76.0 times per 10.000 words in CTAE and CNAE, respectively. The latter was seen 1.1 and 1.6 times per 10.000 words in CTAE and CNAE, respectively. Although the difference between the two corpora with respect to the use of pronouns and possessive adjectives was statistically significant with -6432.10 LL, stance nouns were not observed to be statistically significant with -52.34 LL. *I* was the most frequented item in CNAE with 4759 frequency counts while *we* was the first in CTAE with an occurrence of 977.

These results support previous research on the use of self-mentions. Abdi (2009) revealed that Persian authors preferred a more faceless form of stance when compared to English authors in their research articles. Hyland (2001b) found that the pronouns *I* and *we* were the most frequented items in the corpus. In the corpus of Mur-Duenas (2011), self-mentions were seen less frequent in Spanish corpora when compared to English corpora. Akbaş (2012a) asserted that self-mentions were the least category of IMDMs used by Turkish-speaking academic authors. On the other hand, our findings are contrary to those of Lee and Casal (2014) who showed that Spanish writers of English used self-mentions more frequently than English writers.

In sum, the frequency of self-mentions varied considerably in our corpus. There seemed to be cross-linguistic disciplinary conventions for authorial stance taken up by TAAEs and NAAEs. NAAEs appeared to profoundly emphasize their contribution to the field with the use of self-mentions. In addition to highlighting the uniqueness of their dissertation, they presented themselves as a competent member of the discipline. Specifically, they tended to position themselves mostly through the use of the first person I. Matsuda (2015) labels two orientations of writer identity: personal and social constructionist. The first is rested on the authentic individual contribution of the writer whereas the latter puts socially-accepted values in the core of building identity. Especially, in descriptive studies, the use of self-person I aims to focus on socially available repertoire of the discipline rather than representing personal decisions. It seems that the disciplinary conventions of MD followed by NAAEs are mostly based on the personal orientations which show the unique qualities of the dissertations.

As Ivanic (1998) claims, writers manifest their identity on the basis of socially available resources. It is likely that the disciplinary conventions of MD prevailing in Turkish context have a social-constructionist orientation, which appears to constrain doctoral students' use of self-mentions. It might also be specific to this particular genre in this context. Recall that TAAEs often preferred to mitigate their discoursal self through the use of *we* but it was seen twice more common in CNAE than in CTAE. It can be possible that TAAEs were in solidarity with their supervisors to get a place in their discipline with the use of *we*.

Hyland (2004) explains that how metadiscourse functions to establish an interaction with the author, the reader and the text is a neglected area in L2 classes. Besides, L2 doctoral students are advised to avoid the use of self-mentions. As stated above, the study of Lee and Casal (2014) observed higher occurrences of self-mentions in the Spanish corpus. It is noteworthy that the most frequent item of self- mention was the pronoun *we* in their corpus, which was approved by our finding. It may also be possible that L2 academic authors of English have a tendency of using the pronoun *we* to position themselves as a member of an academic community rather than an individual person contributing to that community. The upcoming chapter will summarize the findings of our study and suggest possible implications for the academic writing courses.

CHAPTER 5

CONCLUSION

5.1. Introduction

In this study we mainly attempted to explore the construal of author stance in doctoral dissertations produced by native and Turkish-speaking academic authors of English. To this end, we composed two corpora; CTAE (The corpus of Turkish academic authors of English and CNAE (The corpus of native academic authors of English), consisting of 120 doctoral dissertations in the fields related to English language. By using Wordsmith 6.0 and Log likelihood statistics, we evaluated a statistical analysis between the two corpora. Through this process we were able to compare how TAAEs (Turkish academic authors of English) and NAAEs (Native academic authors of English) manifested their authorial stance in their doctoral dissertations. In this section, a summary of the findings related to English language teaching and suggestions for further research are presented.

5.2. Evaluation of research questions

RQ 1: What types of interactional metadiscourse markers do native academic authors of English and Turkish-speaking academic authors of English employ to build their stance in their Ph.D. dissertations?

This study revealed that both TAAEs and NAAEs made use of IMDMs in their doctoral dissertations, which means that they were aware of the importance of IMDMs not only to establish a relationship among the author, the readers and the dissertation but also to manifest authorial stance. Apparently, both groups of authors in concern had some similar tendencies about the use of IMDMs for the construal of their stance. Both groups used hedges with a higher frequency than the other categories of IMDMs, followed by boosters. Both TAAEs and NAAEs tended to signal themselves in tentative ways with the use of hedges, which allowed them to disguise their commitment to the propositional content. In a way, hedges provided a room for readers to interpret what authors claimed.

The use of boosters displayed that both groups of authors also made assertive claims. When they statistically proved the truth of their proposition, they felt secure to use boosters.

