

**BAŞKENT UNIVERSITY  
INSTITUTE OF EDUCATIONAL SCIENCES  
DEPARTMENT OF FOREIGN LANGUAGES  
MASTER PROGRAM OF ENGLISH LANGUAGE TEACHING WITH THESIS**

**A COMPARISON OF NATIVE AND NON-NATIVE SPEAKERS ON THE BASIS  
OF THE USE AND FUNCTION OF DISCOURSE MARKERS IN MA THESES  
ABSTRACTS**

**PREPARED BY**

**CANSU ÇELİK**

**MASTER THESIS**

**ANKARA – 2022**

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**ANKARA – 2022**

**BAŞKENT ÜNİVERSİTESİ**  
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Cansu elik

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# ÖZET

Cansu ÇELİK

## Anadili İngilizce Olan ve Anadili İngilizce Olmayan Öğrencilerin Yüksek Lisans Tezlerinin Özet Bölümlerinde Kullandıkları Söylem Belirteçlerinin Kullanımı ve İşlevlerinin Karşılaştırmalı Araştırması

Başkent Üniversitesi  
Eğitim Bilimleri Enstitüsü  
Yabancı Diller Eğitimi Anabilim Dalı  
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İkinci dil (L2) yazarları, dilsel ve söylemsel sorunların yanı sıra anadili İngilizce olamama ve İngilizce konuşulan dünyanın sınırlarında olma sorunuyla karşı karşıyadır. Bu nedenle, L2 yazımı, anadil konuşucularının yazımından farklı olabilir. Bu çalışma, anadili İngilizce olan ve olmayan konuşucuları söylem belirteçleri açısından karşılaştırarak akademik yazıya katkıda bulunmayı amaçlamaktadır. Bu amaçla, katılımcıların yüksek lisans tezlerinin özet bölümleri Fraser'ın (1999) zamansal, ayrıntılı, çıkarımsal ve karşılaştırmalı belirteçler sınıflandırması kullanılarak incelenmiştir. Ant.Conc, veri analizinde kullanılan bir uyum aracıdır. Sonuçlara göre, anadili İngilizce olan ve olmayanlar arasında zamansal, ayrıntılı, çıkarımsal ve karşılaştırmalı belirteçlerde belirli farklılıklar vardır. Bu çalışmanın sonuçları göz önüne alındığında, bu kategorilerin kullanımında bazı benzerlikler ve farklılıklar olduğu belirtilmelidir.

**Anahtar Kelimeler:** EFL, ESL writing, İngilizce anadil konuşucuları, İngilizce yabancı dil konuşucuları

## **ABSTRACT**

**Cansu ÇELİK**

### **A Comparison of Native and Non-Native Speakers on the Basis of the Use and Function of Discourse Markers in MA Theses Abstracts**

**Başkent University  
Institute of Educational Sciences  
Department of Foreign Languages  
English Language Teaching Master Program**

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Second language (L2) writers face linguistic and discursive problems, as well as the problem of not being native speakers and being on the margins of the English-speaking world. Therefore, L2 writing may deviate from L1 speakers writing. The present study aims to contribute to academic writing by comparing native and non-native English speakers in terms of discourse markers. To this end, the abstract sections of the participants' MA theses were examined using Fraser's (1999) classification of temporal, elaborative, inferential, and contrastive markers. Ant.Conc, is a concordance tool used in data analysis. According to the results, there are certain differences in temporal, elaborative, inferential, and contrastive markers between native and non-native English speakers. In view of the results of the present study, it should be noted that there are some similarities and differences in the use of these categories.

**Key Words:** EFL, ESL writing, native speakers of English, non-native speakers of English

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# CHAPTER I

## INTRODUCTION

### 1.1. Background of the Study

In today's world, especially in a time when scholars must produce and publish qualified academic work with innovative ideas, it can be quite difficult to contribute successfully to academia. A researcher is expected to follow a unique style, set of principles and methods known as academic writing in order to participate in the academic world. In addition, academic writing aims to communicate knowledge and present how an investigation is constructed, conducted, and completed.

As reported by Uzun and Huber (2002), academic writing with its typical conventions represents one of the most important genres in textual studies to make cross-cultural observations on the one hand and to recognize textual patterns of different languages on the other. Both native (NS, hereafter) and non-native (NNS, hereafter) writers must skillfully use academic language, enhance statements with credible and applicable facts, reference literature documents using required referencing conventions, and successfully insert a beginning, middle, and end, as well as many other academic learning conventions. As a result, they will be able to write dissertations appropriate to the mode of discourse and genre. An author's membership in the academic community can be damaged if he or she ignores these styles and practices, that is, if he or she fails to use the effective language of the appropriate discipline. A researcher uses linguistic elements of academic language, such as coherence, discourse markers (DMs, hereafter), figures of speech, and glossaries, to reach his audience, arouse their interest, illustrate certain problems, and support his arguments.

In any written or spoken discourse, there are DMs that connect multiple discourse segments (DS, hereafter) to the preceding text to create a unified system that makes it easier for the audience to understand the idea the author wants to express with the text. Similarly, DMs also represent discourse coherence by organizing information and representing an author's stance. Consequently, the range of DM use in a written text changes with the level of discourse competence.

As a result, L2 researchers must skillfully use a language and a written discourse simultaneously. Despite the fact that almost all of them take academic writing courses, both NS and NNS novice writers have difficulties in applying academic perspective and acquiring genre competence in writing (Chang, 2010; Hinkel, 2011). This difficulty may be due to the theoretical element of writing courses that aim to incorporate complex conventions of the discourse community (Masshadi, Manzuri & Dusti, 2011) into prescriptive writing techniques that are not practical and productive. Thus, almost all of these courses fall short of addressing the discursive features of academic writing (Hyland, 2004a; 2005a; Chang, 2010).

Ammon (2001:78) compares NSs and NNSs and claims that NSs of English have less trouble in using scientific language passively (in oral comprehension and reading) and actively (in speaking and writing) than NNSs and, thus, have benefits in communicative contexts requiring the use of English. It is simpler for NSs to come up with utterances and writings that conform to the existing rules of English. However, higher proficiency in language learning and producing linguistically appropriate texts are other dilemmas faced by NNSs.

Novice NNS writers want to gain a qualified identity and fraternize in academic society; on the other hand, they face linguistic and discursive problems, as well as the problem of not being native speakers and being on the margins of the English-speaking world (Connor, 2002; Hyland, 2005b). Their texts differ from those of natives in that they are usually ambiguous, underdeveloped, and unclear (Hinkel, 2002; Thomas, Wareing, Singh, Peccei, Thornborrow & Jones, 2004; Hinkel, 2011).

In this way, NS authors have the advantage of already having mastered the linguistic and grammatical elements as well as the logic and rhetoric of the English language. The only thing that NS authors may need to improve is the discipline-specific academic writing approach (Abdollahzadeh, 2011; Paltridge & Starfield, 2011). However, a NNS author must include all the points presented as advantages to the NS authors.

The above points bridge the gap between NSs and NNSs in academic writing. The current literature suggests that L2 writers' problems may be related to the elements of genre and fluency, as well as culture and educational background

(Gabrielatos & McEney, 2005; Hinkel, 2011; Masshadi et al., 2011). For novice L2 writers, especially those in social sciences such as anthropology, economics, education, geography, history, law, linguistics, political science, psychology, and sociology, it is a dilemma to make knowledge claims and have a practical writer's point of view to demonstrate credible writing.

The credible point of view relies essentially on the interpretive and argumentative potential of authors to formulate convincing statements that are appreciated by their disciplinary society. The rhetoric of the language used to present the data in the research study is as important as the research itself (Hinkel, 2011). The difficulty in expressing a practical point of view of the author may lead to inappropriate evaluation by the audience. Therefore, L2 researchers must strike a balance between modesty and assertiveness by using linguistic and discursive models.

Turkish researchers who speak English as a foreign language face the problem of being on the margins of the English-speaking world and have difficulty acquiring a qualified identity by taking part in their specialized societies. Against this backdrop, the writing practices and rhetorical elements of NSs, as well as the differences between native and non-native writing have recently gained prominence. (Gabrielatos & McEney, 2005; Abdollahzadeh, 2011)

## **1.2. Statement of the Problem**

The analysis of research articles, usually written by professional writers, is a common field in English for Specific Purposes (ESP, hereafter); yet, there has been a shift toward analyzing the progressive academic competence of NNSs at the postgraduate level, especially in their own cultural settings where English is not the national language. Writing an academic dissertation as an essential step on the path to membership in academic society has recently become a prominent area of research in genre studies (Hyland, 2004b; Cho, 2004; Gabrielatos & McEney, 2005; Li, 2006; Flowerdew & Li, 2007; Samraj, 2008; Masshadi et al., 2011; Nodoushan & Khakbaz, 2011; Parkinson, 2011).

Compared to NSs, NNS writers are the ones who face the most difficulties in academic writing, namely, adhering to traditional techniques of academic English

rhetoric and text organization (Hinkel, 2002; Thomas et al, 2004; Abdollahzadeh, 2011; Baştürkmen, 2009, 2011), a practical authorial perspective (Hyland, 1998, 1999, 2000, 2001, 2002a, 2002b, 2005b; Bondi, 2008; Blagojeviü, 2009), and less contextual language skills (Paltridge & Starfield, 2011), which are confirmed in the current literature.

There are a few studies (Buckingham, 2008; Uysal, 2008; Uzuner, 2008) that address the rhetorical and linguistic aspects of Turkish NNS writers' academic writing and the dilemmas they face in an English-dominated research world. Although speakers of English as an L2 outnumber native English speakers, the customs of academic writing in English are recognized as the basis for academics in academic writing. In this regard, the influence of native language on writing practices and the logic behind the arrangement of written text plays an important role in academic writing.

Accordingly, the present study investigates the classification of DMs in various abstract sections of MA theses and the consistencies in each section. In addition, a concordance program will be used to highlight the differences between NS and NNS writers in English in terms of DM use and rhetorical organization. Furthermore, the study attempts to investigate which typical DMs are used in particular ways by Turkish NNS and NS writers, focusing on exactly how these methods differ from each other.

### **1.3. Purpose of the Study**

This study attempts to examine DM use in the abstract sections of MA theses written by Turkish NNSs, considering their conceptual realization as well as their textual and metadiscursive features, and to compare them with the abstracts written by NSs. Fraser's (1999) taxonomy was chosen as a framework for evaluating DMs in NS and NNS abstracts because it provides a clear definition of DMs and explains what role they play in discourse.

Since DMs act as DS-linking and discourse structuring tools in the organizing process in abstracts, this study focuses on DM use in abstracts. First, the structural properties of DMs are examined, e.g., the exact order of DSs linking DMs, the

position of DMs in discourse and the types of DSs linked by DMs. In addition, the study examines the sense realizations that a DM enacts between the DS it connects, such as contrastive, elaborative, inferential, and temporal.

The investigation is referred to as textual metadiscourse analysis. The analysis shows the role of DMs in the organization of ideas by Turkish NNSs and NSs and examines and compares 200 thesis abstracts from two corpora. Therefore, this research is a large-scale study that uses corpus analysis to provide a more detailed explanation of the function of DMs at micro- and macrostructural levels.

The research aims to investigate:

1. What are the frequencies of DMs used in the MA thesis abstracts?
2. What are the similarities and differences between two learner corpora with respect to Fraser's DM categories?
3. What are the functions of DMs used in the MA thesis abstracts?

#### **1.4. Significance of the Study**

Even though there are many research on DM use by NNS learners, studies investigating DM use by NNS writers of English are not common. However, most of the existing research on writing in a L2 intends to explore the comprehensive text cohesion; therefore, they do not explicitly examine the constitutional patterns of DMs or investigate the role of DMs in argument development. In Turkey, in particular, there is a need for studies on DM use and the rhetorical organization of academic texts by students, while genre studies have figured prominently in the literature on language teaching and academic writing.

In this sense, this study can contribute to postgraduate academic writing by raising students' awareness and perceptions of the rhetorical society in which they want to participate in. NNS writers may not always be aware of how and in what ways their writing differs from that of NSs. In this sense, the results may help develop NNS writers' awareness of the rules of academic writing in English. Given the limited number of studies in this field, the study can also raise awareness of the differences in discourse between NNSs and NSs in terms of text organization and practical use



DMs.

Moreover, the study could provide some academic and pedagogical suggestions for material developers, curriculum designers, and instructors who teach academic writing to plan better learning environments by developing more professional curricula and materials. In addition, the findings should also be helpful to EFL teachers. It has been confirmed that the appropriate representation of discourse systems is efficient to show the contrasts between different languages and cultures. Thus, the results can help raise awareness of discourse elements and DMs in teacher education and enable teachers to make exercises on DMs clear and simple in textbooks and courses.

### **1.5. Limitations of the Study**

It is important to note that the DMs examined in the current study consist of a corpus of 200 MA thesis abstracts written by both Turkish NNS and NS writers. Abstracts from the social sciences, namely English Language Teaching (ELT, hereafter), Law, and Political Science, were selected and analyzed to neglect the effects of disciplinary differences on the results. Therefore, the results of the study cannot be generalized to other sciences.

Due to the differences between empirical and theoretical abstracts, only empirical abstracts were examined. For this reason, it is important to point out that what may be true for an empirical abstract is not necessarily true for a theoretical abstract.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

This section focuses primarily on the research areas that are the subject of the study. Since this study is interdisciplinary in nature, a corpus-based method will be used in the discourse analysis. Therefore, corpus linguistics and discourse analysis with their relation to second language acquisition research (SLA, hereafter) will be briefly described first. A description of corpus is given, and linguistic applications of corpora and their importance for ELT and SLA are discussed.

The approach through which corpus linguistic research incorporates discourse investigation will be explained in more detail in the section relevant to discourse research, while written discourse study will be the topic of the remainder of this section. Since discourse analysis involves linguistic tools that function in discourse coherence, the concepts coherence and cohesion will be clarified and various viewpoints on the cohesion of discourse will be concisely listed.

In addition, two main methods for analyzing DMs are listed in the last section. The research includes conceptual features and functions of DMs and these aspects are explained with special reference to an important scholar, Fraser (1999), whose findings influenced the study.

#### **2.1. Conceptual Framework**

Brown and Yule (1983) describe a text as the verbal record of a communicative event, while Halliday and Hasan (1976) refer to it as any spoken or written passage of any length that forms a unified whole. According to these interpretations, a text is not a group of irrelevant or uncoordinated sentences and it is not simply putting the parts together and making a whole; there should be a relationship between the sentences (Sadeghi & Kargar, 2014).

In this way, a written work demands coherence and cohesion, which are established through cohesive means, and this is achieved by formulating sentences through cohesive ties. Nevertheless, coherence is the semantic relationship that allows

a text to be understood and used, and is based on the author's intention, the audience's knowledge and expectations (Witte & Faigley, 1981). Thus, it could be argued that coherence is not as precisely defined as cohesion.

Therefore, the present study mainly examines the management of cohesion by cohesive means instead of coherence. Moreover, DMs are investigated as cohesive devices that shape a relevant text by linking sentences because in order to communicate appropriately in written texts, it is important for students to know cohesive and coherent devices (Sadeghi & Kargar, 2014). DMs are lexical items that are separate from sentence format, can take place independently in a sentence, tend not to represent a single word category, and occur more frequently in spoken discourse. In addition, discourse mode is a passage of many types that have a certain ability and make different contributions to writings such as narrative, definition, statement, instruction, and argument (Halliday & Hasan, 1976). Moreover, the paragraphs or sentences in a discourse are sorted as DSs. The paragraphs or sentences in a DS show precise functions with respect to that segment, and DSs perform specific roles with respect to the whole discourse.

Structural properties of DMs include grammatical categories to which DMs refer, the position of a DM in the discourse, types of DSs that a DM reveals, position and linear structure of these DSs in the discourse. On the other hand, the functions of textual metadiscourse in DMs include linking DSs to organize a coherent and cohesive discourse. DMs can reveal contrasts, concessions, complements, and temporal relations among the DSs they connect (Özhan, 2012).

A genre is a communicative phenomenon whose components share a particular set of communicative functions described by a discourse society (Swales, 1990). The communicative intention frames the discourse and influences the preferences of composition and form in all genres. Features such as style, function, and assumptions indicate if an example is a prototype of a specific genre. Accordingly, Bhatia (2004) offers a detailed description of the concept, arguing genre deals with the use of language in a conventionalized communicative environment to explain a particular group of communicative objectives of a disciplinary or social context that result in stable structural forms by imposing constraints on the use of

lexico-grammatical as well as discursive resources.

The macrostructure of a text describes the overall discourse structure. The macrostructure reflects the general context of an article, which cannot be described by individual sentences. Summaries are a method of conveying the macrostructure of a piece of writing. For example, the topic, theme, and main idea of an article are at the macrostructure level. In contrast, microstructure is the organization of independent sentences in a piece of writing (Van Dijk, 1980). It is the hidden propositional meaning of sentences and paragraphs in an article and the relationship between them in the order in which they appear. For example, words and phrases are joined together to form more complex systems at the microstructural level. In this sense, metadiscourse is a crucial tool which helps to simplify communication, make a point, extend readability, and connect with the reader (Van Dijk, 1980). It is the element of composition that specifically orders a discourse or represents the authors' opinion on the topic.

## **2.2. Corpus Linguistics**

The corpus phenomenon has recently expanded various areas of linguistic study. Research evaluating the use of language in academic dissertations by NSs and/or NNSs who have begun to use computational techniques has gained prominence (Liu, 2008; Shea, 2009), and corpus-based discourse evaluation has begun to become a significant field of inquiry for analyzing linguistic aspects or models in various settings and particular types of discourse.

Corpus studies offer brand-new information on various aspects of linguistic framework and application. They provide opportunities to study the practical use of language in a variety of original texts and extend the reach of previous studies. Before addressing the implications of corpus-based inquiry for linguistic studies, however, it is important to understand the terms corpus and corpus linguistic analysis.

### **2.2.1. Definition**

Different scholars have defined the term corpus in different ways. A corpus is defined as a machine-readable text of limited size selected to best represent the

language in question (McEnery & Wilson, 2001). According to Hunston (2002), whose concept is followed in this review, a corpus is a compilation of everyday language and a set of texts collected with the aim of learning a particular type of language non-linearly as well as qualitatively and quantitatively.

Corpora can be compiled according to criteria such as L1 background, speaker level, text or register type, written and/or spoken language, etc. and analyzed using concordance programs to identify language use in corpus examples, or they can be annotated by tagging words, DSs, or data analysis errors. The criteria for such errors apply to both NNS and NS corpora. Such a method thus brings a distributional perspective to linguistic analysis (Hyland, 2004b) by providing a systematic assessment of the frequency and manner in which an element occurs in a given context, focusing on its meanings rather than its intuitions.

Biber et al. (1998) further note such a method enables the discovery of standard patterns rather than intuitions. Corpora are usually collected for a specific purpose, and depending on the intent of the researchers, general or specialized corpora are used in corpus studies. General corpora allow researchers to study a broader range of spoken and/or written discourse from different genres and to fully represent linguistic patterns, while specialized corpora, consisting of a specific category of genres, are limited and collected for unique goals that represent the discourse and linguistic patterns being analyzed with more precise contextual details.

Since the study focuses on abstracts of Turkish NNSs and NSs, a specific corpus is compiled for the researcher's objectives. Hunston (2002) defines specialized corpus as a collection of texts intended to represent specific types of texts such as academic articles, essays, everyday conversations, textbooks, lectures, newspapers, etc., in order to analyze a specific type of language. Linguistic researchers usually compile their own specialized corpora to demonstrate the type of language under study, setting parameters to limit the type of texts included.