In CNAE, self-mentions were the third and engagement markers were the fourth categories of IMDMs. Attitude markers were the least frequently employed categories of IMDMs. Seemingly, NAAEs asserted their discoursal self and claimed ownership for their dissertations through self-mentions. At the same time, they utilized engagement markers as frequently as self-mentions so as to stamp their readers as a participant of their dissertations. As pointed by Dontcheva-Navrotileva (2013), conveying high author visibility with the involvement of readers is a prominent aspect of academic writing in Anglo-American culture. Since attitude markers show authors' personal attitude rather than epistemic issues, the limited use of them by novice academic authors might not be surprising.

On the other hand, engagement markers were analyzed as the third most frequented category followed by attitude markers in CTAE. Self- mentions were the least frequently applied categories of IMDMs in the corpus. We may propound that TAAEs did not prefer to deploy attitude markers frequently to build their stance like NAAEs. They paid attention to communicate with their readers by using engagement markers in their doctoral dissertations. However, they did not display an explicit self, which might be explained by community sensitive linguistic conventions of this genre in their discipline. Apparently, modesty and distance are the key features of their stance in this particular genre. Besides, as nonnative speakers of English they might be taught to avoid the use of self-mentions. As claimed by Hyland (2001b), in many textbooks and style manuals, eradication of self is suggested as a strategy to achieve scholarly persuasion.

RQ 2: Do native academic authors of English and Turkish-speaking academic authors of English significantly differ in the use of interactional metadiscourse markers in terms of frequency and variety?

Considering the results of LL statistics about the overall frequency of IMDMs in the two corpora, we found a statistically significant underuse of IMDMs in CTAE. We also revealed that TAAEs exhibited a statistically significant underuse of the five categories of the analyzed IMDMs. The most striking difference between the two corpora was found in self-mentions and engagement markers, respectively. Overall, the findings indicated that TAAEs displayed a degree of familiarity with the rhetorical conventions of IMDMs to a certain extent, but they did not employ them as frequently as NAAEs. It is likely that the preferred use of IMDMs by TAAEs reflected the lack of knowledge of the pragmatic functions of IMDMs. As pointed out by Hyland (1999), MD is mostly considered to be linguistic devices that achieve cohesion in academic texts in L2 classes. How they function to establish writer-reader negotiation and to signal authorial stance are often neglected in these classes. In addition, following the cultural conventions of their discipline might have resulted in unsatisfactory use of IMDMs in CTAE.

RQ3: What kinds of syntactic frames of interactional metadiscourse markers do native academic authors of English and Turkish-speaking academic authors of English employ to build their stance in their Ph.D. dissertations?

We assumed there were fine-grained distinctions between CTAE and CNAE in the use of IMDMs. In order to examine these distinctions, we categorized Hyland's (2005b) taxonomy of IMDMs into particular syntactic frames based on the grammatical categories of stance suggested by Biber et al. (1999). The most frequent syntactic frames of hedges in CTAE were stance verbs, modals and stance adverbials, respectively. On the contrary, modals had the highest syntactic frame of hedges in CNAE. Stance adverbials were the second and stance verbs were the third frequent categories. Stance adjectives and prepositions of hedges were the least frequented syntactic categories in both corpora. Stance prepositions did not seem to have much contribution to the construal of author stance in either corpora since they mostly refer to the relationship between the propositional elements. As for their pragmatic role on the construal of author stance, modals were deployed to gain acceptance of readers by down toning the claims. Stance verbs attended the need to present the findings of the study in an assertive way but sometimes authors took an isolated stance with the use of stance verbs so as to help readers process their dissertations and reduce the opposition of the claims by the readers. It can be inferred that NAAEs sought acceptance for their claims with the use of modals and reduced their responsibility towards the truth of the propositions through the use of stance adverbials. On the other hand, the frequent use of stance verbs as hedges in CTAE showed that TAAEs were more concerned with the tentative presentation of their findings in a persuasive way. Stance adverbials and stance adjectives marked their intention to tone down their arguments and to get the approval of the readers.

Stance verbs occurred as the most frequent syntactic category of boosters in both corpora. Stance adjectives and stance adverbials were the other most frequently applied syntactic frames. Modals were the least frequented category. It is worth noting that there was only one item in this category. Considering the pragmatic role of these syntactic frames, we may propound that both TAAEs and NAAEs presented their claims assertively with the use of stance verbs. In order to comment on the truth of the proposition impersonally, authors in concern sometimes made use of passive structures. Stance adverbials performed a valuable role in both corpora: highlighting the degree of certainty of the claims, which was frequently employed by NAAEs. The LL value of modals and stance adverbials, which were found to be statistically significant revealed that TAAEs did not show full commitment to their claims.

Stance adjectives were the most frequently employed syntactic frame of attitude markers. Both groups of academic authors of English applied a limited variety of items stance adjectives. Hyland (2002b) explains that adjectives such of as important/necessary/essential direct readers to an action whereas adjectives such as *interesting/surprising* reflect an evaluative stance showing what the author considers to be important or surprising. Since most of the adjectives in this syntactic frame reflect evaluative stance, they might not have been preferred by both groups of academic authors. Contrarily, the frequent use of the adjective "*important*" in both corpora proved that they were more concerned with leading their readers to a certain proposition. Stance adverbials were the second most frequented while stance verbs were the least applied category in both corpora. All syntactic frames of attitude markers contributed to the explicit expression of authors' personal attitude towards the propositional contexts. Clearly, both TAAEs and NAAEs displayed similar tendencies in the use of attitude markers to mitigate their stance.

As for syntactic frames of engagement markers, stance verbs were strikingly frequented in both corpora. Apparently, with the use of stance verbs, both groups of academic authors built a direct relationship with their readers. In fact, they engaged their readers into their dissertations by establishing solidarity. We also revealed the frequent the use of passive forms of stance verbs, which displayed authors' attempt to distant themselves from their dissertations and provided opportunities for the readers to interpret the propositional contexts. Pronouns and modals were also used at lower occurrences in both corpora. The ultimate pragmatic role of pronouns of engagement markers was to equalize authors and their readers. Therefore, in addition to appealing directly to the readers, NAAEs attempted to get a place in their discipline with the use of pronouns. The lower frequency of pronouns in CTAE proved that TAAEs were reluctant to equalize themselves and their readers, which might be a linguistic convention of this genre in Turkish context. Bondi (2010) points out that metadiscourse practices reflect the ethos of the discipline and the status of the genre in that discipline. Modals assisted the authors to establish a shared attitude with their readers. It is worth noting that, we calculated statistically significant differences between TAAEs and NAAEs in the use of modals and pronouns.

The most frequent syntactic category of self-mentions was the pronouns and possessive adjectives. The occurrences of this syntactic category in the corpus enabled us to propose that TAAEs preferred to take an implicit stance while NAAEs felt confident to express themselves explicitly. They were not simply a mere representation of authorial self employed by NAAEs but revealed cross-linguistic disciplinary conventions between NAAEs and TAAEs. Dontcheva-Navrotileva (2013) explains that Anglo-American academic community is quite competitive, so academic authors of this community mark their authorial stance to convince their potential readers. As Hyland (2005a) claims, the choice of explicit form of stance-taking is a conscious choice shaped by disciplinary conventions. It seems that the disciplinary conventions of the fields of English Language Turkish context shows a marked preference of implicit stance-taking.

We provided a bird-eye view of the use of IMDMs in both corpora and highlighted the different employment of IMDMs by TAAEs and NAAEs. A possible explanation might be that both groups employed culturally-motivated linguistic conventions that provide a link between their dissertations and discipline. To illustrate, Karahan (2013) found that nonnative speakers of English in EFL used *we* rather than *I* in their research articles. Hence, we may propound that the use of *we* to construct stance may be a disciplinary linguistic convention for nonnative speakers of English in EFL context. It is also probable that these conventions reflected the expectations and understandings of the audience for whom the dissertation was written. To illustrate, TAAEs took an implicit stance with the limited use of self-mentions while NAAEs adopted a more explicit stance
with the frequent use of self-mentions, which might reflect a conscious linguistic choice of Ph.D. students and their supervisors.

RQ 4: Do academic authors of English and Turkish-speaking academic authors of English significantly differ with respect to syntactic frames of interactional metadiscourse markers they employ in their Ph.D. dissertations?

It is observed that most of the syntactic frames of each category of IMDMs were underused by TAAEs, which proved to be statistically significant. The syntactic frames that were not observed as statistically significant were as follows: stance verbs and prepositions of hedges; stance verbs of boosters; stance adjectives and verbs of attitude markers; modals and stance adverbials of engagement markers and stance nouns of selfmentions. It is worth noting that these syntactic frames were also underused by TAAEs. The only overused syntactic frame by TAAEs was stance adjectives of boosters but it did not appear to be statistically significant.

A likely explanation for these considerable variations is that TAAEs did not seem to control over the disciplinary-sensitive practices of this academic genre. They might have followed a culturally- motivated choice of linguistic devices. The underuse of IMDMs in CTAE might have been due to the influence of the readers in the genre of doctoral dissertation. Simply put, they may not have felt comfortable to take a strong a stance considering their readers, who are highly proficient academics in their disciplines. Most prominently, TAAEs might not have been aware of the pragmatic functions of IMDMs, which resulted in doctoral dissertations that were sometimes inconsistent with the disciplinary conventions of this genre. As pointed out by Hyland (1998b), MD is "the means by which writers portray a disciplinary awareness of how best to represent themselves and their research (p.453). In another study (2004), he claimed that the sociolinguistic rules of English-speaking academic communities are often neglected in most of the EAP textbooks. The section that follows will move on the implications of the findings to academic writing.