The use of specialized corpus has a number of advantages. First, it is considered useful for context-sensitive analyses (Connor & Upton, 2004), as it gives researchers a much more detailed insight into the contexts of the corpus in which such linguistic patterns emerge and serves particular purposes due to its limited sample

size. For this reason, qualitative research is better suited for specific corpus analyses. Second, the limited sample size allows researchers to easily conduct comparative and contrastive analyses, such as writing in NS and NNS corpora.

In addition, the limited size of such corpora is considered to provide a balanced and representative picture of a particular language domain (Nelson, 2010) and is particularly suitable for the pedagogical purposes envisioned by the analyst. A limited sample size, by the way, is usually in the range of up to 250,000 words, but can be millions of words, depending on what the study requires. Specialized corpora can thus vary in size, and there is no ideal limit to the texts compiled, since they are usually carefully compiled by the researcher for a specific reason and therefore reflect a particular form of genre in a reliable way.

In this regard, genre research with small corpora is worth investigating because it provides a wealth of important information for language teaching and other purposes (Ghadessy et al., 2001). Given the purpose of the study, computerized discourse corpora also greatly enhance metadiscourse analysis, as the use of such corpora provides more accurate and systematic ways of classifying regularities in linguistics. Thus, corpora analysis is intended to provide a solid foundation for discourse studies based on qualitative and quantitative approaches to analyze frequency and discover particular patterns of language use in particular contexts.

Biber et al. (1998:23) shows that corpus-based approach has four characteristics:

1. Corpus-based approach is experimental and investigates major motifs in natural writings,
2. Corpus-based approach uses a broad and rational set of natural writings, called a corpus, as the basis for research,
3. Corpus-based approach uses computers extensively for research, employs automated and interactive methods both,
4. Corpus-based approach relies on both quantitative and qualitative methods of analysis.

Researchers use concordance programs to identify specific linguistic elements

in specific contexts in a dataset based on a set of spoken or written texts in the form of concordance lines. Concordance programs are ideal for corpus-based linguistic studies because of their high generalizability and reliability, as well as their ability to analyze large amounts of linguistic data. Because they provide access to the information sought, such as analysis of the frequency and particular use of certain language elements in corpora that are functionally mapped with the surrounding context, these programs are considered powerful tools. For example, concordances are important for the study of discourse features because they present in concordance lines all occurrences of a discourse element in its particular surrounding context, giving authors access to its broader context to define its functions and potential ambiguities.

### **2.2.2. Linguistic Areas of Corpora Use**

Corpus-based analysis addresses a number of problems in other areas of linguistics. Thus, studying register differences and genre research is a different area of inquiry in which corpus-based studies can be conducted, since corpora encompass an extended scope of genres and registers (McEnery, Xiao & Tono, 2006). The goal is to illustrate in what way corpus-based analysis leads to the development and application of information in the above fields.

The differences between spoken and written discourse, informal and formal registers, different genres and dialect differences, and language can be explored through corpus analysis. Differences in a language consist of the national language, which is consistent with the educational intentions, dialects, which are described geographically, sociolects and idiolects, which are specific to certain speakers, and jargons, which are specific to certain contexts.

Corpus-related studies could also be applied to linguistics in educational contexts (Biber et al, 1998). The findings of the research could be employed in the design of materials and exercises for teaching, curricula, and teacher training, as corpus analysis helps to support learners with vocabulary currently used in various target environments. Interlinguistic research also benefits from the study of the corpus. The differences between NNS data from different backgrounds and NS data provide useful insights into learners' interlinguistic development (Ghadessy et al,

2001). Such studies classify the overuse or underuse of individual linguistic elements and reveal transfer or interference from the L1. NNS corpora can also be used to study the structure of learning of numerous linguistic elements. Academics can examine the discourse frame of the chosen discourse form, lexical items, and grammatical features found in different discourse forms and discourse approaches of the community in their studies.

Another area where corpora are used is discourse analysis, where it is important to examine and compare a variety of different discourse forms such as business, law, media, and medicine (Nelson, 2010). Corpora contain clues to the distribution of the terms sought in such efforts and reveal information not evident in specific writings.

### **2.3. Discourse Analysis**

Discourse analysis is one of the areas of linguistics that takes advantage of the study of corpora because it contributes to a better awareness of discourse. The use of corpora to uncover linguistic structures used in discourse structures, which is also one of the main goals of this research, involves the incorporation of corpus and analysis of discourse. The meaning of the term discourse and the functions of discourse analysis are discussed to explain these two areas of research that contribute to language awareness.

#### **2.3.1. Definition and Purpose**

Discourse research is an important area of analysis in various fields and has been treated from different points of view. Therefore, the word *discourse* has been used in numerous fields in different forms. In linguistics, according to Baker (2006), discourse is referred to as either the language above the sentence or above the clause (Stubbs, 1983) or language in use (Brown & Yule, 1983). He goes on to state that the term discourse is also often extended to various forms of language use or topics such as political discourse, colonial discourse, media discourse, and environmental discourse.

Schiffrin, Tannen, and Hamilton (2001:56) describe discourse analysis as the



result of analyzing language use, examining linguistic structures, and social patterns and cultural beliefs related to communication and language. Analyzing the use of language addresses linguistic frameworks, for example, the arrangement of phrases and clausal systems and examines whether languages exhibit structural variations with similar meanings. However, the study of linguistic structures focuses on the order of utterances and/or sentences and how efficiently they are arranged.

The study of social patterns and cultural beliefs related to language and/or communication focuses not on the linguistic description of texts but on the social construction of discourse. The goal is to comprehend the extensive social dynamics of discourse, and to this end the researcher interviews, analyzes, and interacts with individual authors and audiences. According to Celce-Murcia and Olshtain (2000), the word *discourse* traditionally has two meanings: a system of coherent language consisting of more than one sentence in formal descriptions of the concept, while functional descriptions define discourse as language in use (Brown & Yule, 1983). However, both descriptions are rejected by critics because they are inadequate. Critics claim that a discourse can only include a few words, while the concept of language in use is widely used and accepts that a discourse is an instance in which elements of language are used (Celce-Murcia & Olshtain, 2000). They argue that the most appropriate description is that combines the two above descriptions. Therefore, a discourse is defined as an occurrence of written or spoken language which has definite internal relations of context and structure such as cohesion and words which coherently describe an external communicative objective or intention and a particular audience (Celce-Murcia & Olshtain, 2000).

Douglas (2001), describes discourse as the language employed by people in a speech society, and proposes a different discourse definition that combines style and purpose. He also states that discourse research analyzes both the structure and role of language by examining written and spoken discourse both. As reported by Trappes-Lomax (2004), the approach of researchers of discourse to a language is the same as that of the members of a linguistic society who use that language in their everyday lives.

Discourse analysts emphasize linguistic structures in use and the contexts

associated with linguistic patterns such as participants, purposes, intentions, and outcomes. However, this awareness is conscious, intentional, and methodical, in contrast to the awareness of people in their daily lives. Trappes-Lomax (2004) describes discourse studies as the linguistic analysis from a communicative point of view and/or communication from a linguistic point of view, noting that this description mentions topics such as language above the sentence or above the clause, language in circumstantial and sociocultural contexts, and language in communication and language in use. Discourse is thus a dynamic unit of inquiry in linguistics.

Mautner (2009:34) explains the scope and types of discourse as a linguistic unit:

There have been corpus-based contributions to the discourse of ageing, courtroom discourse, political discourse, as well as inquiries into business English, newspaper discourse and several corpus-informed approaches to metaphor analysis.

It notes that a decent amount of ground has been covered and significant theoretical and methodological groundwork is laid at the intersection of corpus linguistics and discourse analysis. Moreover, this study describes academic writing as a particular form of discourse.

Thus, Hyland (2009:22) lists some of the basic characteristics of academic discourse in this context:

1. Academic discourse identifies the ways of thinking and using language that exist in the academy,
2. Academic discourse has evolved as a means of financing, knowledge building, and evaluating,
3. Academic discourse does more than describe research that plausibly reflects an objective reality: it works to transform academic expertise into research findings or armchair reflections,
4. The academy cannot be isolated from its discourses and could not exist without them.

Within discourse analysis there are several areas of research that have developed into distinct fields of study. Four such areas are discussed in Celce-Murcia and Olshtain (2000). These fields are arrangement of facts, coherence, cohesion, and interaction. Text cohesion is the product of cohesive relations which uniquely combine every statement in a work. Halliday and Hasan (1976) treat these cohesive relations more extensively than grammatical ones such as references, ellipses, substitutions, and conjunctions, as well as lexical links.

Cohesion is an important feature of academic writing because it ensures that a text holds together so that the audience can follow the main idea and/or themes. Another element of discourse that is studied in discourse research is the coherence of a text. Sentences or utterances stay together in a coherent text and link to each other. Discourse analysis examines the solidarity and relevancy of a work. Coherence, like cohesion, is an important element in successful academic writing because without cohesion, the audience will not be able to understand the main ideas of a text.

### **2.3.2. Discourse Analysis in Corpus Linguistics**

Discourse analysis has functions in numerous areas. Nonetheless, the main research area of this thesis is corpus linguistics. Therefore, it is also important to mention how discourse analysis is represented in the corpus analytic method. Teubert (2005) describes discourse using the corpus linguistic approach. He further claims that discourse establishes dissertations written within a discourse society for corpus linguistics. Corpus linguistics makes universal and precise claims about discourse as a function of corpus study.

Accordingly, Alba-Juez (2009) frequently indicates the purpose of corpus in discourse analysis, noting discourse researchers are concerned with the original use of structures in writings that occur spontaneously. Once written and explained, these natural texts are defined as a corpus that forms the basis of the research. Discourse researchers therefore necessarily follow a corpus-based method in studies. Conrad (2002), in the literature review of her study of techniques on discourse-level phenomena within corpus linguistics, states that corpus-based research contributes to knowledge about social and textual influences that affect language preferences, and thus contributes to our understanding of discourse.

In corpus-based research, she summarizes four approaches that are appropriate for discourse analysis. The first method involves the study of features related to the use of a language element. This is to explain influences that shape speakers' preferences for different discourse conditions (e.g., Yasuko, 1989). The second method is to focus on a language feature and decide how to apply it in discourse (e.g., Milton & Tsang, 1993). The third method focuses on the variety of languages in a study (e.g., Granger & Tyson, 1996). For example, learning English scientific jargon or spoken science language are studies that focus on different sides of a language. The fourth method involves analyzing the characteristics of dissertations to decide how they relate to improving discourse (e.g., Cho, 1998). Several dissertations are examined to identify common structures of use. Corpus-based research discusses these primary areas of discourse analysis. Baker (2006) notes that it is quite difficult to be completely unbiased in a study, but the use of a corpus limits the researcher's bias to some degree.

This is because in a corpus analysis, the data are not selected to confirm the current awareness or implicit assumptions of the audience. Researchers are less picky about data because they are not experimenting with a limited number of selected articles, but with a corpus of thousands of dissertations. Nevertheless, corpus-based analysis is a valuable approach to the study of discourse because discourse is incremental (Baker, 2006).

A discourse may be organized with an utterance or a sentence, while it is usually hard to determine if the discourse is characteristic or not. In order to understand this, researchers need to collect various examples of discourse construction that confirm this. A corpus-based approach can reveal words that occur repeatedly in the original discourse, and when such a practice is standard and represents a more practical world-view (Baker, 2006). A further benefit of conducting corpus-based studies for analyzing discourse is triangulation. Clearly, employing numerous approaches of investigation is more useful in research than relying on just one. In small-scale studies, triangulation with a corpus helps in testing the validity of theories and validating results.

### **2.3.3. ESP and EAP**

According to Belcher (2006), defining ESP is not easy, although it has a long history dating back to the 1960s. Despite this challenge, several scholars have attempted to create a description of ESP (Stevens, 1977; Coffey, 1984; Hutchinson & Waters, 1987; Dudley-Evans, 1998; Paltridge & Starfield, 2013). Paltridge & Starfield (2013) define ESP as the teaching and learning of English as a second or foreign language in which the learners' goal is to use English in a specific domain, indicating the different purposes that language learners are trying to achieve considering their different needs.

Stevens (1977) suggests considering learners' needs and content when defining ESP. Accordingly, ESP is indeed a pedagogical style in which the subject matter is appropriate for different learners to achieve their different goals. Similarly, Coffey (1984) and Hutchinson and Waters (1987) emphasize the importance of learners' goals in ESP. Coffey (1984) argues that practicality is at the heart of language teaching in ESP and that learners must be thoroughly analyzed to achieve this.

Hutchinson and Waters (1987) point out that learners' goals are achieved through the communicative purposes of a language. The functional features of a language are the key, in other words, “tell me what you need English for, and I will tell you the English that you need” (Hutchinson & Waters, 1987:8). There are a few basic distinguishing characteristics that set ESP apart from other courses: needs-based, pragmatic, cost-effective, and functional (Belcher, 2006). In other words, needs assessment is a fundamental characteristic that is also used in defining the term ESP. Belcher (2006) points out the importance of needs assessment because it is the first step to be taken and all subsequent course design decisions are based on it. Moreover, Coffey (1984) describes that the pragmatic features of ESP are a direct result of the needs analysis that contributes to making the course design a useful tool for language acquisition. However, EAP is described as methodical learning and teaching of English through understanding and practicing a range of oral and written discourse practices to achieve the required level of communicative competence (Paltridge & Starfield, 2013). Hyland (2016) defines EAP as a style of language

instruction that aims to meet specific communication needs of students in particular academic groups while improving them academically. Similarly, according to Flowerdew & Peacock (2001), EAP is English language teaching aimed at collaborating academic communicative practices in English. All in all, EAP provides students with many opportunities to improve their success in their academic subjects, their communication and comprehension skills, as well as assessing student needs, designing curricula, and creating various materials.

#### **2.3.4. Discourse Competence**

In recent decades, SLA has evolved from merely learning grammar and vocabulary to learning how to communicate effectively. Consequently, in linguistic jargon, the objective of a linguistics course must be to achieve both linguistic competence and communicative competence as a broader concept. Communicative competence is the concept coined by Hymes (1966) in contrast to Chomsky's (1965) notion of linguistic competence. Communicative competence is the instinctive practical insight into and mastery of language conventions.

As stated by Hymes (1972:277), speakers achieve L2 acquisition not only grammatically, but also in an appropriate way. They acquire the competence to know what to talk about in what way, when to speak or not, where, and with whom. To sum things up, speakers will be enabled to achieve a collection of speech acts, to participate in speech occurrences, and to analyze their performance by others. Indeed, a speaker must learn linguistic use both accurately (linguistic competence) and correctly (communicative competence).

This underscores the importance of learning the necessary grammar of an L2, as it is one of the four elements of communicative competence. Traditionally, discourse competence is defined as the concept that concerns the ability to understand and convey a message in a language. An assessment of discourse competence can provide information about how well a speaker can communicate in a particular context. The term *discourse* refers to conversations involving multiple parties.

Discourse competence is a skill that indicates the ability to use pragmatic, sociocultural, and textual parts of information critically, efficiently, and appropriately

while describing and shaping each specific genre of discourse. Thus, it is a multidimensional ability that has three basic dimensions (Hymes, 1971: 269-293):

1. ***The pragmatic dimension:*** to be able to relate a discourse to participants, their goals, place and time
2. ***The sociocultural dimension:*** to be able to understand and interact with the goal and intentions of a discourse, and the cultural and social capacity it involves
3. ***The textual dimension:*** to be able to know how a discourse is constructed and how its typical linguistic elements (grammar and vocabulary) are used to play a particular cultural, pragmatic and social role.

Many scholars claim that there is also an aspect of timeliness in the analysis of discourse capacity or proficiency level (Hymes 1971, Canale 1983, van Ek 1986, Celce-Murcia 2007). Learners who are at the top of the spectrum will be enabled to communicate efficiently and in time, that helps them to contribute their opinions to an ongoing discourse. On the other hand, others who have less discourse competence may feel overwhelmed with these tasks. All of this helps linguists study how learners build linguistic skills over time or analyze their progress.

### **2.3.5. Academic Writing**

Academic writing has always been the most important focus in academia because it is a fundamental tool for sharing and expressing the information gained in various fields of study. Academic writing helps learners and students to evaluate, communicate, think analytically, and focus on methods and procedures. There are two methods of scientific writing. The first is positivist and states that academic dissertations must be impartial and unbiased, and sets strict rules for anonymity. The second is post-positivist and promotes the existence of authors in the text. It is quite common for instructors to recommend that their students leave their personalities at the door and take an impartial role (Hyland, 2002b) when it comes to academic writing. In the last decade, the post-positivist method has gained popularity among many scholars (Clark & Ivanic, 1997; Johns, 1997; Hyland, 2002b; Casanave, 2003; Hyland, 2005a). As Hyland (2002b) notes, the positivist method oversimplifies a more complex picture.

However, academic writing is accepted as a kind of discipline-specific style, suggesting that all techniques accept and express reality in different ways. While positivist research in the natural sciences such as mathematics, chemistry, biology, physics, and astronomy takes a less objective approach, authors of social sciences and humanities prefer an identity which is more personal. However, students and even some faculty have misinterpretations about the rules of academic writing of their own techniques, indicating inadequate genre competence.

Academic writing is the representation of knowledge in a written text (Hyland, 2005a). At the same time, it is the demonstration of an author's personal identity. Researchers attempt to let data speak for themselves, but there must be a topic about which the data are discussed. When data are discussed, only then do they develop into knowledge. In other words, the data cannot speak for themselves; the author must be able to discuss and comment on the data obtained (Hyland, 2005a).

### **2.3.6. Differences between L1 and L2 Writers**

According to Canale and Swain (1980:73), students and scholars must have grammatical (understanding of grammar, vocabulary, and language structure), discursive (understanding of genre and the rhetorical models that shape it), sociolinguistic (ability to use language correctly in a variety of ways to empathize with readers and achieve an acceptable authorial stance), and strategic competence (ability to use a range of communication techniques) to write effectively in English.

Hyland (2003) lists the possible factors that influence the competence and success of L2 writers. Different learning experiences and personalities affect outstanding L2 writing. An individual's interests, attitudes, and abilities are among the factors that are important to writing competence, along with the cultural schemas, practices, and attitudes of the community in which they are members.

Silva (1997) explains the methods L2 writers use to overcome the challenges they face. NNSs writing in a L1 have a distinct linguistic foundation than NSs of English. Even though most NSs possess a vocabulary of several thousand words and an innate capacity to master English grammar when they start writing in their L1, NNSs usually have the burden of learning writing and learning English



simultaneously. Mostly due to this developmental element of SLA, studies often turn up that L2 writing is less effective than those of NSs of English.

Being a successful L1 writer does not guarantee success in L2 writing; it cannot even be considered an advantage. Successful L1 writers may not be able to use the sophisticated cognitive skills and metacognitive strategies they employ in the L1 when writing in the L2. L2 writers have difficulty with structuring discourse, such as ideational continuity, revision, and review, compared to L1 writers. This may be due to either developmental limitations of L2 writers or the transfer of rhetorical paradigms to L1, or both.

Hinkel (2011:30) presents discourse features (macro properties) of L2 writing based on previous studies. According to his research, L2 writers structure and organize discourse moves differently and take a conceptual and logical approach to argumentation, exposition, narrative, persuasion, and rhetorical development. Moreover, they sometimes fail to consider counterarguments and anticipate audience reactions, and they ground arguments and statements in personal views and beliefs rather than more detailed information. In addition, L2 writers often leave their arguments unsubstantiated and list explanations and ideas differently: The norms of rhetorical discourse structures are usually inconsistent with those found in genres published in English. Moreover, they usually rely on personal views and contain little information based on facts in both argumentation and presentation, and usually take approaches based on morality and emotion in argumentation and persuasion.

As a result, L2 writers produce shorter texts with little detail. These differences affect the authenticity and persuasiveness of L1 writing. The logic and rhetorical structure of L1 might hinder the perspective of L2 writers, no matter how good they are at writing in L1. As for linguistic features (micro properties), Hinkel (2011:35) claims that L2 writing has less variety and complexity of lexicon and less lexical density, lexical precision, and more frequent misuse of vocabulary. Shorter sentences and clauses with fewer words per clause are used, and content words such as nouns, verbs, adjectives, and adverbs are repeated more frequently. In addition, L2 writing uses fewer words with two or more syllables, more colloquial and high-frequency words (e.g., good, bad, ask, talk), fewer modifying and informative

prepositional phrases, and a higher rate of misused prepositions. Awareness of these differences could help raise awareness of writing in the L2. Writing in L2 requires explicit instruction because writers do not figure out the differences by reading the text.

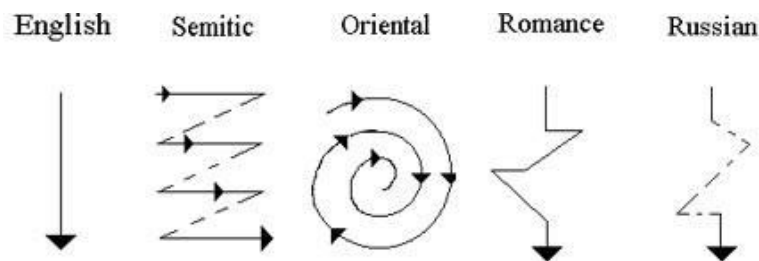
#### 2.4. Contrastive Rhetoric Studies

Kaplan (1966) first introduced the notion of contrastive rhetoric (CR, hereafter) in his seminal study focusing on the management of paragraphs in essays by L2 writers. He describes five examples of paragraph improvement, each representing different rhetorical preferences.

Following this analysis, Kaplan (1966:15) suggests English expository essays develop linearly, Semitic languages employ aligned coordinate clauses, Oriental languages take a roundabout approach and come to the point at the end, in Romance languages and in Russian, essays employ a degree of digressiveness and extraneous material that would seem excessive to a writer of English.

The examples of rhetorical frames are shown in Figure 2.1 to illustrate the models of thought in different classes of speech (Kaplan, 1966):

**Figure 2.1. Types of Rhetorical Structure**



Dissertations by Arabic, Chinese, Indonesian, Japanese, and Korean L2 authors sometimes appear ambiguous and roundabout to NSs, the findings suggest. Kaplan's study focused on student texts in different languages and uncovered their differences from a cultural perspective. The results of Kaplan's study led to the creation of CR, a modern linguistic field of study. Since the introduction of rhetorical tendencies by Kaplan (1966), various CR researches have been conducted on written texts in different languages, using different approaches. Such studies have shown

various patterns of rhetoric through languages (Hinds, 1983, 1987; Ostler, 1988; Leki, 1991, 1992; Hinkel, 1997; Martin, 2003). Connor (2002), following Kaplan's work, categorizes the research into four areas with common basic goals.

Connor's CR analysis and key objectives are presented in Table 2.1 (Shim, 2005):

**Table 2.1. Historical Development of Contrastive Rhetoric Studies**

<b>Domain</b>	<b>Purpose</b>
<b>Classroom-based studies of writing</b>	Investigate cross-cultural trends in process writings, cooperative reviews and meetings with students and teachers.
<b>Contrastive genre-specific studies</b>	Study academic and professional writings.
<b>Contrastive text linguistic studies</b>	Analyze, compare, and contrast in what ways texts were developed and described using written discourse analysis methods in different languages and cultures;
<b>Studies of writing as a cultural and educational activity</b>	Investigate the impact of literacy on L1 and culture and analyze the development of second L2 literacy.

The first contrastive studies usually focus on the analysis of learners' writings, as can be seen from the classification of the relevant literature. For example, Ostler (1988) examined essays with rhetorical organizational patterns. Data were collected from a total of 160 essays written in English by freshmen and Arabic, Spanish, Japanese, and English NNSs. It was found that Arabic used parallel structure (representation of concepts in distinguishable words) more frequently; Spanish used longer and more detailed sentences; Japanese did not apply elaboration at the syntactic level; and English used nominalization and passive voice more frequently compared to other language classes.

Moreover, the Arabic had detailed introductions but less clear conclusions, while the Japanese deviated from the original topic in the latter parts of their essays. Similarly, Hinkel (1997) examined techniques and indicators of indirectness by analyzing writings by 30 NSs and 120 NNSs in English. The NNS community is composed of students from China, Japan, Korea, and Indonesia, many of whom were

educated in Confucian, Taoist, and Buddhist societies. The results of the study suggest that Chinese, Indonesian, Japanese, and Korean NNSs use indirectness such as rhetorical questions, ambiguity, repetition, and uncertainty more frequently than NSs, which may partly explain the concept that dissertations by L2 writers from Asia sound ambiguous and uncertain to NSs. Recent developments suggest that it is useful to know readers' intentions in order to identify genres tailored to audiences (Ostler, 1988; Hinkel, 1997).

It would be beneficial to adhere to the norms and expectations of a discourse community. Therefore, it must be carefully considered in multilingual and bilingual settings and in ELT classrooms to gain the greatest advantage. In the current literature, there is no such study in Turkish.

## **2.5. Discourse Markers**

The study of DMs has largely taken over the pragmatic literature in the last two decades. DMs have been considered from different points of view and techniques, e.g., as a signal of linear connection between sentences and utterances and for identifying coherence between DSs. Moreover, in addition to their local use, DMs can also indicate interrelations by linking paragraphs between clauses and sentences. Sadeghi and Kargar (2014) define DMs as lexical items and that they connect segments in discourse.

Moreover, Zarei (2013) describes them as words or phrases used within the language system to establish relationships between subjects or grammatical units in discourse, as in the use of words such as *because*, *therefore*, and *then*. On the other hand, Sadeghi and Kargar (2014) believe that DMs are too complex to clearly describe and represent their role, as they may vary in parallel with the scholar's point of view. Therefore, in addition to discourse marker, various terms are used such as *comment clause*, *connective*, *continuer*, *discourse/pragmatic connective*, *discourse-deictic item*, *discourse operator*, *discourse/pragmatic particle*, *discourse-shift marker*, *discourse word*, *filler*, *fumble*, *gambit*, *hedge*, *initiator*, *interjection*, *marker of pragmatic structure*, *parenthetic phrase*, *pragmatic expression*, *pragmatic marker*, and *reaction signal* (Brinton, 1996:34).

All the above distinctions illustrate that DMs are studied for different linguistic methods. Moreover, DMs are one of the most ambiguous phenomena in linguistics (Polat, 2011). Fraser (1999) proposes DMs establish the relationship between an element of the DS to in which they belong, called S2, and an aspect of an earlier DS, called S1.

Brinton (1996:33-34) outlines the characteristics of DMs as follows:

1. Because they are informal and spontaneous, they are usually used in oral discourse. In written discourse, however, the structure and reasons for their use may be quite different.
2. In informal or oral discourse, they may be used more than once in a sentence.
3. Despite their frequent use in spoken language, they must be used appropriately and carefully in written and formal speech. They are usually placed at the beginning of a sentence but may be placed in the middle or at the end.
4. Translating DMs into another language is extremely difficult because of their semantic shallowness (Stubbs, 1983).
5. DMs make it easier for speakers and writers to establish coherence and cohesion (Brown & Yule, 1983).

In addition, Zarei (2013) describes some characteristics of DMs such as: connectivity, optionality, non-truth conditionality, weak clause association, literality, morality, and multi-categoriality.

Brown and Yule (1983) present the taxonomy of types of DMs coined by Halliday and Hasan (1976:237) as follows:

1. **Additive:** and, or, furthermore, similarly, in addition
2. **Adversative:** but, yet, however, on the other hand, nevertheless
3. **Causal:** so, consequently, for this reason, it follows from this
4. **Temporal:** then, after that, an hour later, finally, at last

Halliday and Hasan (1976:238-239) present each class with an example to simplify the perception of taxonomy:

(1) For the whole day he climbed up the steep mountainside, almost without stopping.

(2) **And** in all this time he met no one. (*additive*)

- Additives such as *and* function structurally by contributing to the presupposed item.

(3) **Yet** he was hardly aware of being tired. (*adversative*)

- The adversative *yet* acts to specify “contrary to expectation” (Halliday, 1976:51).

(4) **So** by night time the valley was far below him. (*causal*)

- Causal conjunctions such as *so* functions in order to underline the result, reason and purpose.

(5) **Then**, as dusk fell, he sat down to rest. (*temporal*)

- The temporal *then* tie sentences together by specifying sequence and time.

Halliday and Hasan (1976) include the DMs (*and, yet, so, then*) in the above examples, which certainly represent the common linked relations and provide a simple way to approach a text to understand and evaluate cohesion. As Halliday and Hasan (1976) suggest, there is no single, unambiguously correct inventory of the types of conjunctive relations; various classifications are possible, each of which would emphasize different aspects of the subject. Therefore, two other categories of DMs proposed by Quirk et al. (1985) and Fraser (1999) are summarized.

Quirk et al. (1985:45) categorize DMs according to their role and present them as follows:

1. **Appositive:** is used to express the subject of the preceding utterance (*for example, in other words, namely, that is, thus*).
2. **Contrastive:** presents either contrasting words and/or phrases to the previous utterance (*again, anyhow, anyway, better, by contrast, however, in spite of, instead, more precisely, nevertheless, on the contrary, on the other hand, rather, still, that said, worse, yet*).

3. **Inferential:** states a conclusion based on logic and hypothesis (*else, in that case, otherwise, then*).
4. **Listing:** is used to give a list a certain structure or direction (*by the same token, to conclude, correspondingly, equally, finally, first, first of all, firstly, in the first place, in the second place, last of all, likewise, on the one hand, second, secondly*).
5. **Resultative:** concludes and summarizes the utterance and prepares the basis for further conclusions (*accordingly, as a consequence, as a result of, hence, of course, so, therefore*).
6. **Summative:** precedes an utterance, which must be considered in the context of all the preceding utterances (*above all, also, altogether, further, furthermore, in addition, moreover, on the top of it all*).
7. **Transitional:** is used to draw the audience's attention to a different point or a temporarily akin occurrence (*by the way, by the way, eventually, incidentally, meantime*).

### 2.5.1 Fraser's Taxonomy of DMs

Fraser's (1999) taxonomy differs from that of Quirk et al. (1985) in terms of naming and numbering of classes as shown in Table 2.2.

**Table 2.2. Analytical Framework for Fraser's (1999) Taxonomy**

DM Type	Function
<b>Contrastive</b>	indicating comparison or contrast
<b>Elaborative</b>	elaborating meaning with examples paraphrasing an initial discourse unit
<b>Inferentials</b>	indicating addition indicating cause and effect
<b>Temporals</b>	ordering discourse-internal units

In addition, he introduces two other subcategories which include *after all*, *because*, *for this/that reason*, *since* which are called reason/causative markers. The other subcategory includes topic-relating markers such as *incidentally*, *to return to my point*, *with regards to* (Fraser, 1999).

The following are examples of every subclass presented by Fraser (1999).

- (6) I was very tired. *Nevertheless*, I kept on working (*Nevertheless* demonstrates that two sentences contradict each other because they introduce different views).
- (7) The teacher doesn't like Karen because she's lazy. *Furthermore*, she has no sense of responsibility (*Furthermore* shows the quasi-parallel relationship between the two sentences and contributes further meaning to discourse).
- (8) Antalya is a coastal city. *Thus*, it has many beaches (*Thus* introduces a conclusion for the first sentence).
- (9) The children are hungry, *because* they haven't eaten anything since breakfast (*Because* presents the purpose for the first sentence).
- (10) I am glad you finished your homework. *To return to my point*, I'd like to ask you how your day was (*To return to my point* operates the discourse employing a topic-relating DM).

Fraser (1999) notes that DMs have been analyzed under various terms, and although scholars accept DMs as lexical items that refer to DSs, they usually disagree on their meaning and purpose. He describes DMs as a group of pragmatic indicators that appear as an element of a DS but are not involved in the propositional substance of the conveyed input and interpretation of a sentence.

Fraser (1999:831) proposes a simple description of DMs as lexical phrases derived mainly from the syntactic categories of adverbs, conjunctions, and prepositional phrases. They indicate a relationship between the perception of the DS they present (S2), and the preceding DS (S1). They have a central context that is procedural rather than conceptual, and their more particular interpretation is "negotiated" by the conceptual and linguistic contexts both.



DMs belonging to a pragmatic marker category mark a relationship between DSs (one of which contains a DM and the other is the corresponding discourse component).

Fraser (1999:942) neglects to include several DS-initial elements to DM categories that fail to imply a relationship between two DSs, for example *frankly* in (11) and *well* in (12) below:

(11) She's in a pretty tough spot at the moment, but *frankly*, I don't care.

(12) I didn't study for the exam. *Well...* I think I'll fail.

Fraser (1999:945) notes there is no consensus on the characteristics and categorization of DMs. He outlines the taxonomy of DMs, which includes elements of DMs, as follows. First, DMs are grammatical, so nonverbal expressions cannot be classified as DMs. Second, DMs do not support the linguistic connotation of the sentence to which they belong (S2) and have no function for the truth circumstance of S2. Moreover, DMs often present coherent DSs and such DSs do not include only one utterance.

S2 (the DS, incorporating DM and S1), like the previous DS, may contain many DSs. Moreover, DMs exhibit one of four classes of relations between DSs: contrastive, elaborative, inferential, and temporal. In addition, DMs belong to one of five groups in syntax: adverbs, coordinate conjunctions, prepositional phrases, prepositions, and subordinate conjunctions (Fraser, 2009). Finally, the phonology and morphology associated with DMs are not highly generalized.

This study follows Fraser's (1999) description and categorization of DMs and will further address it. The coherence-based approach, which is one of the most important approaches to the study of DMs, is discussed in the following section.

#### **2.5.1.1. Coherence-Based Approach**

DMs function as important elements for understanding texts by signaling the relations of coherence between discourse systems. In particular, the perception of a writing relies on recognizing the relations of coherence between the systems of a dissertation. Scholars of coherence-based communities assume that dissertations must

be coherent and that understanding the relationship between elements of coherence is necessary for comprehension (Schoroup, 1999).

Specifically, scholars believe the most essential characteristic of dissertations is coherence and that coherence may be studied in terms of specific coherence relationships which connect sentences in a piece of writing. For example, the links of coherence, such as cause, chain, proof, and consequence, can be identified in an article, which contribute to the fact that different parts of a text belong together and the audience's understanding of the entire article depends on them.

In the coherence-based method, DMs function as tools for organizing and shaping knowledge in spoken or written texts. Fraser (1999) defines segment-introducing phrases like *frankly*, *obviously*, and *stupidly* as annotative pragmatic markers but not DMs because they do not connect two DSs but reveal an observation of an independent input that relates to the latter DS. For the same reason, Fraser further neglects expressions like *even*, *only*, *just*, and pause markers like *well* and *ah* from his categorization of DMs. His point is illustrated by the following example (2006:2):

- (13) *Frankly*, I'm not sure how we can do the presentation now that we lost our flash drive.

Fraser (1999) claims DMs are not grammatically unified as a category. Thus, they may act like adverbs (*anyway* and *however*), conjunctions (*although* and *if*), and prepositional phrases (*above all* and *on the contrary*). That is, DMs vary in grammatical category, but they share a common role. Moreover, DMs are linguistically subordinate conjunctions and therefore cannot constitute independent clauses. Fraser (1999) conveys DMs provide a link between the meanings of DSs, which they present (S2), and the preceding DS (S1), given their role in a sentence.

DMs are partly responsible for discourse coherence through showing discourse relations between units of expression. They not only signal connections between linear DSs, but can also connect DSs they present to all other previous DS. Lastly, Fraser (1999) claims DMs possess a central and functional message. Thus, it is possible to remove DMs without affecting the propositional content of the

connected DSs. However, the audience has no clue about the relationship between two DSs once they are removed. Thus, the central interpretation conveyed through DMs presents the audience knowledge about in what way to perceive a word or utterance. DMs function as practices that provide the audience with information that reveals S2's understanding versus S1's understanding (Fraser, 1999). The structural context expressed by DMs provides coherence to a text. In this study, the coherence-based method is used because it provides insight into the function of DMs and coherence in discourse (Fraser, 1999). However, the elements of coherence do not necessarily ensure the interpretation of the discourse. A discourse could be accepted as incoherent despite the DMs signaling the author's specific discourse relation.

### 2.5.1.2. Structural Characteristics of DMs

This part deals with the characteristics of DMs at the macrostructural level of discourse, taking into account their conceptual recognizability. Although there are different methods of analyzing DMs and different DM definitions, many scholars who study DMs agree on the structural features of these grammatical elements, their structural categories, their position in discourse, and their sequential existence. DMs establish a category of pragmatic markers that occur in each language group. They show the relationship between the DSs to which they belong and the preceding DSs. Fraser (1999) argues that any DS, representing a DM, can be either antecedent, correspondent, or nonadjacent.

Even though the category of DMs is practically described as lexical phrases indicating a link between two DSs, they all belong to one of five syntactic classes (Fraser, 2009:11):

1. **Adverbials:** besides, consequently, further(more), however, still, then
2. **Coordinate conjunctions:** and, but, nor, or, so, yet
3. **Prepositional phrases:** as a consequence, as a result, because, besides, for example, for this reason, in addition, in comparison, in contrast, in fact, in general, in particular, instead of, of course, on the other hand, rather than
4. **Prepositions:** despite, instead of, rather than
5. **Subordinate conjunctions:** after, although, as, because, before, but, directly, except, given, if, in that/this, like, once, since, such that, though,

until, when(ever), whereas, wherever, while

The syntactic class of a DM determines where it can appear in a DS, whether it is sentence-initial, sentence-medial, or sentence-final. All DMs occur in initial position, except though. They can only appear sentence-initially because of the syntactic rules of conjunctions, namely coordinated and subordinating conjunctions. The other three groups (adverbials, prepositional phrases, prepositions) are more syntactically flexible, some appearing sentence-final, others sentence-final and sentence-medial both.

According to Fraser (2009), another feature of DMs is related to the previous DS (S1), where a DM refers to S2. The grammatical features of DMs, which are conjunctions, require that there should be two DSs. However, DMs with certain anaphoric expressions, which are usually neglected, imply a prior DS, which functions as S1, while in other examples the link between S2 and S1 is inferred from the context of a DM (Fraser, 2009:14):

1. **Anaphoric expression:** as a consequence, as a result, because, besides, despite, for this reason, in addition, in comparison, instead of, rather than
2. **Implied by meaning of the DM:** accordingly, also, besides, consequently, conversely, equally, further(more), hence, however, in particular, likewise, moreover, nevertheless, nonetheless, on the other hand, similarly, still, then, therefore, thus, what is more, yet
3. **Syntactic requirement:** although, and, but, or, since, so, whereas, while

The sequences below represent the appropriate syntactic organization of DMs, ignoring the initial/medial/final alternative listed above (Fraser, 2009:15):

- a. **S1, DM + S2:** in a sequence of DSs (S1-S2), a DM must occur as part of the second DS, S2 (Fraser, 1999: 298).