5.3. Implications of the findings to academic writing

The present study suggests that both TAAEs and NAAEs often build their stance through the use of hedges and boosters. They serve authors to reflect their disciplinary knowledge. Additionally, as pointed out by Hyland (2005a), they provide a balance between objective presentation of the propositional content and subjective evaluation of truth of this content, which help them gain acceptance for their claims. It seems that both TAAEs and NAAEs are inclined to establish a balance between objectivity and subjectivity on the construction of their stance. Besides, the limited use of attitude markers in both corpora suggests that they tend to focus on epistemic matters rather than their affective attitude. Finally, they are both aware of the pulling their readers to their dissertations in order to maintain the persuasiveness of their dissertations. The main difference between the two groups of authors is that NAAEs are more confident with taking a personal stance with the use of self-mentions while TAAEs follow a more impersonal form of authorial stance and do not take the ownership of their perspectives. These findings strengthen the idea that "metadiscourse is socially authorized and contextually constrained by the disciplinary communities in which it occurs" (Hyland, 1998b, p.448). Namely, the use of IMDMs is influenced by cultural norms of academic writing, which might be problematic for TAAEs. As non-native academic authors of English, TAAEs might feel positioned by these dominant conventions of their discipline, which may sometimes bring about inappropriate employment of the universal linguistic conventions of their discipline.

Taken together, the findings of the current study highlight the importance of MD in academic writing. Seemingly, TAAEs do not seem to deploy the rhetorical strategies as appropriately as NAAEs. Beyond doubt, there are some cultural differences in the use of IMDMs. However, academic writing is a universal issue. It is widely believed that it is a process of turning out the findings of a specific study into a universally accepted knowledge. Thus, authors embrace the universally accepted linguistics conventions of their discipline while following the culturally available norms of their discipline.

Before moving on the implications of this study related to academic writing courses in the field of English Language, let us explain an important issue. Ağçam (2014) claims that most of the postgraduate programs in Turkey do not include academic writing courses. We also investigated whether postgraduate programs related to English Language offer academic writing courses. We searched for official websites of the universities offering these postgraduate programs. When the programs were not available online, we sent e-mails to some academicians working in those departments. It seems that most of the programs related to English Language do not include academic writing courses especially in their Ph.D. programs.

The following implications can be drawn from this study. Academic writing plays an important role in gaining a membership in the globalized academic world. It is typically restricted by cultural and disciplinary conventions, which is especially a challenging issue for nonnative English-speaking academics. Hence, it seems to be a major concern in postgraduate programs. Simply put, academic writing courses focusing on the awareness of the conventions of academic genres should be implemented in the curricula of postgraduate programs. The present study specifically suggests that the inclusion of academic writing courses emphasizing the appropriate use of MD in the curricula of higher education might be of help to raise students' awareness of MD. Irvin (2010) states that the success of an academic writer depends on his / her awareness of the writing and his / her approach to the writing task. MD does not only consist of linguistics features that organize the texts but it also enables authors to achieve academic persuasion and gain a credible place in their discipline. Hence, the curricula of academic writing courses in all the fields of English Language should be rested on the fact that effective academic writing assists authors to be a competent member of their discipline. Hyland (2009) claims that academic discourse possesses such social roles as: creating academics and the knowledge itself and supporting universities and disciplines.

In her doctorate dissertation, Ağçam (2014) suggests the early inclusion of these courses into the curricula of higher education so that students can have the chance to improve their academic skills extensively. Similarly, Çapar (2014) proposes that these courses should be included in MA and Ph.D. programs because students attending such courses need to develop their academic skills to be able to write in English. Turkish academic authors of English should adopt the universal linguistic conventions of their discipline to be able get a place in this globalized academic world.

Besides, since metadiscourse is discipline-based, the curricula of academic writing courses need to be planned based on specific disciplines, and students need to be taught the linguistic conventions of MD to meet the expectations of their disciplines. A number of studies have revealed substantial variations in the use of MD across different disciplines. For instance, Hyland (2004) investigated the use of MD across six disciplines and found considerable variations in the employment of MD. In addition, they should offer students the particular linguistic features of MD that each genre requires. This said, each genre has its own routinely employed rhetorical and linguistics features and students

must be aware of these features in order to write competently in a specific genre and to meet the expectations of that genre. Hyland and Tse (2004b) examine the acknowledgment sections of 240 MA and PhD dissertations and suggest that EAP teachers should help their students raise their awareness of how to write acknowledgments to signal a competent academic identity.

More specifically, a need analysis of an academic writing course may provide useful insights to academics giving these courses. Hyland (2005b) outlines the key elements of MD instruction:

- 1. the writer's target needs;
- 2. the writer's prior writing and learning experiences;
- 3. the role of language in expressing functions;
- 4. the importance of social interactions;
- 5. the use of authentic texts;
- 6. the role of audience and community practices (p. 181).

It is quite apparent that a need analysis with the contribution of all stake holders can provide a framework for the key elements stated above. To illustrate, based on our findings, we can propound that TAAEs do not prefer to take an individual stance in their doctoral dissertations while NAAEs feel confident to express their discoursal self. As Hyland (2002c) claims, Anglo-American cultures encourage academic students to stamp their self explicitly whereas L2 academic students are not inclined to present their individual self. In this case, conducting a need analysis can be beneficial in understanding the exact reasons underlying this drawback of TAAEs. It can be speculated that this difference stems from the linguistic conventions of the genre of dissertations. Another reason might be the influence of the readers in this genre. TAAEs might have been suggested to disguise their stance by their supervisors.

It is likely that corpus linguistics provide authentic materials for academic courses. Scholars who give the academic writing courses can compile different corpora consisting of a variety genres produced by native and nonnative speakers of English. With the analysis of these corpora, postgraduate students may figure out the universal and cultural conventions of each genre in their discipline. Specifically, Can (2012) points out that the content of academic writing courses and the methods used in these courses play a crucial role in the development of students' academic writing skills. In this regard, a stance corpus compiled from the studies of scholars might be a useful tool. Lee and Casal (2004) suggest using a mini-corpus of theses and exploring the employment of different metadiscoursal categories to raise the awareness of L2 graduate students.

As regards to teaching methods and activities, two studies applying a specific method are worth to mention at this point. Conducting a process-based writing course, Tavakoli et al. (2012) reported that process-based approach enabled EFL learners to improve the use of IMDMs and to feel more confident. Similarly, Cheng and Steffensen (1996) found that process-based teaching of metadiscourse enhanced writers' awareness towards their readers' needs.

Hyland (2005b) suggests a particular method to teach MD which is called *Rhetorical Consciousness Raising Method*. It aims to create better writers rather than producing better texts and requires four main steps:

1. Analyzing texts: In this step students get familiar with the linguistic features of MD. One way of doing this is examining some authentic sample texts using concordancing programs. The outputs of concordance data can be used as authentic materials and students can be asked to complete the gaps in these concordance outputs. Students can also search for texts and draw on conclusions on the use of MD features. As a third activity, they may be asked to examine MD features in text fragments. Another activity is centered on the analysis of texts by answering some questions provided by teachers. We believe that data-driven learning can be a beneficial technique used in this step. Meunier (2002) emphasizes the contributions of corpus linguistics into English language teaching and suggests the use of data driven learning (DDL) in the classrooms. In this approach, students figure out lexis and lexico-grammatical patterns in the target language by focusing on computer-generated concordances.

2. Manipulating texts: This step encourages students to change the sample texts through some activities such as controlled composition tasks, completing a parallel text, editing a text, including MD features into a text appropriately.

3. Understanding the audiences: It requires the incorporation with real or stimulated audiences. For instance, student peers can be useful means of providing feedback. Genre-specific and community-specific issues of audience should also be kept

in mind. In order to raise audience awareness some activities may be used: Experts can be asked to evaluate students' writing by using thinking aloud technique and students can listen to this recording and discuss about it. Secondly, students can be asked to manipulate the MD features in a text after being provided particular audiences. Alternatively, they may find their own audiences.

4. Creating texts: Extended writing tasks encourage students to produce their own texts which are constructed for particular audiences.

Another point to be discussed is the type of instruction. Jalilifar and Shoostari (2011) revealed the facilitative effects of explicit instruction on the recognition of hedges and improved students' reading comprehension. It seems that explicit instruction contributes to evoke students' awareness of MD in the class. In fact, the methods stated above also follow an explicit teaching of MD. Hence, it would not be wrong to propound that explicit instruction facilitates the teaching of MD.

All in all, metadiscourse basically refers to three aspects: organization of academic genres, mitigating authorial stance and pulling readers into these genres. All three aspects serve one ultimate aim - maintaining persuasiveness of their claims and opinions to gain credibility in a particular field. Thus, understanding and using MD features appropriately is an important issue for academic authors, so a careful implementation of these features into the curricula of academic writing courses is prominent. A needs analysis may be the first step of this implementation so as to figure out the needs of the students and the materials to be used. Methods focusing on raising students' awareness of the use of MD could be applied during these courses. Specific corpora can provide authentic texts for the academic writing courses.

5.4. Suggestions for further studies

This particular study is limited to the examination of doctoral dissertations written by Turkish-speaking academic authors of English and native academic authors of English in the fields related to English Language. So, it would not be wise to generalize the results to other contexts. Another point is that, in our analysis of the syntactic frames of IMDMs, we came up with a variety of grammatical structures such bundles and passives. To illustrate, investigating the use of stance adjectives as boosters, we found that both groups of academic authors employed a particular grammatical structure (It + adjective + extraposed complement clause) but we could not calculate the frequency counts of them in the corpora because it was beyond the scope our study. What is now needed is a closer inspection of IMDMs with respect to their syntactic frames and grammatical structures. Examining the pragmatic functions of them would give us a more comprehensive understanding of these structures for the construal of authorial stance.

More broadly, cross-linguistic studies comparing the use of IMDMs in different genres produced by Turkish-speaking academic authors of English and native academic authors of English are also needed. In order to figure out the effects of L1, a third corpus consisting of a collection of dissertations written in Turkish might also be added. We came up with two doctoral dissertations related to this issue but they focused a specific genre. Akbaş (2014) investigated the use of hedges, boosters, authorial references in discussion sections of MA theses written by Turkish L1 writers, Turkish writers of English and native English writers. The results proved that Turkish L1 writers differed significantly from English L1 and L2 writers. Capar (2014) examined the use of IMDMs in research articles written by American academic writers, Turkish L1 academic writers, and Turkish non-native academic writers of English. These results revealed significant differences among the three corpora. Another possible area of further research is to figure out the reasons of the underuse of IMDMs by Turkish-speaking academic authors of English. Interviews with the authors in concern might be done to examine the reasons of the underuse.