(14) I didn't study, *but* I passed the exam (*coordinate conjunction*).

(15) I failed the exam *because* I didn't study (*subordinate conjunction*).

- b. **S1. DM + S2:** often, a DM has an intonational contour that separates it from the rest of the DS, but this depends on the particular DM and

linguistic context (Fraser, 1999:298).

- (16) I didn't study. *However*, I passed the exam (*adverbial*).
- (17) I didn't study. *But* I passed the exam (*coordinate conjunction*).
- (18) I didn't study. *Despite that*, I passed the exam (*preposition*).
- (19) I passed the exam. *After all*, I'm smart (*preposition phrase*).

c. **DM + S1, S2:** the position of a DM is determined by its syntactic analysis and by what it specifically signals (Fraser, 1999:298).

- (20) *Despite* the fact that I didn't study, I passed the exam (*preposition*).

Fraser's taxonomy reflects the pragmatic roles of DMs and every syntactic feature that represent implications indicating the communicative purpose of an author's ability. He claims that DMs provide the audience with knowledge about how to connect the meaning of S2 with that of S1. The structural context expressed by DMs assists achieving coherence in a text. Fraser points out a DM can connect the DSs, to which it contributes, to any other nonadjacent DS, in addition to the connections between S2 and S1, which are adjacent DSs.

### 2.5.1.3. Sense Realizations of DMs

DMs are also discussed at the microstructural level of discourse about their sense realizations. Many scholars categorize DMs according to meaning classes, such as additive, contrastive, and temporal. Fraser (2009) states that while there are more than 100 DMs in English, he has discovered four main sense groups, with subgroups in each basic compound. These compounds are (Fraser, 2009:15-16):

#### 1. *Contrastive markers (CDMs)*

although, but, conversely, despite, however, in comparison, in contrast, instead of, nevertheless, nonetheless, on the other hand, rather than, still, though, whereas, yet

#### 2. *Elaborative markers (EDMs)*

also, and, besides, equally, for example, for instance, further(more), in addition, in particular, likewise, moreover, or, rather than, similarly, that

is

3. *Inferential markers (IDMs)*

accordingly, as a consequence, as a result, because, consequently, for this reason, hence, so, then, therefore, thus

4. *Temporal markers (TDMs)*

after, as soon as, before, eventually, finally, first, immediately afterwards, originally, second, subsequently, then, when(ever)

Given the features of DMs, as discussed before, Fraser (1999) shows DMs are defined structurally; if omitted, they have no effect on the propositional subject of DSs. As a result, the audience would not have a clear understanding of the relationship between two DSs. Thus, DMs play a simplifying role for the audience to understand the message that an author wants to express.

### **2.5.2. Studies on DM Use by L2 Learners in ELT**

Several scholars listed below have documented the learning and effective use of DMs as one of the greatest challenges, especially for L2 writers in English. Yasuko (1989) investigated DM use in English academic articles by Japanese NNSs. He analyzed the data by combining and using the categorizations of Quirk et. al. (1972) and Ball (1986). It was reported that there were certain types of errors in each DM class that was used.

Yasuko (1989) reported that Japanese NNSs seemed to overuse additive DMs, and it was noted that colloquial language could cause such overuse in writing. However, they tended to exclude adverse DMs, and this use was explained by the writers' lack of awareness that adverse relations are typically identified with and require a DM. In addition, causal DMs were claimed to be a difficult field for Japanese NNSs because they were used when not needed and were not used when needed. The researcher pointed out an overuse of L1 transfer.

Milton and Tsang (1993) investigated a Chinese NNS corpus for DM use and examined them in comparison with NSs in American Brown, LOB, and HKUST corpora, which contains textbook excerpts of freshman students of computer science. The results show a high percentage of overuse of DMs by NNSs. The researchers

divided the problems of using DMs into overuse and misuse and also presented examples of learners' texts to define the use of *moreover* and *therefore*. They claimed the challenges in coherence instruction, writing, and writing patterns lay in learners' attitudes, which were a fundamental part of their educational background.

Tang and Ng (1995) analyzed the ways Chinese NNSs used DMs in written texts and compiled 32 texts from the art and science departments. The findings revealed students of science used less DMs and resultative and contrastive DMs were used slightly more frequently than other types. *And* and *however* were the most frequently used DMs. In addition, they analyzed the position of DMs in sentences and discovered that NNSs preferred the same DMs when the position of a DM was considered. For example, *besides* and *however* were frequently used at the beginning of sentences by all NNSs, so science students tended to use it at the beginning, while humanities students tended not to place it at the beginning. The researchers claimed that NNSs have difficulty in constructing and structuring ideas and that because of this challenge, the frequency of DMs in their texts is excessive.

Granger and Tyson (1996) examined a model from ICLE corpus in comparison with a sample of texts from the control corpus of English essays. Since several previous studies introduced overuse, they made this assumption. The results showed that NNSs tended to overuse DMs such as *for instance* and *namely*, while they appeared to underuse DMs that contrast, such as *however*, *though*, and *yet*. They suggested the influence of the L1 for the cases of overuse and explained the misuse of DMs by the lack of knowledge of linguistic problems and thorough definition of DMs in dictionaries. There were also various syntactic placements of DMs, with considerable overuse of DMs which occur sentence-initially, and further L2 analyses suggest it is not unique to linguistics.

Cho (1998) examined 18 texts of Korean NNSs for overuse, underuse, misuse, and grammatical errors. The results showed that the group that had practiced English longer developed a wider range of DMs. Several DMs were overused and there were grammatical errors in some DMs such as *because*. Based on these findings, it is suggested that NNSs should be instructed not to overuse DMs and to pay attention to grammatical constraints of certain DMs. In addition, since the study found that many

errors are due to the transfer of language norms to writing norms, the researcher pointed out that NNSs need to consider the correct writing rules and traditions.

Milton (1999) investigated the assumption which students at a university in Hong Kong overused particular fixed interactive phrases in writings, which led to adopting a repetitive writing approach. He analyzed a large 500,000-word student corpus with a similar-sized corpus of Hong Kong textbooks, NS essays, and published research articles. The investigation proved NNS students indeed employed the same metadiscursive expressions much more frequently than NS writers, whereas they used alternative expressions such as transitions like *on the other hand*, frame markers such as *especially* and *all things considered*, and code glosses such as *an example of which is that* is less frequently. L2 students use attitude and engagement expressions like *as we all know* and *in my opinion* extensively, which are further more frequent than in the NS writings significantly.

Warsi (2001) analyzed the acquisition of contrastive DMs of English from Russian NNSs. In the pilot analysis, he selected 10 Russian NNSs and 10 NSs and measured DM use using a cloze text. Participants were expected to determine if the sentences can be tied to the DMs given or not. The findings revealed the contrasts between the comments of NNSs and NSs. He noted that the differences in participants' results could be due to various aspects, such as language level, contact with the L2, and interference with the L1.

Ting (2003) studied cohesion errors in Chinese NNS texts, adopting the structure of Halliday and Hasan (1976). 80 essays were compiled for the research, examined for errors of cohesion, and classified by two graders. Considering the errors in DM use, Ting found that these forms of errors were common in the students' essays. In fact, errors in adversative and additive use were more common than errors in causal and temporal use. However, the researcher found there was no important difference in the use of subcategories of DMs between good and poor essays, which means DM use is a common challenge for any student with Chinese L1 background. The results of the study show excessive use of additive DMs and misuse of certain adversative DMs.

Martinez (2004) analyzed DM use by Spanish NNSs. In the pilot study, she



asked 7 NNSs for an essay on a subject of applied linguistics and reviewed the conclusion paragraphs. The research showed that the participants used DMs widely and had no trouble in using DMs correctly. On the other hand, while each participant used DMs, few participants used a broader spectrum of DMs. The initial research further found more DMs were used in texts that were written in better English and fewer DMs were used in those that emphasized a weaker command of English. After the first study, Martinez investigated DM use by Spanish NNSs writing in their L2 to compare and contrast DM use in Spanish and English. This time, subjects were expected to come up with an essay in Spanish. Even though the results of the second research were very much alike to the results of the initial research, a greater variation was found between the DM forms. The study found that native Spanish speakers used DMs extensively and appropriately in both Spanish and English.

Choi (2005) examined how Korean NNSs and English NSs write, considering 3 variables: errors, text management, cohesion tools, and described the problems that Korean NNSs have. The researcher collected 46 essays from both groups of students for the study. The use of cohesion tools and DMs were among the variables he examined in the text study, and it was found that both groups of subjects used DMs in addition to various cohesion tools.

Leung (2005) analyzed L2 writing on DMs. He investigated the use of 3 primary DMs *and*, *or*, and *but* by Chinese NNS and American NS university students. The adapted material for the research came from The International Corpus of Learner English, Hong Kong University of Science and Technology, and Hong Kong Baptist University. Leung examined the use of these DMs in terms of their place and role in discourse. He listed the roles of each DM for discourse role analysis. The findings of the research revealed Chinese NNSs struggled with using DMs, and the researcher explained that confusion, insignificant errors, L1 interference, and overlap of different DMs can be identified using corpora. It was discovered *but* was mostly used at sentence-initially in corpora. Sentences with sentence-initial *but* were often followed by a lengthy sentence with coherent content, and mostly *but* was used to demonstrate a difference. However, the study showed that NNSs used fewer types of DMs than NSs, but more DMs overall than NSs. When evaluating the number of DMs in the corpora, it was found that NNSs used some DMs more, such as *after*, *before*, *then*,

*however*, and *besides*, and the researcher claimed that this was the result of L1 interference and overemphasis of these DMs by teachers.

Tapper (2005) examined how advanced Swedish NNSs used DMs in argumentative essays, in line with how American NSs used DMs in texts. The data was obtained from the Swedish subcorpus of ICLE and the control corpus of American NS essays. The findings showed that Swedish NNSs used more DMs. According to the researcher, this may be due to the influence of the L1 on the authors, and it may be a general linguistic element for NNSs, as such excessive use has also been found in other studies of authors with other L1s. In addition, Swedish NNSs tend to use significantly more types of DMs, and it was suggested that this might be a result of the focus in DM differences in textbooks. Contrastive DMs were found to be widely used in both corpora. However, Swedish NNSs seemed to overuse the clarifying and confirming types. When the DMs were analyzed individually, it was found that DMs were used frequently in both corpora. Essays from both corpora were examined in the second part of the study and it was revealed Swedish NNSs were as qualified as NSs in terms of the quality of texts and a high frequency of DMs does not indicate qualified composition for any class of authors.

Chen (2006) investigated DM use in two corpora, one consisting of 23 writings of Taiwanese NNSs and the other consisting of a control corpus of 10 journal texts. In the analysis, Chen followed a clear adaptation of Halliday and Hasan's (1976) categorization of Celce-Murcia and Larsen-Freeman (1999). It was found that L2 writers significantly overuse DMs and misused *besides* and *therefore*. Finally, he recommended to increase writers' awareness of register variations.

Fei (2006) investigated NNSs' use of DMs, focusing on the effects of adverbial DMs on the writing quality of Chinese NNSs of English. For the analysis, he used a sub-corpus of the Chinese NNS corpus, which contained texts written by NNSs of numerous linguistic proficiencies. The corpus-based research revealed NNSs with greater proficiency were able to use additional forms of adverbial DMs and they used DMs more effectively when it came to stylistic awareness in their texts. However, the researcher observed that all NNSs seemed to overuse these DMs, which could be clarified through instruction and appropriate L1 transfer.

Ying (2007) analyzed the parallels and contrasts in DM use between English NSs, Chinese, and Japanese NNSs and obtained a total of 300 expository and narrative essays. The results showed that there were significant differences in DM use between NNSs and NSs, but not between Chinese and Japanese NNSs. It was reported that NNSs used fewer types of DMs than NSs. In addition, the researcher pointed out some examples of inappropriate use of DMs by NNSs, and it was suggested that these errors were due to L1 interference.

Cao and Hu (2014) directly compared and contrasted the post-method sections of quantitative and qualitative research articles in three disciplines: applied linguistics, education, and psychology. They concluded that the DMs used in the research articles in their corpora vary in ways that can be related to both disciplinary factors and the different epistemologies underlying the qualitative and quantitative research paradigms.

Jiang (2015) investigated noun complement structure as an element of attitude associated with students' academic competence. Using a corpus-based contrastive interlinguistic analysis, the use of stance construction in argumentative essays of 366 Chinese students was compared with that of 82 American university students of the same age and educational level. The results show that Chinese students use this structure significantly less, especially event, discourse, and epistemic categories associated with the general conventions of argumentative essays. However, they tend to use first-person possessives, personal affect, and pre-modifying nouns with attitude-related adjectives.

Schmied (2015) introduces the key concepts of academic writing, metalanguage, and genre: he explains and illustrates them with examples from the ChemCorpus, which can be used as a partial reference corpus for the European academic writing project SE and all other small corpora from other countries. The metalanguage includes all author-reader interactions, especially attitude and DMs. A research-based method means that authors learn the rules by testing ideas or exploring their own small corpus, discovering patterns and conventions themselves, and even testing whether their linguistic variables match their text/genre or social-biographical variables. They can also use comparisons with similar corpora to position themselves

within the boundaries between personal identity and disciplinary conventions. In this way, the skills graduates acquire should be useful for their own texts in universities and even later in their careers.

Ali and Mahadin (2016) adopted Fraser's (2009) classification to investigate DM use in explanatory texts by Jordanian EFL learners of different proficiency levels. The comparative analysis shows that advanced and intermediate EFL learners use comparable DM rates in their essays, but the latter seem to play a narrower range of functions within a more limited number of positions in sentences. In addition, advanced learners are found to use more types of DMs. The conclusion is that DM use is influenced by the knowledge of EFL learners.

Hyland and Jiang (2016a) examined the rhetorical functions of metadiscursive nouns such as facts, analyses, beliefs, etc., and classified them into metadiscourse models. The study examined the pattern of metadiscursive *noun + postnominal clause* in a corpus of 120 research articles in six disciplines, which is one of the most common structures containing such nouns. The researchers showed that metadiscursive nouns are a key element of metadiscourse, providing a way for authors to classify discourse within the cohesion of information flow and construct an attitude toward it.

Another study by Hyland and Jiang (2016b) examined whether academics can now construct less rigorous and objective texts more freely and build broader relationships with readers. The researchers extracted a 2.2-million-word corpus three times in recent years from the same journals in four sciences and analyzed the variations in the use of ten main elements considered by scholars to express informality. The results show that the use of these features has increased only slightly, mainly due to an increase in positive sciences instead of social sciences. Moreover, the increase is mainly limited to the addition of first person pronouns, unnoticed references, and conjunction-initial sentences.

Hyland and Jiang (2018) analyzed whether and to what extent metadiscourse in specialized texts from different sciences has changed over the past 50 years. Analyzing a 2.2-million-word corpus from dissertations across four disciplines in major journals, they found that interactional features have increased significantly and

interactional types have decreased significantly. Interactional metadiscourse has decreased in the discursive areas of the soft sciences and increased significantly in the hard sciences.

Ondondo (2020) examined how JOOUST doctoral students use interactive markers in their dissertations. The researcher used a descriptive analysis design and followed the classification of Hyland (2005) and Kondowe (2014). The study examined the extent, form, and function of interactive markers in the introduction and discussion sections of doctoral dissertations deposited in the JOOUST library across all disciplines. The results show that there is a variation among JOOUST students in the use of interactive markers in writing doctoral dissertations. Compared to hedging, boosters appear repeatedly, and other interactive markers are used the least. Boosters are used to convince the reader that the claim is true. Hedging is used to convince readers to deviate from the claims made.

Velickovic and Jeremic (2020) examined a corpus of argumentative and opinion explanatory articles written by Serbian learners of English to understand what strategies they used to express their opinions. The articles were reviewed and various linguistic structures used to express stance were coded. These positions included nouns followed by demonstratives at the beginning of the sentence. This is a structure that summarizes preceding statements and reported speech. Reported speech is used to specify and express the attitude of the speaker and the event, passive voice, demonstrative pronouns, etc.

A study dealing with DM use by Turkish NNSs, but with a particular focus, comes from Dülger (2001), in which he examined university students' essays that considered DM use in both product-oriented and process-oriented writing courses. The study was conducted over the course of two semesters, with students presented with a course of product-oriented writing in the first semester and a process-oriented writing course in the second semester. The researcher asked students to write an essay in each semester, and their essays were assessed in terms of their use of DMs. She deduced the essays written during a course of process-oriented writing were of higher quality in terms of their use of DMs and contained a greater number and variety of DMs.

Ekoc (2008) examined strategies of lexical hedging in abstracts from four sciences: ELT, chemistry, biology, international relations, and political science written by Turkish MA students. The aim of the study is to investigate whether there are subject-specific differences in the frequency of lexical hedging. Koutsantoni's (2006) taxonomy is used to classify hedging strategies, with some additional categories such as pronouns and impersonalization strategies added. The results show that all disciplines that are the focus of the study have used hedging. On the other hand, the type and number of strategies used by authors from four different disciplines are very different in many cases.

Altunay (2009) studied DM use of Turkish NNSs in written discourse. She collected 132 essays from freshmen students and Halliday and Hasan's (1976) categorization was adapted for the classification of DMs and Cho's (1998) rubric was developed and updated for appropriateness of discourse and structural correctness. DMs were analyzed for convenient use, grammatical and punctuation errors, overuse, underuse, and misuse. The British National Corpus was employed to examine if NSs frequently used the same DMs, and it was found *and*, *but*, *if*, *so*, and *when* were employed frequently. In NNSs' essays, the researcher clarified the immense frequency of certain DMs and the type of text the learners came up with. Looking at the coherence relationships, it was shown causative DMs were most frequently employed, then additive and adversative DMs. The analysis revealed participants in the research used the concessive sense of *but* to a greater extent than the contrastive sense. *However* was used less than *but*. When the incorrect use of DMs was analyzed, it was shown 50 percent of them were misused. As reported by the researcher, it could be by the reason of learners did not study the connotations of different DMs. Learners usually believe that all DMs within the same category can be used interchangeably. In terms of structural errors, punctuation were found to be more common than grammatical errors.

Çepik and Karaata (2012) investigated the combination of explicit instruction or incidental acquisition in relation to the efficient acquisition and recognition of DMs among six freshmen English students. The findings reveal a combination of explicit instruction and incidental acquisition improves the amount and diversity of DM use significantly, but not accuracy.

Akbaş (2014) investigated interactional metadiscourse in English and Turkish articles written by Turkish authors. Both language corpora were compiled by representative sampling from two groups of ten discussion chapters from MA theses in education and examined in terms of Hyland and Tse's (2004) interpersonal framework. The results show that Turkish authors did not express their authorial identity clearly enough to engage in objective discourse, although they relied on their own subjective evaluations when discussing their findings. In contrast, they increased their authorial engagement through the increased use of interactional metadiscourse to emphasize their personal interference and contribution to the overall discourse. This confirms Kaplan's (1966) claim that L2 writing students tend to adopt the cultural conventions and rhetorical strategies of their L1.

İnceçay (2015) investigated whether bilingual writers with similar Turkish L1 backgrounds share the same composition patterns or whether these patterns differ when they write in L1 or L2 (English in this case), and whether transfer is related to rhetorical patterns. The researcher examined two English and two Turkish opinion essays, each written by six first-year students who had taken an English essay writing course at an English-language university, to determine the presence and transfer of rhetorical patterns. Additional data came from the students' reflection assignments and from the conducted interviews. Examination of the texts showed that students also used more DMs than expected. This indicates that students were able to transfer information from their L1 to the L2 as well as from the L2 to the L1.