In the present study, we compiled the corpus with Ph.D. theses written between 2010-2015 but we did not analyze them in terms of the years they were written. Historical studies would be a fruitful area for future work so as to comprehend how the use of IMDMs has changed in decades. There is little published data about this issue. Gillaerts and Van de Velde (2010) tried to identify how interpersonality was achieved in research article abstracts. They traced historical changes in the use of 3 interactional MD markers: hedges, boosters and attitude markers in research article abstracts in the field of applied linguistics. The findings showed that the use of boosters and attitude markers in abstract dropped while the use of hedges increased in the last 3 decades.

During our analysis we realized some differences about the use of IMDMs on the construal of stance in the fields we analyzed. To illustrate, there seem to exist some differences between doctoral dissertations written in the field of Linguistics and those written in the field of English Language and Literature. Thus, comparing the use of

IMDMs in related disciplines of English Language might provide us insights about what kinds of IMDMs authors of this field use to build their stance.

Other types of MD could also be investigated to tackle with the issue of author stance. Jiang and Hyland (2016) suggested a new taxonomy of metadiscourse nouns. They examined the use of interactive and interactional metadiscoursive nouns in 120 research articles across six disciplines and concluded these devices play a key role in organizing the discourse and constructing author stance. Further investigation of metadiscoursive nouns on the construal of author stance is strongly recommended.



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APPENDICES

Appendix A. Dissertations in CTAE

- Ağçam, R. (2014). A corpus-based study on author stance in academic English (Unpublished doctoral dissertation). Çukurova University, Adana.
- Akal, T. (2014). Processing of Turkish complex sentences with w-h phrases (Unpublished doctoral dissertation). Hacettepe University, Ankara.
- Akçeşme. İ. B. (2010). Comparative discourse analysis of gender constructions in the novels of Robert Heinlein, Ursula Le Guin, Joanna Russ and Samuel Delany (Unpublished doctoral dissertation). METU, Ankara.
- Alan, B. (2012). *Ngugi Wa Thiong'o and cultural resistance* (Unpublished doctoral dissertation). Yüzüncü Yıl University, Van.
- Altunkol, E. (2011). Acquisition of causative/Inchoative transitivity alternations by Turkish learners of L2 English (Unpublished doctoral dissertation). Çukurova University, Adana.
- Altay, M. (2015). Using semantic mapping strategy for teaching content words practice in EFL context (Unpublished doctoral dissertation). Çukurova University, Adana.
- Bakla, A. (2012). The effectiveness of instruction through moodle and accent reduction software on the pronunciation of EFL teacher trainees (Unpublished doctoral dissertation). Hacettepe University, Ankara.
- Bardakçı. M. (2010). The impact of raising awareness about reasoning fallacies on the development of critical reading (Unpublished doctoral dissertation). Gazi University, Ankara.
- Baş, M. (2015). Conceptualization of emotion through body part idioms in Turkish: A cognitive linguistic study (Unpublished doctoral dissertation). Hacettepe University, Ankara.
- Cesur, K. (2012). Examining competencies of prospective English teachers through their pedagogical content knowledge: A case study (Unpublished doctoral dissertation).
 Gazi University, Ankara.
- Cinoğlu, O. (2011). Practicum in English language teaching as perceived by mentors at cooperating schools in İstanbul (Unpublished doctoral dissertation). İstanbul University, İstanbul.

- Çakır, S. (2014). The analysis of the L2 performances of Turkish speakers on the island constraints in English to assess the validity of the interpretability hypothesis (Unpublished doctoral dissertation). Hacettepe University, Ankara.
- Çapar, M. (2014). A study on interactional metadiscourse markers in research articles (Unpublished doctoral dissertation). Anadolu University, Eskişehir.
- Çıraklı, M. Z. (2010). The relationships between the narrative strategies and meaning in William Golding's The Inheritors, Pincher Martin and Free Wall (Unpublished doctoral dissertation). METU, Ankara.
- Demir, Y. (2014). Characterizing multiparticipant Tv debate as an argumentative activity type: A pragma-dialectical analysis of the argumentative discourse in Siyaset Meydani (Unpublished doctoral dissertation). Hacettepe University, Ankara.
- Demir, B. (2015). Exploring the role of proficiency as a mediator of the relationship between working memory and text comprehension in the L2 (Unpublished doctoral dissertation). Yeditepe University, Istanbul.
- Demirşahin, I. (2015). *The discourse structure of Turkish* (Unpublished doctoral dissertation). METU, Ankara.
- Dörschel, F. B. (2011)." Female identity": Rewritings of Greek and Biblical myths by contemporary women writers (Unpublished doctoral dissertation). METU, Ankara.
- Ede, M. (2012). Design and evaluation of a language preparatory program at an English medium university in an EFL setting: A case study (Unpublished doctoral dissertation). Yeditepe University, Istanbul.
- Ekmekçi, E. (2014). *Flipped writing class model with a focus on blended learning* (Unpublished doctoral dissertation). Gazi University, Ankara.
- Ergül, H. (2014). *The social organization of watching television: A conversation analytic investigation of assessments in TV audience interaction* (Unpublished doctoral dissertation). Newcastle University, England
- Ertin, S. (2012). Perpetuation of the gay male sterotype: A study on camping and closeting the gay male subculture in Hollinghurst's fiction (Unpublished doctoral dissertation). METU, Ankara.
- Eşberk, H. (2013). *Metadrama, theatricality, and performativity in Samuel Becket's late plays* (Unpublished doctoral dissertation). METU, Ankara.

- Genca, P. A. (2011). Postmodern realism in Jeanette Winterson's Sexing the Cherry, Alasdair Gray's Poor Things, and Peter Ackroyd's The Plato Papers (Unpublished doctoral dissertation). Hacettepe University, Ankara.
- Göncüoğlu, M. Ö. (2011). Spiritual Africa/materyalized England: Reconciliation of in Haggard's work (Unpublished doctoral dissertation). İzmir, Turkey.
- Gönen, S. I. K. (2012). A study on reciprocal peer-coaching: An application in preservice English language teaching context (Unpublished doctoral dissertation). Anadolu University, Eskişehir.
- Günay, D. (2012). Perspectives on identity representation in intermediate level English language teaching course books used in Turkey (Unpublished doctoral dissertation). İstanbul University, İstanbul.
- Gürer, A. (2015). Semantic, prosodic, syntactic marking of information structural units in Turkish (Unpublished doctoral dissertation). Boğaziçi University, İstanbul.
- Han, T. (2013). The impact of rating methods and rater training on the variability and reliability of EFL students' classroom-based writing assessment in Turkish universities: An investigation of problems and solutions (Unpublished doctoral dissertation). Atatürk University, Erzurum.
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Appendix B. Dissertations in CNAE

- Adelman, A.S. (2014). *Conversations with native speakers: Acquiring Japanese as a second language* (Unpublished doctoral dissertation). The University of California, Santa Barbara.
- Ahn, B.T. (2015). *Giving reflexivity a voice: Twin reflexives in English* (Unpublished doctoral dissertation). The University of California, Los Angeles.
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 University of San Francisco, San Francisco.
- Brown, C. E. (2014). Perceptions of the value and uses of English among university English mayors in Taiwan (Unpublished doctoral dissertation). The Ohio State University, Ohio.
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Appendix C. Interactional Metadiscourse Markers

Interactional Metadiscourse markers (Hyland, 2005b)

Attitude Markers admittedly agree agrees agreed amazed amazing amazingly appropriate appropriately astonished astonishing astonishingly correctly curious curiously desirable desirably disappointed disappointing disappointingly disagree disagreed disagrees dramatic dramatically essential essentially even x expected expectedly fortunate fortunately hopeful hopefully important importantly inappropriate inappropriately interesting interestingly prefer preferable preferably preferred remarkable remarkably shocked shocking shockingly striking strikingly surprised surprising

surprisingly unbelievable unbelievably understandable understandably unexpected unexpectedly unfortunate unfortunately unusual unusually usual **Boosters** actually always believe believed believes beyond doubt certain certainly clear clearly conclusively decidedly definite definitely demonstrate demonstrated demonstrates doubtless establish established evident evidently find finds found in fact incontestable incontestably incontrovertible incontrovertibly indeed indisputable indisputably know known must (possibility] never no doubt obvious obviously

of course prove proved proves realize realized realizes really show showed shown shows sure surely think thinks thought truly true undeniable undeniably undisputedly undoubtedly without doubt Self Mention I we me my our mine us the author the author's the writer the writer's **Engagement Markers** (the) reader's add allow analyse apply arrange assess assume by the way calculate choose classify compare connect consider consult

contrast define demonstrate determine do not develop employ ensure estimate evaluate find follow go have to imagine incidentally increase input insert integrate key let x = ylet us let's look at mark measure mount must need to note notice observe one's order ought our (inclusive) pay picture prepare recall recover refer regard remember remove review see select set should show suppose state take (a look/as example) think about think of turn us (inclusive)

use we (inclusive) you your Hedges about almost apparent apparently appear appeared appears approximately argue argued argues around assume assumed broadly certain amount certain extent certain level claim claimed claims could couldn't doubt doubtful essentially estimate estimated fairly feel feels felt frequently from my perspective from our perspective from this perspective generally guess indicate indicated indicates in general in most cases in most instances in my opinion in my view in this view in our opinion in our view largely likely mainly may

maybe might mostly often on the whole ought perhaps plausible plausibly possible possibly postulate postulated postulates presumable presumably probable probably quite rather x relatively roughly seems should sometimes somewhat suggest suggested suggests suppose supposed supposes suspect suspects tend to tended to tends to to my knowledge typical typically uncertain uncertainly unclear unclearly unlikely usually would wouldn't