Aysu (2016) examined DMs employed by 104 beginner-level preparatory school students. They were asked to compose a 100-word paragraph as part of their midterm exam. These texts were used to create a small corpus. The corpus was examined to determine the types and frequencies of DMs. In addition, the 180 DMs were classified into four categories using Fraser's (1999) taxonomy. It was found that of all the DMs used by the students, 101 were elaborative, 52 were contrastive, 18 were causative, and 9 were inferential.

Atmaca (2016) investigated the similarities and differences in terms of hedging between 10 MA and 10 Ph.D. theses from ELT, which were randomly selected. The data were analyzed using content analysis and classified based on the

relevant characteristics. The content analysis revealed different hedging instruments and that hedging in the Ph.D. theses is about twice as high as in the MA theses. In addition, modal verbs and passives are the most frequent form of hedging, while nouns are the lowest, which might clarify the differences between experienced and inexperienced authors.

Duruk (2017) investigated how frequently interpersonal metadiscourse markers occur in academic written discourse, in this case in MA theses from ELT. A corpus-based study was conducted, examining a total of 20 texts written in L2 from methodology, results, and discussion sections. The results show that although Turkish writers use hedges, boosters, and attitude markers to some extent, attitude markers are used most frequently.

Okan and Özer (2018) examined DMs used by NNS and NS teachers in classrooms of EFL and compared them in terms of type and frequency. Two separate corpora were collected through recordings of lectures by two NNS and two NS teachers. The results show that NNS teachers used 29 DMs in their classroom discourse, while NS teachers used 37 DMs. It was also found that NNS teachers underused most DMs compared to NS teachers in EFL classrooms.

Baltacı (2019) identified, classified, and analyzed the use and frequency of causal markers in paragraphs written by forty preparatory school students in both L1 and L2. The data showed that the participants used 5 categories of causal markers in their Turkish causal paragraphs, namely nouns, verbs, postpositions, connectives, and suffixes, and that they in turn used 5 different categories in their English causal paragraphs, namely nouns, verbs, conjunctions, prepositions, and complex prepositions. It was also found that participants transferred their L2 knowledge related to paragraph organization into their L1 writing.

Güçlü (2020) investigated evidential markers used in Turkish RA abstracts published in journals in 2008-2009 and 2017-2018 using Hyland's (2005) classification as a theoretical framework. The results of the study show the diachronic evolution of the author-audience relationship from the perspective of social relations, such that authors in 2017-2018 are more likely to use evidence to claim that they are members of a particular discourse community.



Özdamar (2020) investigated the discourse structure of Turkish and English texts through DM use. Data were collected from 52 selected participants from ELT and Turkish Language Teaching (TLT) departments. The students from ELT were asked to write argumentative essays in both English and Turkish, while the students from TLT were expected to write argumentative essays in Turkish only. Moreover, the DMs used in the English texts were examined and classified into four groups: additive, adversative, causative, and temporal. The study determined the classification and frequency of DMs. Accordingly, and in English texts *and* was the most frequent DM, while in Turkish texts the most frequent DMs were *ve* (and) by both ELT and TLT students.

As the review of previous L2 studies that addressed DM use has shown, overuse and underuse of certain DMs along with misuse is a typical finding. Studies have shown that L2 writers with different L1 backgrounds seem to overuse DMs in their texts and whereas few DMs were underused, few were overused (Yasuko, 1989; Ting, 2003; Leung, 2005; Altunay, 2009). The phenomenon of underuse and overuse is related to the form or role of DMs, and underuse and overuse of DMs by NNSs have been justified by the influence of the L1 in many research.

The role of DMs in discourse has also been investigated in some studies, and it was found *but* was used clause-initially, on the other hand, *however* was used phrase-initial position (Tang & Ng, 1995; Leung, 2005). However, in some studies, there are also results that are different from the results in different research. Thus, there is a contradictory result concerning the use of general classes of DMs by L2 writers. Several research documented overuse of the full spectrum of DMs in L2 writing (Milton & Tsang, 1993; Granger & Tyson, 1996; Tapper, 2005), while some research described above revealed underuse and overuse of various forms of DMs both.

The previous analysis of L2 research on DM use further shows there is little research on DM use in writing at all levels among Turkish learners of English. Thus, the current literature analyzing both the metadiscourse roles of DMs and their structural realizations in L2 writing is at the microstructural level of discourse. Most research has addressed the semantic categorization of DMs, analyzing misuse and

frequency of DMs belonging to a particular semantic class. However, in the present work, DMs are studied in detail with their role and structural properties in metadiscourse in L2 writing at microstructural and macrostructural levels of discourse. Such a study will have the opportunity to reveal use patterns not found in previous research.

## **CHAPTER III**

### **METHODOLOGY**

#### **3.1. Introduction**

The study design, corpora, data collection, and data analysis are introduced in this chapter. The first section discusses the characteristics of the corpora, how they were collected and chosen, as well as the frequencies of words. The corpus and concordance tools used in this study are then explained to enhance the credibility of the study. As mentioned before, the study is based on Fraser's (1999) proposed categorization of DMs and will discuss both problems coherently based on this taxonomy. Fraser's classification of DMs will be presented and quantitative research methods will be used to show the frequencies, forms, ratios, overuse, underuse, similarities, and discrepancies between two corpora in the final section.

#### **3.2. Research Design**

The current thesis attempts to analyze the forms and DM frequencies used by MA students who are Turkish NNSs of English and English NSs, as well as the parallels and contrasts in DM use between two learner corpora. The data were examined quantitatively by determining the frequency of DMs and their role in their respective contexts. The abstracts used in the study are the language products of NSs and NNSs that share common features, such as the fact that they are MA students, which is will be presented in more depth.

#### **3.3. The Corpora**

The corpora consist of two groups: one consists of 100 English NSs MA students, all studying in countries where English is the native language, the other consists of 100 Turkish NNSs MA students studying in different universities in Turkey. The universities where the participants study include Oxford, Başkent, Ankara, Boğaziçi, İstanbul, etc. Both groups consist of 50 female and 50 male students (see Appendix I).

### 3.4. Data Collection

The data was collected from two separate corpora. Although the term corpus has been described differently for various reasons in the current literature, O’Keeffe, McCarthy and Carter (2007)’ definition is used as a foundation in this thesis: a compilation of electronic texts which were collected according to the researcher’s intention. Features of corpus-based linguistic study are given by numerous scholars. As stated by Hunston (2006), corpus linguistics suggests comparing massive amounts of spontaneous language, and analyzing frequencies relatively (in raw structure or arbitrated by statistical applications) and connection designs between a function and a form of text or word classes.

The data is obtained from two classes of corpus consisting of the abstracts written by English NSs and Turkish NNSs of English based on the aforementioned descriptions employed in the thesis. The abstracts written by NNSs and NSs were saved on the computer as separate files and citations which were used by the speakers were removed from the abstracts. By basic random sampling, the abstracts of both groups of speakers are chosen and each corpus is made up of 100 abstracts collected from tez.yok.gov.tr for NNS corpora and ora.ox.ac.uk for NS corpora.

The total number of words for each speaker corpus can be found in Table 3.1:

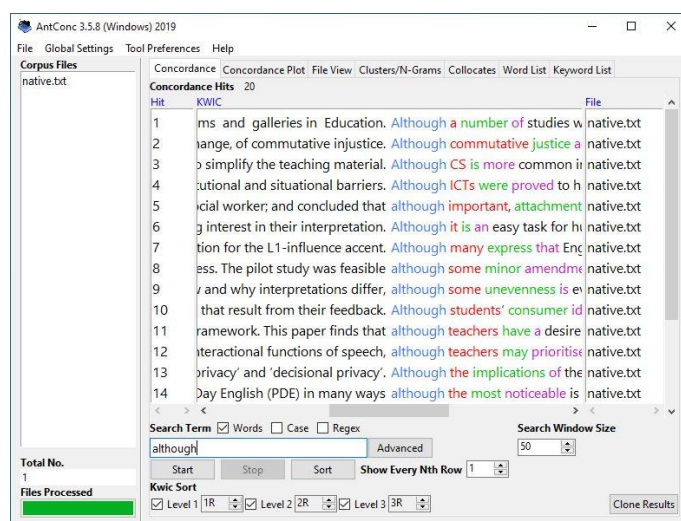
**Table 3.1. Number of Words for Each Corpus After Random Sampling**

<b>Corpus Type</b>	<b># of words</b>
NS Corpus	26,934
NNS Corpus	29,041

### 3.5. Data Analysis

In order to carry out corpus-based research and evaluate an extensive quantity of data, corpus software software such as Ant.Conc. are used that allow the researcher to access a intricate elements of a corpus including collocations, concordances, and key terms. Concordance programs are computer software used to scan and interpret particular linguistic elements of a language found in a compiled corpus. The data is provided in the design of concordance lines, as shown in Figure 3.1. (Anthony, 2005):

**Figure 3.1. Screenshot of Sample Concordance Lines for *although***



This helps the researcher analyze specific linguistic purposes as well as the structure of principles established by a culture's society that shape discourse features such as formality and vocabulary. Corpus software programs help researchers easily interpret large amounts of data and evaluate different linguistic purposes. Hunston (2006) claims that corpus software programs search the corpus for a particular target item, count the number of instances of the target item in the corpus, and calculate the relative frequencies that instances of the target item display so that the corpus user can do further research.

There are programs to use despite the corpora type and programs that were explicitly programmed for particular types of corpora. Accordingly, the data in this study were examined employing Ant.Conc 3.3.4 which is a concordance and text program (<http://www.antlab.sci.waseda.ac.jp/software.html>) that equip scholars with numerous features being Clusters, Collocates, Concordance Plot, Concordance/KWIC Lines, File View, Keyword List, N-Grams (a segment of clusters), and Word List.

Ant.Conc. is a valuable tool for determining clusters (frequency patterns of a sequence of words) or N-Grams (a sequence of n words in a corpus). This can be particularly useful when a researcher has a certain number of high frequency words as a strategy, but when the researcher needs to increase precision by either searching for phrases that contain these words or by identifying good collocates when making adjacency search selections (Anthony, 2005).

It is best used once a researcher determines the very common words that are included in their procedure: Tools such as PubReminer and Systematic Review Accelerator's Word Frequency Analysis are appropriate for this purpose, as both the occurrence of words and the number of records in which those words occur are taken into account for use before conducting the analysis in Ant.Conc. The corpus containing the relevant bibliographic records can then be opened in Ant.Conc for text mining.

Some researchers suggest analyzing titles and abstracts independently and setting different thresholds for consideration (less strict for titles, stricter for abstracts). Lists of stop words and lemmas can also be included in the tool. There are numerous such lists available for reuse on the Internet, and the choice depends on the context of the search. First, the Wordlist function of the concordance program is used to specify all words from most to least frequent. Following Fraser's (1999) taxonomy of DMs in the academic abstracts, the words in the list were ranked one by one to determine the DMs in both corpora. The abstracts were analyzed twice to avoid missing any DMs. The researcher categorized the functions of these DMs and also identified the misused DMs that were neglected in the analysis. A total of 200 abstracts (100 abstracts from each speaker corpus) were examined in the manner shown in Table 3.2:

**Table 3.2. Number of Abstracts Collected from Each Social Science**

	<b>ELT</b>	<b>Law</b>	<b>Political Science</b>	<b>Total</b>
<b>NS Corpus</b>	50	25	25	100
<b>NNS Corpus</b>	50	25	25	100
<b>Total</b>	100	50	50	

The frequencies were analyzed in terms of similarities and differences between the two corpora once the DMs were determined. The frequencies of the DMs were measured and presented by evaluating the occurrences per 10,000 words to put the two corpora on a consistent foundation.

Moreover, the Log-likelihood calculating program (<http://ucrel.lancs.ac.uk/llwizard.html>) is employed in order to compare and contrast the respective frequencies of underuse and overuse of Corpus 1 compared to Corpus 2 between the two corpora (see Figure 3.2.).

**Figure 3.2. Screenshot of the Initial Screen of the Log-likelihood Calculator**

In Figure 3.3., Corpus 1 shows the corpus of native speakers, while Corpus 2 is the corpus of Turkish speakers.

**Figure 3.3. Example of Log-likelihood Calculator Result for *and***

Item	O1	%1	O2	%2	LL
word	500	1.86	1141	3.93 -	211.22

The larger the value LL, the larger the difference between the two frequency scores. For example, the log-likelihood ratio of *and* is 211.22 according to this result, which means that NNS overuse this DM in abstracts. Log-likelihood rates for all DMs present in both speaker corpora are measured and compared in the same manner.

## CHAPTER IV

### RESULTS

#### 4.1. Introduction

In this chapter, the results of the study are presented. First, descriptive statistics are presented with the aim of investigating the frequencies and types of DMs employed by NS and Turkish NNSs in abstracts, as well as identifying the similarities and contrasts in DM use between two learner corpora. The research data consists of thesis abstracts from 100 Turkish NNSs and 100 NSs. The Wordlist feature of Ant.Conc. 3.3.4 is employed during the research to specify all the words, from the most to the least frequent.

To classify the DMs in both corpora, Fraser's (1999) taxonomy for DMs in academic abstracts is used. After all DMs were found in two speaker corpora, the researcher evaluated all occurrences twice. First, the DMs that occur in either the NS or the NNS corpus are identified. Second, the DMs identified in both learner corpora are evaluated in the following section, and the DMs present in either NNS or NS corpus are described thoroughly.

The DM frequencies in both speaker corpora are shown and the average mean frequency per 10,000 words and the log-likelihood values of the DMs are presented. The values of the log-likelihood results performed to discover underuse or overuse of DMs in NNS abstracts compared to NSs, as well as the standardized frequencies per 10,000 words of DMs in NS and NNS corpora, are explained in the last part. Furthermore, in terms of practical application, it is explained that each DM was evaluated in its own context, and examples from the NS and NNS corpora are presented and illustrated.

#### 4.2. DMs Used by NSs and Turkish NNSs

The research questions are discussed in this section under the following subtitles. The DMs used by the NSs are presented in one part and the DMs used in the Turkish NNS abstracts are explained in the other part.



The results of the study show that the NSs used *after, also, although, and, as, as a consequence, as a result, because, before, besides, but, conversely, despite, directly, equally, finally, first, for example, further(more), given, however, if, immediately afterwards, in addition, in comparison, in contrast, in fact, in general, in particular, in that/this, instead of, like, moreover, nevertheless, nonetheless, nor, on the other hand, once, or, originally, rather than, second, similarly, since, so, still, subsequently, such that, that is, then, therefore, though, thus, until, when(ever), whereas, wherever, while, yet.*

However, Turkish NNSs used *accordingly, after, also, although, and, as, as a result, as soon as, because, before, besides, but, consequently, despite, eventually, except, finally, first, for example, for this reason, further(more), given, hence, however, if, in addition, in comparison, in contrast, in general, in that/this, instead of, like, likewise, moreover, nevertheless, of course, once, or, rather than, second, similarly, since, so, still, subsequently, such that, that is, then, therefore, though, thus, what is more, when(ever), whereas, wherever, while, yet.*

The DMs identified in both speaker corpora are *after, also, although, and, as, as a result, because, before, besides, but, despite, finally, first, for example, further(more), given, however, if, in addition, in comparison, in contrast, in general, in that/this, instead of, like, moreover, nevertheless, once, or, rather than, second, similarly, since, so, still, subsequently, such that, that is, then, therefore, though, thus, when(ever), whereas, wherever, while, yet.*

Nonetheless, the DMs that are only discovered in the NS corpus are *as a consequence, conversely, directly, equally, immediately afterwards, in fact, in particular, nonetheless, nor, on the other hand, originally, and until*, whereas the DMs only present in NNS learner corpus are *accordingly, as soon as, consequently, eventually, except, for instance, for this reason, hence, likewise, of course, and what is more.*

#### **4.3. The Frequency of DMs in Both NS and NNS Corpora**

This section presents the results of quantitative analyses. The presentation of the results is organized according to the main types of DMs studied. Overall,

elaborative markers occurred most frequently, followed by temporal markers, contrastive markers, and inferential markers. It can be seen that speaker abstracts are characterized by extensive use of DMs when the frequency of DMs used by NS and NNSs is evaluated.

The total use of DMs by NNSs is 1985, while the use in NS abstracts is 1772, as shown in Table 4.1.

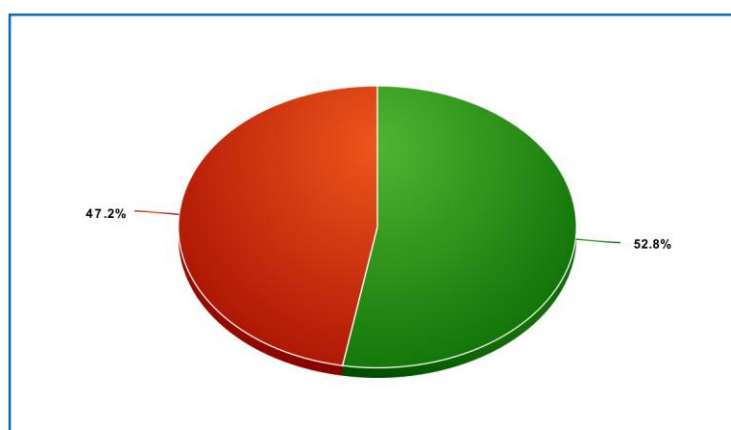
**Table 4.1. Mean Overall Frequency and Log-likelihood Results of DMs in Both Corpora**

Item	NS	%1	NNS	%2	LL
Word	1772	6.58	1985	6.84	-1.37

It is evident that DMs are used more frequently by NNSs than by NSs. Moreover, the total frequency of DMs in the NNS corpus is 6.84 per 10,000 words, while in the NS corpus it is 6.58. The log-likelihood values for the underuse and overuse of DMs in the NNS corpus compared to the NS corpus deduce that NNSs overuse DMs by (+1.40).

Figure 4.1. illustrates the discrepancies between these two groups in terms of the overall frequency of DMs in NS and NNS corpora.

**Figure 4.1. Pie Chart of the Overall Distribution of DMs in Both Corpora**

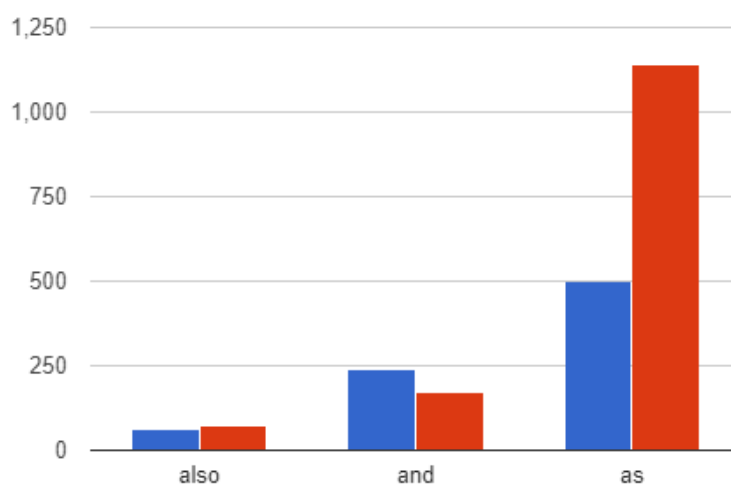


DMs occur in 1985 out of 29,041 words in the NNS corpora, while they occur in 1772 out of 26,934 words in the NS corpora. In comparison, DM use in the NNS

corpora has a share of 52.8 percent, while in the NNS corpora it has a share of 47.2 percent. The data show that DMs are used more frequently by NNSs than by NSs.

Figure 4.2. shows the differences between NS and the NNS corpus with respect to the most frequently used DMs, namely *also*, *and* and *as*.

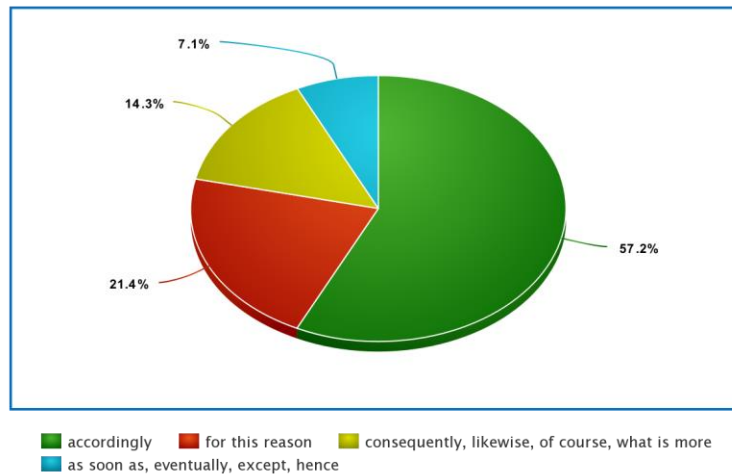
**Figure 4.2. Distribution of The Most Frequently Used DMs in Both Corpora**



*Also* has 71 occurrences with 3.58 percent in the NNS corpus, while it has 60 occurrences with 3.39 percent in the NS corpus. It can be seen that both NSs and NNSs use this elaborative marker with equal frequency. Moreover, *and* has 1141 occurrences with 57.45 percent in NNS corpus and 500 occurrences with 28.22 percent in NS corpus. Accordingly, NNSs use the elaborative marker significantly too frequently compared to NSs. Moreover, *as* occurs 242 times with 13.66 percent in NS corpora, while it occurs 174 times with 8.76 percent in NNS corpora.

Figure 4.3. shows the DMs used only in the NNS corpus.

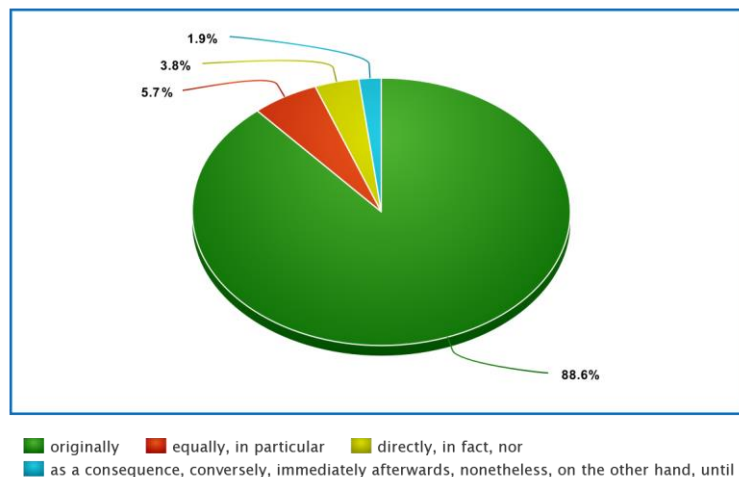
**Figure 4.3. Distribution of DMs Found Only in NNS Corpus**



It can be seen that *accordingly* is most frequently used in the abstracts of Turkish NNSs with 57.1 percent. It is followed by *for this reason* with 21.4 percent, *consequently, likewise, of course and what is more* with 14.3 percent and *as soon as, eventually, except and hence* with 7.1 percent.

Figure 4.4. shows the DMs used only in the NS corpus.

**Figure 4.4. Distribution of DMs Found Only in NS Corpus**



It can be seen that *originally* is the most frequently used DM in the abstracts of NSs, with 88.7 percent. It is followed by *equally and in particular* with 5.7 percent, *directly, in fact and nor* with 3.8 percent and, *as a consequence, conversely, immediately afterwards, nonetheless, on the other hand and until* with 1.9 percent. To

answer the research questions, Fraser's (1999) taxonomy of DMs is used as an analytical framework. This framework distinguishes four main types of DMs (see Table 2.2.). While not exhaustive, these types of DMs cover a comprehensive range of metadiscursive resources in various linguistic forms.

#### 4.3.1. Temporal (Topic Change) Markers

Temporal markers are used primarily to organize texts for readers. They are an umbrella term for a variety of linguistic devices and are used to divide the text into sequences, signal the transition from one topic to another, mark the stages of text development, and indicate discursive purposes (Fraser, 1999). Temporal markers can be used to fulfill the pragmatic functions of local/overall organization of a text and to reduce the reader's processing effort by explicitly marking text structures and boundaries. There is a greater variety of NS abstracts with temporal markers when we evaluate the results considering the variations in Table 4.2. below:

**Table 4.2. Mean Frequency and Log-likelihood Results for Temporal Markers in Both Corpora**

Item	NS Corpus (O2)	Occurrence per 10.000 words	NNS Corpus (O2)	Occurrence per 10.000 words	LL Ratio
After	19	1.07	22	1.11	- 0.01
As	242	13.66	174	8.76	+ 20.27
As soon as	-	-	1	0.05	- 1.28
Before	3	0.17	17	0.86	- 9.29
Eventually	-	-	1	0.05	- 1.28
Finally	3	0.17	7	0.35	- 1.22
First	33	1.86	32	1.61	+ 0.34
Immediately afterwards	1	0.06	-	-	+ 1.50
Originally	47	2.65	-	-	+ 70.67
Second	23	1.30	27	1.36	- 0.03
Subsequently	2	0.11	1	0.05	+ 0.46
Then	12	0.68	11	0.55	+ 0.23
When(ever)	16	0.90	15	0.76	+ 0.25
<b>Total</b>	<b>401</b>		<b>308</b>		

In NS corpora, *as*, *first*, and *originally* are the most frequently used DMs, while *before*, *finally*, *immediately afterwards*, and *subsequently* are the least frequent. *As* has 242 occurrences with 13.66 percent, *originally* has 47 occurrences with 2.65 percent and *first* has 33 occurrences with 1.86 percent. On the other hand, *before* and

*finally* each have 3 occurrences with 0.17 percent, *subsequently* has 2 occurrences with 0.11 percent and *immediately afterwards* has 1 occurrence with 0.06 percent.

In the NNS corpora, *as*, *first*, and *second* are the most frequently used DMs, while *as soon as*, *eventually*, *finally*, *subsequently*, and *then* are the least frequent. *As* has 174 occurrences with 8.76 percent, *first* has 32 occurrences with 1.61 percent, and *second* has 27 occurrences with 1.36 percent. In contrast, *then* has 11 occurrences with 0.55 percent, *finally* has 7 occurrences with 0.35 percent, and *as soon as*, *eventually*, and *subsequently* each have 1 occurrence with 0.05 percent.

The total number of temporal markers used in the NS and NNS corpora is 401 and 308, respectively. For this reason, there are significantly more temporal markers used in the NS corpora.

The following are examples of temporal markers used in both NNS and NS corpora:

- (21) (NNS - ELT) *The students were subjected to a pretest before the treatment process and to a posttest after the process. The treatment procedures and materials were prepared according to the CDIO curriculum and standards. The treatment process lasted for fifteen weeks for the experimental group while the control group continued learning English without being exposed to CDIO teaching method. Subsequently the collected data was analyzed with the assistance of IBM SPSS Statistics 23.0 to see whether the CDIO methodology has effective results on the students' performance or not.*
- (22) (NS – Political Science) *Several Dissenters therefore united with a parallel Catholic campaign for toleration, whilst very few united with their fellow-Protestant Churchmen against the Catholic threat. The Dissenters' strategies reveal the ambiguity of their relationship to the nation: they were usually seen by Churchmen as marginalised or subordinate though less so than the Catholics. Moreover, overlooked divisions between evangelical and old Dissent, and between Trinitarian and Unitarian Dissent, led different sections of Dissent to pursue different strategies according to their perception amongst Churchmen.*

The DMs *subsequently* and *moreover*, shown in (21) and (22), signal that the speaker thinks the following utterance is a departure from the current topic (Fraser, 1999). In other words, temporal markers are used to list discourse elements such as research findings or constraints, and often serve together to frame propositional content and structure texts.

#### 4.3.2. Contrastive Markers

Contrastive markers help create text cohesion by signaling logical connections between sentences. From a pragmatic perspective, they often explicitly encode information about inferential processes or procedures to guide readers toward intended interpretations. This type of metadiscourse includes what are called internal conjunctions (Halliday & Hasan, 1976; Martin & Rose, 2003), discourse connectives (Blakemore, 2002), linking adverbials (Biber et al., 1999), and logical markers (Mur Dueñas, 2009). A judicious use of transitions can relieve the reader of the task of making connections between preceding and following information.

As shown in Table 4.3., *although*, *but*, and *however* are the most frequently used DMs in the corpora of NS, while *conversely*, *in comparison*, *in contrast*, *instead of*, *nonetheless*, *on the other hand*, and *whereas* are the least frequently used.

**Table 4.3. Mean Frequency and Log-likelihood Results for Contrastive Markers in Both Corpora**

Item	NS Corpus (O2)	Occurrence per 10.000 words	NNS Corpus (O2)	Occurrence per 10.000 words	LL Ratio
Although	20	1.13	12	0.60	+ 3.04
But	37	2.09	19	0.96	+ 8.12
Conversely	1	0.06	-	-	+ 1.50
Despite	13	0.73	5	0.25	+ 4.65
However	36	2.03	27	1.36	+ 2.52
In comparison	2	0.11	4	0.20	- 0.47
In contrast	2	0.11	1	0.05	+ 0.46
Instead of	3	0.17	2	0.10	+ 0.33
Nevertheless	5	0.28	2	0.10	+ 1.69
Nonetheless	1	0.06	-	-	+ 1.50
On the other hand	1	0.06	-	-	+ 1.50
Rather than	11	0.62	4	0.20	+ 4.24
Still	6	0.35	5	0.25	+ 0.24
Though	6	0.34	3	0.15	+ 1.39

Whereas	1	0.06	5	0.25	- 2.47
Yet	12	0.68	8	0.40	+ 1.33
<b>Total</b>	<b>157</b>		<b>97</b>		

*But* has 37 occurrences with 2.09 percent, *however* has 36 occurrences with 2.03 percent, and *although* has 20 occurrences with 1.13 percent. On the other hand, *instead of* has 3 occurrences with 0.17 percent, *in comparison* and *in contrast* have 2 occurrences with 0.11 percent and *conversely*, *nonetheless*, *on the other hand* and *whereas* all have 1 occurrence with 0.06 percent. Similar to the corpora from NS, *although*, *but*, and *however* are the most frequently used DMs in the NNS corpora, while *in contrast*, *instead of*, *nevertheless*, and *though* are the least common.

*However* has 27 occurrences with 1.36 percent, *but* has 19 occurrences with 0.90 percent and *although* has 12 occurrences with 0.60 percent. Whereas, *though* has 3 occurrences with 0.15 percent, *instead of* and *nevertheless* have 2 occurrences with 0.10 percent and *in contrast* has 1 occurrence with 0.05 percent. The total number of contrastive markers used in the NS and NNS corpora is 157 and 97, respectively. For this reason, significantly more contrastive markers are used in the NS corpora.

The following are examples of contrastive markers used in both NNS and NS corpora:

- (23) (NNS - ELT) *In foreign language teaching, teachers generally depend on course books and the aim is usually regarded as teaching its grammar solely. Students may not have the opportunity to see the language in its original form because many of the course books that are used by Turkish Ministry of Education do not contain authentic materials. However, literary texts are authentic materials and they can be used to teach English.*
- (24) (NS - ELT) *Native accents are believed to ensure effective communication due to their high intelligibility, whereas Hong Kong accent was viewed as having marginal significance in signaling participants' cultural identity but project an undesirable identity as incompetent L2-users.*



In examples (23) and (24), the DMs *however* and *but* are used to signal the following utterance is either a negation or a contrast to an utterance connected with the initial discourse (Fraser, 1999). That is, contrastive markers are used to compare empirical findings with initial expectations or alternative hypotheses.

### 4.3.3. Elaborative Markers

Elaborative markers are used to explain, elaborate, or revise propositional meanings. In terms of their pragmatic functions, elaboratives contribute to the explicitness of communication by providing explicatures or explicating implicit premises and conclusions (Murillo, 2004). In academic discourse, they illustrate by example and/or revise a previous discourse unit for specification or elaboration. The appropriate use of elaboratives in RAs can elaborate meaning and help readers grasp propositional information.

As shown in Table 4.4., abstract authors tend to guide their readers primarily with elaborative markers that best represent the organizational structure of the discourse and provide information about text boundaries or elements of schematic text structure (Hyland & Tse, 2004).

**Table 4.4. Mean Frequency and Log-likelihood Results for Elaborative Markers in Both Corpora**

<b>Item</b>	<b>NS Corpus (O2)</b>	<b>Occurrence per 10.000 words</b>	<b>NNS Corpus (O2)</b>	<b>Occurrence per 10.000 words</b>	<b>LL Ratio</b>
Also	60	3.39	71	3.58	- 0.10
And	500	28.22	1141	57.45	- 189.42
Besides	1	0.06	22	1.11	- 21.34
Equally	3	0.17	-	-	+ 4.51
For example	4	0.23	1	0.05	+ 2.29
Furthermore	41	2.31	15	0.76	+ 15.69
In addition	8	0.45	14	0.70	- 1.04
In particular	3	0.17	-	-	+ 4.51
Likewise	-	-	2	0.10	- 2.55
Moreover	5	0.28	15	0.76	- 4.16
Or	46	2.60	36	1.81	+ 2.63
Rather than	11	0.62	4	0.20	+ 4.24
Similarly	2	0.11	2	0.10	+ 0.01
That is	7	0.40	5	0.25	+ 0.60
<b>Total</b>	<b>691</b>		<b>1328</b>		

In NS corpora, *also*, *and* and *or* are the most commonly used DMs, while *besides*, *equally*, *in particular*, and *similarly* are the least common. *And* has 500 occurrences with 28.22 percent, *also* has 60 occurrences with 3.39 percent, and *or* has 46 occurrences with 2.60 percent. On the other hand, *equally* and *in particular* both have 3 occurrences with 0.17 percent, *similarly* has 2 occurrences with 0.11 percent and *besides* has 1 occurrence with 0.06 percent.

Similar to NS corpora, in the NNS corpora, *also*, *and* and *or* are the most frequently used DMs, while, *for example*, *likewise*, *rather than* and *similarly* are the least frequent. *And* has 1141 occurrences with 57.45 percent, *also* has 71 occurrences with 3.58 percent, and *or* has 36 occurrences with 1.81 percent. In contrast, *rather than* has 4 occurrences with 0.20 percent, *likewise* and *similarly* both have 2 occurrences with 0.10 percent and *for example* has 1 occurrence with 0.05 percent.

The total number of elaborative markers used in both NS and the NNS corpora is 691 and 1328, respectively. For this reason, elaborative markers are overused in the NNS corpora.

The following are examples of elaborative markers used in both NNS and NS corpora:

- (25) (NS - ELT) *With English being the preeminent medium of international interaction, millions are learning and using English as an additional language: L2-users are outnumbering L1-users at an ever-growing rate.*
- (26) (NNS - ELT) *Their paraphrasing performance was affected by both their L2 proficiency and demanding nature of paraphrasing as well as writing task. There was also found a gap between their theoretical knowledge on paraphrase and their paraphrasing performance. Although they had the same level of L2 proficiency, their paraphrase performances were significantly different from each other.*

In examples (25) and (26), the DM *and* signals that the following utterance is a type of clarification of the initial discourse (Fraser, 1999). The authors used the elaborative marker *and* to mark the text phase, which has the function of indicating

the text boundaries and ordering the argument in the text. In other words, the second units of discourse also clarified or elaborated the first units of discourse. The reason for NNSs' overuse of this DM could be due to the instructions they were given. The instructions in their textbook direct them to represent their ideas and use conjunctions to support their interpretations and connect different sentences.

#### 4.3.4. Inferential Markers

As shown in Table 4.5., in NS corpora *as a result*, *because*, *so*, and *then* are the most frequently used DMs, while *as a consequence* and *thus* are the least frequent.

**Table 4.5. Mean Frequency and Log-likelihood Results for Inferential Markers in Both Corpora**

Item	NS Corpus (O2)	Occurrence per 10.000 words	NNS Corpus (O2)	Occurrence per 10.000 words	LL Ratio
Accordingly	-	-	8	0.40	- 10.20
As a consequence	1	0.06	-	-	+ 1.50
As a result	12	0.68	16	0.81	- 0.21
Because	10	0.56	5	0.25	+ 2.32
Consequently	-	-	2	0.10	- 2.55
For this reason	-	-	3	0.15	- 3.83
Hence	-	-	1	0.05	- 1.28
So	18	1.02	16	0.81	+ 0.46
Then	12	0.68	11	0.55	+ 0.23
Thus	8	0.45	12	0.60	- 0.41
<b>Total</b>	<b>61</b>		<b>74</b>		

*So* has 18 occurrences with 1.02 percent, *as a result* and *then* both have 12 occurrences with 0.68 percent, and *because* has 10 occurrences with 0.56 percent. On the other hand, *thus* has 8 occurrences with 0.45 percent and *as a consequence* has 1 occurrence with 0.06 percent. Similar to the corpora of NS, in the NNS corpora *as a result*, *so*, *then*, and *thus* are the most frequently used DMs, while *consequently*, *for this reason*, and *hence* are the least frequent.

*As a result* and *so* both have 16 occurrences at 0.81 percent, *thus* has 12 occurrences at 0.60 percent and *then* has 11 occurrences at 0.55 percent. In contrast, *for this reason* has 3 occurrences with 0.15 percent, *consequently* has 2 occurrences with 0.10 percent, and *hence* has 1 occurrence with 0.05 percent. The total number of

inferential markers used in the corpora of NS and NNS is 61 and 74, respectively. Consequently, both NSs and NNSs use inferential markers almost equally frequently.

The following are examples of inferential markers used in both NNS and NS corpora:

(27) (NS - Law) *As a result of these changes the princeps was also largely represented as a chief magistrate who acted for the benefit of the state.*

(28) (NNS - Law) *The statistical data were analyzed by using SPSS 20.0 program, frequency (%), Crosstabs and Chi-Square (X2), Independent Samples T-Test and Correlations tests were performed to determine the differences between the variables. As a result of the research; that the participants have learned and learned the legal terms and rules in the medium level at the intermediate level and they know the knowledge and terms related to sports law in general at intermediate level, but the male participants concentrate on the yes option in some information according to women; we can say that there is a linear parallelism between law and sports law and general law consciousness.*

The results show that in examples (27) and (28), the DM *as a result* indicates the author is deducing an inference from the initial argument, contrary to a disjunctive relationship, which notifies the audience that he is departing from the expectations established by the preceding discourse, and later becomes aware of a logical point in the argument. Inferential markers are used to establish relationships between discourse elements and indicate metadiscursive objectives. They form relations of logic that lie within the steps in their arguments.

## CHAPTER V

### DISCUSSION

In this chapter, the results of the study are discussed. The first research question, which deals with the type of DMs in the two speaker corpora, is posed in the first part. Then, the DMs that occur in either the NS or the NNS corpus are identified. Later, the DMs identified in both learner corpora are evaluated in the following section, and the DMs present in either NNS or NS corpus are analyzed thoroughly.