Appendix D. Categorization of Hyland's Interactional Metadiscourse Taxonomy Regarding Syntactic Frames

A- Attitude Markers

a- Single adverbials	b. Stance verbs	c. Stance adjectives
admittedly	agree	amazed
amazingly	agrees	amazing
appropriately	agreed	appropriate
astonishingly	disagree	astonished
correctly	disagreed	astonishing
curiously	disagrees	curious
desirably	prefer	desirable
disappointingly		disappointed
dramatically		disappointing
essentially		dramatic
expectedly		essential
fortunately		expected
hopefully		fortunate
importantly		hopeful
inappropriately		important
interestingly		inappropriate
remarkably		preferable
preferably		preferred
shockingly		interesting
strikingly		remarkable
surprisingly		shocked
unbelievably		shocking
understandably		striking
unexpectedly		surprised
unfortunately		surprising
unusually		unbelievable
even		understandable
		unexpected
		unfortunate
		unusual

usual

B-Boosters

Stance Adverbials		Stance Verbs		Stance Adjectives	Modals
actually	without	believe	think	certain	must
always	doubt	believed	thinks	clear	(possibility]
beyond doubt	surely	believes	thought	definite	
certainly		demonstrate		doubtless	
clearly		demonstrated		established	
conclusively		establish		evident	
decidedly		find		incontestable	
definitely		finds		incontrovertible	
evidently		found		indisputable	
in fact		demonstrates		sure	
incontestably		know		true	
incontrovertibly		known		undeniable	
indisputably		obvious			
no doubt		prove			
obviously		proved			
of course		proves			
never		realize			
really		realized			
indeed		realizes			
truly		show			
undeniably		showed			
undisputedly		shown			
undoubtedly		shows			
C. Self Mention

Stance Pronouns and Possessive Adjectives	Stance Nouns
Ι	the author
we	the author's
me	the writer
my	the writer's
our	
mine	
us	

D. Engagement Markers

Stance Adverbials	Stance Verbs		Stance Nouns	Modals	Stance pronouns
Stance Adverbials by the way incidentally	Stance Verbs Add allow analyse apply arrange assess assume calculate choose classify compare connect consider consult contrast define demonstrate determine do not develop employ	let us let's look at mark measure mount note notice observe order pay picture prepare recall recover refer regard remember remove review see	Stance Nouns (the) reader's key one's	Modals have to must need to ought should	Stance pronouns our (inclusive us (inclusive) we (inclusive) you your
	develop employ ensure estimate evaluate find follow go imagine increase input insert integrate let $x = y$	review see select set show suppose state take (a look/as example) think about think of turn use			

E. Hedges

Stance Adverbials	Stance Verbs	Stance Adjectives	Modals	Stance
				Prepositions
almost	appear	apparent	could	about
apparently	appeared	doubtful	couldn't	around
approximately	appears	plausible	might	
broadly	argue	possible	ought	
certain amount	argued	presumable	should	
certain extent	argues	probable	would	
certain level	assume	typical	wouldn't	
fairly	assumed	uncertain	may	
frequently	claim	unclear		
from my	claimed	likely		
perspective	claims			
from our	doubt			
perspective	estimate			
from this	estimated			
perspective	feel			
generally	feels			
in general	felt			
in most cases	guess			
in most instances	indicate			
in my opinion	indicated			
in my view	indicates			
in this view	postulate			
in our opinion	postulated			
in our view	postulates			
largely	seems			
mainly	suggest			
essentially	suggested			
maybe	suggests			
mostly	suppose			
often	supposed			
on the whole	supposes			
perhaps	suspect			
plausibly	suspects			
possibly	tend to			
presumably	tended to			
probably	tends to			
quite				
rather x				
relatively				
roughly				
sometimes				
somewhat				
to my knowledge				
typically				
uncertainly				
unclearly				
unlikely				
usually				

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Educational Background

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2017-2013	Doctor of Philosophy	Erciyes University
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2011-2013	Master of Arts	Çağ University
		Institute of Social Sciences
		Division of English Language Teaching
1998-2003	Bachelor of Arts	Hacettepe University
		Division of English Language Teaching

Professional Background

Date	Title	Institution
2004-	English Instructor	Kahramanmaraş Sütçü İmam University
		Kahramanmaraş, Turkey
2003-2004	EFL Teacher	Mükrimin Halil High School
		Kahramanmaraş, Turkey

Academic Background

Papers Presented

- Yuvayapan, F. (2013). Enhancing Teachers' Professional Development through Critical Friends Group. 13th Bilkent University Busel Conference "Teachers Exploring Practice for Professional Learning". Bilkent University, Turkey, June, 17-18, 2013.
- Yuvayapan, F. (2015). A Need for Conceptually Fluent Language Learners: Rethinking the Use of Translation Method in the Teaching of Idioms. 2nd Çukurova University ELT Conference. Çukurova University, Turkey, May, 21-22, 2015.
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