For the second research question, the frequencies of the DMs in each speaker corpus are shown and average mean frequency per 10,000 words and the log-likelihood values of the DMs are shown. The values of the log-likelihood results performed to discover underuse or overuse of DMs in NNS abstracts compared to NSs, as well as the standardized frequencies per 10,000 words of DMs in NS and NNS corpora are explained lastly, as the third research question.

After analysis, it was concluded that among all types of DMs, *and* was used most frequently in both NNS and NS corpora. The highly frequent *and* in both corpora may be because this DM is more frequent in informal everyday speech and formal academic writing both. However, *and* is generally defined as a DM that students are more likely to use in their informal writings than the sophisticated language required to summarize a MA thesis.

The overall high frequency of use of *and* is also consistent with Fraser (1999), who assumes that elaborative markers signal that the following utterance is some type of clarification of the preceding discourse. The most extensive elaborative marker type is *and* because it is the easiest form of elaboratives to use. For example, Fraser (1999) argues that *and* can always take the place of *furthermore*, however not the other way around, because the rules required by *furthermore* are more considerable than those required by *and*.

It could clarify the greater frequency of *and* in both corpora. Other DMs that are significantly overused by NNSs are *accordingly*, *besides* and *in that/this*. Only

*originally* is used significantly less by NNSs compared to the NS corpus. In addition, the other DMs that were used more frequently by NNSs are *as*, *further(more)*, and *such that*. Looking at the total number of DMs in both learner corpora, it was found that they are used more frequently in the NNS corpora of the current study.

This could be due to the genre of academic writing where the academic community is demanded to persuade their audience by substantiating or disproving previous hypotheses. Lorenz (1998) proposes that most writers of L2 strive to impress, inspire and are aware of the restraints on their linguistic repertory and therefore their need to emphasize the importance of what they have to say than NSs. In the texts of L2 learners, the comparatively excessive use of DMs is due to cross-cultural variations in the role of metaphors in texts, in addition to the attributes of overzealousness.

Moreover, the frequent occurrence of DMs in the NNS corpus may be explained by the difficulty for a L2 writer to articulate a neutral stance. Accordingly, Hyland and Milton (1997) found that NNS learners have a more restrained capability to control the degree of definiteness and generally produce greater arguments than NSs, suggesting that DMs are used more frequently by NNS writers. In the current study, the results show that DMs were used extensively in both NS corpus and NNS corpus, with the highest proportion of elaboratives, followed by temporals, contrastives, and finally inferentials.

The most frequent DMs in each class are *as* (temporal markers), *but* and *however* (contrastive markers), *and* (elaborative markers), and *as a result* and *so* (inferential markers). In English, all the elements of each class of DMs are also known as conjunctions, connectors, or linking words because they connect one part of a statement to another. The use of different categories of DMs is justified, especially when collecting empirical evidence.

This tendency is evident in empirical writing in various scientific fields, and it is a major challenge to remove it from academic writing. The DMs used in the data of the present study served four different functions of Fraser's (1999) taxonomy. The functions of DMs in the collected data are indicated as follows: marking text segments

(temporal), announcing the author's goal (inferential), indicating topic shifts (elaborative), and comparing two points (contrastive).

The presence of these lexical devices in abstracts confirms that the author's intention is to actively involve or engage the reader in the written work. One of the most crucial aspects of academic writing is the involvement of the audience in the work. Thus, one could say that an academic text is effective when the audience is involved. Thus, if a text has achieved the desired effect, it can be accepted as a quality work. The results of the study suggest that authors help the audience navigate through the text.

Helping the audience navigate through the text is important to the effectiveness of the written work because readers should have little to no difficulty with the text. DM use illustrates that authors are concerned with making their text as coherent and persuasive as possible, and with organizing their work in such a way that they can predict what readers of an explicit text will know. In other words, authors' recourse to metadiscourse may reveal the fact that authors intend to consciously direct the flow of information in such a way as to produce their intended meanings.

The preference of one type of DM over another depends on the author's objective and the particular message to be conveyed to a particular audience. Therefore, a scholar cannot use every DM in academic texts. Doing so may compromise the clarity of the work, reduce its effectiveness, and jeopardize its credibility. Therefore, to master academic writing, one should acquire a sound knowledge of DMs. Academic writing presents challenges to students and novice writers, especially when writing in a L2.

Chang and Swales (1999) found that the majority of their L2 graduate students were uneasy about learning the rules of formal academic English and that this was further complicated by changing styles that allowed them to effectively mix formal and informal language. While informality may be easy for experienced writers, it can create additional complexity in the relationships the writer is trying to build with the audience and further increase the compositional burden of novices.

Hyland (2001) and Li and Li (2013) claim that social disciplines have an intelligible authorial stance and a higher use of DMs. Scientists seem to adopt an authorial stance in their texts to emphasize the importance of their research findings and individual contributions. The linguistic features of texts evolve over time, and many self-promotional elements such as DMs have become more important. The only possible conclusion that can be drawn is that DM use may change with numerous beliefs concerning the impacts of rhetorical interference and author presence in various contexts of transmission of information.

Authors' linguistic backgrounds may have less influence on authorial choices in academic writing than disciplinary conventions. In light of the above discussion of the current study's findings, it is important to point out that the presentation of information in academic writing, however rewarding, is not always easy because it takes effort to arrange information and ideas coherently in academic writing. However, as difficult as it may be, it is necessary because the primary responsibility of authors is to connect with their audience.

Therefore, scholars must develop the skills of academic writing if their work to be taken seriously and achieve international prominence. This goal can be achieved if one has advanced knowledge of DMs and their use in writing. In this study, the following research questions were investigated:

1. Which DM categories from Fraser's Taxonomy are used by MA students in abstract sections?

The quantitative results show that NS students used *after, also, although, and, as, as a consequence, as a result, because, before, besides, but, conversely, despite, directly, equally, finally, first, for example, further(more), given, however, if, immediately afterwards, in addition, in comparison, in contrast, in fact, in general, in particular, in that/this, instead of, like, moreover, nevertheless, nonetheless, nor, on the other hand, once, or, originally, rather than, second, similarly, since, so, still, subsequently, such that, that is, then, therefore, though, thus, until, when(ever), whereas, where(ever), while, yet* as DMs.



Turkish NNS students, however, used *accordingly, after, also, although, and, as, as a result, as soon as, because, before, besides, but, consequently, despite, eventually, except, finally, first, for example, for instance, for this reason, further(more), given, hence, however, if, in addition, in comparison, in contrast, in general, in that/this, instead of, like, likewise, moreover, nevertheless, of course, on the other hand, once, or, rather than, second, similarly, since, so, still, subsequently, such that, that is, then, therefore, though, thus, what is more, when(ever), whereas, where(ever), while, yet* as DMs.

The analysis of the frequency of DMs used by NNSs and NSs shows that NNSs' abstracts are characterized by extensive use of DMs, while NSs tend to use a limited range of DMs. All in all, it can be seen that Turkish NNSs use a greater variety of DMs in their abstracts than NSs.

## 2. What are the frequency and functions of DM categories from Fraser's Taxonomy in MA abstracts?

The results show that there are a total of 1985 occurrences of DMs in the NNS corpus, although there are 1772 in the NS corpus. The mean frequencies and log-likelihood values of DMs in the NNS corpus calculated in comparison with NS corpus indicate that NNS students use DMs relatively much in their abstracts.

The analyses show that DMs such as *although, but, conversely, despite, however, in comparison, in contrast, instead of, nevertheless, nonetheless, on the other hand, rather than, still, and whereas* are used to signal that the explicit interpretation of S2 is in contrast to an interpretation of S1 (Martinez, 2004:67); *and, also, besides, correspondingly, equally, furthermore, in addition, in particular, likewise, moreover, or, similarly, that is, and what is more* are used to relate aspects messages of S2 and S1 and indicate a quasi-parallel relationship between S2 and S1 (Martinez, 2004:68); *accordingly, as a consequence, as a result, consequently, for this/that reason, hence, in this/that case, of course, so, then, therefore, and thus* are used to signal that S2 is to be understood as a conclusion based on S1 (Martinez, 2004:68); *after,*

*because, for this/that reason, and since*, to specify that S2 provides a reason for the content presented in S1 (Martinez, 2004:68).

3. What are the frequencies of DM categories from Fraser's Taxonomy in MA abstracts?

The results show that elaborative markers account for the largest proportion of total DMs, followed by temporal markers, contrastive markers, and inferential markers. This result is very similar to the study of Martinez (2004), who investigated DM use in exposition essays of Spanish students. In many composition and writing course books for students, DMs are mentioned only very briefly or not at all, although DMs have an important function in investigations and materials for teachers of academic L2 learners. This may be another explanation for why DMs are used less frequently than expected by NNS and NS students.

In the current study, by examining different types of DMs in a corpus of 200 abstracts, we found clear evidence of paradigm- and discipline-specific use of temporal, elaborative, contrastive, and inferential markers in the abstracts of quantitative theses in the social science disciplines ELT, law, and political science. Metadiscourse, which includes DMs, is fundamentally practical and necessary for the study of academic discourse.

Fuertes-Olivera et al. (2001) point out that metadiscourse allows users to achieve their specific goals in accordance with two basic pragmatic principles: cooperation and least effort. Similarly, Hyland (1998) shows that metadiscourse is a central pragmatic construct that shows us how authors attempt to influence readers' understanding of both the text and their attitudes toward the content and audience. The results show that there are a large number of DMs and writing methods used to convey information to readers.

This suggests that research information should be introduced in a compelling sequence to pave the way for easy and natural reading of the finished text. Academic writing is not a monolithic construct, even though we generally like to refer to academic writing. Instead, academic writing is widely viewed as a register that has

inherent variations. Similarly, it is widely recognized that written academic language varies by discipline that disciplines use linguistic resources in different ways to construct meaning and build knowledge within their disciplinary communities.

The language used by these disciplinary communities is assumed to differ just as disciplines differ in their epistemological beliefs, research practices, and knowledge structures. The congruence of writing with scholarly culture, conventions, and the structure of information has greatly influenced research in many fields such as rhetoric and composition, applied linguistics, and EAP. Bazerman (1994) highlights that knowledge of language use across disciplines helps writers to use language more effectively, editors to work with writers' texts, and readers to access different types of discourse across disciplines, while teaching academic writing is an important goal.

The high frequency of DMs that represent internal discursive ties which is apparently a crucial characteristic of academic argumentation. Certainty depends on the writer's sense of reader and self: indicating an argument at which an author has thought about the creation process of the writing, triggering an identical consciousness in the audience. Academic writing is a context in which an audience orientation is essential to achieving rhetorical goals.

The task of convincing an academic audience of the authenticity of an author's claims involves making linguistic choices that readers perceive as persuasive, even though they are often seen as prepositional and impersonal. The act of persuasion, however, varies from genre to genre. Metadiscourse is one of many implications of an author's reaction to the possible negotiability of their arguments, an interference in order to involve the audience and predict potential disagreements or problems of explanation.

Then, its function in scientific discourse, is to provoke approval, signal collegiality, deal with the problematic points, and prevent argument. However, there is not only one writing method in a specific language, which is crucial to consider more effective and decentralized cultural approaches that recognize, for example, how different small-scale cultures like age, classroom, discipline, line of work, and society might be communicate with national cultures.

## CHAPTER VI

### CONCLUSION AND IMPLICATIONS

A DM is described as a pair of words, phrases, or words that connects two DSs such as commands, events, facts, questions, situations, statements, and so on. Therefore, it was predicted that an investigation of DMs would reveal compelling findings about in what way both Turkish NNSs and NSs form different relations of discourse in the abstract sections of their MA theses. In the present study, a NS and a NNS corpus were comparatively examined in terms of DM use at the macrostructural and microstructural levels of discourse.

At the microstructural level, the basic features and purposes of textual metadiscourse were examined. On the other hand, DM use was examined in terms of their interpersonal metadiscourse purposes at the macrostructural level. A research summary, dissertation findings, suggestions for teachers and learners on pedagogical implications, and further research in light of current research findings are provided for members of the academic community.

The results of both analyses are summarized and presented with the functional applications of every element defined as DMs in both corpora. The aim of the current study was to investigate DM use in the abstracts of NS and Turkish NNS master students. To discover the forms and frequencies of DMs and to determine parallels and discrepancies between two learner corpora regarding DM use, the study questions were examined quantitatively.

#### **6.1. Pedagogical Implications and Suggestions**

The results provide some important implications for SLA, and administrators, linguists, material developers, students, pre-service and in-service teachers, and test developers can benefit from the findings. First, given the findings on the use of metadiscourse, students used a limited number of DMs, resulting in an overuse of certain DMs in the texts. This can lead to pragmatic fossilization that creates weak ties and induces boredom in readers (Asassfeh et al., 2013).

Therefore, different types of DMs need to be explored in writing classes to show the relationships between ideas through different examples. In Turkey, a student does not have many opportunities to speak English outside the classroom. As a result, the materials and teachers play an important role in teaching English metadiscourse. Teachers need to be well instructed in metadiscourse and its use in an L2 in order to guide their students to write more qualified essays.

Teachers also need to provide good examples and feedback on texts to equip learners with the guidance and awareness they need to be able to write coherent and cohesive essays. Second, the incorrect and/or excessive use of certain DMs is evident in the writings of NNSs, which not only cause the writings to be unsystematic, however, is further unclear to the audience. The incorrect, excessive, and/or inadequate use of DMs can be explained by several reasons.

First, the inadequate procedure and instruction of DMs in instructional materials. Although DMs are presented in teaching materials such as textbooks, there is neither much specific information nor further practice for students. This finding implies that current teaching materials do not provide significant development of DMs' adequacy rate due to the lack of specific information and exercises. Therefore, teaching and practicing the use of DMs in the proper context is very important.

To avoid misrepresentation, instructional materials must be peer-reviewed and authentic materials must be used so that learners are able to write appropriate and natural academic texts in an L2. Material developers should keep up with the newest corpus research, norms and trends in discourse register in order to design teaching materials for academic writing lectures correspondingly. Apart from teaching materials, the interference of L1 further leads to some incorrect use of DMs, such as *even* and *on the other hand*.

Determining interference of L1 by context-specific examination is crucial, and students, teachers and material developers must be careful when using metadiscourse. It is suggested teaching learners to edit and revise, which are both important phases of procedural writing. Novice writers must be aware that writing is not a product, but a process and thus, the initial outline of a text is not the same as the finished product.

In the revision process, writers could reiterate the main ideas and fix the errors while trying to convey their intended message appropriately. The results of this thesis provided additional proof of the significance of metadiscourse instruction. If the use of metadiscourse in the L2 is not studied and exercised in instructional course books, L2 writers will face challenges while using them and tend to use certain metadiscourse inappropriately, resulting in disorganized and poor texts.

Therefore, teaching materials and teaching techniques should be reevaluated and developed in relation to the use of metadiscourse. Both pre-service and in-service teachers must be educated in metadiscourse and its use in L2 writing in order to guide their students to produce coherent essays by using different classes and correct DM forms. The current thesis has further emphasized the significance of corpus-based studies of context-specific use of DM in academic texts.

The findings from context-specific research determine the problems regarding DM use in L2 texts, therefore it will be helpful in raising awareness of material developers, researchers and teachers. As reported by Baker (2006), the most crucial example of corpus is contextual corpus in discourse analysis. Thus, instructors of ELT must be supported in examining the conventions of discourse in student texts by context-specific research, for example action study.

## REFERENCES

- Abdollahzadeh, I. (2011). Poring over the findings: Interpersonal authorial engagement in applied linguistic papers. *Journal of Pragmatics*, 43, 288-297.
- Akbaş, E. (2014). Commitment-detachment and authorial presence in postgraduate academic writing: A comparative study of Turkish native speakers, Turkish speakers of English and English native speakers. PhD thesis, University of York.
- Alba-Juez, L. (2009). *Perspectives on discourse analysis: Theory and practice*. UK: Cambridge Scholars.
- Ali, E. A., & Mahadin, R. S. (2016). The use of discourse markers in written discourse by students of English at the University of Jordan. *International Journal of Humanities and Social Science*, 6 (3), 23–35.
- Altunay, D. (2009). Use of connectives in written discourse: A study at an ELT department in Turkey. Unpublished doctoral dissertation. Anadolu University, Turkey.
- Ammon, U. (2001). *The dominance of English as a language of science: effects on other languages and language communities*. Berlin: Mouton de Gruyter.
- Asassfeh, S., Al-Shaboul, Y., Alshboul, S., & Momani, H. (2013). Are Jordanian students phonemically aware? A descriptive study. *Journal of Educational and Psychological Sciences*, 14, 2, 37-53.
- Atmaca, Ç. (2016). Error Analysis of Turkish EFL Learners: A Case Study. *Procedia - Social and Behavioral Sciences* 232, 234 – 241.
- Aysu, S. (2017). The use of discourse markers in the writings of Turkish students of English as a foreign language: A corpus based study. *Journal of Higher Education and Science*. 7, 132.

- Baker, P. (2006). *Using corpora in discourse analysis*. London: Continuum.
- Ball, W. J. (1986). *Dictionary of link words in English discourse*. London: Macmillan.
- Baltacı, H. Ş. (2019) Cause markers in L1 and L2 cause paragraphs: Turkish vs. English.
- Baştürkmen, H. (2009). Commenting on results in published research articles and master's dissertations in language teaching. *Journal of English for academic purposes*, 8, 241-251.
- Bazerman, C. (2014). *Encountering Academic Writing*. Buenos Aires: Universidad de Buenos Aires.
- Belcher, D. (2006). English for specific purposes: Teaching to perceived needs and imagined futures in worlds of work, study, and everyday life. *TESOL Quarterly*, 40.
- Bhatia, V.K. (2004). *Worlds of written discourse. A genre-based view*. London: Continuum.
- Biber, D., Conrad, S., & Reppen, R. (1998) *Corpus linguistics: Investigating language structure and use*. Cambridge: Cambridge University Press.
- Biber, D.; Johansson, S.; Leech, G.; Conrad, S. & Finegan, E. (1999). *Longman grammar of spoken and written English*. England: Pearson PTR Interactive.
- Blagojević, S. (2009). Expressing attitudes in academic research articles written by English and Serbian authors. *Linguistics and literature*, 7 (1), 63-73.
- Blakemore, D. (2002). *Relevance and linguistic meaning: The semantics and pragmatics of discourse markers*. Cambridge: Cambridge University Press.
- Bondi, M. (2008). Emphatics in academic discourse: Integrating corpus and discourse tools in the study of cross-disciplinary variation, in Adel, Annelie & Reppen, Randi (Eds), *Corpora and discourse: The challenges of different settings*, John Benjamins.



- Brinton, L. J. (1996). *Pragmatic markers in English: grammaticalization and discourse functions*. Berlin: Walter de Gruyter.
- Brown, G. & Yule, G. (1983). *Discourse analysis*. New York: Cambridge University Press.
- Buckingham, L. (2008). Development of English academic writing competence by Turkish scholars. *International journal of doctoral studies*, 3, 1-18.
- Canale, M. (1983). From Communicative Competence to Communicative Language Pedagogy. In J. C. Richards, & R. W. Schmidt (Eds.), *Language and Communication*, 2-14. London: Longman.
- Canale, M. & Swain, M. (1980). Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing. *Applied Linguistics* 1, 1.
- Cao, F. & Hu, G. (2014). Interactive metadiscourse in research articles: A comparative study of paradigmatic and disciplinary influences. *Journal of Pragmatics*. 66, 15–31.
- Casanave, C. P. (2003). Looking ahead to more sociopolitically-oriented case study research in L2 writing scholarship (but should it be called postprocess?). *Journal of Second Language Writing*, 12, 85–102.
- Celce-Murcia, M. & Larsen-Freeman, D. (1999). *The grammar book (2nd ed.)*. USA: Heinle & Heinle.
- Celce-Murcia, M & Olshtain, E. (2000). *Discourse and context in language teaching*. Cambridge: Cambridge University Press.
- Chang, P. (2010). Taking effective authorial stance in academic writing: inductive learning for second language writers using a stance corpus. Unpublished Doctoral Dissertation, University of Michigan.
- Chen, C. W. (2006). The use of conjunctive adverbials in the academic papers of advanced Taiwanese EFL learners. *International journal of corpus linguistics*, 11 (1), 113–130.

- Cho, Y. (1998). *Use of connectives in writings by Korean learners of English*. New York, NY: Columbia University.
- Cho, S. (2004). Challenges of entering discourse communities through publishing in English: Perspectives of non-native speaking doctoral students in the United States of America. *Journal of language, identity & education*, 3 (1), 47-72.
- Choi, J. (2005). A contrastive analysis of argumentative essays written in English by Korean ESL students and by native English-speaking students. Unpublished doctoral dissertation. Southern Illinois University Carbondale.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. M.I.T. Press.
- Clark, R. & Inavic, R. (1997). *The politics of writing*. Routledge.
- Coffey, B. (1984). ESP-English for Specific Purposes. *Language Teaching*, 17, 1, 2–16
- Connor, U. (2002). New directions in contrastive rhetoric. *TESOL Quarterly* 36, 493-510.
- Connor, U. & Upton, T. A. (2004). *Discourse in the professions: Perspectives from Corpus linguistics*. Philadelphia: John Benjamins
- Conrad, S. (2002). Corpus linguistic approaches for discourse analysis. *Annual Review of Applied Linguistics*, 22, 75-95.
- Çepik, Ş. & Karaata, C. (2012). Enhancing the use of discourse markers in academic writing: The combination of incidental acquisition and explicit instruction. Retrieved from <https://dergipark.org.tr/tr/pub/esosder/issue/6154/82682>
- Douglas, D. (2001). Language for Specific Purposes assessment criteria: where do they come from? *Language Testing*, 18 (2), 171-185.
- Dudley-Evans, T. (1987). Introduction to Genre analysis and ESP. *English Language Research Journal*, 1. Birmingham: University of Birmingham.

- Duruk, E. (2017). Analysis of metadiscourse markers in academic written discourse produced by Turkish researchers. *Journal of Language and Linguistic Studies*, 13 (1), 1-9. Retrieved from <https://dergipark.org.tr/tr/pub/jlls/issue/36109/405445>
- Dülger, O. (2001). The use of discourse markers in teaching writing. Unpublished Master's Thesis. Selçuk Üniversitesi, Konya.
- ekoç, A. (2008). Analyzing Turkish MA Students' Use of Lexical Hedging Strategies in Theses Abstracts. Unpublished MA Thesis, Istanbul: Istanbul University.
- Fei, D. (2006). The effect of the use of adverbial connectors on Chinese EFL learners' English writing quality. Retrieved December 12, 2009 from <http://www.celea.org>
- Flowerdew, J. & Li, Y. (2007). Language re-use among Chinese apprentice scientists writing for publication. *Applied linguistics*, 28 (3), 440-465.
- Flowerdew, J. & Peacock, M. (2001). Research perspectives on English for Academic Purposes. Cambridge, UK: Cambridge University Press.
- Fraser, B. (1999). What are discourse markers? *Journal of pragmatics*, 31 (7), 931–52.
- Fraser, B. (2009). An Account of Discourse Markers. *International Review of Pragmatics*. 1, 293-320.
- Fuertes-Olivera, P., Velasco-Sacristán, M., Arribas-Baño, A. & Samaniego, E. (2001). Persuasion and advertising English: Metadiscourse in slogans and headlines. *Journal of Pragmatics*. 33, 1291-1307.
- Gabrielatos, C. & McEnery, T. (2005). Epistemic modality in MA dissertations, in Olivera, P.A. (Ed), *Lengua y sociedad: Investigaciones recientes en lingüística aplicada, Lingüística y filología*. Valladolid: Universidad de Valladolid.

- Ghadessy, M., Henry, A., & Roseberry, R.L. (2001). *Small corpus studies and ELT: theory and practice*. Philadelphia: John Benjamins
- Granger, S. & Tyson, S. (1996). Connector usage in the English essay writing of native and non-native EFL speakers of English. *World Englishes*, 15 (1), 17-27.
- Halliday, M.A.K., & Hasan, R. (1976). *Cohesion in English*. London: Longman.
- Hinkel, E. (1997), Appropriateness of Advice: DCT and Multiple Choice Data. *Applied Linguistics*, 18, 1, 1–26.
- Hinkel, E. (2002). *Second Language Writer's Text: Linguistic and Rhetorical Features*. Lawrence Erlbaum Associates, Publishers.
- Hinkel, E. (2011). What research on second language writing tells us and what it doesn't, in Hinkel, E. (Ed) *Handbook of research in second language teaching and learning, Volume II*. Routledge: New York and London.
- Hunston, S. (2002). *Corpora in applied linguistics*. Cambridge: Cambridge University.
- Hunston, S. (2006). *Corpus Linguistics*. De Gruyter: Mouton.
- Hutchinson, T. & Waters, A. (1987). *English for Specific Purposes*. Cambridge: Cambridge University Press.
- Hymes, D.H. (1972). *On communicative competence*. Philadelphia: University of Pennsylvania Press.
- Hyland, K. (1998). *Hedging in scientific research articles*. John Benjamins publishing company: Amsterdam and Philadelphia.
- Hyland, K. (1999). Academic attribution: Citation and the construction of disciplinary knowledge. *Applied linguistics*, 20 (3), 341-367.

- Hyland, K. (2000). *Disciplinary Discourses: Social interactions in academic writing*. Longman.
- Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for specific purposes*, 20, 207-226.
- Hyland, K. (2002a). Authority and invisibility: authorial identity in academic writing. *Journal of pragmatics*, 34, 1091-1112.
- Hyland, K. (2002b). Options of identity in academic writing. *ELT journal*, 56 (4), 351-358.
- Hyland, K. (2003). *Second language writing*. Cambridge University Press.
- Hyland, K. (2004a). Disciplinary interactions: metadiscourse in L2 postgraduate writing, *Journal of Second Language Writing*, 13, 133-151.
- Hyland, K. (2004b). Graduates' gratitude: the generic structure of dissertation acknowledgements. *English for specific purposes*, 23, 303-324.
- Hyland, K. (2005a). Stance and engagement: a model of interaction in academic discourse, *Discourse Studies*, 7 (2), 173-192.
- Hyland, K. (2005b). *Metadiscourse: Exploring interaction in writing*. Continuum: London and New York.
- Hyland, K. (2006). *English for academic purposes: An advanced resource book*. Routledge.
- Hyland, K. (2009). Writing in the disciplines: Research evidence for specificity. *Taiwan International ESP Journal*, 1 (1), 5-22.
- Hyland, K. (2016). *Teaching and researching writing (3rd ed.)*. New York: Routledge.
- Hyland, K. & Jiang, K. (2016a). Change of Attitude? A Diachronic Study of Stance. *Written Communication*, 1, 33.

- Hyland, K. & Jiang, K. (2016). Nouns and Academic Interactions: A Neglected Feature of Metadiscourse. *Applied Linguistics*. 2016, 1-25.
- Hyland, K. & Jiang, K. (2018). In this paper we suggest: Changing patterns of disciplinary metadiscourse. *English for Specific Purposes*, 51.
- Hyland, K. & Milton, J. (1997). Qualification and Certainty in L1 and L2 Students' Writing. *Journal of Second Language Writing*. 6, 183-205.
- Hyland, K., & Tse, P. (2004). Metadiscourse in Academic Writing: A Reappraisal. *Applied Linguistics*, 25, 156-177.
- Hyon, S. (2001). Long-term effects of genre-based instruction: A follow-up study of an EAP reading course. *English for specific purposes*.
- İnceçay, V. (2015). The Foreign Language Classroom is Like an Airplane Metaphorical Conceptualizations of Teachers' Beliefs. *Turkish Online Journal of Qualitative Inquiry*, 6 (2), 74-96. Retrieved from <https://dergipark.org.tr/en/pub/tojqi/issue/21407/229428?publisher=tojqi>.
- Jiang, H. (2015). *Learning to Teach with Assessment-A Student Teaching Experience in China*. Singapore: Springer.
- Johns, A. M. (1997). *Text, role and context: Developing academic literacies*. Cambridge University Press.
- Kaplan, R. (1966). Cultural thought patterns in intercultural education. *Language Learning*, 16, 1-20.
- Koester, A. (2010). *Workplace discourse*. A & C Black: London and New York.
- Kondowe, W. (2014). Interpersonal Metafunctions in Bingu wa Mutharika's Second-Term Political Discourse: A Systemic Functional Grammatical Approach. *International Journal of Linguistics*, 6, 3.

- Koutsantoni, D. (2006). Rhetorical strategies in engineering research articles and research theses: Advanced academic literacy and relations of power. *Journal of English for Academic Purposes*, 5, 19-36.
- Leki, I. (1991). The Preferences of ESL Students for Error Correction in College-Level Writing Classes. *Foreign Language Annals*, 24, 203-218
- Leung, C. (2005). A comparison of the use of major English conjunctions by American and Hong Kong university students. Unpublished Bachelor Thesis, Lunds Universitet.
- Li, Y. (2006). A doctoral student of physics writing for publication: A sociopolitically-oriented case study. *English for specific purposes*, 25, 456–478.
- Liu, D. (2008). Linking adverbials. An across-register corpus study and its implications. *International Journal of Corpus Linguistics*, 13 (4), 491-518.
- Lorenz, G. (1998). Overstatement in advanced learners' writing: Stylistic aspects of adjective intensification. Routledge: London and New York.
- Martinez, A. C. L. (2004). Discourse markers in the expository writing of Spanish university students. Retrieved September 10, 2009 from <http://www.aelfe.org/documents/05-RA-8-Lahuerta.pdf>
- Mashhadi, H., Manzuri, H. A., & Dusti, M. (2011). Genre analysis in an Asian academic setting, *Sino-US English Teaching*, 8 (1), 38-46.
- Mautner, G. (2009) Corpora and critical discourse analysis. In P. Baker (Ed.). *Contemporary corpus linguistics* (32–46). London: Continuum.
- McEnery, T. & Wilson, A. (2001). *Corpus linguistics: an introduction*. Edinburgh: Edinburgh University Press.
- McEnery, T., Xiao, R., & Tono, Y. (2006). *Corpus-based language studies. An advanced resource book*. London and New York: Routledge.

- Milton, J. & Tsang, E. S. C. (1993). A Corpus-based study of logical connectors in EFL students' writing: directions for future research. In R. Pemberton and E.S.C. Tsang (Ed.), *Studies in Lexis*. Hong Kong: The Hong Kong University of Science and Technology.
- Milton, J. (1999). Lexical thickets and electronic gateways: Making text accessible by novice writers. In C. N. Candin and K. Hyland (eds). *Writing: Texts, Processes and Practices*. London: Longman.
- Mur Dueñas, P. (2009). Logical markers in L1 (Spanish and English) and L2 (English) Business research articles. *English Text Construction*. 2, 246-264.
- Nelson, M. (2010). Building a written corpus. *The Routledge handbook of corpus linguistics*. Routledge: London and New York.
- Nesselhauf, N. (2004). Learner corpora and their potential for language teaching. In Sinclair, John McH. (ed.). *How to use corpora in language teaching*. Amsterdam: John Benjamins.
- Nodoushan, M. A. S. & Khakbaz, N. (2011). Theses discussion sections: a structural move analysis. *International journal of language studies*, 5 (3), 111-132.
- O'Keeffe, A., McCarthy, M. J. & R. A. Carter (2007) *From Corpus to Classroom: language use and language teaching*. Cambridge: Cambridge University Press.
- Özer, H. & Okan, Z. (2018). Discourse markers in EFL classrooms: A corpus-driven research. *Journal of Language and Linguistic Studies*, 3, 50-66. Retrieved from <https://dergipark.org.tr/en/pub/jlls/issue/43213/527675>
- Ondondo, E. A. (2020). Prosodic domains in Kisa. *Journal of Language and Linguistic Studies*, 16 (3), 1334-1351.
- Özdamar, B. (2020). Discourse structure and discourse markers in the argumentative essays of English and Turkish language teaching students (Unpublished Master's thesis). Hacettepe University, Ankara.



- Özhan, D. (2012). A comparative analysis on the use of but, however and although in the university students' argumentative essays: A corpus-based study on Turkish learners of English and American native speakers. (Unpublished Doctoral Dissertation). METU, Ankara.
- Paltridge, B. (2011). *Continuum companion to discourse analysis*. London: Continuum.
- Paltridge, B. & Starfield, S. (2011). Research in English for specific purposes, in Hinkel, E. (Ed.). *Handbook of research in second language teaching and learning, Volume II*. Routledge: New York and London.
- Paltridge, B. & Starfield, S. (2013). *The Handbook of English for Specific Purposes*. Boston: Wiley-Blackwell.
- Parkinson, J. (2011). The discussion section as argument: The language used to prove knowledge claims. *English for specific purposes*, 30, 164-175.
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1972). *A grammar of contemporary English*, London: Longman.
- Quirk et al. (1985). *A Comprehensive Grammar of the English Language*. London Pearson Longman.
- Sadeghi, B. & Kargar, A. (2014). The effect of explicit instruction of discourse markers on EFL learners' writing ability. *International Journal of Educational Investigations*, 1(1), 328-338.
- Samraj, B. (2008). A discourse analysis of master's theses across disciplines with a focus on introductions. *Journal of English for academic purposes*, 7, 55-67.
- Schiffrin, D., Tannen, D. & Hamilton, H. (eds). (2001). *The handbook of discourse analysis*. Oxford: Blackwell.
- Schourup, L. (1999). Discourse Markers. *Lingua*, 107, 227-265.

- Shea, M. (2009). A corpus-based study of adverbial connectors in learner text. *MSU Working Papers in SLS*, 1 (1), 1-13. Retrieved from <http://sls.msu.edu/soslap/journal/index.php/sls/article/view/4>
- Silva, T. (1997). On the Ethical Treatment of ESL Writers. *1997 TESOL International Association*.
- Stevens, P. (1977). Special-purpose language learning: A perspective. *Language teaching & linguistics: Abstracts*, 10 (3), 145-163.
- Stubbs, M. (1983). *Discourse analysis: The sociolinguistic analysis of natural language*. Chicago, IL: The University of Chicago Press.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Tang, E. & Ng, C. (1995). A study on the use of connectives in ESL students' writing. *Perspectives*, 7 (2), 105-122.
- Tapper, M. (2005). Connectives in advanced Swedish EFL learners' written English – preliminary results. In F. Heinat and E. Klingvall (Eds.), *The Department of English in Lund: Working Papers in Linguistics*. 5, 115-144. Lund University.
- Teubert, W. (2005). My version of corpus linguistics. *International Journal of Corpus Linguistics*, 10 (1), 1-13.
- Thomas, L., Wareing, S., Singh I., Peccei J. S., Thornborrow, J. & Jones, J (2004). *Language, society and power: An introduction, 2<sup>nd</sup> edition*. Routledge.
- Ting, F. (2003). An investigation of cohesive errors in the writing of PRC tertiary EFL Students. *STETS Language and Communication review*, 2 (2).
- Trappes-Lomax, H. (2004) Discourse analysis. In A. Davies and C. Elder (eds.). *The Handbook of Applied Linguistics*. Blackwell: UK.

- Uysal, H. H. (2008). Tracing the culture behind writing: Rhetorical patterns and bidirectional transfer in L1 and L2 essays of Turkish writers in relation to educational context. *Journal of Second Language Writing*, 17, 183–207.
- Uzun, L. & Huber, E. (2002). *Türkçede Bilgi Yapısı ve Bilimsel Metinler*. Essen, Germany: Die Blaue Eule.
- Uzuner, S. (2008). Multilingual scholars' participation in core/global academic communities: A literature review. *Journal of English for academic purposes*, 7, 250-263.
- Van Dijk, T. A. (1980). *Macrostructures: An interdisciplinary study of global structures in discourse, interaction, and cognition*. Hillsdale, N.J.: L. Erlbaum Associates.
- Van Ek, J. (1986). *Objectives for Foreign Language Learning*. Strasbourg: Council of Europe.
- Veličković, M.V., Jeremić J.R. (2020). Stance markers: An underdeveloped aspect of Serbian EFL writers' competence. *Journal of Teaching English for Specific and Academic Purposes*, 8 (2), 147–158,
- Warsi, J. (2001). The acquisition of English contrastive discourse markers by advanced Russian ESL students. Retrieved December 25, 2009 from <http://jilaniwarsi.tripod.com/contrastivediscourse.pdf>
- Witte, S. P. & Faigley, L. (1981). Coherence, cohesion, and writing quality. *College Composition and Communication*, 32 (2), 189- 204.
- Yasuko, K. (1989). The Use of Connectives in English Academic Papers Written by Japanese Students. *Psycholinguistics*, 2, 41-54.
- Ying. S. (2007). An analysis of discourse markers used by non-native English learners: Its implication for teaching English as a foreign language. Retrieved December 30, 2008 from [http://www.kuis.ac.jp/icci/publications/kiyo/pdfs/19/19\\_03.pdf](http://www.kuis.ac.jp/icci/publications/kiyo/pdfs/19/19_03.pdf)

Zarei, A. (2013). Language learning strategies as predictors of L2 idioms comprehension. *International Journal of Language Learning and Applied Linguistics World*, 4(2), 330-313.

## APPENDIX I

# of abstracts	University name
1	<ul style="list-style-type: none"><li>• Adnan Menderes University</li><li>• Amasya University</li><li>• Ankara University</li><li>• Ankara Yıldırım Beyazıt University</li><li>• Bahçeşehir University</li><li>• Başkent University</li><li>• Burdur Mehmet Akif Ersoy University</li><li>• Bülent Ecevit University</li><li>• Dicle University</li><li>• Düzce University</li><li>• Erciyes University</li><li>• Eskişehir Osmangazi University</li><li>• Gaziosmanpaşa University</li><li>• İnönü University</li><li>• Kırşehir Ahi Evran University</li><li>• Kütahya Dumlupınar University</li><li>• Vienna University</li></ul>
2	<ul style="list-style-type: none"><li>• Bursa Uludağ University</li><li>• Çukurova University</li><li>• İhsan Doğramacı Bilkent University</li><li>• İstanbul Aydın University</li><li>• Sakarya University</li><li>• Selçuk University</li></ul>

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	<ul style="list-style-type: none"> <li>• Tekirdağ Namık Kemal University</li> </ul>
3	<ul style="list-style-type: none"> <li>• Atılım University</li> <li>• Eskişehir Anadolu University</li> <li>• Karadeniz Technical University</li> <li>• Mersin University</li> <li>• Middle East Technical University</li> <li>• Trakya University</li> </ul>
4	<ul style="list-style-type: none"> <li>• Akdeniz University</li> <li>• Atatürk University</li> <li>• Çanakkale Onsekiz Mart University</li> <li>• Hacettepe University</li> <li>• İstanbul University</li> <li>• Marmara University</li> </ul>
5	<ul style="list-style-type: none"> <li>• Gazi University</li> <li>• Yeditepe University</li> </ul>
6	Gaziantep University
11	Çağ University

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